

Market Price Monitor

Local Equity Markets

- Global equity markets had a positive performance in July, as easing inflation and better than expected GDP data gave investors more confidence of a potential soft landing.
- The Euro Stoxx 50 index was up 1.8% in July, gaining 21.3% year-to-date.
- The FTSE 100 index gained 2.3%, returning 5.7% year-to-date.

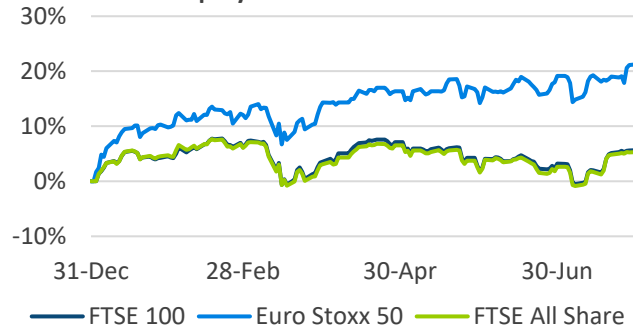
Global Equity Markets

- Developed market equities underperformed their emerging market counterparts in July, with the S&P 500 up 3.2% and the Topix index gaining 1.5%. Meanwhile, the MSCI Emerging Markets index gained 6.3%.

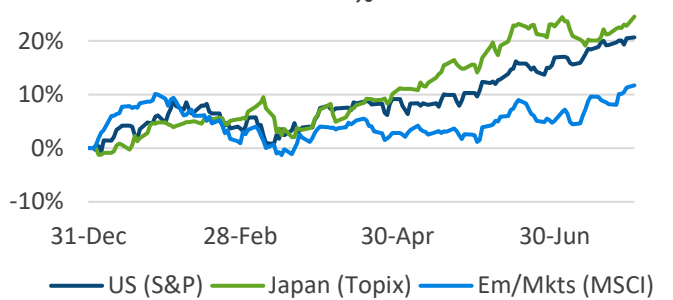
Bond/FX Markets

- Both the British government and corporate bond index increased in July, with the former gaining 0.8% and the latter 2.4%.
- In July the British Pound gained 0.4% against the Euro and 1.2% against the US Dollar but lost 0.3% against the Japanese Yen.

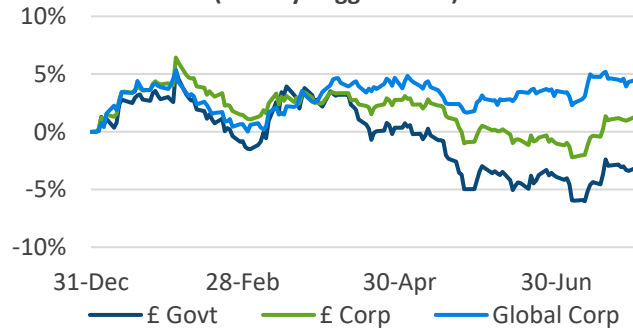
Local Equity Markets: 2023 YTD Total Return %



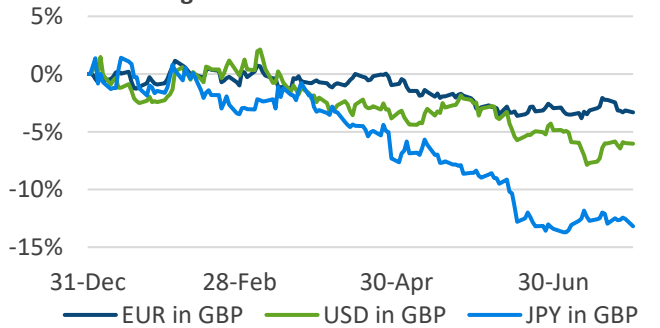
Global Equity Markets: 2023 YTD Total Return %



Bonds (Barclays Agg. Indices): 2023 YTD % Δ



Foreign Currencies in GBP: 2023 YTD % Δ



	Total Returns as of July 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	2.3%	2.6%	1.8%	3.2%	1.5%	6.3%	0.8%	2.4%	1.0%	-0.4%	-1.2%	0.3%
3 Month	-1.3%	-1.2%	4.2%	10.5%	13.1%	8.6%	-3.5%	-1.4%	-0.2%	-2.4%	-2.3%	-6.3%
1 Year	7.8%	6.1%	24.6%	13.0%	23.0%	8.8%	-17.1%	-7.9%	0.2%	2.0%	-5.3%	-11.2%
YTD	5.7%	5.3%	21.3%	20.6%	24.5%	11.7%	-3.1%	1.3%	4.5%	-3.3%	-6.0%	-13.2%

Milliman Financial Risk Management

London Market Monitor – 31 July 2023

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

Insurance Monitor

Solvency II Risk Free Rates

- Short and medium-term risk-free rates decreased in July, whilst the longer-term risk-free rates increased slightly.
- The 1 and 5-year GBP risk-free rates declined by 24 and 27 basis points, respectively. In contrast the 30-year rate increased by 7 basis points.
- The 1-year EUR risk-free rate declined by 14 basis points. Meanwhile the 20-year rate rose by 15 basis points.
- The EUR CRA was unchanged and remains floored at 10 basis points.

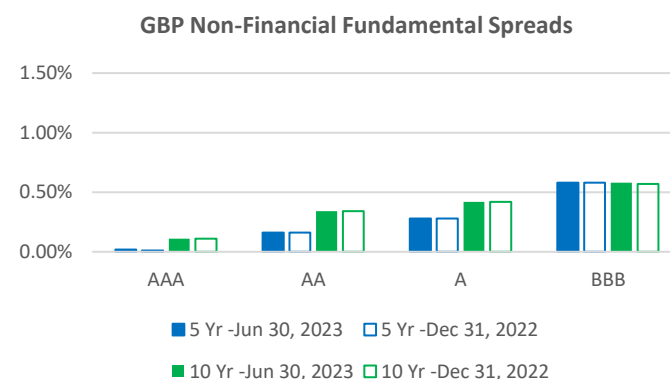
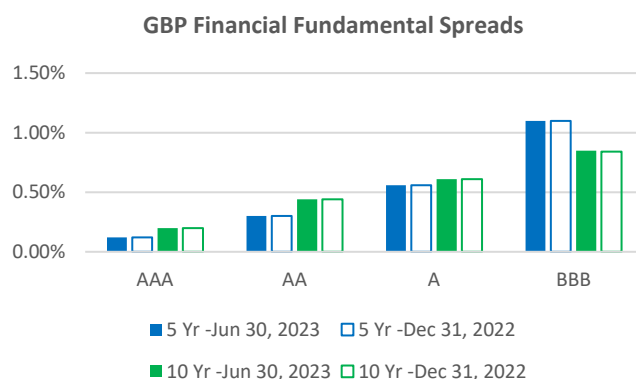
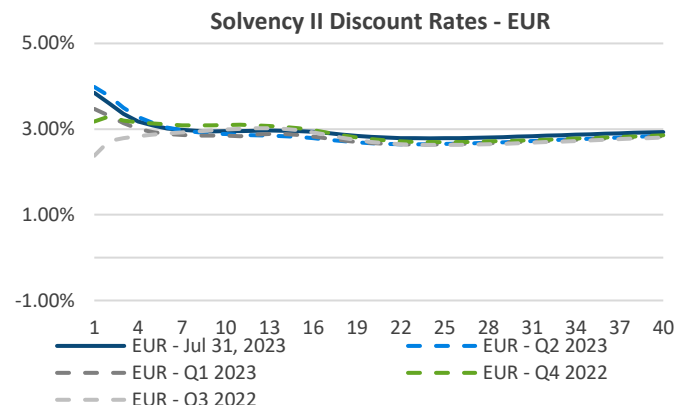
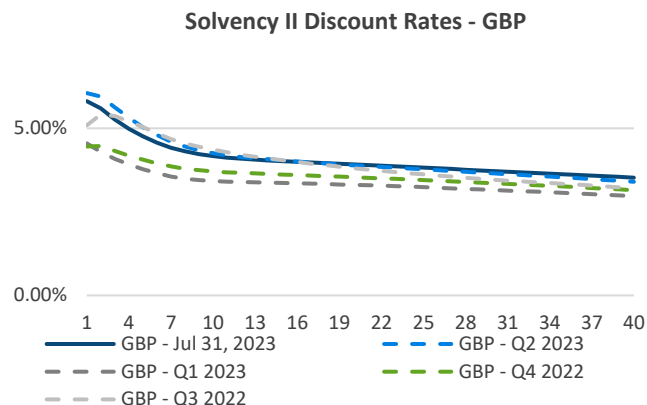
The **Solvency II risk-free discount rates** are calculated independently based on applying the Smith-Wilson Extrapolation to swap rates sourced from Bloomberg and applying the Credit Risk Adjustment as defined in the Technical Specs. For the official published curves please refer to [EIOPA](#) and [PRA](#)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

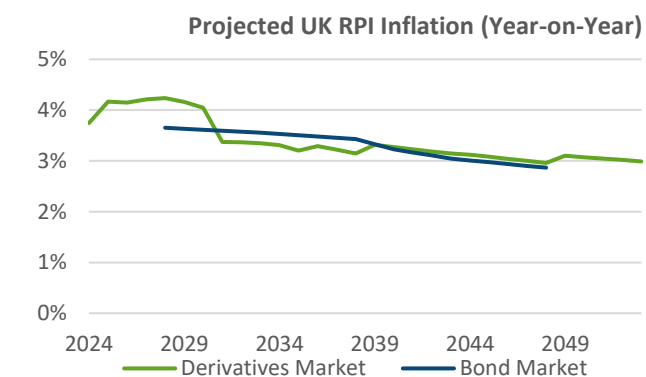
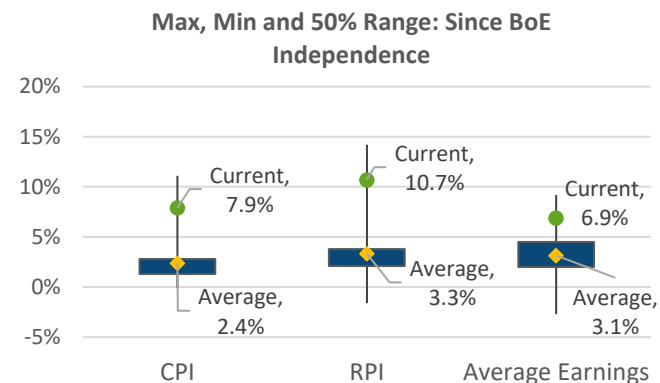
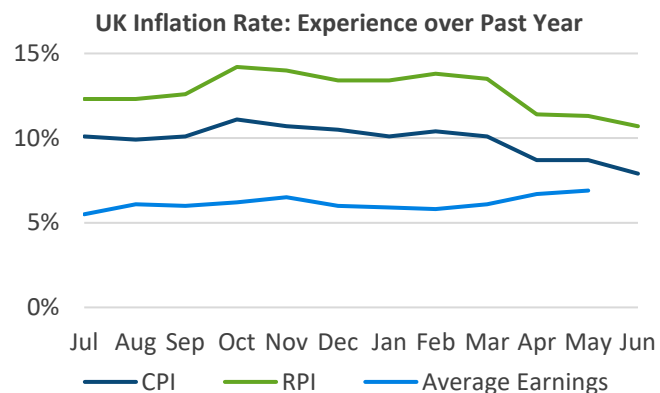


	Change in GBP Discount Rates (bps)				
	1Y	Y5	Y10	Y20	Y30
Since Q2 2023	-24	-27	-9	2	7
Since Q1 2023	126	98	75	61	57
Since Q4 2022	135	70	46	38	37
Since Q3 2022	72	-28	-20	11	26

	Change in EUR Discount Rates (bps)					
	1Y	Y5	Y10	Y20	Y30	CRA
Since Q2 2023	-14	-6	6	15	12	0
Since Q1 2023	38	16	10	14	13	0
Since Q4 2022	67	-4	-14	5	9	0
Since Q3 2022	147	21	-4	12	15	0

UK Inflation Monitor

- UK's CPI declined by 80 basis points in June to 7.9%.
- UK's RPI measure decreased by 60 basis points to 10.7% in June.
- According to the ONS: *"Falling prices for motor fuel led to the largest downward contribution to the monthly change, while food prices rose in June 2023 but by less than in June 2022, also leading to an easing in the rates. There were no large offsetting upward contributions to the change in the rate."*
- Average earnings increased by 20 basis points to 6.9% in May after the previous month's reading was revised higher by 20 basis points.
- The projected RPI curve decreased at the very short end, whilst the rest of the curve saw a marginal increase 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.

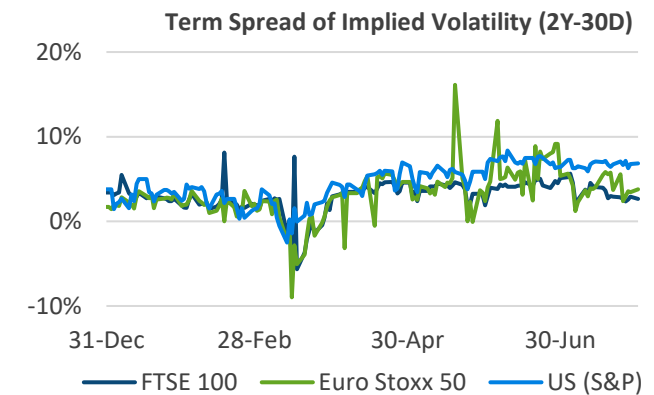
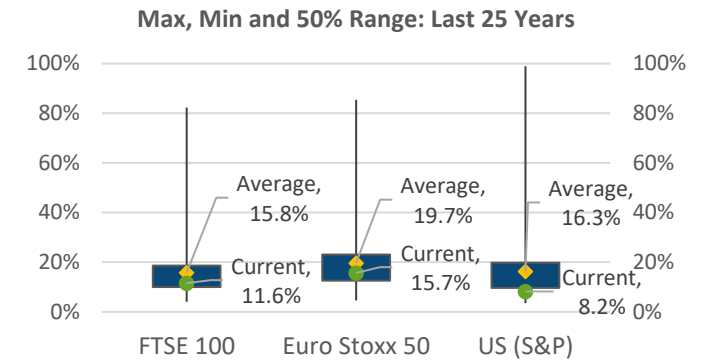
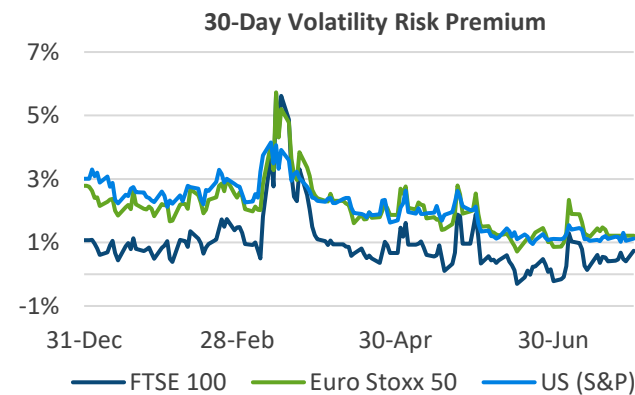
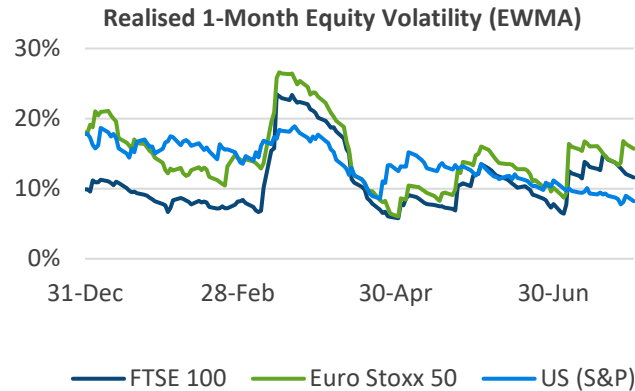
Projection year-on-year inflation rate is the forward rate calculated from market data:

- **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 on major indices increased in July but remain well below historical long-term averages.
- The FTSE 100 ended the month with a realised volatility of 11.6%. The same measure stood at 15.7% and 8.2% on the Euro Stoxx 50 and the S&P 500, respectively.
- Volatility risk premiums on major indices increased in July. The FTSE 100 had a volatility risk premium of 0.7% at month-end. The volatility risk premium on the Euro Stoxx 50 and the S&P 500 was 1.2% 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.

Please contact Milliman for more information on the basis and methodology used for these results.



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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