

**Market Price Monitor**

**Local Equity Markets**

- Global equity markets had a mixed performance in July, as it turned out to be a volatile month on the back of political and economic developments and uncertainties.
- Euro Stoxx 50 ended the month 0.3% down.
- The FTSE 100 was up 2.5%.

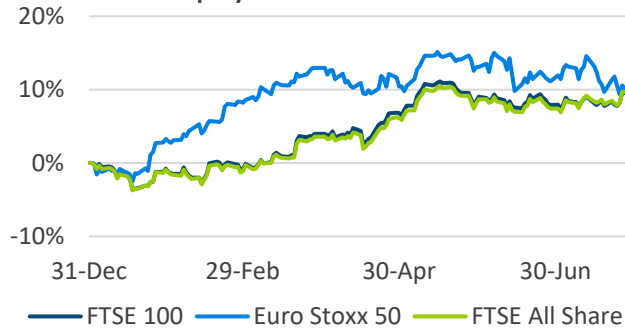
**Global Equity Markets**

- The S&P 500 gained 1.2% in July. In contrast, the Japanese Topix index lost 0.5%.
- The MSCI Emerging Markets index was up 0.4% at month-end.

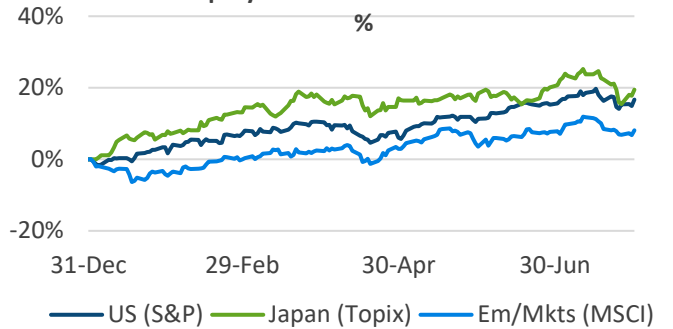
**Bond/FX Markets**

- Both the British government and corporate bond indices made gains for the months, up 1.9% and 1.8%, respectively.
- The British Pound had a mixed performance in July, gaining 0.6% and 1.5% against the Euro and the US Dollar, respectively. Meanwhile, weakening by 5.3% against the Japanese Yen.

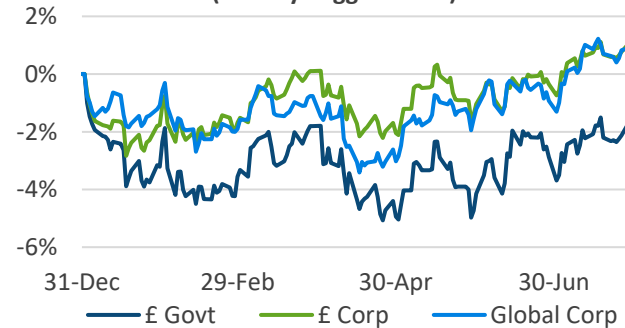
**Local Equity Markets: 2024 YTD Total Return %**



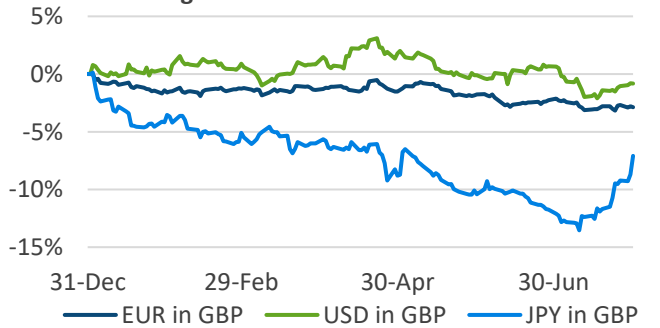
**Global Equity Markets: 2024 YTD Total Return %**



**Bonds (Barclays Agg. Indices): 2024 YTD % Δ**



**Foreign Currencies in GBP: 2024 YTD % Δ**



**Total Returns as of July 31, 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	2.5%	3.1%	-0.3%	1.2%	-0.5%	0.4%	1.9%	1.8%	2.4%	-0.6%	-1.5%	5.3%
3 Month	3.6%	4.4%	0.4%	10.0%	2.1%	5.0%	4.1%	3.6%	4.6%	-1.4%	-2.6%	1.9%
1 Year	13.0%	13.5%	12.6%	22.1%	23.1%	6.7%	5.8%	9.9%	6.4%	-1.6%	0.2%	-5.4%
YTD	10.6%	10.8%	10.8%	16.7%	19.5%	8.1%	-1.1%	1.4%	1.5%	-2.9%	-0.8%	-7.1%

## Milliman Financial Risk Management

London Market Monitor – 31 July 2024

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

### Insurance Monitor

#### Solvency II Risk Free Rates

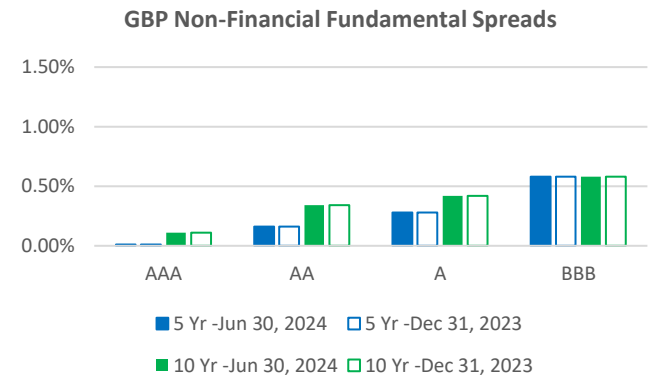
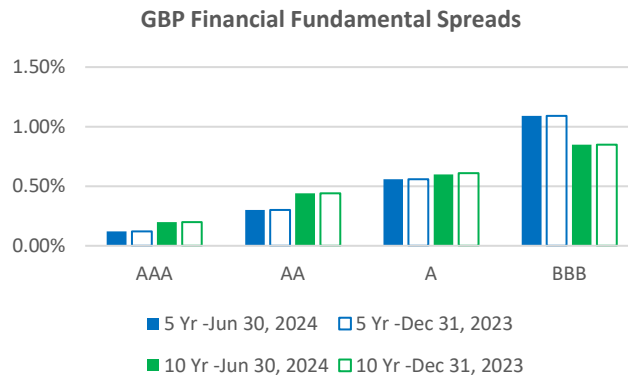
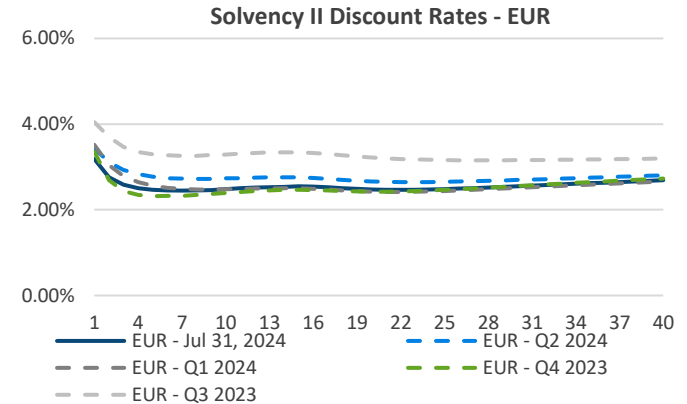
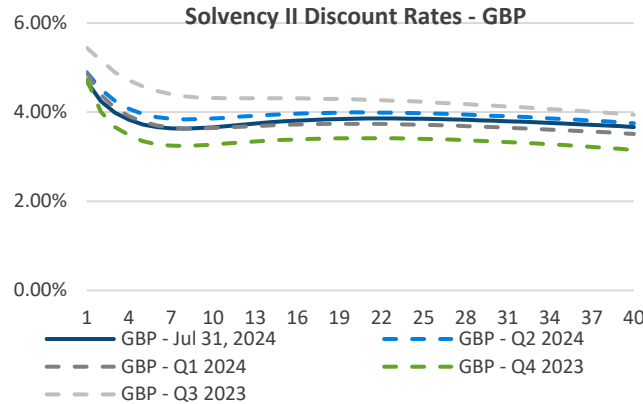
- GBP risk-free rates declined at all terms in July.
- The 1 and 10-year GBP risk-free rates fell by 20 basis points, whilst the 5-year rate decreased by 24 basis points.
- Similarly, EUR risk-free rates fell in July.
- The 1 and 10-year EUR risk-free rates fell by 25 basis points, whilst the 5-year rate decreased by 31 basis points.
- 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.

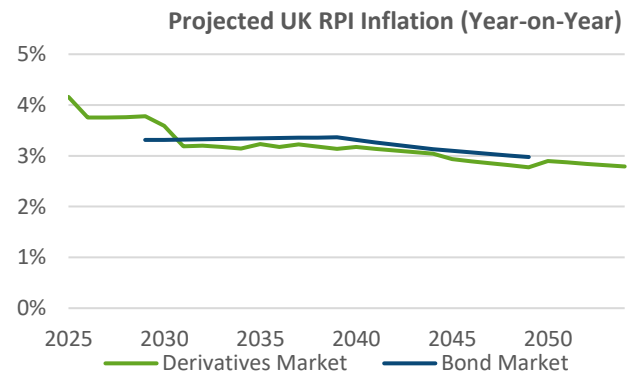
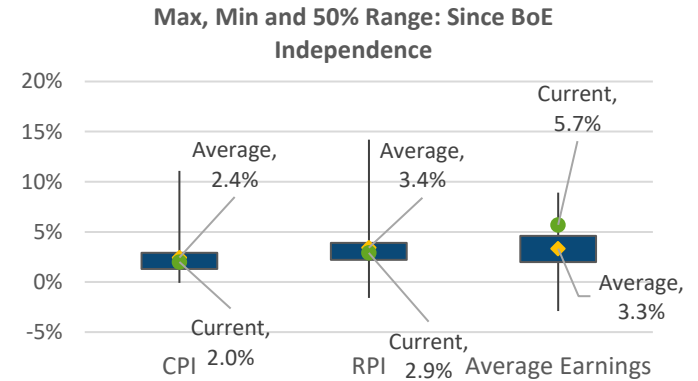
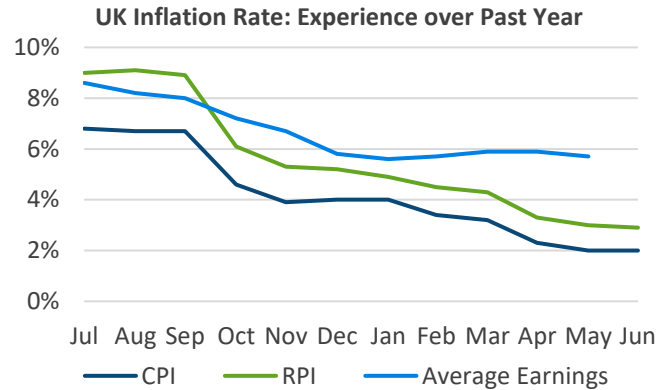


	Change in GBP Discount Rates (bps)				
	1Y	Y5	Y10	Y20	Y30
Since Q2 2024	-20	-24	-20	-14	-11
Since Q1 2024	-18	-6	2	11	14
Since Q4 2023	-4	38	39	44	46
Since Q3 2023	-75	-85	-66	-43	-34

	Change in EUR Discount Rates (bps)					
	1Y	Y5	Y10	Y20	Y30	CRA
Since Q2 2024	-25	-31	-25	-19	-15	0
Since Q1 2024	-33	-9	0	5	4	0
Since Q4 2023	-17	15	9	5	-1	0
Since Q3 2023	-86	-83	-80	-75	-61	0

### UK Inflation Monitor

- UK's CPI remained unchanged at 2.0% in June.
- UK's RPI measure decreased by 10 basis points to 2.9% in June.
- According to the ONS: *“The largest upward contribution came from restaurants and hotels, where prices of hotels rose more than a year ago; the largest downward contribution came from clothing and footwear, with prices of garments falling this year having risen a year ago.”*
- Average earnings fell by 20 basis points to 5.7% in May.
- The projected RPI curve was relatively unchanged from the previous month.



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

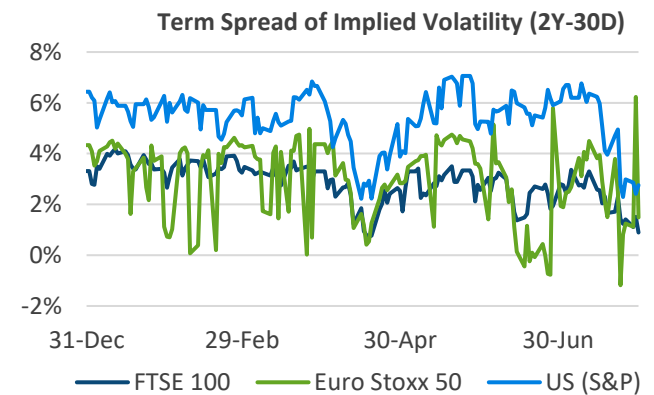
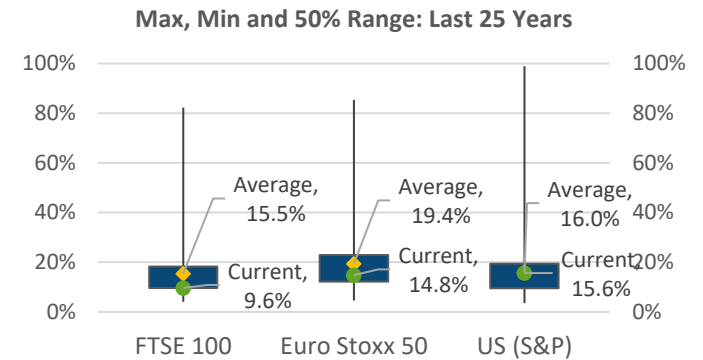
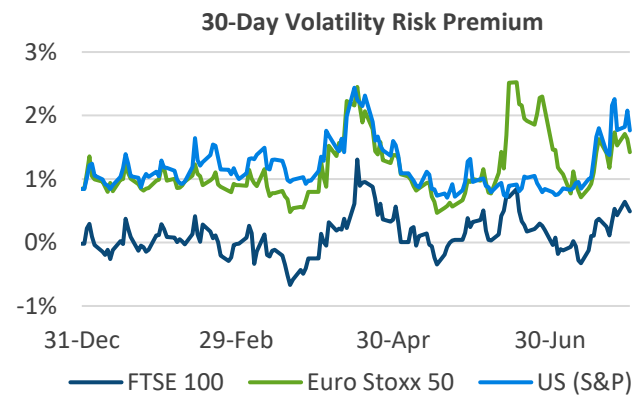
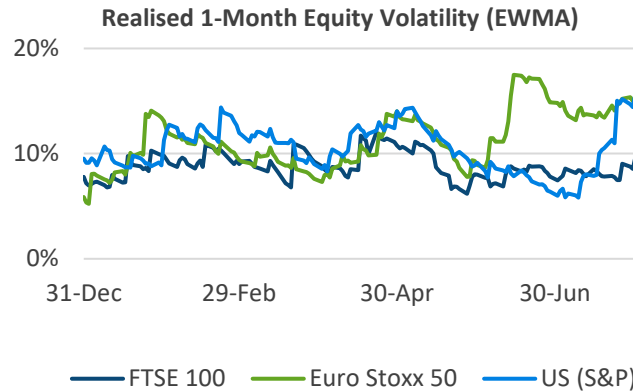
- **Consumer Price Index (CPI)** – measuring the monthly price of a basket of consumer goods and services
- **Retail Price Index (RPI)** – similar to CPI, but the main difference due the addition of mortgage payments, council tax and other housing costs
- **Average Earnings** – measuring the average 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 equity indices increased in July, with the exception of Euro Stoxx 50 which saw its realised volatility remaining relatively unchanged at month-end.
- The FTSE 100 ended the month with a realised volatility of 9.6%. The same measure stood at 14.8% and 15.6% on the Euro Stoxx 50 and the S&P 500, respectively.
- Volatility risk premium on the Euro Stoxx 50 declined, whilst increasing for the other indices. The FTSE 100 had a volatility risk premium of 0.5% at month-end. The volatility risk premium on the Euro Stoxx 50 was 1.4%, and 1.8% on the S&P 500.
- 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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