Market Price Monitor

Local Equity Markets

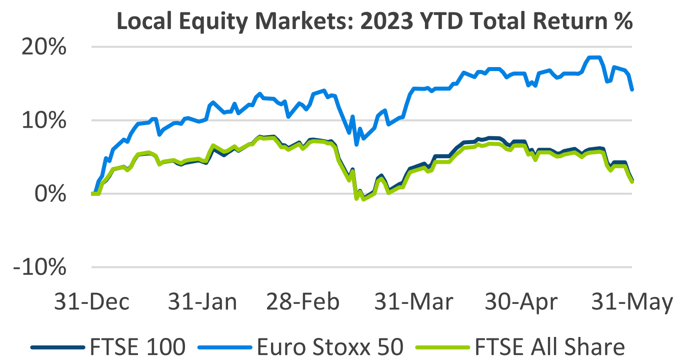
- Global equity markets had a mixed performance in May, with economic indicators showing a mixed picture for global growth
- The FTSE 100 index lost 4.9%, returning 1.8% year-to-date.
- The Euro Stoxx 50 index was down 1.9% in May, gaining 14.2% year-to-date.

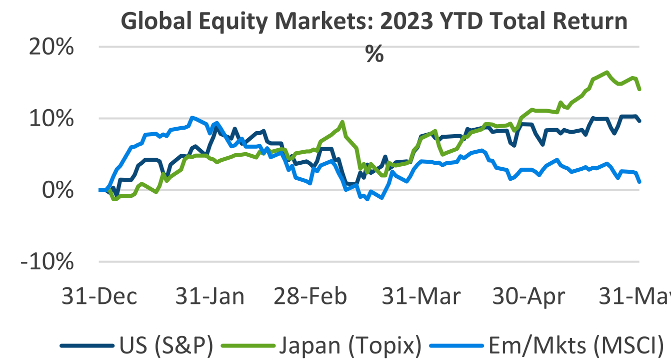
Global Equity Markets

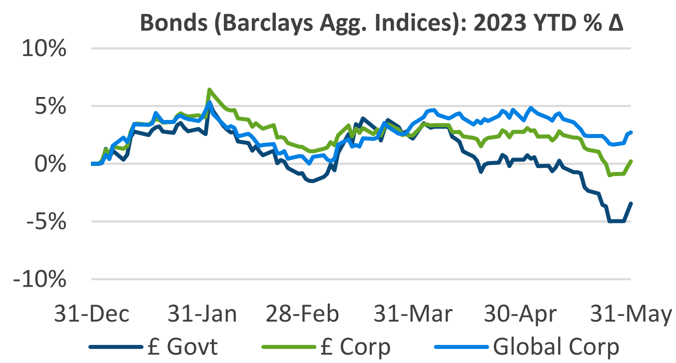
- Developed market equities outperformed their emerging market counterparts, with the S&P 500 up 0.4% and the Topix index gaining 3.6%. Meanwhile, the MSCI Emerging Markets index was down 1.7%.

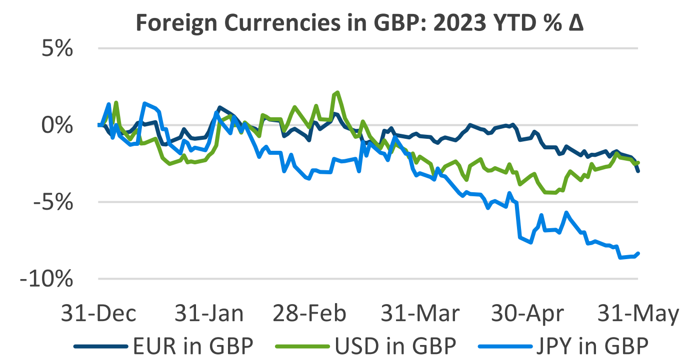
Bond/FX Markets

- Bond markets had a negative performance in May, with the British government bond index down 3.8%, and the British corporate bond index falling by 2.5%.
- The global corporate bond index lost 1.9%.
- The British Pound had a mixed performance in May, losing 1.5% against the US dollar, but gained 2.0% and 1.1% against the Euro and the Japanese Yen, respectively.









Total Returns as of May 31, 2023

	FTSE 100	FTSE All Share	Euro Stoxx 50	US (S&P)	Japan (Topix)	Em/Mkts (MSCI)	£ Govt	£ Corp	Global Corp	EUR in GBP	USD in GBP	JPY in GBP
1 Month	-4.9%	-4.6%	-1.9%	0.4%	3.6%	-1.7%	-3.8%	-2.5%	-1.9%	-2.0%	1.5%	-1.1%
3 Month	-4.1%	-4.2%	1.9%	5.7%	8.2%	0.2%	-2.6%	-1.2%	2.0%	-2.0%	-2.3%	-5.1%
1 Year	1.7%	0.4%	15.1%	2.9%	14.5%	-8.1%	-16.8%	-8.9%	-2.4%	1.0%	1.9%	-6.3%
YTD	1.8%	1.6%	14.2%	9.6%	14.1%	1.2%	-3.4%	0.2%	2.7%	-3.0%	-2.5%	-8.4%

Insurance Monitor

Solvency II Risk Free Rates

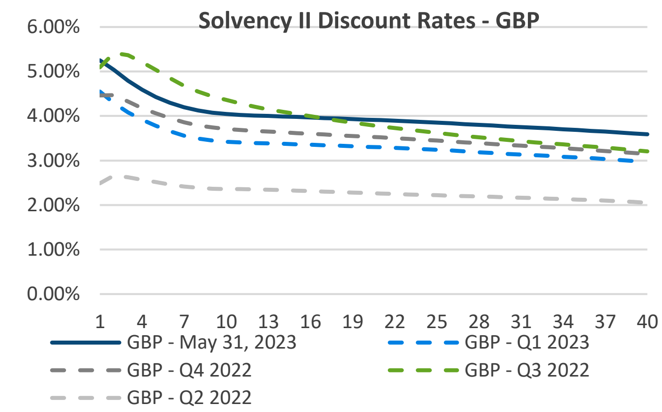
- There was a largely uniform shift up in the GBP risk-free rates of between 35-50 basis points, on the back of heightened market expectation of future rate rises.
- Movement in the EUR risk-free curve was fairly muted this month, with the movements being in the single digits.
- The EUR CRA was unchanged and remains floored at 10 basis points.

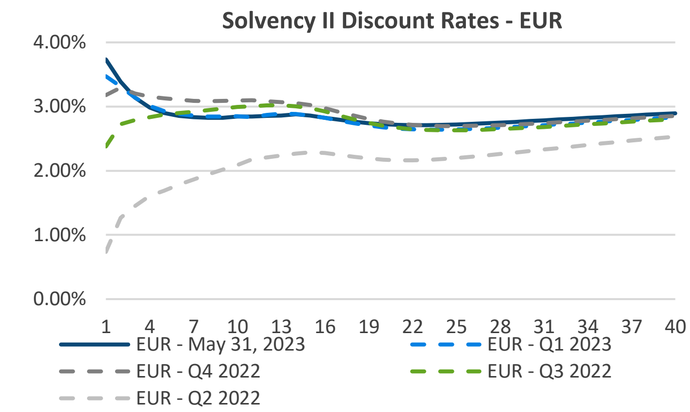
The **Solvency II risk-free discount rates** are calculated independently based on applying the Smith-Wilson Extrapolation to swap rates sourced from Bloomberg and applying the Credit Risk Adjustment as defined in the Technical Specs. For the official published curves please refer to EIOPA and PRA websites.

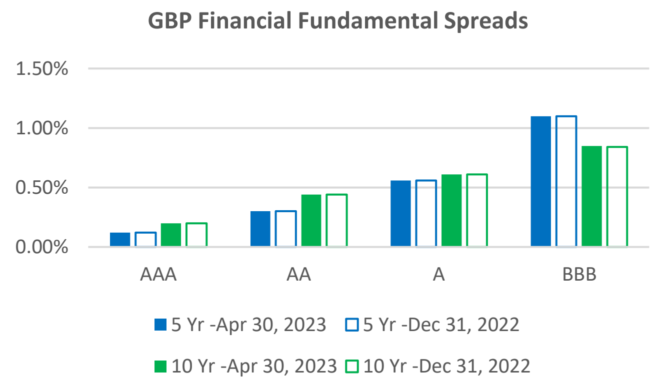
Solvency II Fundamental Spreads

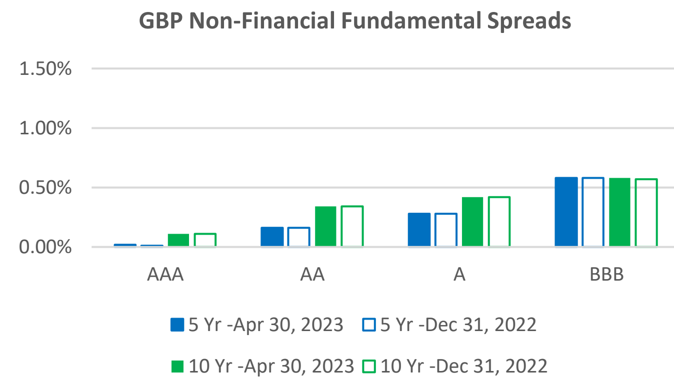
- There were no material changes since the start of the year.

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 non-financial 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 EIOPA website.









Change in GBP Discount Rates (bps)

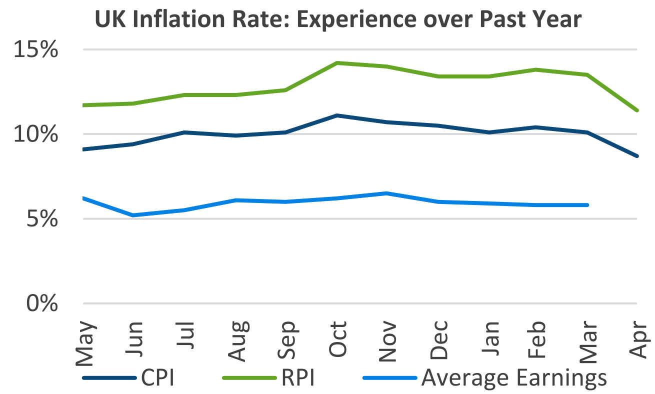
	1Y	Y5	Y10	Y20	Y30
Since Q1 2023	70	65	63	61	62
Since Q4 2022	79	37	34	38	42
Since Q3 2022	16	-61	-32	11	31
Since Q2 2022	276	191	169	165	159

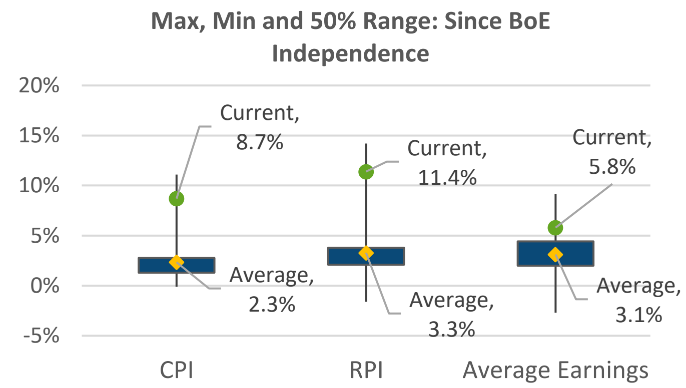
Change in EUR Discount Rates (bps)

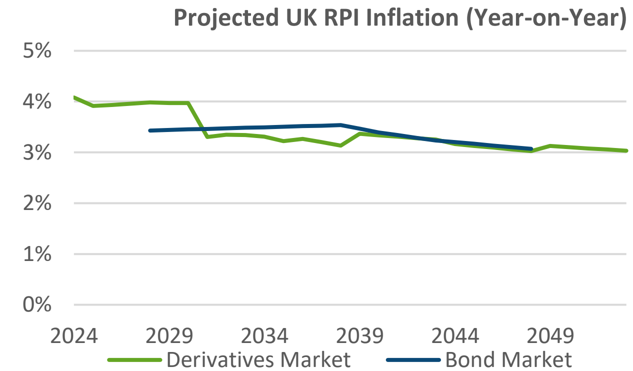
	1Y	Y5	Y10	Y20	Y30	CRA
Since Q1 2023	26	-3	-1	5	8	0
Since Q4 2022	56	-23	-25	-4	4	0
Since Q3 2022	136	3	-15	3	10	0
Since Q2 2022	300	121	76	55	47	0

UK Inflation Monitor

- UK's CPI declined by 140 basis points in April to 8.7%.
- UK's RPI measure decreased by 210 basis points to 11.4% in April.
- According to the ONS: *"Electricity and gas prices contributed to the fall in annual inflation in April as last April's rise dropped out of the annual comparison. Food and non-alcoholic beverage prices continued to rise in April and contributed to high annual inflation."*
- Average earnings were unchanged at 5.8% in March after the previous month's reading was revised lower by 10 basis points.
- UK's Q1 2023 GDP growth came in 40 basis points lower than the previous quarter at 0.2%.
- The projected RPI curve was relatively unchanged from the previous month.





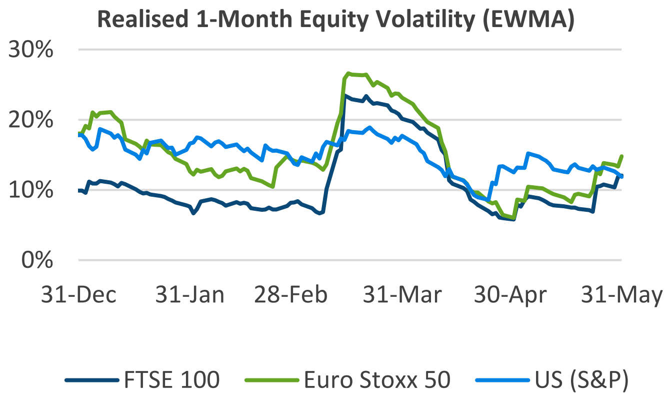


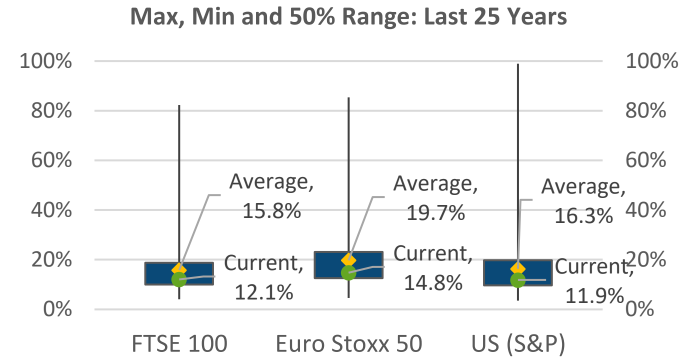
Historical year-on-year inflation rate is assessed by the % change on:
- **Consumer Price Index (CPI)** – measuring the monthly price of a basket of consumer goods and services
- **Retail Price Index (RPI)** – similar to CPI, but the main difference due the addition of mortgage payments, council tax and other housing costs
- **Average Earnings** – measuring the average total weekly employee remuneration over the previous 3 months.

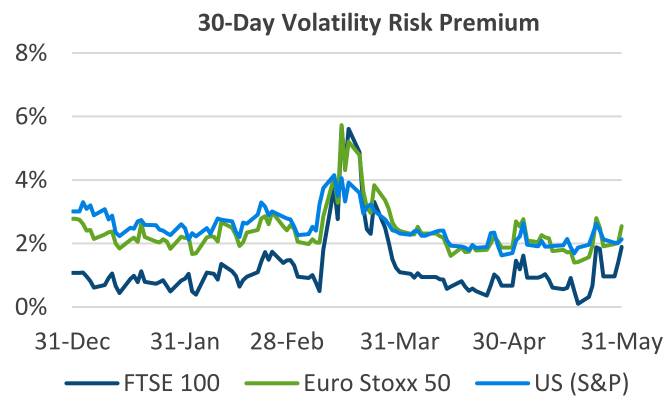
Projection year-on-year inflation rate is the forward rate calculated from market data:
- **Derivatives Market View** – constructed from zero coupon inflation par swap rates against the RPI index at various tenors
- **Bond Market View** – constructed from the difference between the nominal rates implied by the conventional gilts and the real rates implied by the index-linked (RPI) gilts.

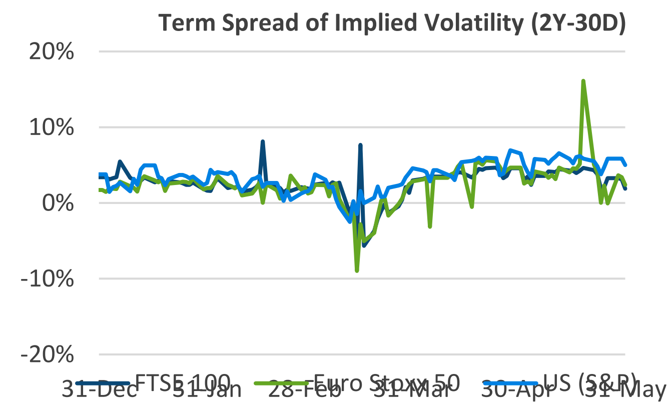
Volatility and Hedging Cost Monitor

- Realised volatilities on major indices increased in May but remain below historical averages.
- The FTSE 100 ended the month with a realised volatility of 12.1%. The same measure stood at 14.8% and 11.9% on the Euro Stoxx 50 and the S&P 500, respectively.
- Volatility risk premiums on major indices also increased in May. The FTSE 100 had a volatility risk premium of 1.9% at month-end. The volatility risk premium on the Euro Stoxx 50 and the S&P 500 was 2.5% and 2.1%, respectively.
- The spread between implied volatility of 2-year and 30-day at-the-money options on major indices declined towards the end of the month but remained in positive territory.









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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