

Market Price Monitor

Local Equity Markets

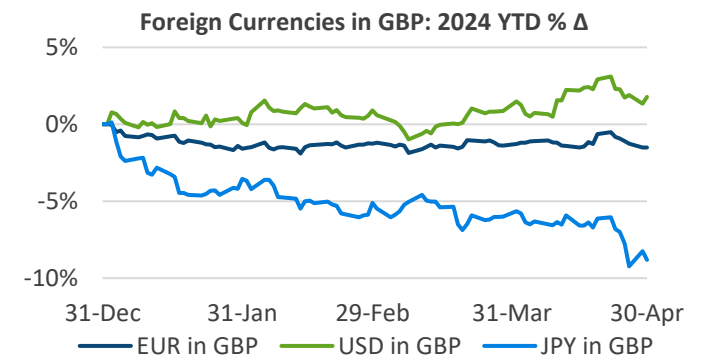
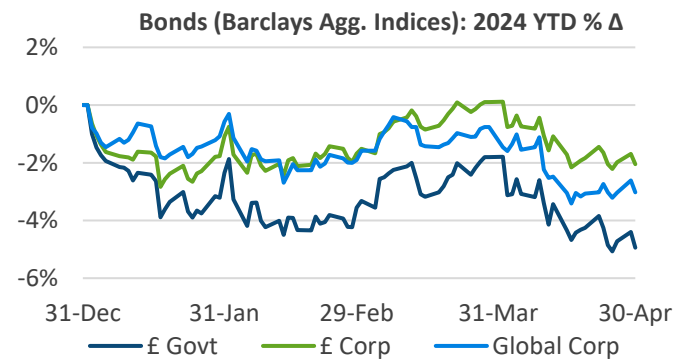
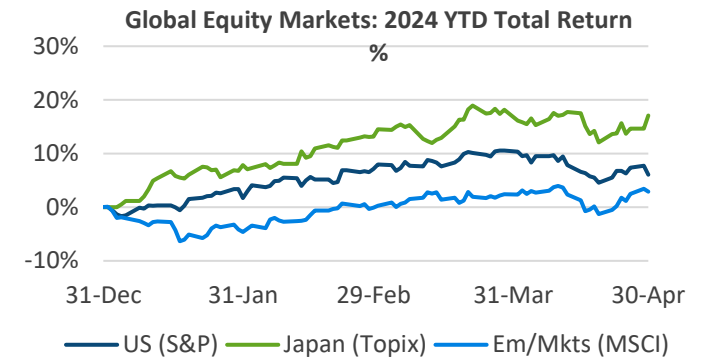
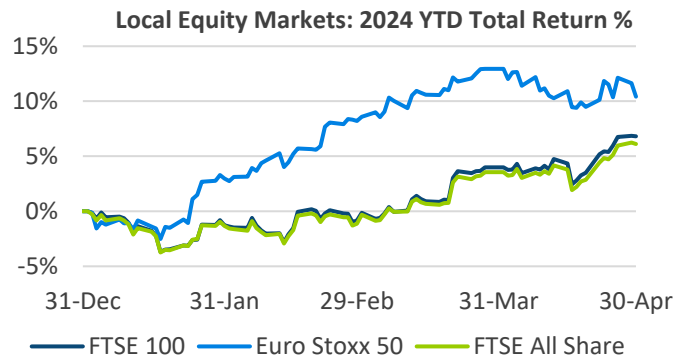
- The performance of major global equity markets was mixed in April, predominantly influenced by sticky inflation data that tempered investor sentiment.
- The FTSE 100 index gained 2.7% in April, as higher commodity and energy prices supported the index.
- The Euro Stoxx 50 index was down 2.2% in April, returning 10.4% year-to-date.

Global Equity Markets

- The S&P 500 ended the month down 4.1%, and the Topix index lost 0.9%.
- The MSCI Emerging Markets index gained 0.5%.

Bond/FX Markets

- The British government and corporate bond indices both declined, losing 3.2% and 2.2%, respectively.
- The British Pound had a mixed performance in April, gaining 3.0% against the Japanese Yen. Meanwhile, losing 0.9% against the US Dollar.



	Total Returns as of April 30, 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	2.7%	2.5%	-2.2%	-4.1%	-0.9%	0.5%	-3.2%	-2.2%	-2.3%	-0.1%	0.9%	-3.0%
3 Month	8.2%	7.5%	7.2%	4.3%	8.6%	7.9%	-2.7%	-1.0%	-2.5%	0.1%	1.7%	-5.5%
1 Year	7.7%	7.5%	16.9%	22.7%	36.4%	10.3%	-1.9%	4.7%	1.5%	-2.6%	0.5%	-13.1%
YTD	6.8%	6.1%	10.4%	6.0%	17.1%	2.9%	-4.9%	-2.0%	-3.0%	-1.5%	1.8%	-8.8%

Milliman Financial Risk Management

London Market Monitor – 30 April 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 April.
- The 5 and 10-year GBP risk-free rates rose by 44 and 41 basis points, respectively.
- Similarly, EUR risk-free rates increased for all tenors.
- The 5 and 10-year EUR risk-free rates increased by 30 and 28 basis points, respectively.
- The EUR CRA was unchanged and remains floored at 10 basis points.

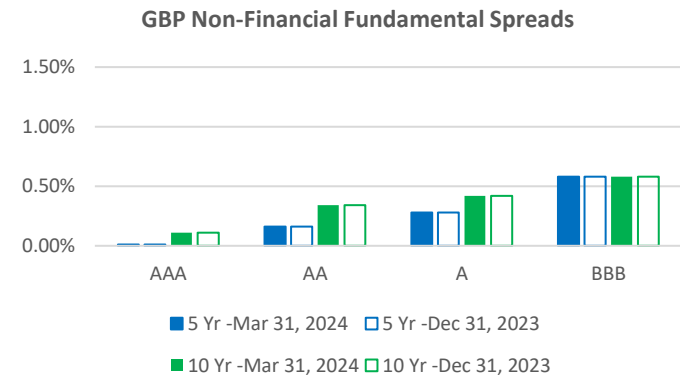
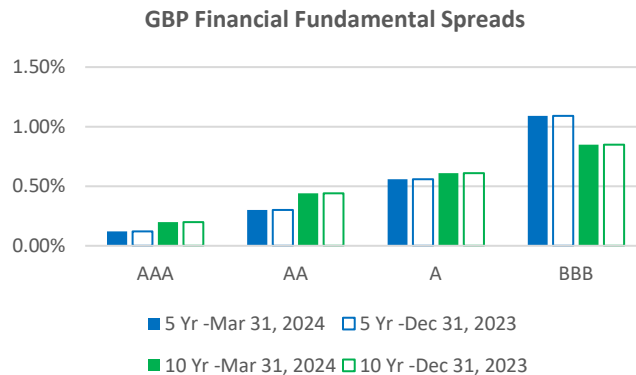
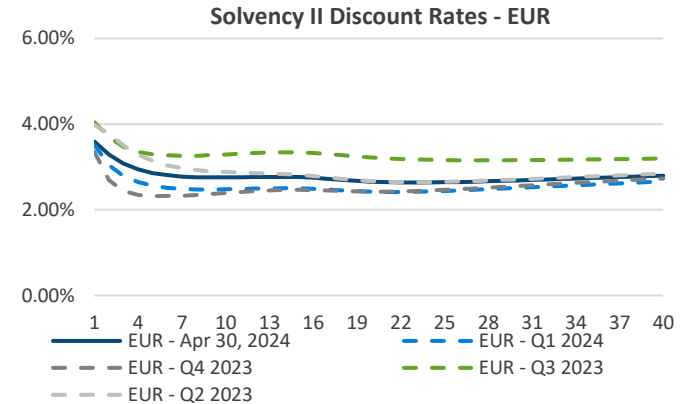
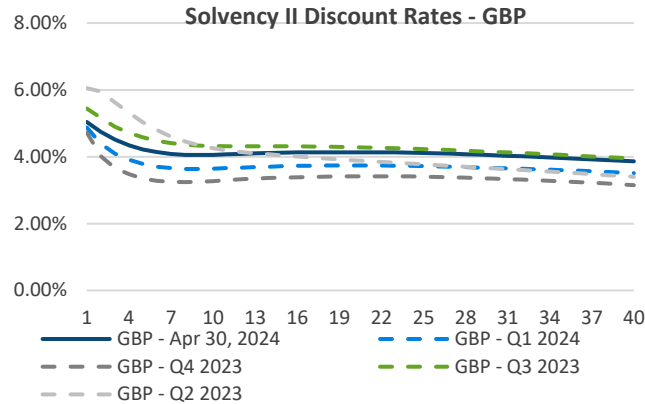
The **Solvency II risk-free discount rates** are calculated independently based on applying the Smith-Wilson Extrapolation to swap rates sourced from Bloomberg and applying the Credit Risk Adjustment as defined in the Technical Specs. For the official published curves please refer to [EIOPA](#) and [PRA](#)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



	Change in GBP Discount Rates (bps)				
	1Y	Y5	Y10	Y20	Y30
Since Q1 2024	16	44	41	39	38
Since Q4 2023	31	87	79	72	70
Since Q3 2023	-40	-36	-26	-15	-10
Since Q2 2023	-101	-81	-20	24	39

	Change in EUR Discount Rates (bps)					
	1Y	Y5	Y10	Y20	Y30	CRA
Since Q1 2024	8	30	28	23	18	0
Since Q4 2023	24	54	36	24	13	0
Since Q3 2023	-45	-44	-53	-56	-47	0
Since Q2 2023	-39	-29	-13	-1	-2	0

Milliman Financial Risk Management

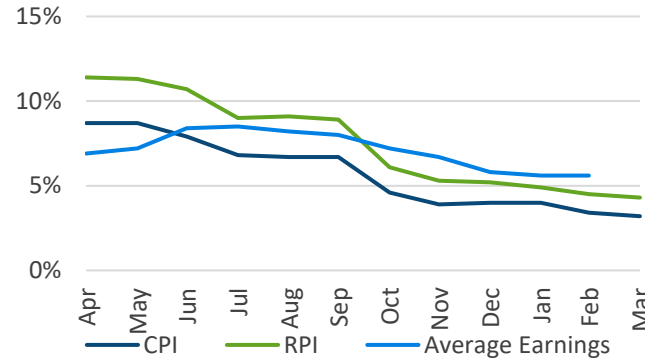
London Market Monitor – 30 April 2024

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

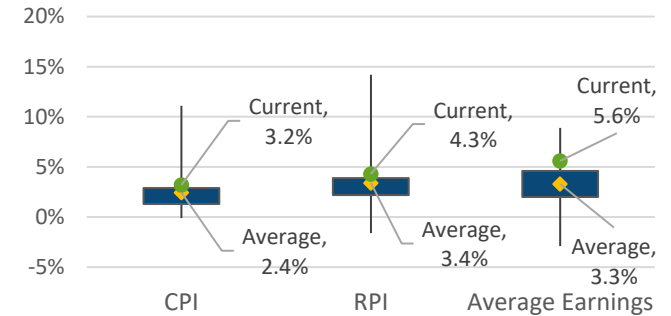
UK Inflation Monitor

- UK's CPI decreased in March to 3.2%, a 20 basis points decline from the previous month.
- UK's RPI measure decreased by 20 basis points to 4.3% in March.
- According to the ONS: *"The largest downward contributions came from food, with prices rising by less than a year ago, while the largest, partially offsetting, upward contribution came from motor fuels, with prices rising this year but falling a year ago."*
- Average earnings remained unchanged at 5.6% in February.
- The projected RPI curve rose at the short-end in comparison to the previous month.

UK Inflation Rate: Experience over Past Year



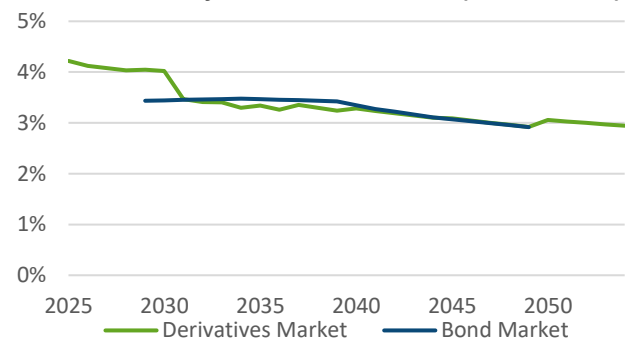
Max, Min and 50% Range: Since BoE Independence



Historical UK GDP Growth (Year-on-Year)



Projected UK RPI Inflation (Year-on-Year)



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

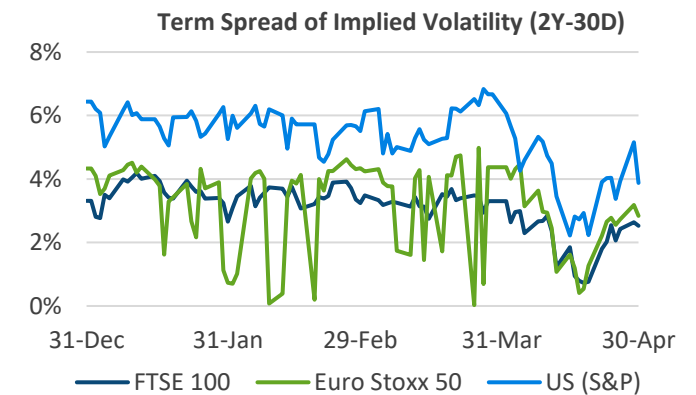
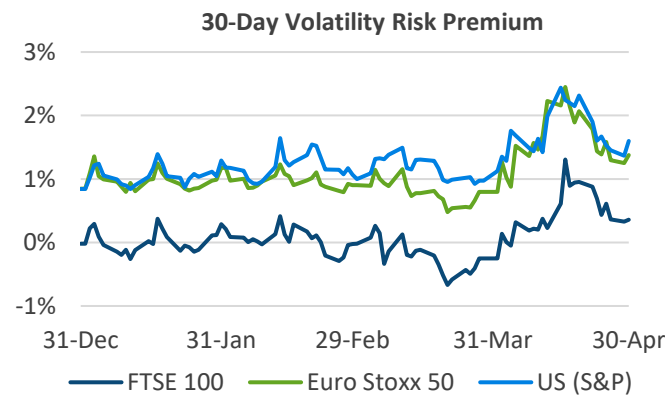
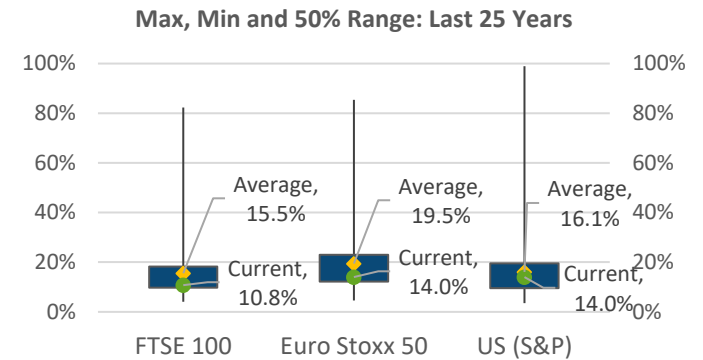
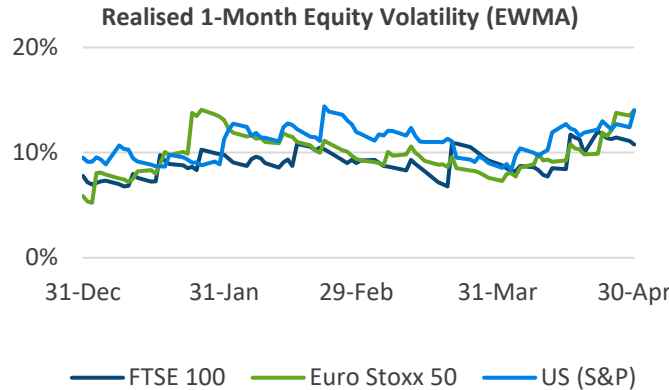
- **Consumer Price Index (CPI)** – measuring the monthly price of a basket of consumer goods and services
- **Retail Price Index (RPI)** – similar to CPI, but the main difference due the addition of mortgage payments, council tax and other housing costs
- **Average Earnings** – measuring the average 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 increased in April for the major global equity markets, though remaining well below historical long-term averages.
- The FTSE 100 ended the month with a realised volatility of 10.8%. The same measure stood at 14.0% on the Euro Stoxx 50 and the S&P 500, respectively.
- Volatility risk premiums on major indices increased in April. The FTSE 100 had a volatility risk premium of 0.4% at month-end. The volatility risk premium on the Euro Stoxx 50 and the S&P 500 were at 1.4% and 1.6%, respectively.
- The change in spread between implied volatility of 2-year and 30-day at-the-money options was mixed but remained positive for the 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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