

Market Price Monitor

Local Equity Markets

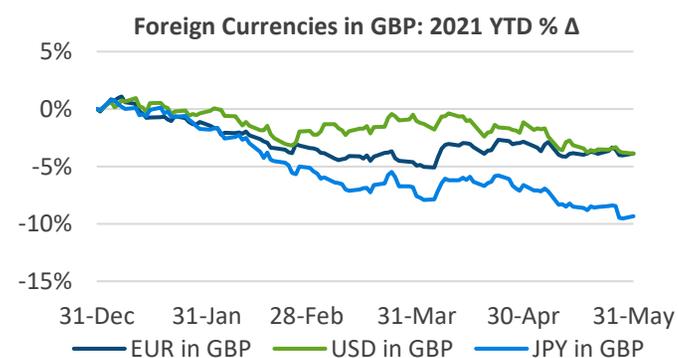
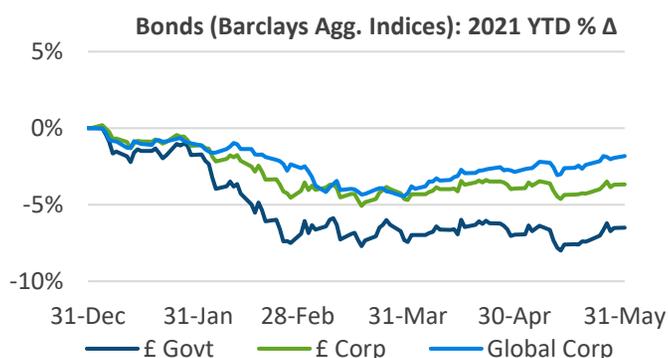
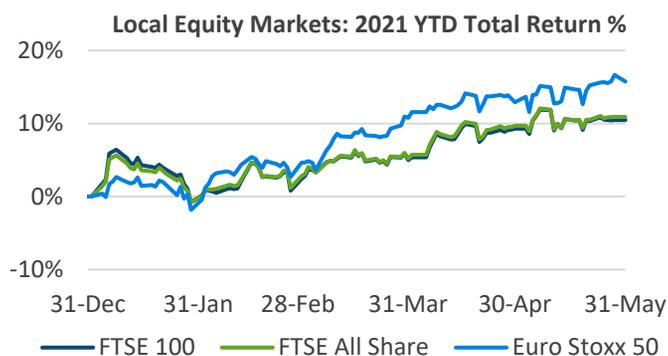
- Equity markets were up again in May. Although movements were somewhat muted given the backdrop of ongoing concerns about inflation. However, on the back of optimism about successful vaccination rollouts, gradual opening of economies and stronger than expected data, most major indices ended the month on a positive note.
- The FTSE 100 gained 1.1%, up 10.5% year-to-date.
- The Euro Stoxx 50 index was one of the best performing indices of the month, returning 2.5%.

Global Equity Markets

- Emerging markets outperformed most developed economies, with the MSCI Emerging Markets index up 2.3%.
- The Japanese Topix gained 1.4%, while the S&P 500 was up 0.7% at month-end.

Bond/FX Markets

- The British government and corporate bond indices gained 0.5% and 0.3%, respectively.
- The global corporate bond index gained 1.1% in May.
- The British Pound had a strong performance, gaining 2.9% against the Japanese Yen and 2.7% against the US Dollar. The Pound was 1.1% stronger against the Euro at month-end.



Total Returns as of May 31, 2021

	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	1.1%	1.1%	2.5%	0.7%	1.4%	2.3%	0.5%	0.3%	1.1%	-1.1%	-2.7%	-2.9%
3 Month	9.6%	9.6%	12.8%	10.7%	4.1%	3.3%	1.1%	0.9%	0.6%	-0.7%	-1.9%	-4.6%
1 Year	19.5%	23.1%	36.4%	40.3%	25.6%	51.5%	-7.7%	3.4%	7.7%	-4.3%	-13.0%	-14.4%
YTD	10.5%	10.9%	15.8%	12.6%	7.6%	7.4%	-6.5%	-3.7%	-1.8%	-3.9%	-3.9%	-9.3%

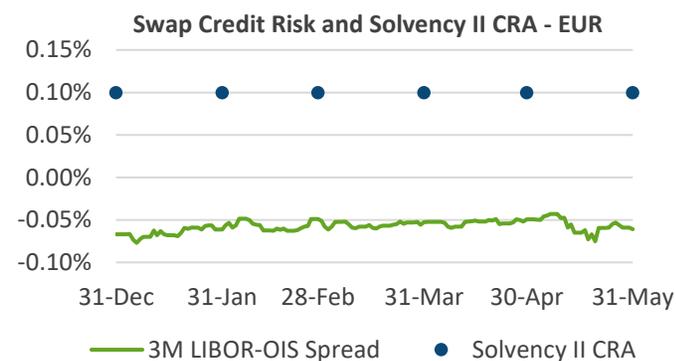
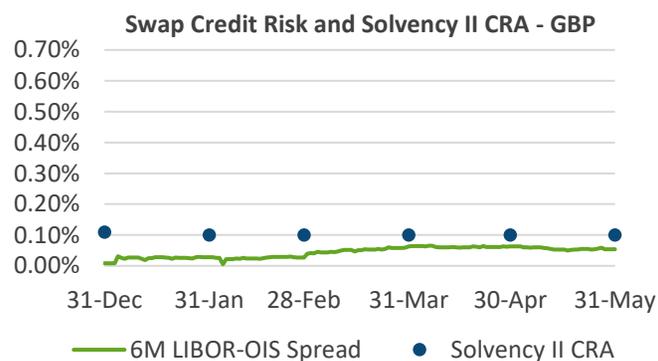
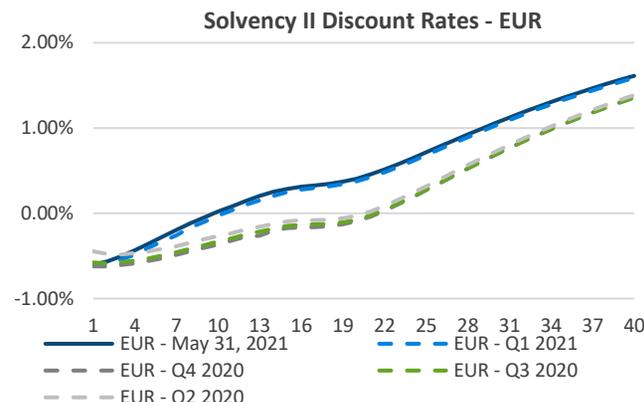
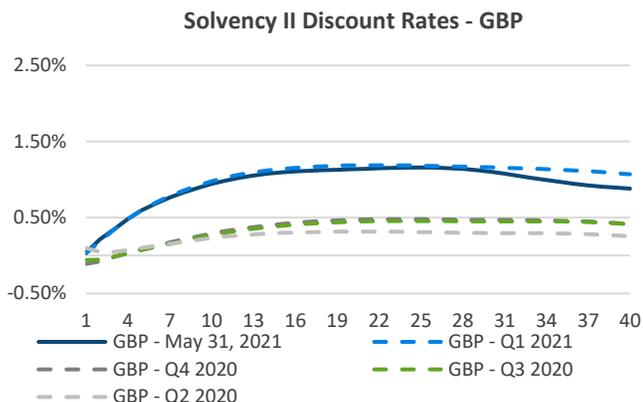
Solvency II Monitor - Rates

Risk Free Rates

- GBP risk-free rates declined at all terms in May, with the exception of the 1-year rate which was unchanged.
- The 10-year GBP risk-free rate fell by 5 basis points, while the 5, 20 and 30-year rates all decreased by 4 basis points.
- Short-term EUR risk-free rates were unchanged during the month. Meanwhile, medium and long-term rates witnessed a decline.
- The 20-year EUR risk-free rate decreased by 4 basis points. The 30-year risk-free rate declined by 3 basis points.

Credit Risk Adjustment

- Both the GBP and EUR CRAs were unchanged and remain floored at 10 basis points.



	Change in GBP Discount and CRA (bps)					
	1Y	Y5	Y10	Y20	Y30	CRA
Since Q1 2021	1	0	-4	-5	-6	0
Since Q4 2020	15	51	65	67	63	-1
Since Q3 2020	10	52	67	69	65	-3
Since Q2 2020	-6	49	71	82	81	-4

	Change in EUR Discount and CRA (bps)					
	1Y	Y5	Y10	Y20	Y30	CRA
Since Q1 2021	1	5	5	3	3	0
Since Q4 2020	2	20	39	50	37	0
Since Q3 2020	-3	17	35	48	37	0
Since Q2 2020	-16	9	29	43	33	0

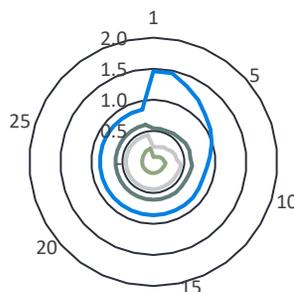
Solvency II Monitor - Spreads

Fundamental Spreads

- There were no material changes since the last report.

Fundamental Spreads %

GBP - Financial

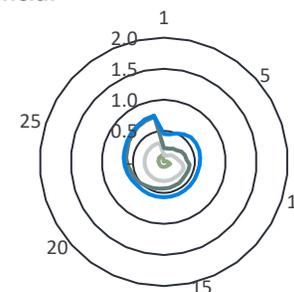


— AAA — AA — A — BBB

GBP Financial Fundamental Spread %					
	1Y	Y5	Y10	Y20	Y30
AAA	0.08	0.12	0.19	0.18	0.22
AA	0.24	0.30	0.44	0.44	0.44
A	0.54	0.57	0.61	0.61	0.61
BBB	1.46	1.13	0.84	0.86	0.86

GBP Financial 'Before Floor' %					
	1Y	Y5	Y10	Y20	Y30
AAA	0.00	0.04	0.08	0.15	0.22
AA	0.04	0.07	0.11	0.19	0.26
A	0.06	0.12	0.20	0.33	0.44
BBB	0.15	0.24	0.34	0.49	0.60

GBP - Non-Financial



— AAA — AA — A — BBB

GBP Non-Financial Fundamental Spread %					
	1Y	Y5	Y10	Y20	Y30
AAA	0.00	0.01	0.11	0.08	0.11
AA	0.11	0.16	0.34	0.31	0.31
A	0.22	0.28	0.42	0.51	0.74
BBB	0.45	0.59	0.57	0.57	0.76

GBP Non-Financial 'Before Floor' %					
	1Y	Y5	Y10	Y20	Y30
AAA	0.00	0.01	0.04	0.07	0.11
AA	0.00	0.04	0.08	0.17	0.25
A	0.04	0.14	0.26	0.51	0.74
BBB	0.11	0.23	0.35	0.57	0.76

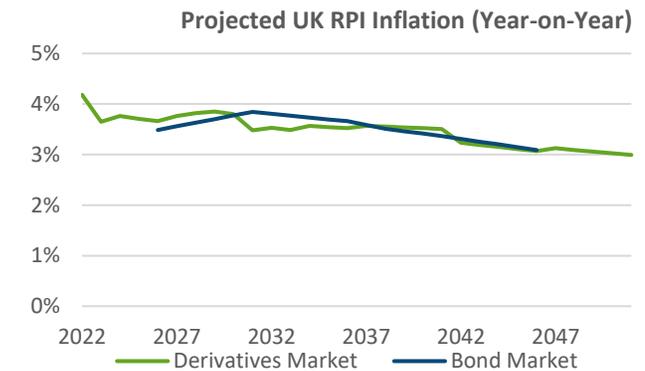
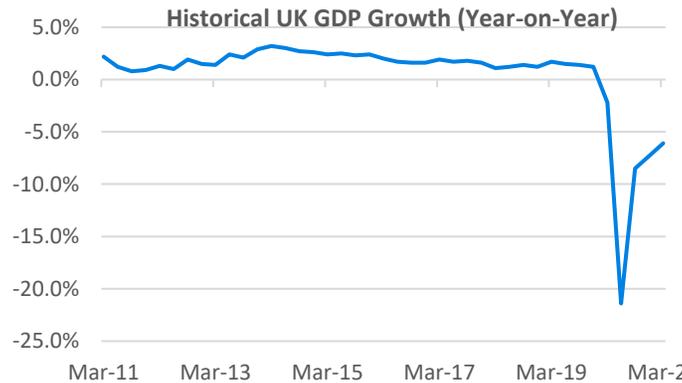
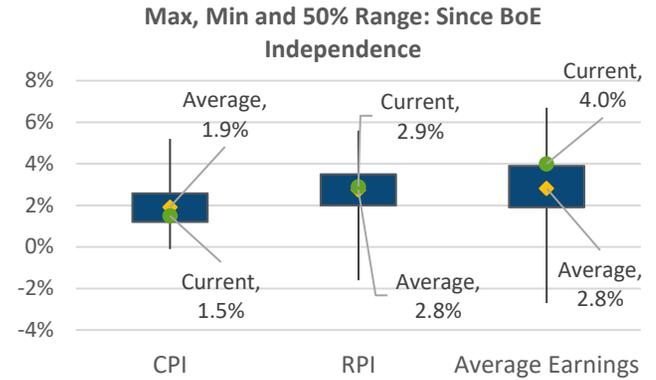
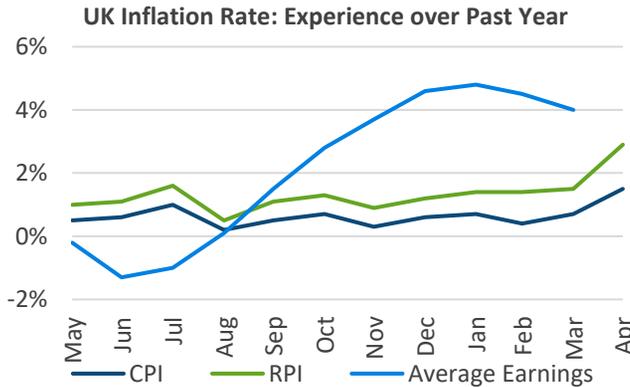
The **Solvency II risk-free discount rates** are based on applying the Smith-Wilson Extrapolation to LIBOR swap rates sourced from Refinitiv and applying the Credit Risk Adjustment as defined in the Technical Specs. The data is provided by EIOPA and as of 31/05/21.

The **Credit Risk Adjustment** is a component of the risk-free discount curve defined by EIOPA. It is calculated from actual experience in the 'LIBOR-OIS' spread (3 months for EUR, 6 months for GBP), and is bounded between 0.10 and 0.35. We show actual LIBOR-OIS spread levels and the defined CRA, for both GBP and EUR.

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 and as of 31/05/21. **Fundamental spread** = maximum (probability of default + cost of downgrade; 35% of long-term average spread). In the tables we show the **'before floor'** measure = probability of default + cost of downgrade.

UK Inflation Monitor

- UK's CPI inflation increased by 80 basis points to 1.5% in April.
- UK's RPI inflation was 2.9% in April, an increase of 140 basis points from the previous month.
- To put the current inflation numbers into perspective, CPI is 0.4% below its long-term average level, and RPI 0.1% above.
- According to the ONS: *"Rising household utility, clothing, and motor fuel prices made the largest upward contributions; these were partially offset by a large downward contribution from recreation and culture."*
- In March, UK's average earnings fell by 50 basis points to 4%.
- The Q1 2021 GDP growth figure for the UK came in at -6.1%, an increase of 120 basis points from the previous quarter.
- The Projected RPI curve increased at the very short end of the curve, pointing to an RPI of over 4% in the near-term. The rest of the curve was broadly unchanged but remains elevated at above 3% for medium to longer terms.



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

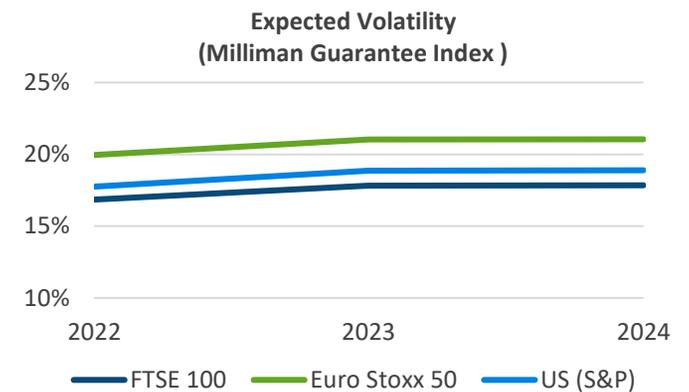
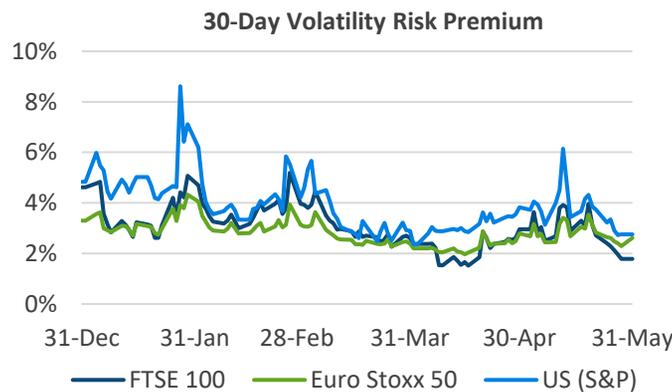
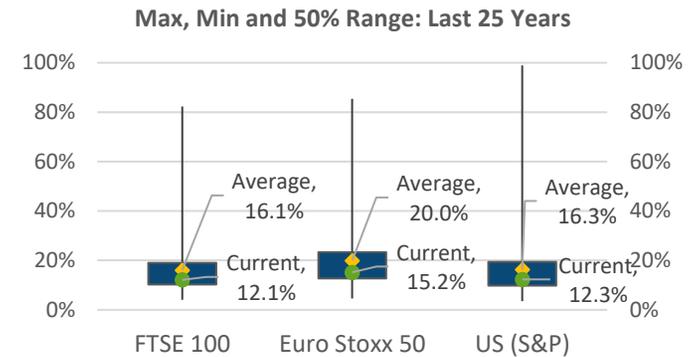
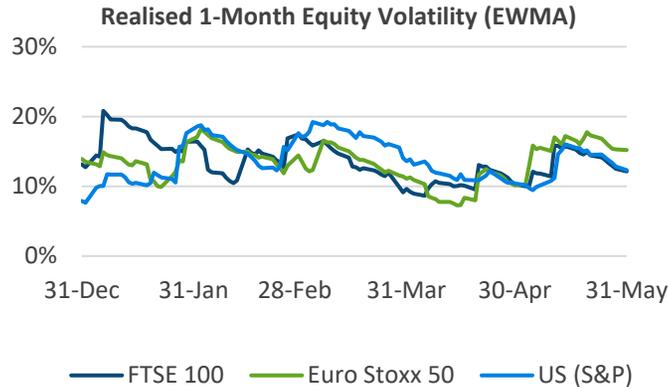
- **Consumer Price Index (CPI)** – measuring the monthly price of a basket of consumer goods and services
- **Retail Price Index (RPI)** – similar to CPI, but the main difference due the addition of mortgage payments, council tax and other housing costs
- **Average Earnings** – measuring the average 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 of major indices increased in May as inflation concerns grew amongst market participants.
- The FTSE 100 had a realised volatility of 12.1% at month-end. The realised volatility of Euro Stoxx 50 and S&P 500 indices was 15.2% and 12.3%, respectively.
- In contrast, implied volatilities fell, resulting in a decline in volatility risk premiums over the month. The volatility risk premium of the FTSE 100 was 1.8%. The S&P 500 had a volatility risk premium of 2.8%, meanwhile the measure stood at 2.6% for the Euro Stoxx 50, 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 (on data from the Oxford-Man Institute). 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).

Expected realised volatility is an intermediate result from the [Milliman Guarantee Index™ \(MGI\)](#), which provides volatility parameters for variable annuity guarantee (VA) valuation and risk management. The levels shown are on an expected basis, and do not reflect any risk adjustment.



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