

Asset Price Monitor

Local Equity Markets

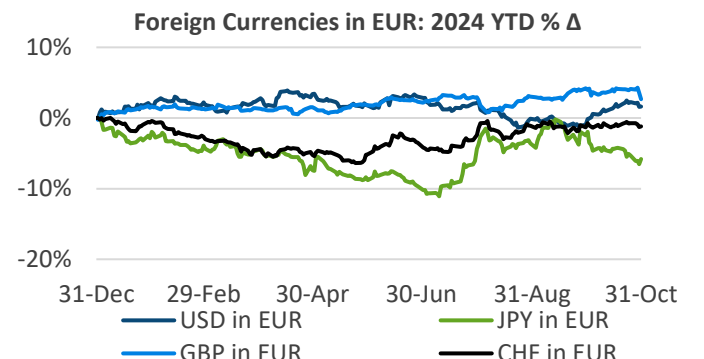
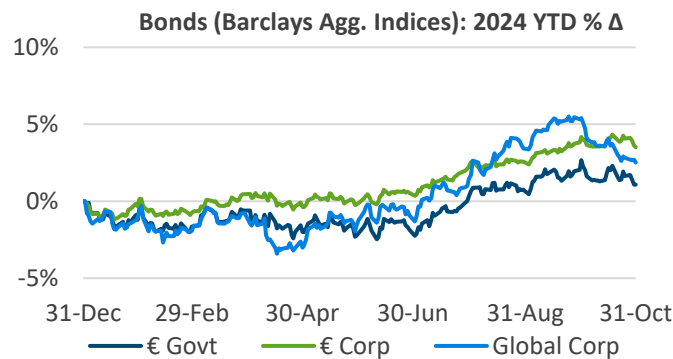
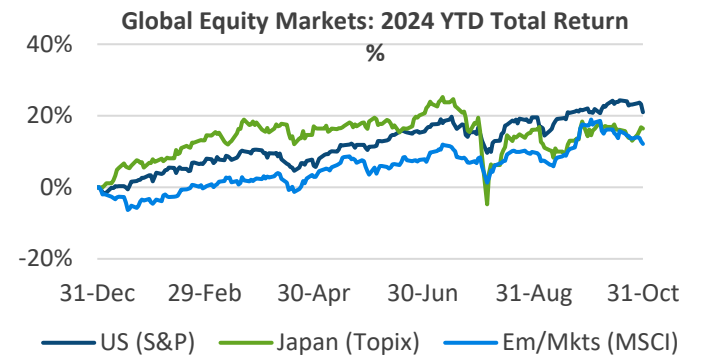
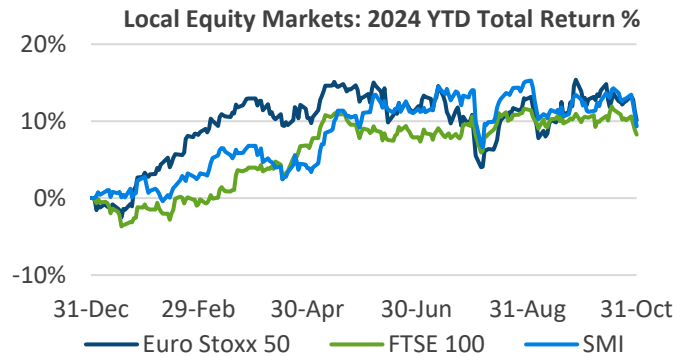
- Most major global equity markets suffered losses in October as global growth outlook and uncertainty surrounding the upcoming US presidential elections weighed on risk sentiment.
- The Euro Stoxx 50 lost 3.3% in October.
- The FTSE 100 ended the month down 1.4%.

Global Equity Markets

- The S&P 500 fell 0.9%, whilst the Japanese Topix outperformed gaining 1.9%.
- The MSCI Emerging Markets index was down 4.3%.

Bond/FX Markets

- Both the European government and corporate bond indices fell in October. The former was down 0.9% and the latter lost 0.3%.
- The Euro had a mixed performance in October, strengthening against the Japanese Yen and the British Pound by 3.5% and 1.5%, respectively. However, the Euro weakened against the US Dollar by 2.6%.

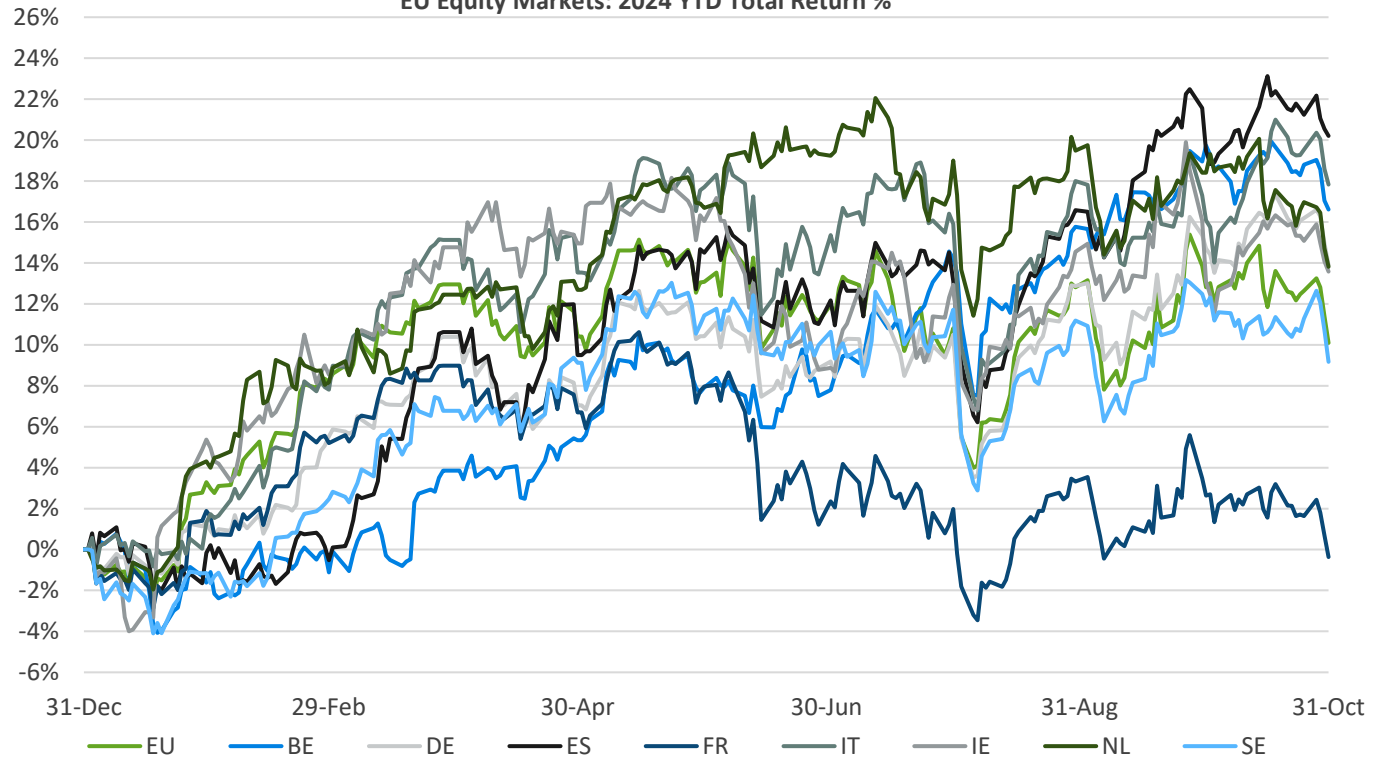


	Total Returns as of October 31, 2024											
	Euro Stoxx 50	FTSE 100	SMI	US (S&P)	Japan (Topix)	Em/Mkts (MSCI)	€ Govt	€ Corp	CHF in EUR	USD in EUR	JPY in EUR	GBP in EUR
1 Month	-3.3%	-1.4%	-3.1%	-0.9%	1.9%	-4.3%	-0.9%	-0.3%	0.2%	2.6%	-3.5%	-1.5%
3 Month	-0.7%	-2.1%	-4.1%	3.7%	-2.6%	3.8%	0.8%	1.2%	1.3%	-0.5%	-1.5%	-0.3%
1 Year	22.8%	15.0%	17.2%	38.0%	22.4%	25.9%	7.8%	8.8%	2.3%	-2.6%	-3.1%	3.1%
YTD	10.1%	8.3%	9.3%	21.0%	16.4%	12.2%	1.1%	3.5%	-1.2%	1.6%	-5.8%	2.6%

Eurozone Equity

- All major European equity markets were down in October, except for the Italian equity index that was up 0.5%.
- The Dutch equity market suffered the largest losses in the region, down 3.9% for the month.
- The Spanish equity market remains the best performing market in the region year-to-date, having returned 20.2% during this period.
- The French equity index remains the laggard performer year-to-date, having lost 0.4% so far in 2024.

EU Equity Markets: 2024 YTD Total Return %



Equity Returns as of October 31, 2024

	EU	Belgium	Germany	Spain	France	Italy	Ireland	Netherlands	Sweden
1 Month	-3.3%	-2.0%	-1.3%	-1.1%	-3.7%	0.5%	-2.1%	-3.9%	-2.9%
3 Month	-0.7%	2.1%	3.1%	6.3%	-2.3%	1.7%	0.6%	-4.4%	-2.3%
QTD	-3.3%	-2.0%	-1.3%	-1.1%	-3.7%	0.5%	-2.1%	-3.9%	-2.9%
YTD	10.1%	16.6%	13.9%	20.2%	-0.4%	17.8%	13.6%	13.8%	9.2%

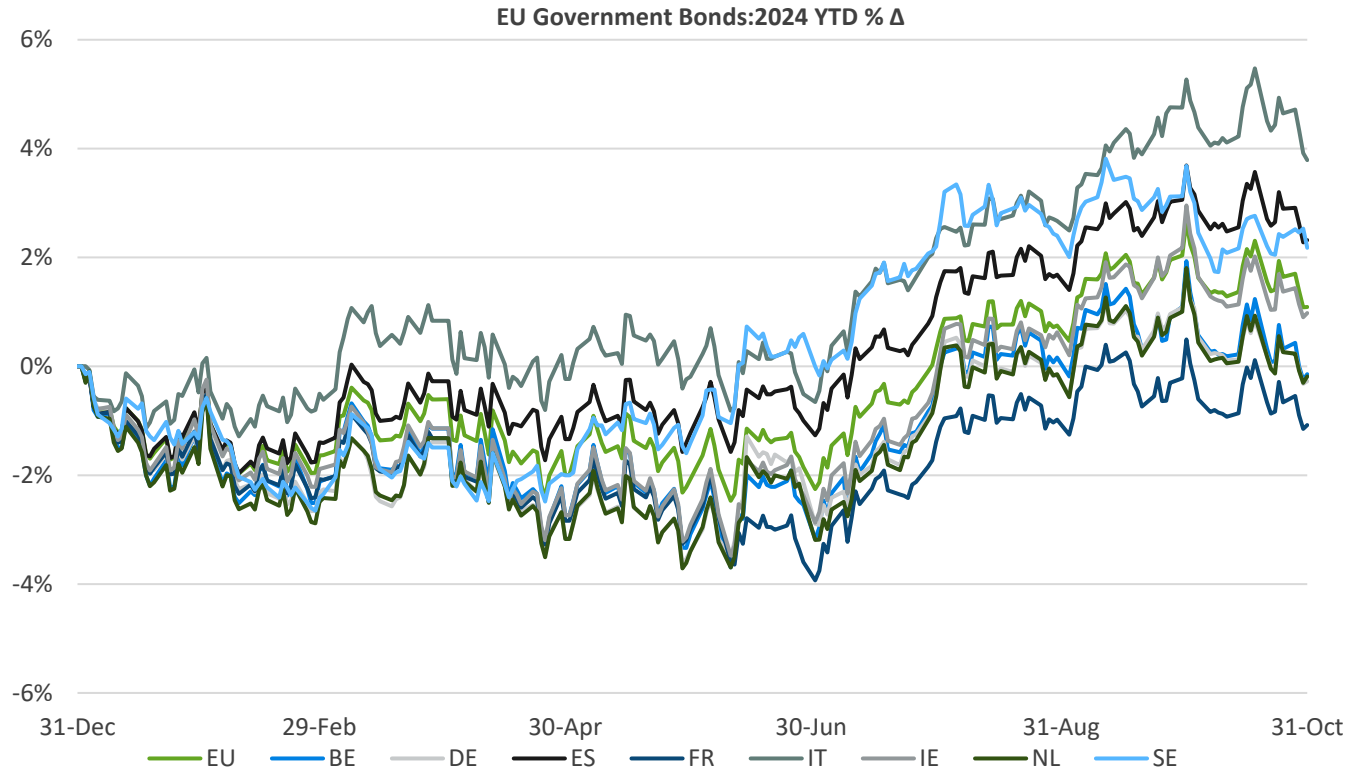
Milliman Financial Risk Management

EuroZone Market Monitor – 31 October 2024

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

Eurozone Government Bonds

- European government bond indices had a negative performance in October.
- The German government bond index saw the largest monthly drop, down 1.3%.
- The Spanish government bond index experienced the smallest loss for the month, down 0.7%.
- The Italian government bond index remains the outperformer in the region year-to-date, having gained 3.8% in 2024 so far.
- The French government bond index remains the worst performer in the region year-to-date, down 1.1%.



Bond Returns as of October 31, 2024

	EU	Belgium	Germany	Spain	France	Italy	Ireland	Netherlands	Sweden
1 Month	-0.9%	-1.2%	-1.3%	-0.7%	-0.9%	-0.9%	-1.2%	-1.2%	-0.9%
3 Month	0.8%	0.2%	0.3%	1.0%	0.3%	1.4%	1.1%	0.4%	0.0%
QTD	-0.9%	-1.2%	-1.3%	-0.7%	-0.9%	-0.9%	-1.2%	-1.2%	-0.9%
YTD	1.1%	-0.1%	-0.3%	2.3%	-1.1%	3.8%	1.0%	-0.2%	2.2%

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

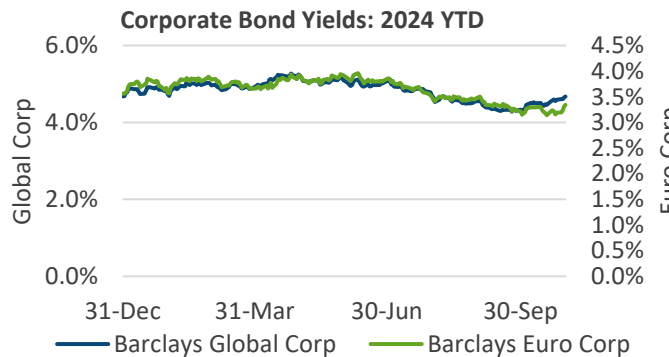
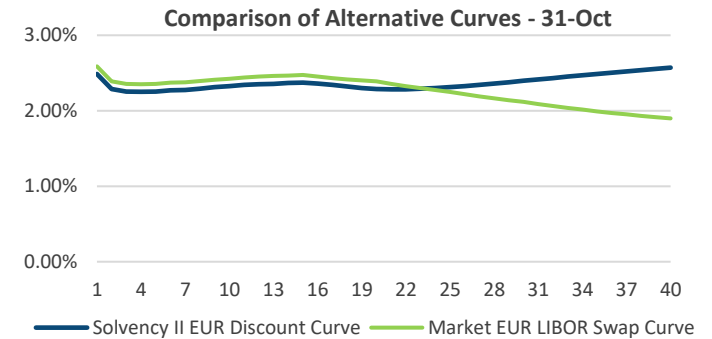
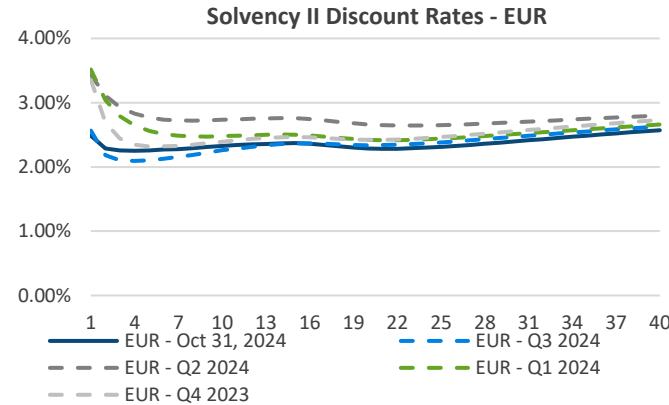
Liability Valuation Monitor

Risk Free Rates

- EUR risk-free rates fell at the 1-year term and past the 20-year point, whilst the belly of the curve rose.
- The 1 and 30-year risk-free rates fell by 8 and 7 basis points, respectively. Meanwhile, the 5-year risk-free rate increased by 15 basis points.

Corporate Bonds

- Global and European corporate bond yields rose by 34 and 13 basis points, respectively.
- Global spreads tightened by 8 basis points, and their European counterparts tightened by 13 basis points.
- The increase in risk-free rates, partially offset by the tightening in European corporate bond spreads, resulted in small 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 Q3 2024	-8	15	6	-5	-7	-6	34	13	-8	-13
Since Q2 2024	-95	-52	-41	-37	-30	-23	-37	-48	-12	-16
Since Q1 2024	-103	-31	-16	-13	-11	-9	-21	-32	-8	-10
Since Q4 2023	-87	-6	-7	-13	-16	-16	-1	-22	-23	-34

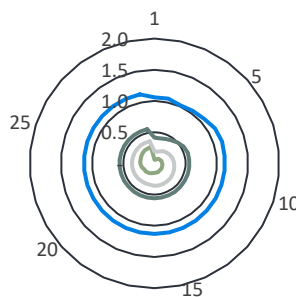
Solvency II Monitor - Spreads

Fundamental Spreads

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

Fundamental Spreads %

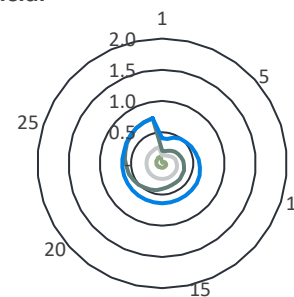
EUR: Financial



— AAA — AA — A — BBB

EUR Financial Fundamental Spread %					
	1Y	Y5	Y10	Y20	Y30
AAA	0.06	0.10	0.13	0.19	0.27
AA	0.19	0.26	0.33	0.36	0.36
A	0.41	0.50	0.56	0.56	0.56
BBB	1.06	1.07	1.13	1.13	1.13
EUR Financial 'Before Floor' %					
	1Y	Y5	Y10	Y20	Y30
AAA	0.00	0.04	0.10	0.19	0.27
AA	0.04	0.07	0.11	0.18	0.26
A	0.05	0.11	0.17	0.29	0.40
BBB	0.11	0.19	0.28	0.41	0.52

EUR: Non-Financial



— AAA — AA — A — BBB

EUR Non-Financial Fundamental Spread %					
	1Y	Y5	Y10	Y20	Y30
AAA	0.01	0.02	0.07	0.08	0.11
AA	0.13	0.17	0.25	0.25	0.26
A	0.20	0.28	0.37	0.51	0.74
BBB	0.40	0.51	0.63	0.64	0.74
EUR Non-Financial 'Before Floor' %					
	1Y	Y5	Y10	Y20	Y30
AAA	0.00	0.01	0.04	0.08	0.11
AA	0.00	0.04	0.09	0.17	0.26
A	0.04	0.15	0.27	0.51	0.74
BBB	0.10	0.21	0.33	0.54	0.74

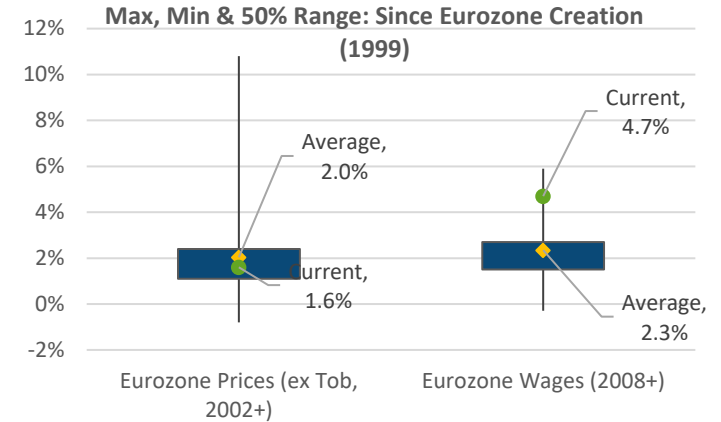
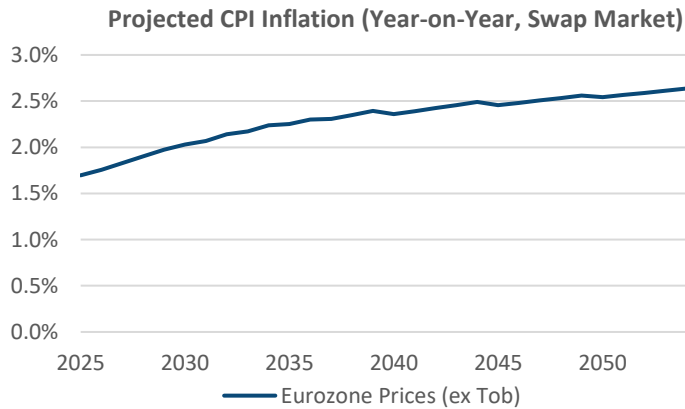
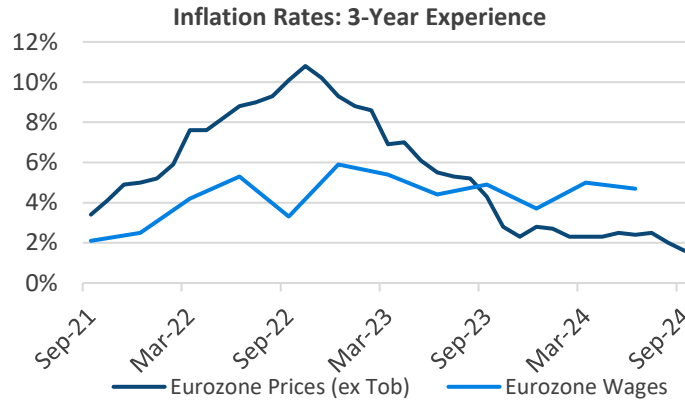
The **Solvency II risk-free discount rates** are based on applying the Smith-Wilson Extrapolation to LIBOR swap rates sourced from Bloomberg (current curve is for 31/10/24) and applying the Credit Risk Adjustment as defined in the Technical Specs. For the official published curves please refer to the [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 30/09/24. **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 declined by 40 basis points to 1.6% in September.
- The Eurozone projected CPI curve was marginally higher from the previous month.
- Eurozone Q3 2024 GDP grew by 0.9%, an increase of 30 basis points from the previous quarter.
- There were no updates to the wage inflation figures this month.



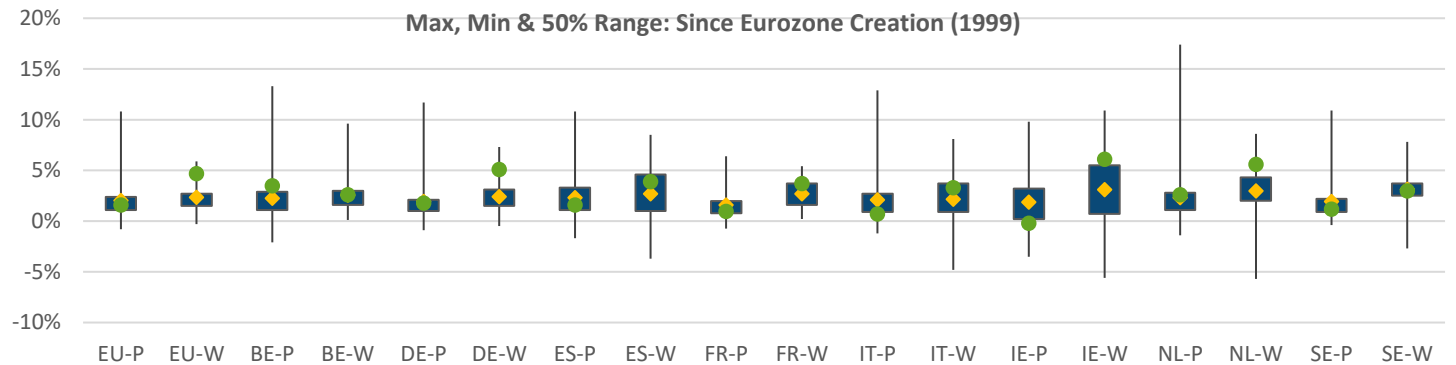
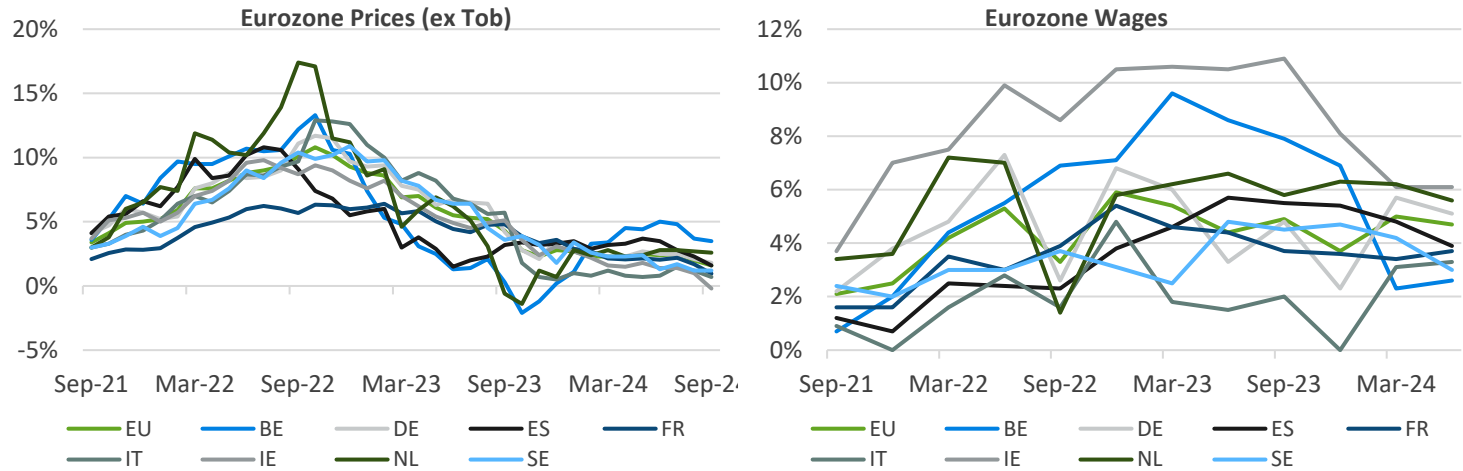
Milliman Financial Risk Management

EuroZone Market Monitor – 31 October 2024

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

Inflation Monitor

- All major European economies saw their price inflation drop in September, except for Sweden which saw its price inflation remain unchanged at 1.2%.
- Ireland saw the largest decline in price inflation in September, falling by 120 basis points to -0.2%, which was the lowest reading in the region, and the only country in deflation territory.
- Belgium continued to post the highest reading in the region at 3.5%.
- There were no updates to the wage inflation figures 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.	2.0%	2.3%	2.3%	2.6%	1.9%	2.4%	2.3%	2.7%	1.6%	2.7%	2.1%	2.2%	1.9%	3.1%	2.3%	3.0%	1.9%	3.1%
Cur	1.6%	4.7%	3.5%	2.6%	1.8%	5.1%	1.6%	3.9%	1.0%	3.7%	0.7%	3.3%	-0.2%	6.1%	2.6%	5.6%	1.2%	3.0%



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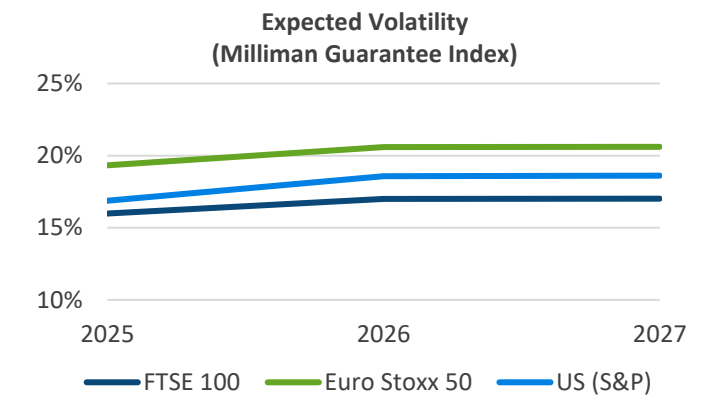
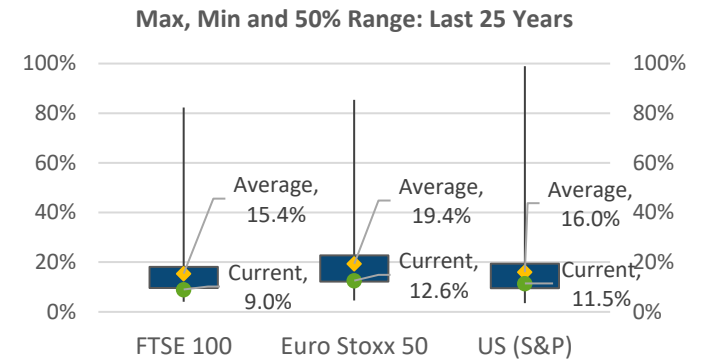
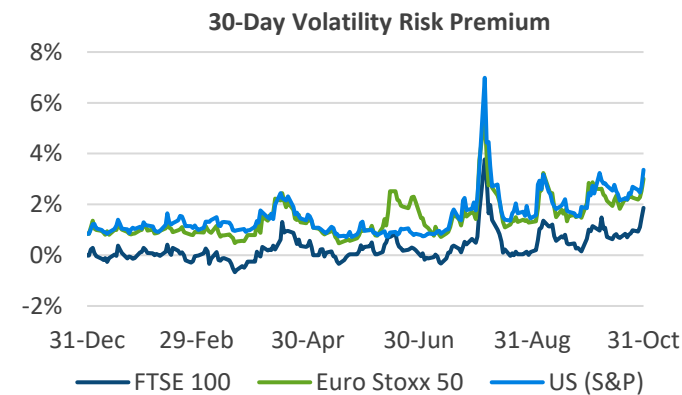
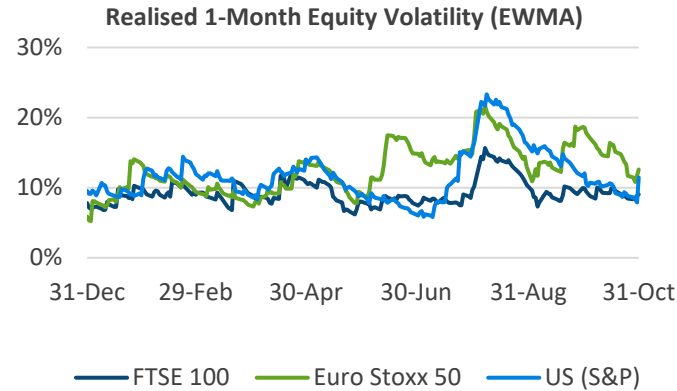
EuroZone Market Monitor – 31 October 2024

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

Volatility and Hedging Cost Monitor

- Realised volatilities on major equity indices declined in October.
- The FTSE 100 ended the month with a realised volatility of 9.0%. The same measure stood at 12.6% and 11.5% on the Euro Stoxx 50 and the S&P 500, respectively.
- In contrast, volatility risk premiums on major indices increased. The FTSE 100 had a volatility risk premium of 1.9% at month-end. The volatility risk premium on the Euro Stoxx 50 was 3.0%, and 3.4% on the S&P 500.

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





Creating transformational improvement in the retirement savings industry.

Milliman Financial Risk Management LLC / Milliman Financial Strategies Ltd. is a global leader in financial risk management to the retirement savings industry. Milliman FRM provides investment advisory, hedging, and consulting services on approximately \$176.1 billion USD in global assets (31 December 2021).

Milliman is among the world's largest providers of actuarial and related products and services. The firm has consulting practices in healthcare, property & casualty insurance, life insurance and financial services, and employee benefits. Founded in 1947, Milliman is an independent firm with offices in major cities around the globe.

Established in 1998, the practice includes professionals operating from four trading platforms around the world (Chicago, London, Amsterdam and Sydney).

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