

Asset Price Monitor

Local Equity Markets

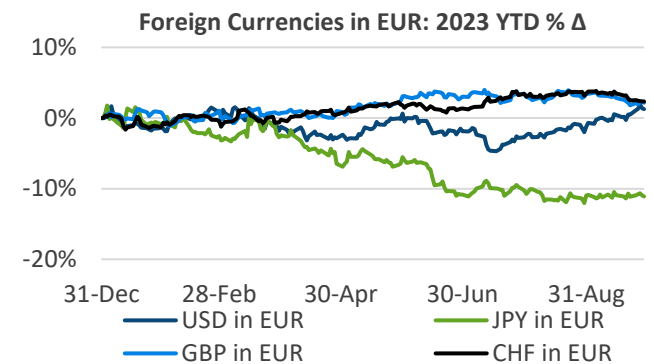
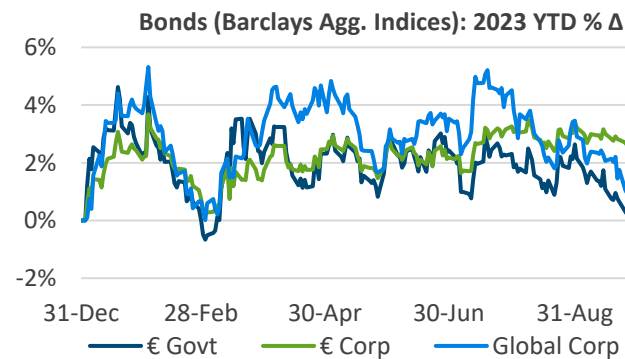
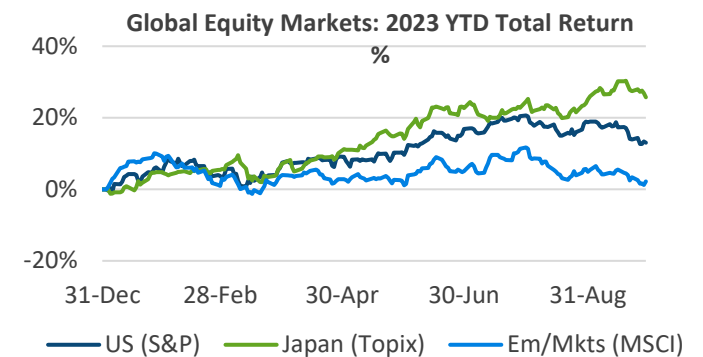
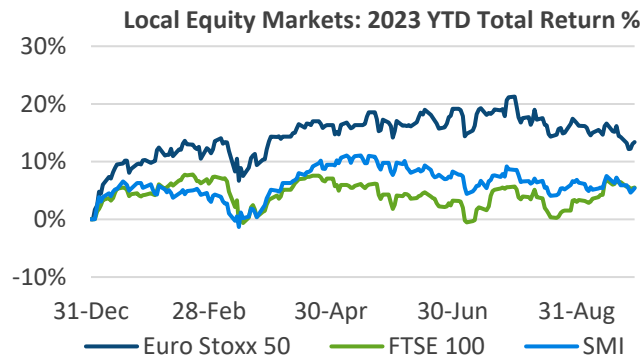
- Global equity markets had a mixed performance in September, as investors came to terms that rates may be staying higher for longer as central banks voiced their commitment to suppress inflation.
- The Euro Stoxx 50 index was down 2.8% in September, losing 4.8% in Q3.
- The FTSE 100 index gained 2.4% in September, returning 2.2% over the quarter.

Global Equity Markets

- Developed markets had a mixed performance, with the S&P 500 down 4.8%, whereas the Topix index gained 0.5%.
- The MSCI Emerging Markets index declined by 2.6%.

Bond/FX Markets

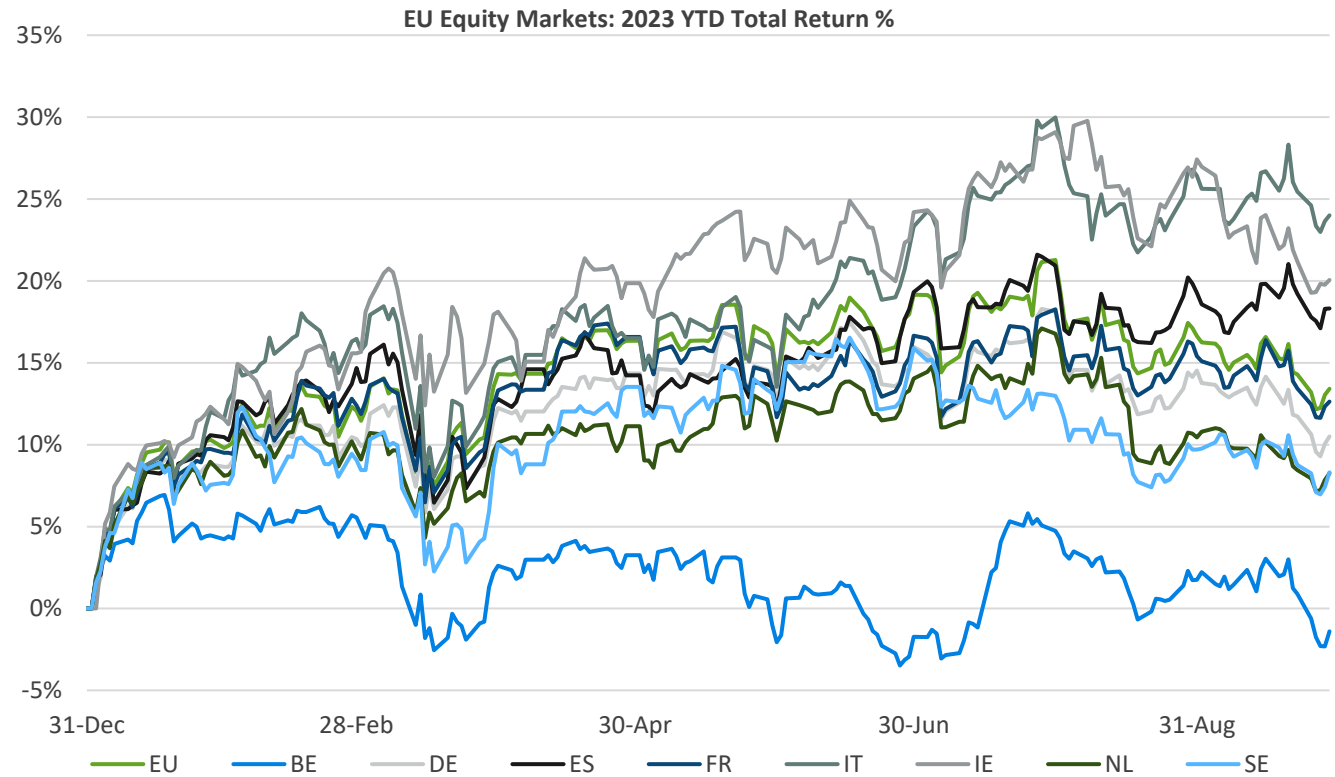
- The European government and corporate bond indices both declined, losing 2.5% and 0.9%, respectively.
- The Euro had a mixed performance in September, losing 2.5% against the US dollar, while gaining 1.2% against the British Pound.



	Total Returns as of September 29, 2023											
	Euro Stoxx 50	FTSE 100	SMI	US (S&P)	Japan (Topix)	Em/Mkts (MSCI)	€ Govt	€ Corp	CHF in EUR	USD in EUR	JPY in EUR	GBP in EUR
1 Month	-2.8%	2.4%	-1.3%	-4.8%	0.5%	-2.6%	-2.5%	-0.9%	-1.1%	2.5%	-0.1%	-1.2%
3 Month	-4.8%	2.2%	-2.7%	-3.3%	2.5%	-2.8%	-2.3%	0.3%	1.0%	3.2%	-0.3%	-0.9%
1 Year	30.0%	14.7%	10.2%	21.6%	29.8%	12.2%	-2.0%	3.6%	0.0%	-7.3%	-10.1%	1.3%
YTD	13.4%	5.5%	5.4%	13.1%	25.7%	2.2%	0.0%	2.5%	2.3%	1.3%	-11.1%	2.2%

Eurozone Equity

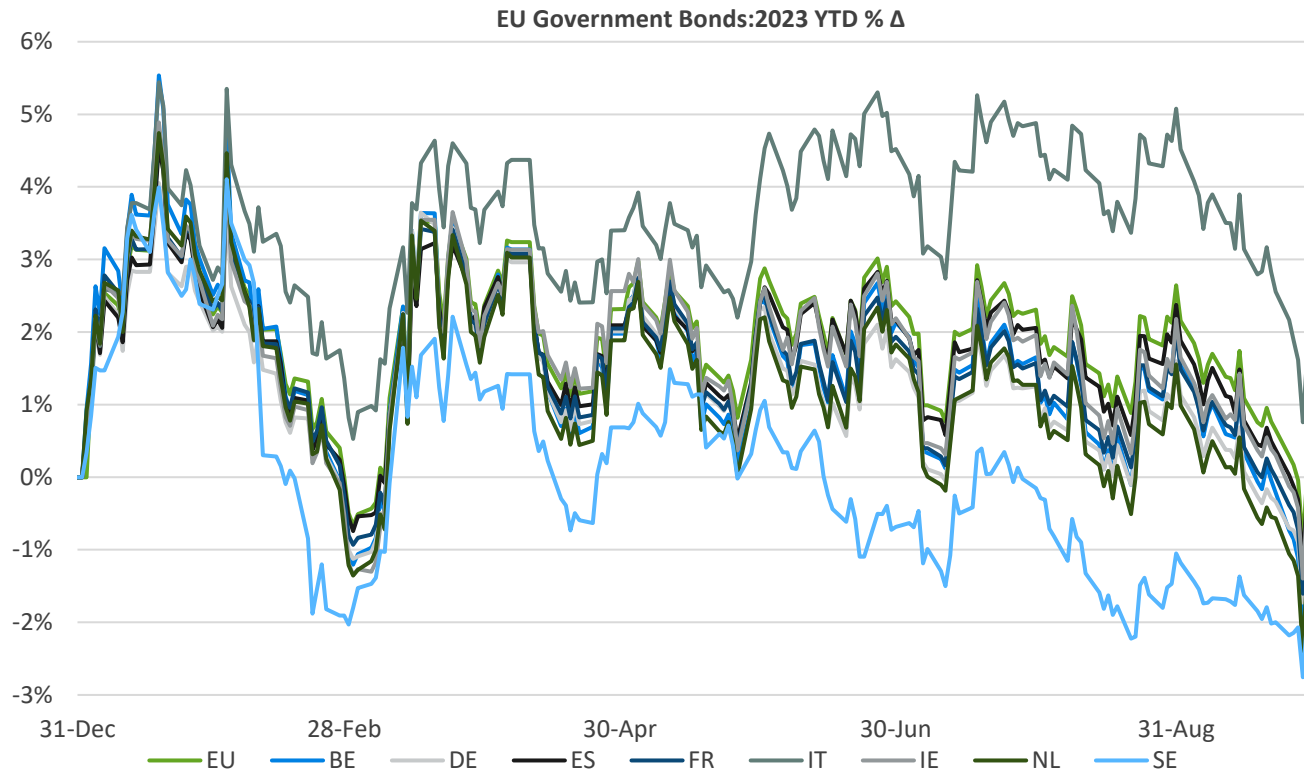
- All major European equity markets saw losses in September.
- The Irish equity market saw the largest losses in the month, down 5.8%. The Spanish market saw the smallest losses, losing 0.8%.
- The Belgian equity market remains the worst performer year-to-date, being the only major equity market in the region with a negative return year-to-date, down 1.4%.
- The Italian equity market is the best performing market year-to-date, having returned 24.0% thus far.



Equity Returns as of September 29, 2023									
	EU	Belgium	Germany	Spain	France	Italy	Ireland	Netherlands	Sweden
1 Month	-2.8%	-3.1%	-3.5%	-0.8%	-2.4%	-1.9%	-5.8%	-2.0%	-1.3%
3 Month	-4.8%	0.3%	-4.7%	-0.8%	-3.4%	0.6%	-3.3%	-5.1%	-6.5%
QTD	-4.8%	0.3%	-4.7%	-0.8%	-3.4%	0.6%	-3.3%	-5.1%	-6.5%
YTD	13.4%	-1.4%	10.5%	18.3%	12.6%	24.0%	20.1%	8.3%	8.3%

Eurozone Government Bonds

- All major European government bond indices had a negative performance in September.
- The Italian government bond index saw the largest monthly decrease, down 3.2% in September. Despite this, the index remains the outperformer year-to-date, up 1.7%.
- The Swedish government bond index saw the smallest monthly decrease, down 0.9%. The Swedish government bond index also remains the laggard performer for the year, having lost 1.9% year-to-date.



Bond Returns as of September 29, 2023									
	EU	Belgium	Germany	Spain	France	Italy	Ireland	Netherlands	Sweden
1 Month	-2.5%	-3.0%	-2.4%	-2.5%	-2.5%	-3.2%	-2.5%	-2.8%	-0.9%
3 Month	-2.3%	-3.0%	-2.4%	-2.3%	-2.5%	-2.7%	-2.5%	-3.1%	-1.3%
QTD	-2.3%	-3.0%	-2.4%	-2.3%	-2.5%	-2.7%	-2.5%	-3.1%	-1.3%
YTD	0.0%	-1.0%	-0.8%	-0.2%	-0.6%	1.7%	-0.3%	-1.3%	-1.9%

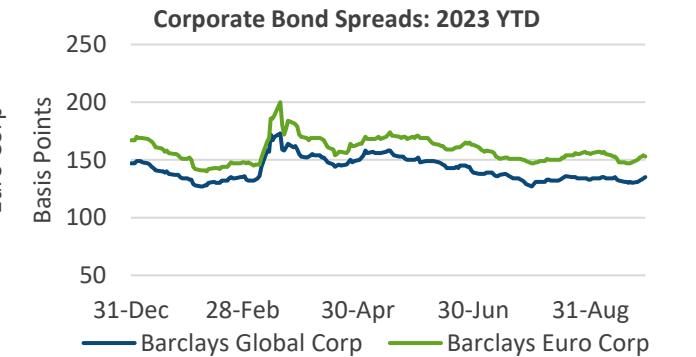
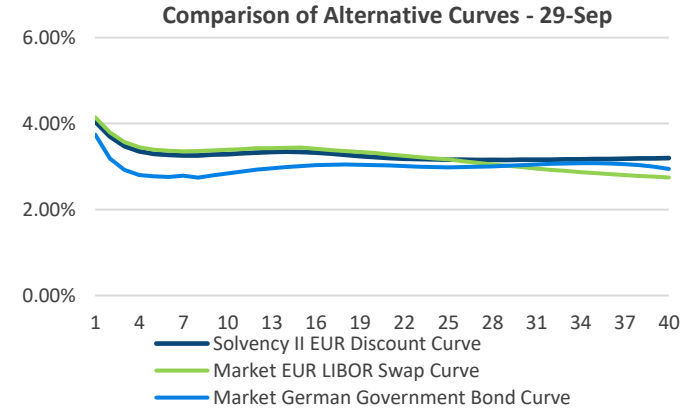
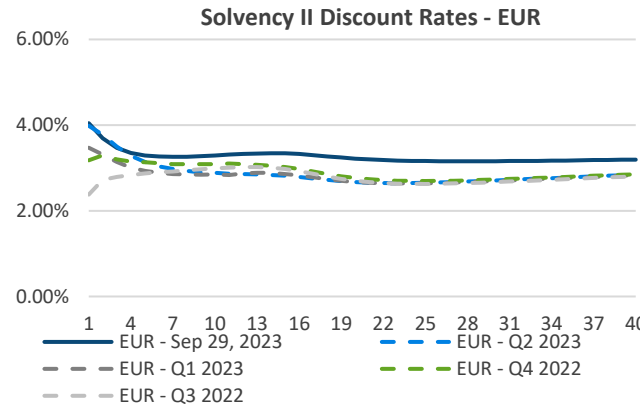
Liability Valuation Monitor

Risk Free Rates

- EUR risk-free rates increased for all tenors in September though the increase was more pronounced for longer dated tenors.
- The 1-year and 5-year EUR risk-free rates increased by 15 and 28 basis points, respectively. Meanwhile, the 20-year rate increased by 39 basis points.

Corporate Bonds

- Both European and global corporate bond yields rose in September. The former increased by 25 basis points and the latter increased by 35 basis points.
- Global credit spreads widened by 2 basis points, whilst their European counterpart tightened by 2 basis points.
- The rise in risk-free rates partially offset by the marginal tightening in corporate bond spreads, resulted in losses for the European corporate bond index.



	Change in Solvency II Discount (bps)						Change in Corporate Bond Yields (bps)		Change in Corporate Bond Spreads (bps)	
	1Y	Y5	Y10	Y20	Y30	Y40	Global Corp	Euro Corp	Global Corp	Euro Corp
Since Q2 2023	6	15	40	55	45	35	38	8	-4	-10
Since Q1 2023	57	36	44	54	46	36	70	30	-18	-17
Since Q4 2022	87	16	20	45	43	34	48	20	-12	-14
Since Q3 2022	167	42	30	52	49	39	28	29	-45	-72

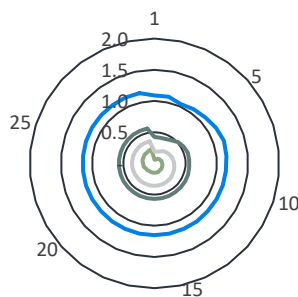
Solvency II Monitor - Spreads

Fundamental Spreads

- The fundamental spread data shown is for the end of August.
- There were no material changes since the last report.

Fundamental Spreads %

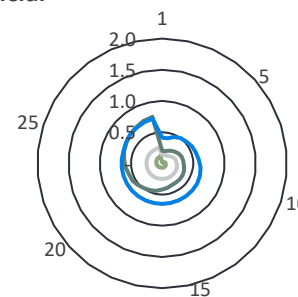
EUR: Financial



— AAA — AA — A — BBB

EUR Financial Fundamental Spread %					
	1Y	Y5	Y10	Y20	Y30
AAA	0.06	0.10	0.13	0.16	0.23
AA	0.19	0.26	0.33	0.36	0.36
A	0.42	0.51	0.57	0.57	0.57
BBB	1.09	1.10	1.15	1.15	1.15
EUR Financial 'Before Floor' %					
	1Y	Y5	Y10	Y20	Y30
AAA	0.00	0.04	0.08	0.16	0.23
AA	0.04	0.07	0.11	0.18	0.26
A	0.06	0.12	0.19	0.32	0.42
BBB	0.14	0.22	0.32	0.46	0.57

EUR: Non-Financial



— AAA — AA — A — BBB

EUR Non-Financial Fundamental Spread %					
	1Y	Y5	Y10	Y20	Y30
AAA	0.01	0.02	0.06	0.08	0.12
AA	0.14	0.17	0.25	0.25	0.26
A	0.20	0.28	0.37	0.52	0.76
BBB	0.41	0.52	0.64	0.65	0.73
EUR Non-Financial 'Before Floor' %					
	1Y	Y5	Y10	Y20	Y30
AAA	0.00	0.01	0.04	0.08	0.12
AA	0.00	0.04	0.09	0.17	0.26
A	0.04	0.15	0.27	0.52	0.76
BBB	0.11	0.22	0.34	0.55	0.73

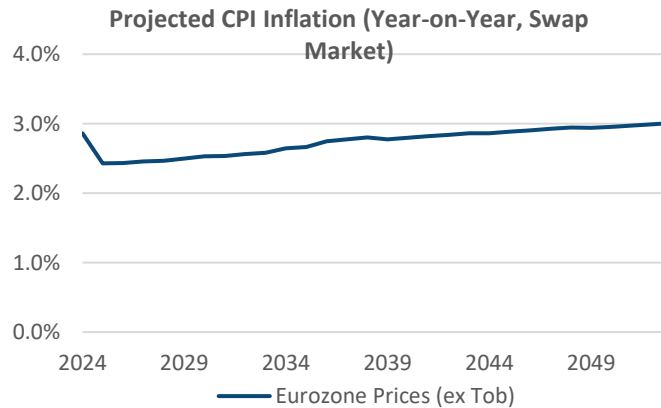
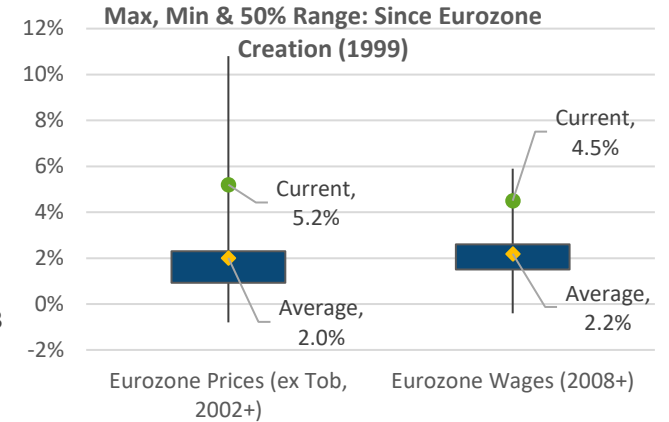
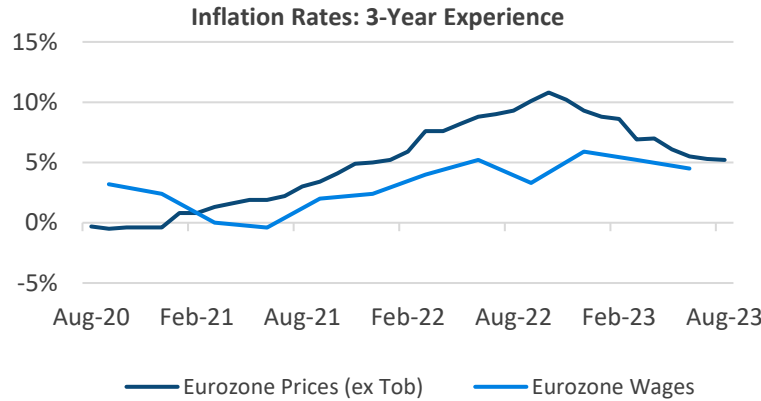
The **Solvency II risk-free discount rates** are based on applying the Smith-Wilson Extrapolation to LIBOR swap rates sourced from Bloomberg (current curve is for 30/09/23) and applying the Credit Risk Adjustment as defined in the Technical Specs. For the official published curves please refer to the [EIOPA](#) website.

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), and is bounded between 0.10 and 0.35. We show actual LIBOR-OIS spread levels and the defined CRA, for 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 31/08/23. **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.

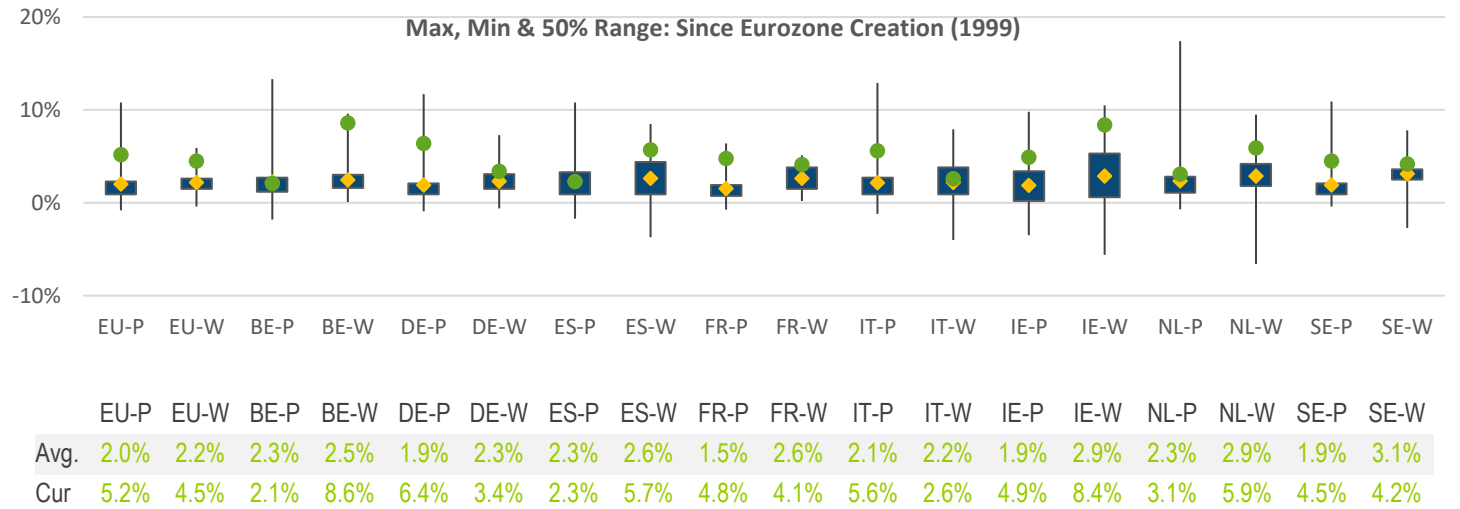
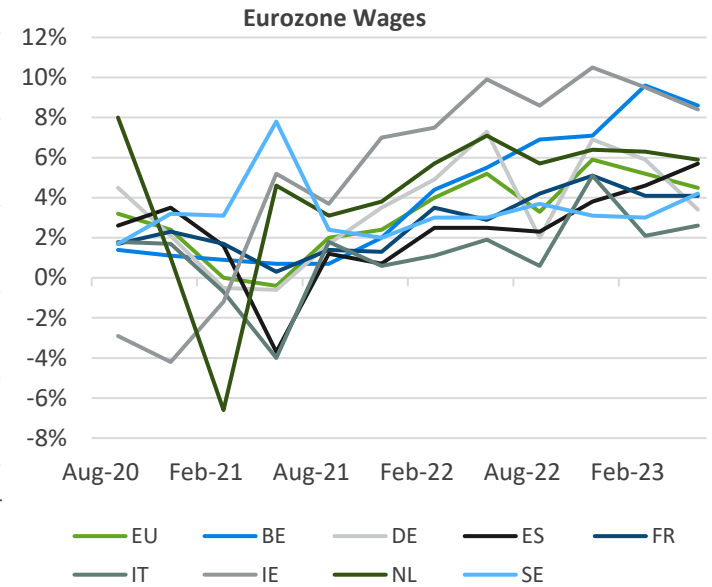
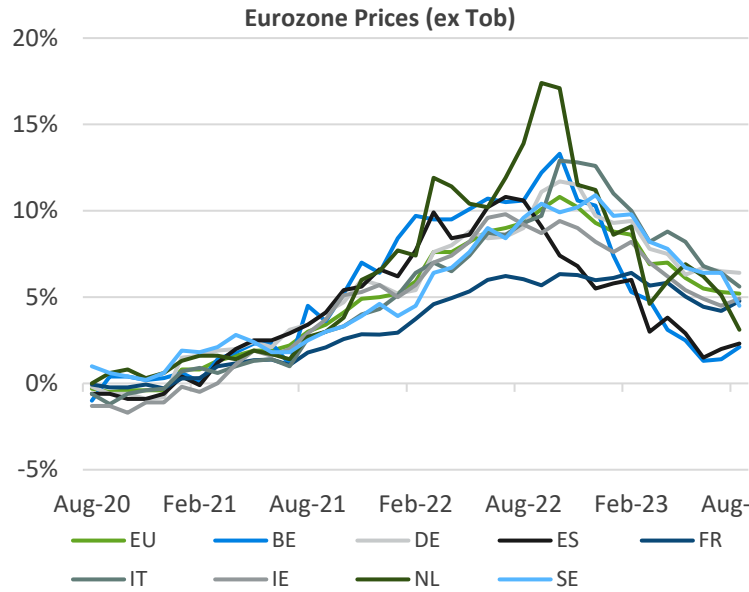
Inflation Monitor

- Eurozone price inflation decreased by 10 basis points to 5.2% in August.
- Eurozone Q2 2023 wage inflation saw a 70-basis point decrease to 4.5%, after the previous quarter's figure was revised higher by 20 basis points.
- The Eurozone projected CPI curve had a small upward shift at the longer tenors in comparison to the previous month.



Inflation Monitor

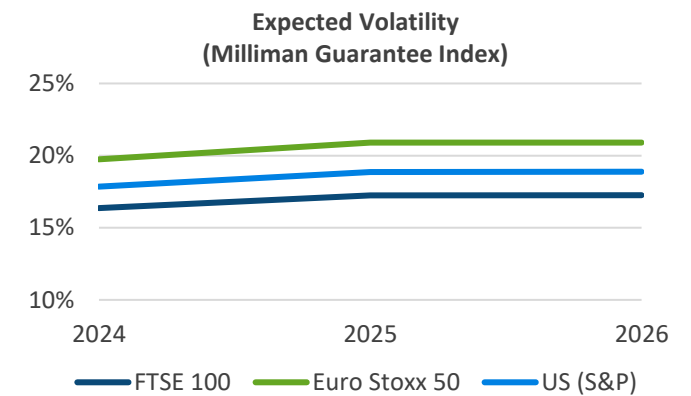
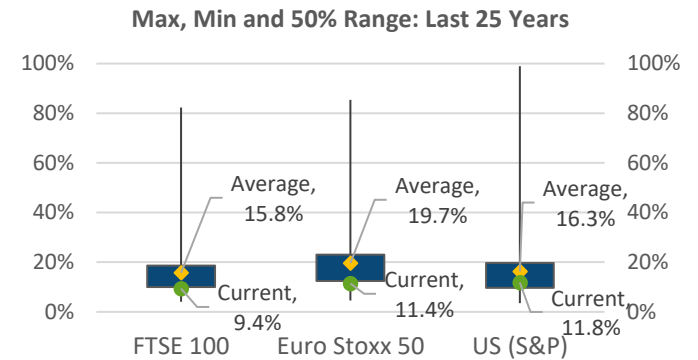
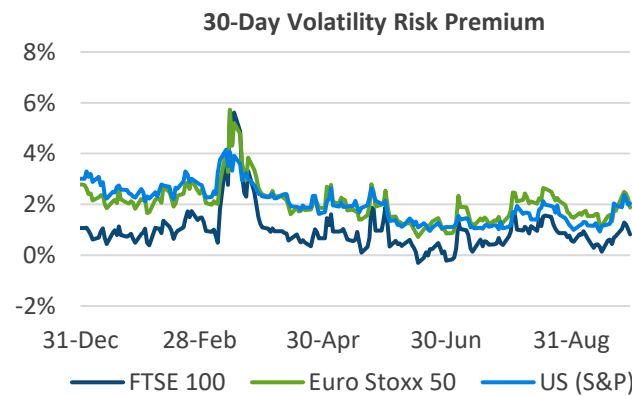
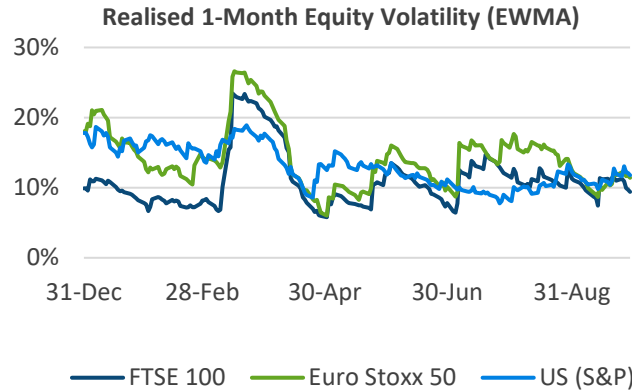
- Price inflation movements were mixed for major European economies in August.
- Belgian prices increased the most, rising by 70 basis points to 2.1%, Belgian price inflation was nevertheless the lowest reading in the region.
- Dutch price inflation decreased the most, falling by 200 basis points to 3.1%.
- German price inflation showed the highest level in the region in August, at 6.4%, down 10 basis points compared to the previous month.
- Q2 2023 wage inflation figures were mixed for major European countries.
- Germany saw the largest decline in Q2 2023 wage inflation, decreasing by 250 basis points to 3.4%, after the previous quarter's reading was revised higher by 10 basis points.
- Swedish wages increased the most, with the Q2 figure coming in at 4.2%, an increase of 1.2% from the previous quarter, after the Q1 figure was revised higher by 20 basis points.
- Belgium's Q2 wage inflation was the highest reading in the region at 8.6%.
- In contrast, Italy posted the smallest Q2 wage inflation figure at 2.6%.



Volatility and Hedging Cost Monitor

- Realised volatilities marginally declined for each of the three major indices, remaining below historical long-term averages for all major indices.
- The FTSE 100 ended the month with a realised volatility of 9.4%. The same measure stood at 11.4% and 11.8% on the Euro Stoxx 50 and the S&P 500, respectively.
- Volatility risk premiums on major indices increased in September. The FTSE 100 had a volatility risk premium of 0.8% at month-end. The volatility risk premium on the Euro Stoxx 50 and the S&P 500 was 1.9% and 2.0%, respectively.

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





Creating transformational improvement in the retirement savings industry.

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