London Market Monitor – 31 January 2024 Data sources: Bloomberg; Barclays; EIOPA; PRA; ONS; Milliman FRM



Market Price Monitor

Local Equity Markets

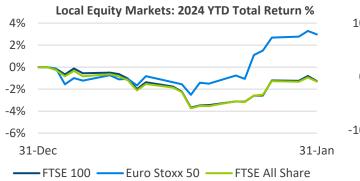
- Global equity markets had a mixed performance in January. Whilst the economic data releases were strong, market expectation for upcoming rate cuts shifted.
- The FTSE 100 index lost 1.3% in January.
- The Euro Stoxx 50 index was up 3.0% in January.

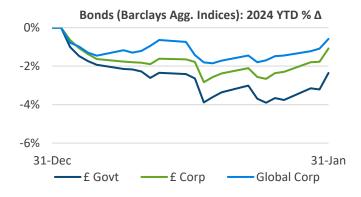
Global Equity Markets

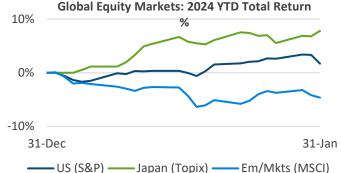
- The S&P 500 ended the month up 1.7%, and the Topix index gained 7.8%.
- The MSCI Emerging Markets index was down 4.6%.

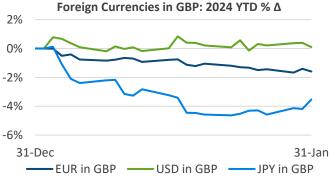
Bond/FX Markets

- The British government bond index declined by 2.4%, and the corporate bond index fell by 1.1%.
- The British Pound had a mixed performance in January, gaining 1.6% against the Euro and 3.5% against the Japanese Yen, but remained flat against the US Dollar.









Total Returns as of January 31, 2024												
	FTSE 100	FTSE All	Euro	US (S&P)	Japan	Em/Mkts	£ Govt	£ Corp	Global	EUR in	USD in	JPY in
		Share	Stoxx 50	,	(Topix)	(MSCI)	~ ••••		Corp	GBP	GBP	GBP
1 Month	-1.3%	-1.3%	3.0%	1.7%	7.8%	-4.6%	-2.4%	-1.1%	-0.6%	-1.6%	0.1%	-3.5%
3 Month	4.9%	6.2%	14.9%	16.0%	13.4%	7.1%	6.5%	7.6%	9.6%	-2.0%	-4.5%	-1.1%
1 Year	2.1%	1.9%	15.4%	20.8%	32.4%	-2.5%	-1.6%	4.4%	4.8%	-3.2%	-3.1%	-13.8%
YTD	-1.3%	-1.3%	3.0%	1.7%	7.8%	-4.6%	-2.4%	-1.1%	-0.6%	-1.6%	0.1%	-3.5%

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Insurance Monitor

Solvency II Risk Free Rates

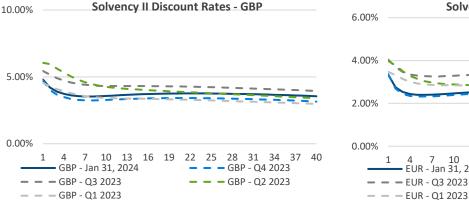
- GBP risk-free rates increased for all tenors in January.
- The 5 and 10-year GBP risk-free rates increased by 27 and 30 basis points, respectively.
- Similarly, EUR risk-free rates increased for all tenors.
- The 5 and 10-year EUR risk-free rates increased by 8 and 7 basis points, respectively.
- The EUR CRA was unchanged and remains floored at 10 basis points.

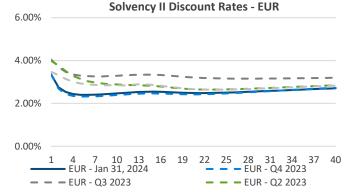
The **Solvency II risk-free discount rates** are calculated independently based on applying the Smith-Wilson Extrapolation to swap rates sourced from Bloomberg and applying the Credit Risk Adjustment as defined in the Technical Specs. For the official published curves please refer to <u>EIOPA</u> and <u>PRA</u> websites.

Solvency II Fundamental Spreads

• There were no material changes since the start of the year.

EIOPA fundamental spreads show the credit spread corresponding to the risk of default or downgrading of an asset. This is shown here across financial and nonfinancial assets, credit quality steps 0-3 and durations of 1-30 years. The data is provided by EIOPA. Fundamental spread = maximum (probability of default + cost of downgrade; 35% of long-term average spread). For fundamental spreads on other tenors please refer to the <u>EIOPA</u> website.



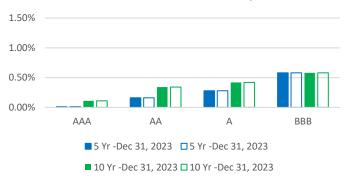


GBP Financial Fundamental Spreads



Change in GBP Discount Rates (bps)									
	1Y	Y5	Y10	Y20	Y30				
Since Q4 2023	7	27	30	34	37				
Since Q3 2023	-64	-96	-75	-53	-43				
Since Q2 2023	-125	-142	-69	-14	6				
Since Q1 2023	25	-16	15	45	56				

GBP Non-Financial Fundamental Spreads



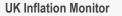
Change in EUR Discount Rates (bps)									
	1Y	Y5	Y10	Y20	Y30	CRA			
Since Q4 2023	0	8	7	7	1	0			
Since Q3 2023	-69	-89	-82	-73	-59	0			
Since Q2 2023	-63	-74	-42	-18	-14	0			
Since Q1 2023	-12	-53	-39	-19	-13	0			



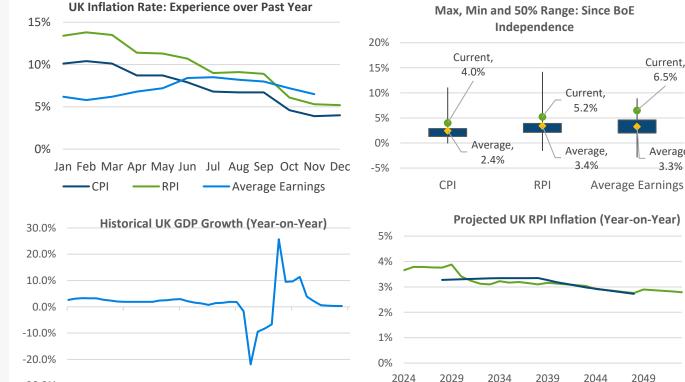
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- UK's CPI increased by 10 basis points to 4.0% in December.
- UK's RPI measure decreased by 10 basis points to 5.2% in December.
- According to the ONS: "The largest upward contribution to the monthly change came from housing and household services (principally higher gas and electricity charges), while the largest downward contribution came from furniture and household goods, and food and non-alcoholic beverages."
- Average earnings fell by 70 basis points to 6.5% in November.
- The projected RPI curve was relatively unchanged in comparison to the previous month.



Current.

6.5%

Average,

3.3%

2049

Bond Market

Derivatives Market

Historical year-on-year inflation rate is assessed by the % change on:

Dec-17

-30.0%

Dec-13

Dec-15

- Consumer Price Index (CPI) - measuring the monthly price of a basket of consumer goods and services

Dec-19

- Retail Price Index (RPI) - similar to CPI, but the main difference due the addition of mortgage payments, council tax and other housing costs

Dec-2

- Average Earnings - measuring the average total weekly employee remuneration over the previous 3 months.

Projection year-on-year inflation rate is the forward rate calculated from market data:

- Derivatives Market View - constructed from zero coupon inflation par swap rates against the RPI index at various tenors

Dec-21

- Bond Market View - constructed from the difference between the nominal rates implied by the conventional gilts and the real rates implied by the index-linked (RPI) gilts.



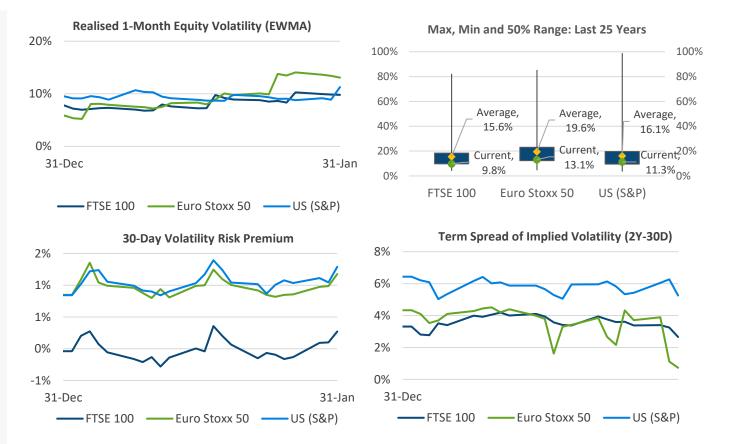
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Volatility and Hedging Cost Monitor

- Realised volatilities increased in January on the back of market uncertainty surrounding expectations of potential upcoming rate cuts, nonetheless, remaining well below historical long-term averages.
- The FTSE 100 ended the month with a realised volatility of 9.8%. The same measure stood at 13.1% and 11.3% on the Euro Stoxx 50 and the S&P 500, respectively.
- Volatility risk premiums on major indices increased in January. The FTSE 100 had a volatility risk premium of 0.3% at month-end. The volatility risk premium on the Euro Stoxx 50 and the S&P 500 1.2% and 1.3%, respectively.
- The change in spread between implied volatility of 2-year and 30-day at-the-money options was mixed but remained positive for all major indices at month-end.



Actual realised equity volatility is measured by the weighted standard deviation of 1 month daily index change. The Exponentially Weighted Moving Average (EWMA) methodology places more importance to the recent returns in the calculation of the volatility.

Volatility Risk Premium is estimated as the difference between 30-day implied volatility and projected realised volatility. This reflects the additional cost of hedging from purchasing a basket of options, in comparison to managing a dynamic delta hedge with futures (ignoring rolling transaction costs).

Volatility Term Premium is calculated as the difference between the implied volatility of an at-the-money 2-year maturity option and the implied volatility of an at-the-money 30-day option. This gives an indication of market demand for protection over the longer term, relative to demand for protection in the shorter-term. Bloomberg as the source of the data interpolates between listed options to provide implied volatility data for these fixed terms.



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