

Asset Price Monitor

Local Equity Markets

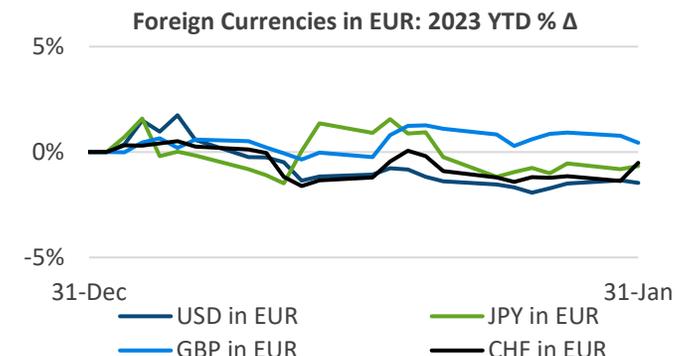
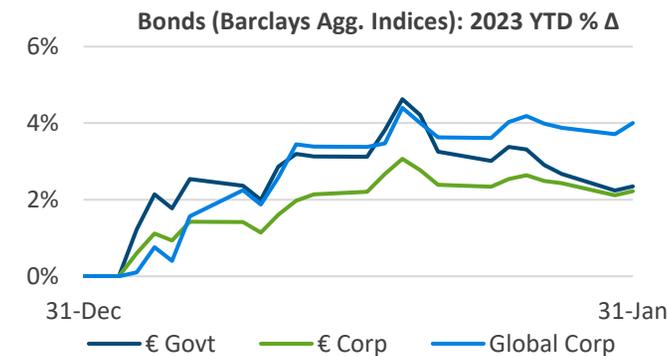
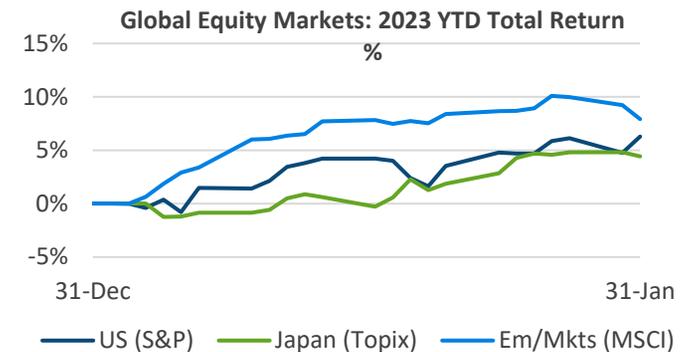
- Equity markets saw a positive performance in January as pressure eases on central bank rate hikes. This is on the back of inflation slowing down globally, partially driven by energy prices showing downward momentum.
- The Euro Stoxx 50 gained 9.9% in the first month of the year.
- The FTSE 100 ended January with a gain of 4.3%.

Global Equity Markets

- The S&P 500 ended January with a 6.3% gain, compared to the Japanese Topix which showed a 4.4% gain.
- The MSCI Emerging Markets index rose 7.9%.

Bond/FX Markets

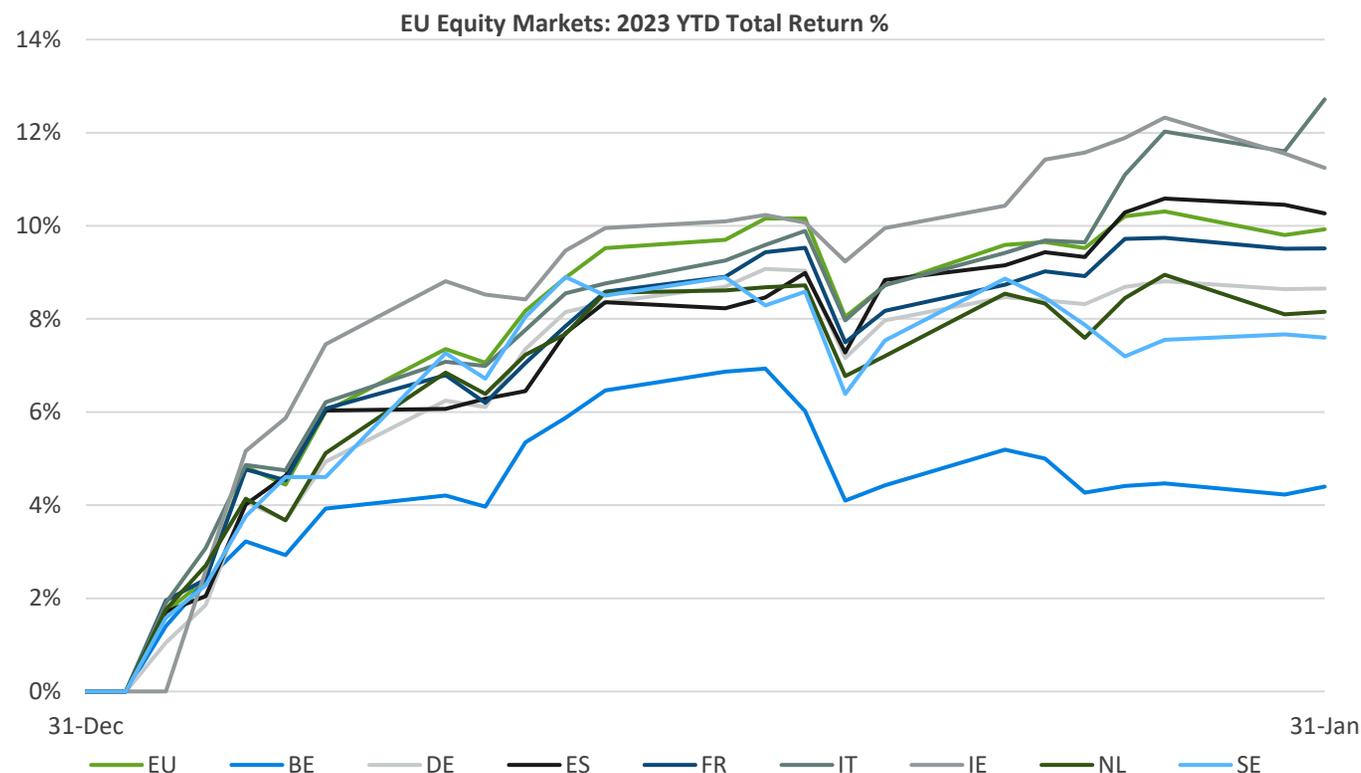
- The European government bond index ended January with a 2.4% gain.
- The European corporate bond index gained 2.2%.
- The Euro had a mixed performance in January, gaining 1.5% against the US Dollar and 0.7% against the Yen. Meanwhile, the Euro weakened against the British Pound by 0.4%.



	Total Returns as of January 31, 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	9.9%	4.3%	5.2%	6.3%	4.4%	7.9%	2.4%	2.2%	-0.5%	-1.5%	-0.7%	0.4%
3 Month	15.5%	10.1%	4.2%	5.8%	2.6%	22.3%	0.1%	3.2%	-0.5%	-9.0%	4.0%	-2.2%
1 Year	3.1%	8.0%	-5.1%	-8.2%	7.0%	-11.7%	-15.4%	-10.5%	4.6%	3.4%	-8.5%	-5.2%
YTD	9.9%	4.3%	5.2%	6.3%	4.4%	7.9%	2.4%	2.2%	-0.5%	-1.5%	-0.7%	0.4%

Eurozone Equity

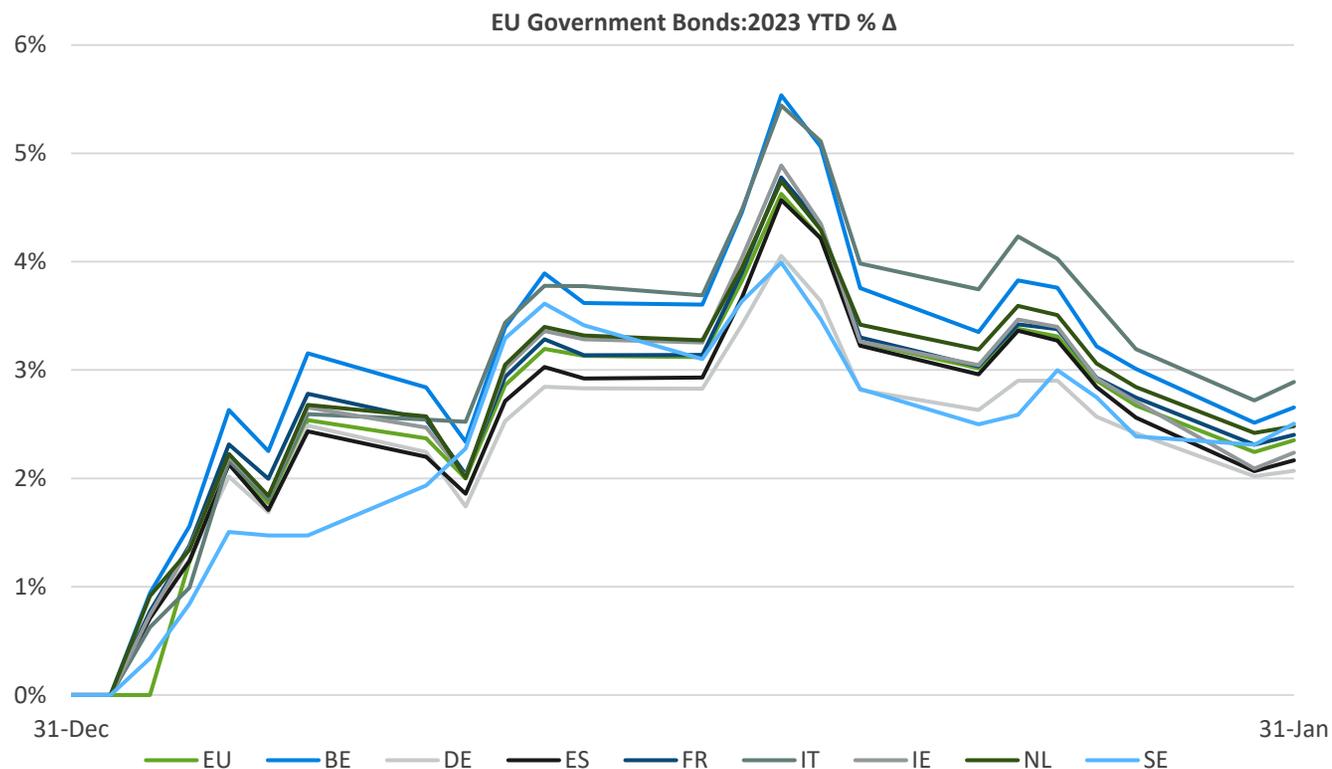
- All major European equities posted gains in January, with the Italian equity market leading with a 12.7% gain.
- Belgian equities were the worst performers in January, gaining only 4.4%.



Equity Returns as of January 31, 2023									
	EU	Belgium	Germany	Spain	France	Italy	Ireland	Netherlands	Sweden
1 Month	9.9%	4.4%	8.7%	10.3%	9.5%	12.7%	11.2%	8.2%	7.6%
3 Month	15.5%	8.7%	14.1%	14.5%	13.3%	18.8%	13.3%	11.5%	11.9%
QTD	9.9%	4.4%	8.7%	10.3%	9.5%	12.7%	11.2%	8.2%	7.6%
YTD	9.9%	4.4%	8.7%	10.3%	9.5%	12.7%	11.2%	8.2%	7.6%

Eurozone Government Bonds

- All major European government bond indices saw gains in January.
- The German government bond index saw the smallest gain, up 2.1%.
- The Italian government bond index saw the largest gain at 2.9%, closely followed by the Belgian government bond index at 2.7%.



Bond Returns as of January 31, 2023

	EU	Belgium	Germany	Spain	France	Italy	Ireland	Netherlands	Sweden
1 Month	2.4%	2.7%	2.1%	2.2%	2.4%	2.9%	2.2%	2.5%	2.5%
3 Month	0.1%	-0.2%	-0.4%	-0.2%	-0.3%	1.1%	-0.6%	-0.3%	1.1%
QTD	2.4%	2.7%	2.1%	2.2%	2.4%	2.9%	2.2%	2.5%	2.5%
YTD	2.4%	2.7%	2.1%	2.2%	2.4%	2.9%	2.2%	2.5%	2.5%

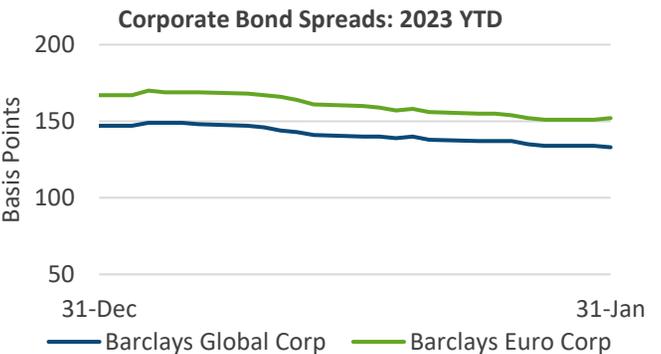
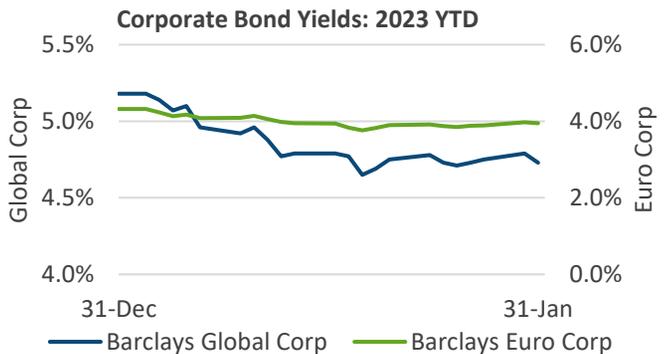
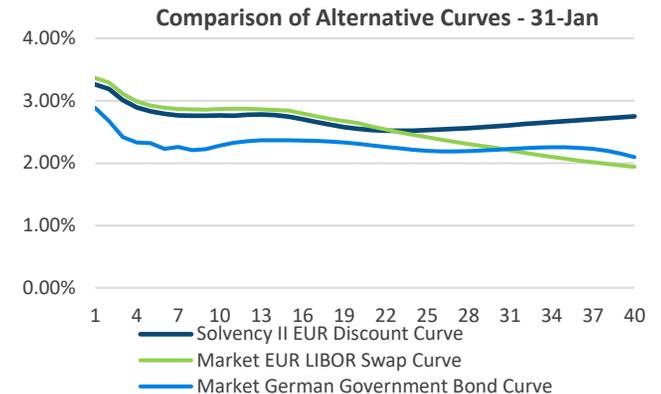
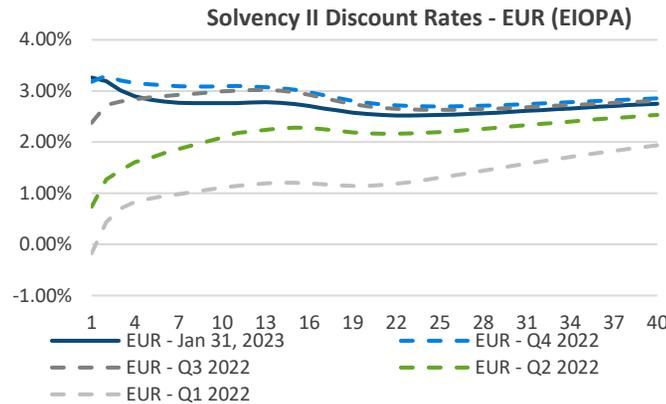
Liability Valuation Monitor

Risk Free Rates

- EUR risk-free rates decreased at all terms in January, except for the 1-year rate.
- The 5 and 10-year EUR risk-free rates decreased by 30 and 33 basis points, respectively. Whereas the 1-year risk-free rates increased by 9 basis points.

As of 1 January 2023, the EUR UFR remained unchanged at 3.45%. **Corporate Bonds**

- European and global corporate bond yields decreased in January. The former declined by 37 basis points and the latter by 45 basis points.
- Global credit spreads tightened by 14 basis points, whilst their European counterparts tightened by 15 basis points.
- The decrease in risk-free rates and corporate bond spreads, resulted in gains 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 Q4 2022	9	-30	-33	-22	-14	-10	-45	-37	-14	-15
Since Q3 2022	88	-4	-23	-15	-8	-6	-65	-29	-47	-73
Since Q2 2022	253	114	68	38	29	22	39	71	-42	-66
Since Q1 2022	344	193	166	141	106	81	164	240	9	23

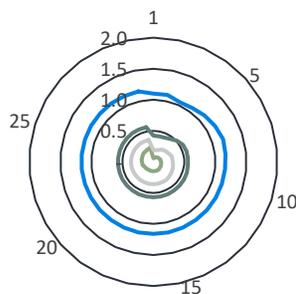
Solvency II Monitor - Spreads

Fundamental Spreads

- There were reductions between 2 to 3 basis points for some spreads with lower ratings and higher terms. Other spread indices didn't see material changes since the last report.

Fundamental Spreads %

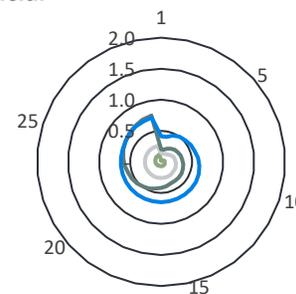
EUR: Financial



— 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	1.10	1.11	1.16	1.16	1.16
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	0.45	0.57

EUR: Non-Financial



— AAA — AA — A — BBB

EUR Non-Financial Fundamental Spread %					
	1Y	Y5	Y10	Y20	Y30
AAA	0.02	0.03	0.06	0.08	0.12
AA	0.14	0.17	0.25	0.26	0.26
A	0.20	0.29	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	0.21	0.33	0.55	0.73

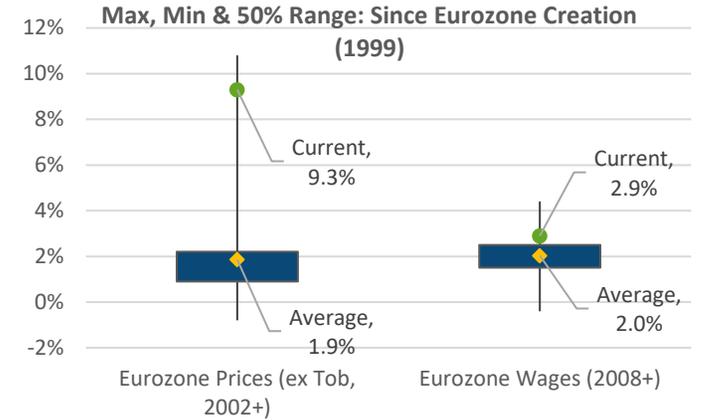
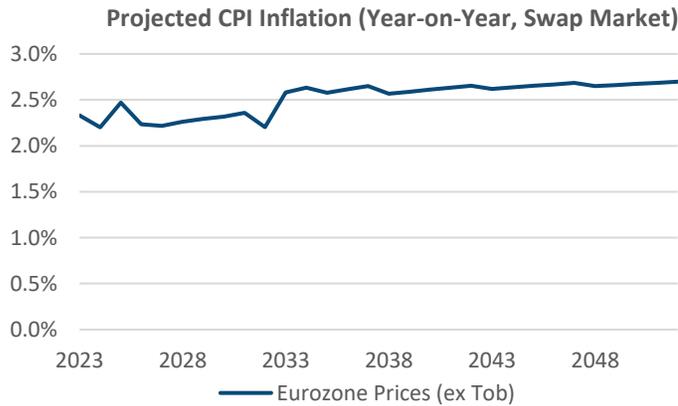
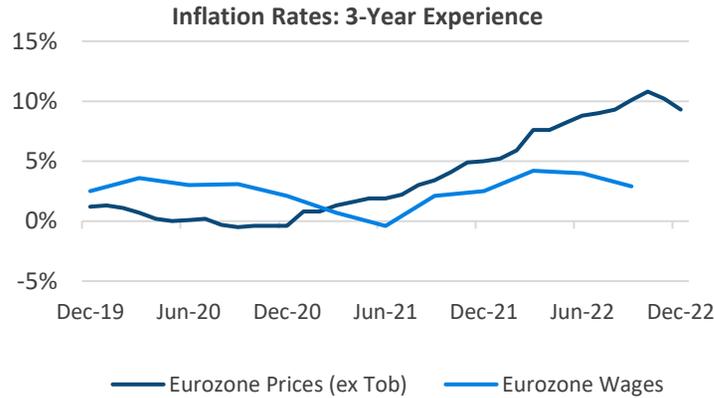
The **Solvency II risk-free discount rates** are based on applying the Smith-Wilson Extrapolation to LIBOR swap rates sourced from Refinitiv and applying the Credit Risk Adjustment as defined in the Technical Specs. The data is provided by EIOPA and as of 31/01/23.

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 31/01/23. **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 dropped to 9.3% in December, a decline of 90 basis points from the previous month.
- Eurozone projected CPI curve fell sharply at the 1-year term, whilst the rest of the curve remained relatively steady compared to the previous month.
- Eurozone GDP growth rate decreased by 50 basis points in Q4 2022, to 1.9%.



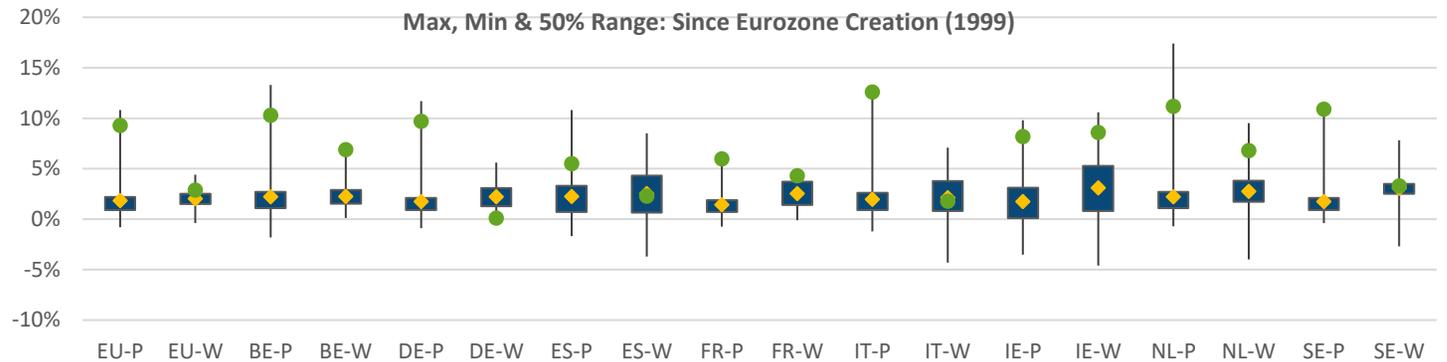
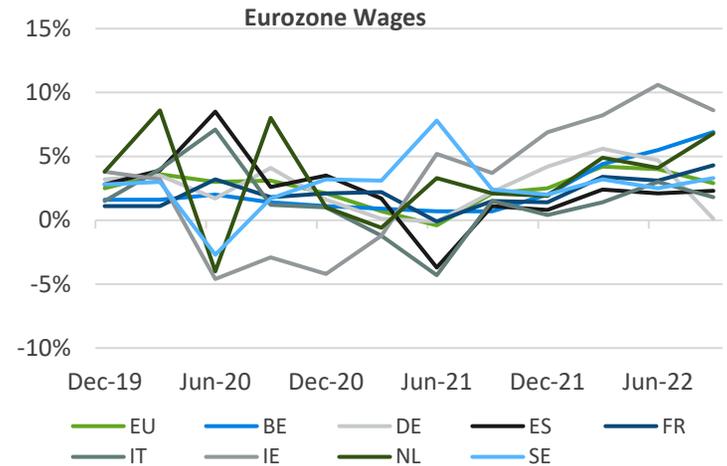
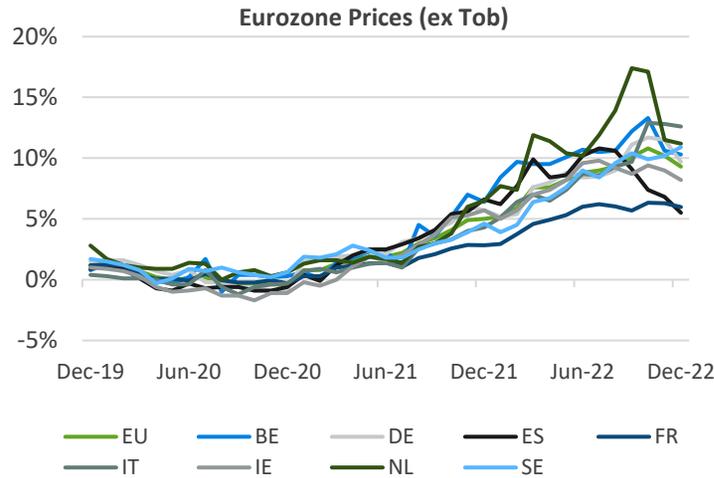
Milliman Financial Risk Management

EuroZone Market Monitor – 31 January 2023

Data sources: Bloomberg; Barclays; EuroStat; Milliman FRM

Inflation Monitor

- All major European economies except Sweden saw their price inflation fall in December, with Sweden gaining 70 basis points.
- German price inflation saw the largest drop in the region in December, with the headline figure declining by 180 basis points to 9.7%.
- Spain was the country with the lowest price inflation, at 5.5%.
- Italian price inflation was the highest in the region in December at 12.6%.
- There were no updates to wage inflation this month.



	EU-P	EU-W	BE-P	BE-W	DE-P	DE-W	ES-P	ES-W	FR-P	FR-W	IT-P	IT-W	IE-P	IE-W	NL-P	NL-W	SE-P	SE-W
Avg.	1.9%	2.0%	2.2%	2.3%	1.8%	2.2%	2.3%	2.5%	1.4%	2.6%	2.0%	2.1%	1.7%	3.1%	2.2%	2.8%	1.8%	3.1%
Cur	9.3%	2.9%	10.3%	6.9%	9.7%	0.1%	5.5%	2.3%	6.0%	4.3%	12.6%	1.8%	8.2%	8.6%	11.2%	6.8%	10.9%	3.3%

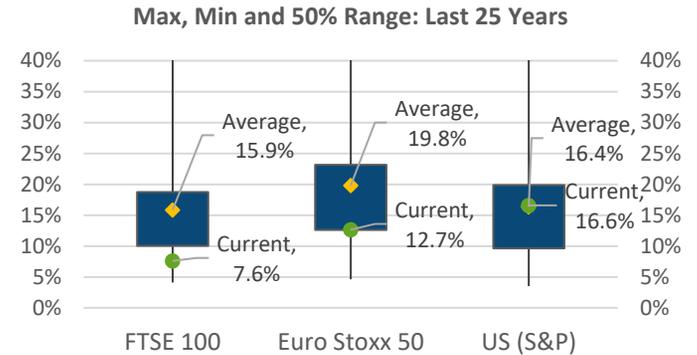
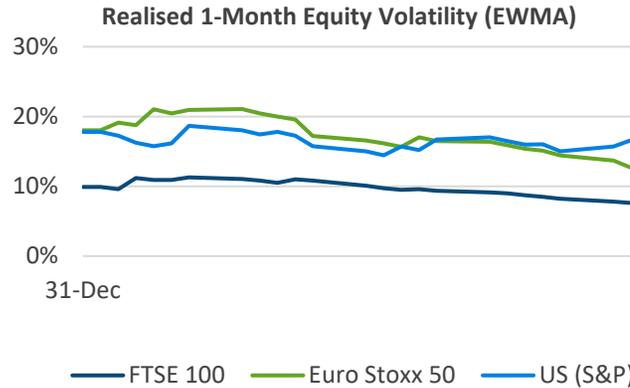


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Volatility and Hedging Cost Monitor

- Realised volatilities rose slightly in the beginning of January for the Euro Stoxx 50 and the FTSE 100. The S&P 500 saw a small decline in that timeframe before slightly ticking up. All volatilities ended the month slightly lower than it started.
- The FTSE 100 ended January with a realised volatility of 7.6%. The same measure stood at 12.7% and 16.6% on the Euro Stoxx 50 and the S&P 500, respectively.
- The volatility risk premium chart is omitted this month, as we are currently in the process of reviewing our data provider.

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



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