

Data sources: Bloomberg; Barclays; EIOPA; PRA; ONS; Milliman FRM

## Market Price Monitor

### Local Equity Markets

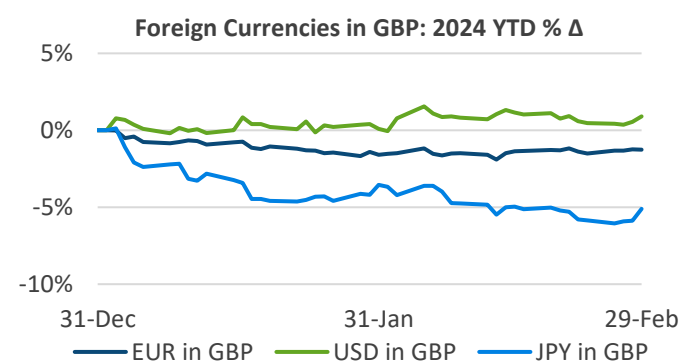
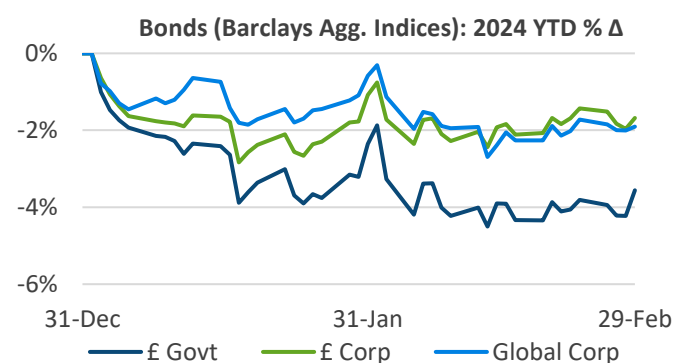
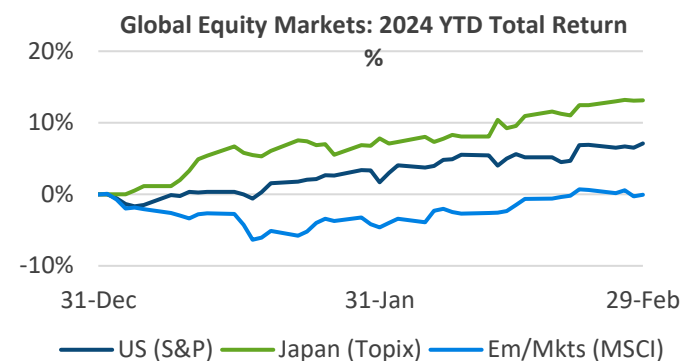
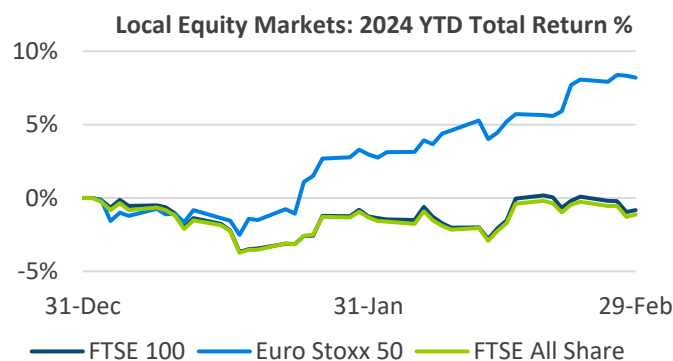
- The performance of major global equity markets was positive in February, driven by both strong earnings reports and robust macro-economic indicators.
- The FTSE 100 index gained 0.5% in February, losing 0.8% year-to-date.
- The Euro Stoxx 50 index was up 5.1% in February, returning 8.2% year-to-date.

### Global Equity Markets

- The S&P 500 ended the month up 5.3%, and the Topix index gained 4.9%.
- The MSCI Emerging Markets index gained 4.8%.

### Bond/FX Markets

- The British government and corporate bond indices both declined, losing 1.2% and 0.6%, respectively.
- The British Pound had a mixed performance in February, losing 0.3% against the Euro and 0.8% against the US Dollar. Meanwhile, the British Pound gained 1.6% against the Japanese Yen.



### Total Returns as of February 29, 2024

	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	0.5%	0.2%	5.1%	5.3%	4.9%	4.8%	-1.2%	-0.6%	-1.3%	0.3%	0.8%	-1.6%
3 Month	3.0%	3.3%	11.7%	12.0%	12.9%	3.9%	2.0%	3.2%	2.3%	-0.8%	0.0%	-1.1%
1 Year	0.8%	0.6%	18.9%	30.5%	37.6%	9.2%	0.7%	6.4%	6.8%	-2.3%	-4.1%	-13.1%
YTD	-0.8%	-1.1%	8.2%	7.1%	13.1%	-0.1%	-3.6%	-1.7%	-1.9%	-1.3%	0.9%	-5.1%

## Milliman Financial Risk Management

London Market Monitor – 29 February 2024

Data sources: Bloomberg; Barclays; EIOPA; PRA; ONS; Milliman FRM

### Insurance Monitor

#### Solvency II Risk Free Rates

- GBP risk-free rates increased for all tenors in February.
- The 5 and 10-year GBP risk-free rates increased by 38 and 24 basis points, respectively.
- Similarly, EUR risk-free rates increased for all tenors.
- The 5 and 10-year EUR risk-free rates increased by 29 and 16 basis points, respectively.
- The EUR CRA was unchanged and remains floored at 10 basis points.

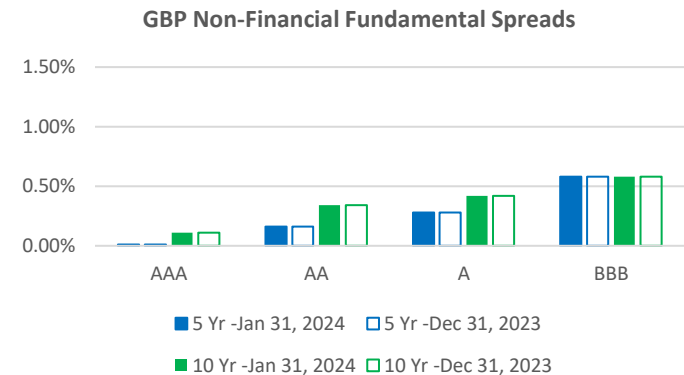
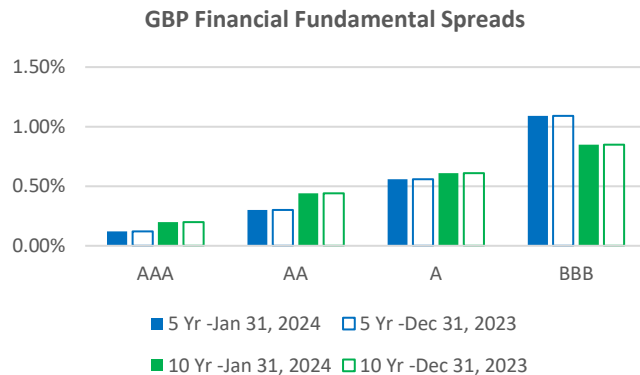
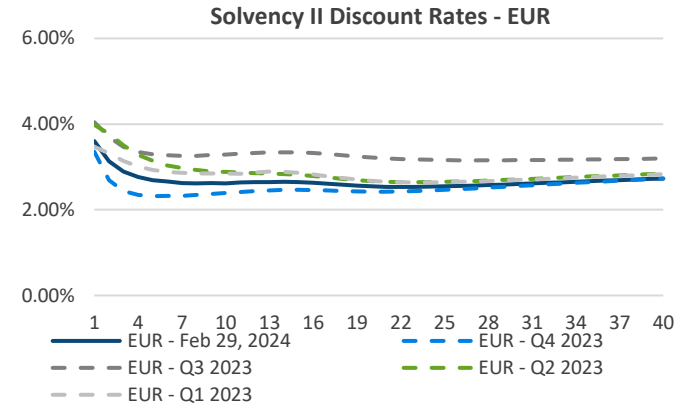
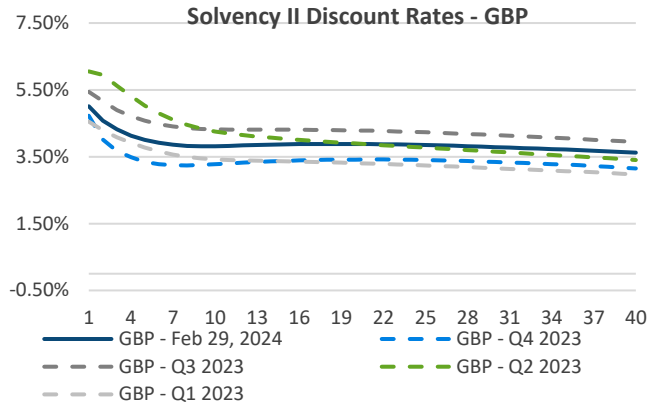
The **Solvency II risk-free discount rates** are calculated independently based on applying the Smith-Wilson Extrapolation to swap rates sourced from Bloomberg and applying the Credit Risk Adjustment as defined in the Technical Specs. For the official published curves please refer to [EIOPA](#) and [PRA](#)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

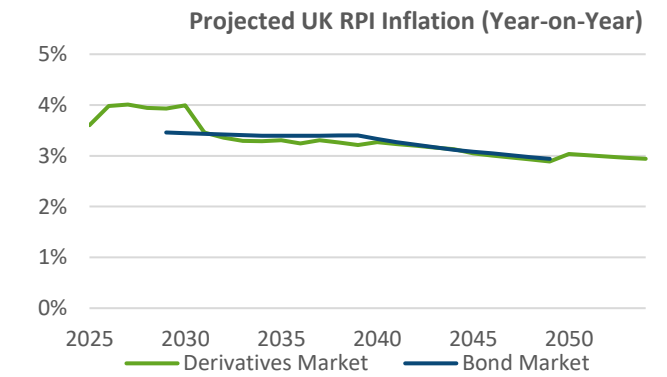
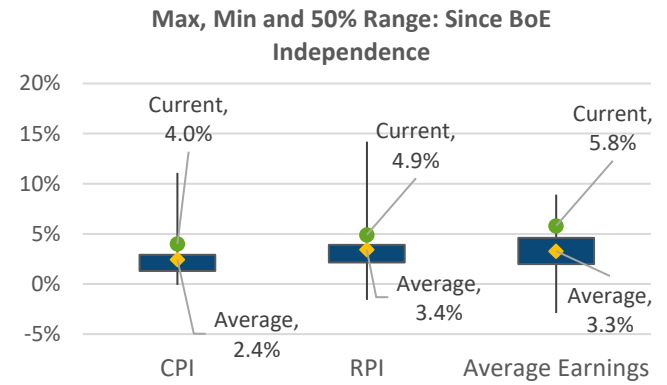
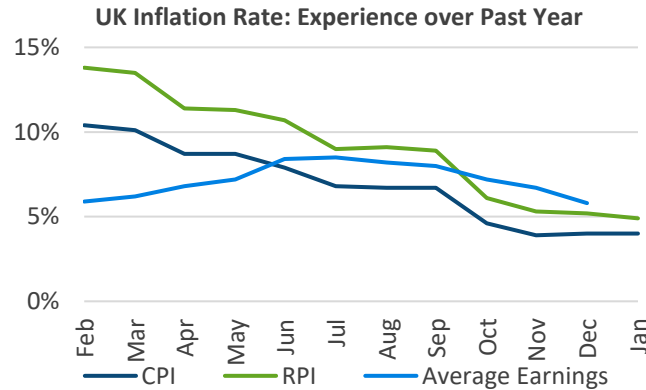


	1Y	Y5	Y10	Y20	Y30
Since Q4 2023	28	65	54	46	44
Since Q3 2023	-43	-58	-50	-41	-36
Since Q2 2023	-104	-103	-44	-2	14
Since Q1 2023	46	22	40	57	64

	1Y	Y5	Y10	Y20	Y30	CRA
Since Q4 2023	25	37	23	13	5	0
Since Q3 2023	-44	-60	-67	-67	-56	0
Since Q2 2023	-38	-45	-27	-12	-11	0
Since Q1 2023	13	-24	-23	-13	-9	0

UK Inflation Monitor

- UK's CPI remained unchanged in January at 4.0%.
- UK's RPI measure decreased by 30 basis points to 4.9% in January.
- 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 90 basis points to 5.8% in December, after the previous month's figure was revised higher by 20 basis points.
- The projected RPI curve was slightly higher in comparison to the previous month.



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

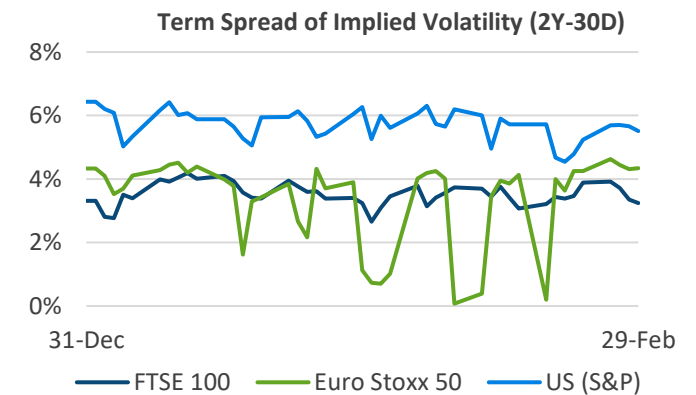
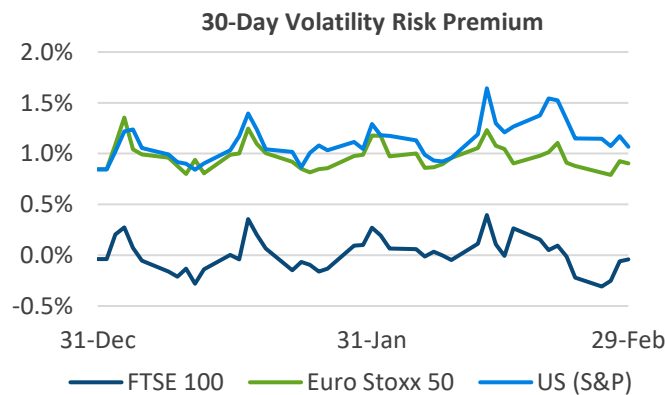
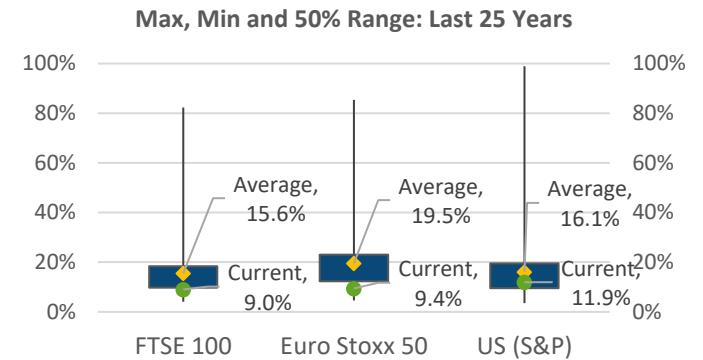
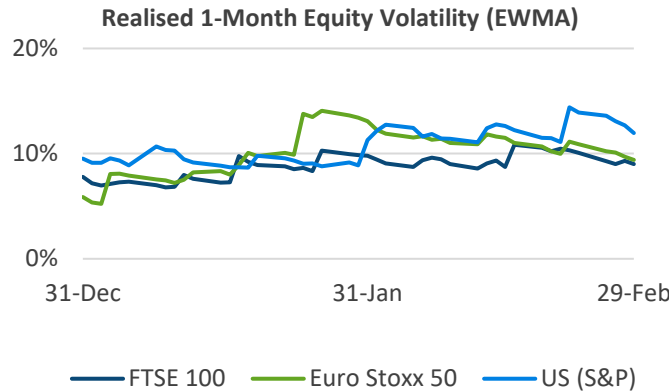
- **Consumer Price Index (CPI)** – measuring the monthly price of a basket of consumer goods and services
- **Retail Price Index (RPI)** – similar to CPI, but the main difference due the addition of mortgage payments, council tax and other housing costs
- **Average Earnings** – measuring the average 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 decreased in February for the Euro Stoxx and FTSE 100, but increased for the S&P 500, remaining well below historical long-term averages.
- The FTSE 100 ended the month with a realised volatility of 9.0%. The same measure stood at 9.4% and 11.9% on the Euro Stoxx 50 and the S&P 500, respectively.
- Volatility risk premiums on major indices decreased in February. The FTSE 100 had a volatility risk premium of 0.0% at month-end. The volatility risk premium on the Euro Stoxx 50 and the S&P 500 were at 0.9% and 1.1%, 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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