

Asset Price Monitor

Local Equity Markets

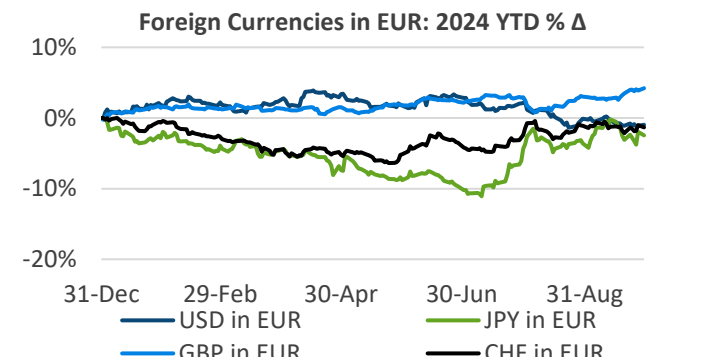
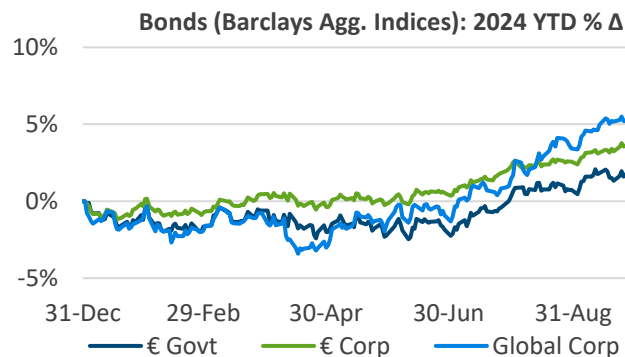
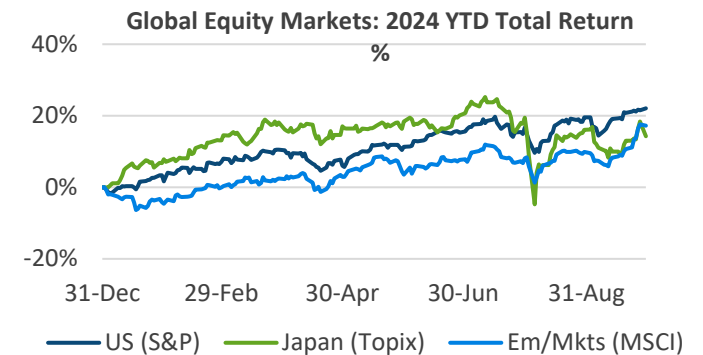
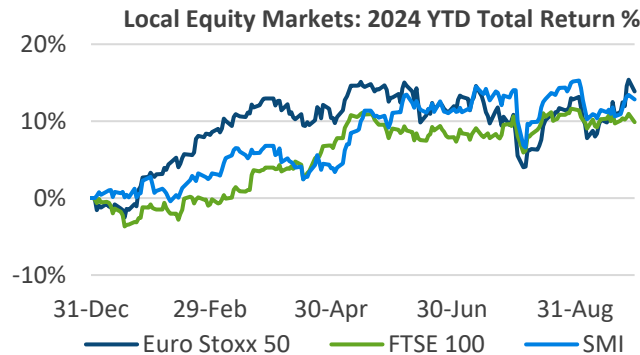
- Equity markets had a mixed performance this month, during which the Federal Reserve cut the US benchmark rate by 50 basis points.
- The Euro Stoxx 50 ended the month up 0.9%.
- In contrast, the FTSE 100 was down 1.5%.

Global Equity Markets

- The S&P 500 returned 2.1%, whilst the Japanese Topix index lost 1.5%.
- Emerging markets outperformed their developed market counterparts, with the MSCI Emerging Markets index returning 6.7%, as Chinese policy makers announced stimulus to boost the economy.

Bond/FX Markets

- European government and corporate bond indices gained 1.3% and 1.2%, respectively.
- The Euro had a mixed performance, having risen 0.9% against the US Dollar but weakened by 1.2% against both the Japanese Yen and the British Pound.



	Total Returns as of September 30, 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	0.9%	-1.5%	-2.0%	2.1%	-1.5%	6.7%	1.3%	1.2%	-0.2%	-0.9%	1.2%	1.2%
3 Month	2.5%	1.8%	1.6%	5.9%	-4.9%	8.9%	4.0%	3.3%	2.3%	-3.9%	8.0%	1.9%
1 Year	23.7%	12.4%	14.6%	36.4%	16.6%	26.5%	9.2%	9.6%	2.8%	-5.2%	-1.0%	4.2%
YTD	13.9%	9.9%	12.8%	22.1%	14.2%	17.2%	2.0%	3.8%	-1.3%	-1.0%	-2.4%	4.2%

Milliman Financial Risk Management

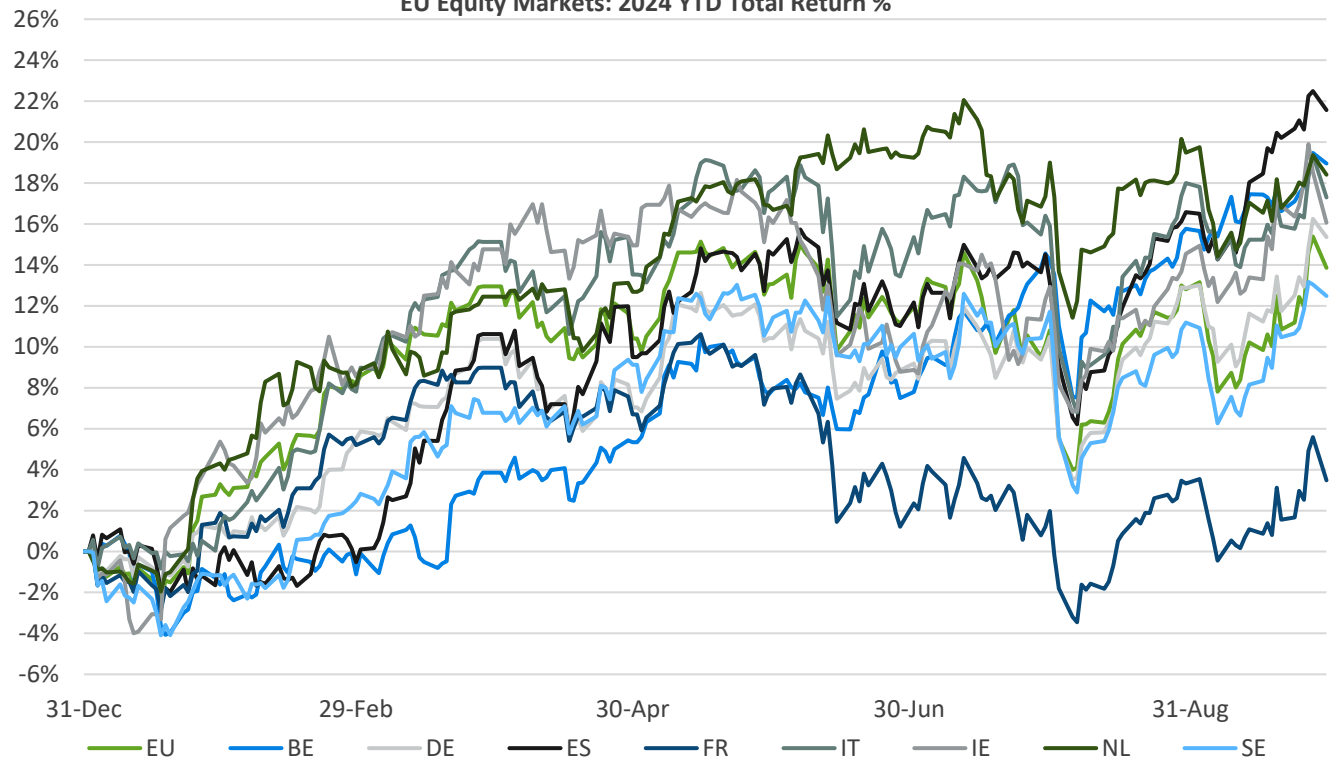
EuroZone Market Monitor – 30 September 2024

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

Eurozone Equity

- All major European equity markets were up in September, except for the Dutch and Italian equity indices, which lost 0.9% and 0.6%, respectively.
- For the second consecutive month, the Spanish equity market experienced the largest gains for the month, up 4.3% in September. The index is also the best performing market in the region year-to-date, having returned 21.6% during this period.
- The French equity index remains the laggard performer year-to-date, having only gained 3.5% so far in 2024.

EU Equity Markets: 2024 YTD Total Return %

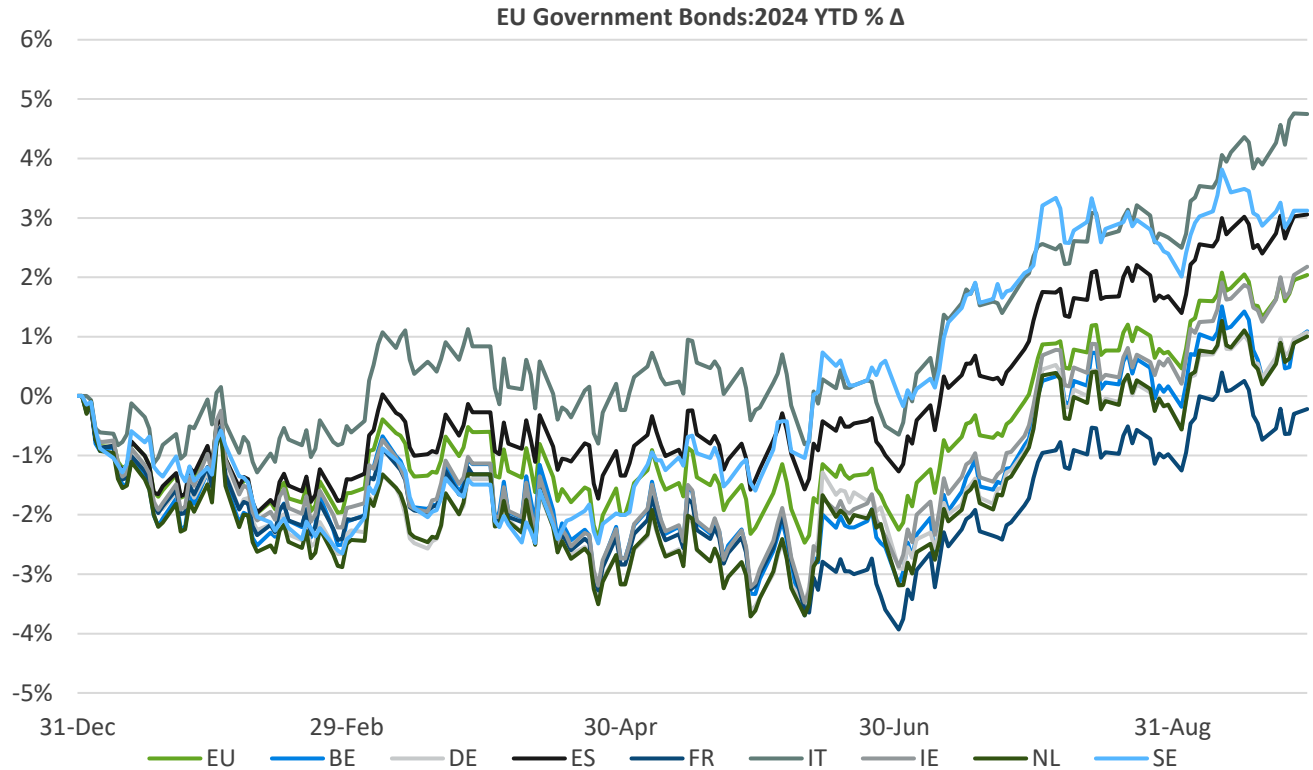


Equity Returns as of September 30, 2024

	EU	Belgium	Germany	Spain	France	Italy	Ireland	Netherlands	Sweden
1 Month	0.9%	2.8%	2.2%	4.3%	0.1%	-0.6%	1.3%	-0.9%	1.2%
3 Month	2.5%	10.7%	6.0%	9.5%	2.2%	3.4%	6.7%	-0.8%	2.3%
QTD	2.5%	10.7%	6.0%	9.5%	2.2%	3.4%	6.7%	-0.8%	2.3%
YTD	13.9%	19.0%	15.4%	21.6%	3.5%	17.3%	16.1%	18.4%	12.5%

Eurozone Government Bonds

- European government bond indices had a positive performance in September.
- The Italian government bond index saw the largest monthly gain, up 2.0%, and remains the outperformer in the region year-to-date, having gained 4.8% in 2024 so far.
- The Swedish government bond index was the laggard performer, returning 0.7% for the month.
- The French government bond index remains the worst performer in the region year-to-date, down 0.2%.



Bond Returns as of September 30, 2024									
	EU	Belgium	Germany	Spain	France	Italy	Ireland	Netherlands	Sweden
1 Month	1.3%	0.9%	1.2%	1.4%	0.8%	2.0%	1.5%	1.1%	0.7%
3 Month	4.0%	3.7%	3.3%	4.1%	3.5%	5.3%	4.7%	3.6%	2.5%
QTD	4.0%	3.7%	3.3%	4.1%	3.5%	5.3%	4.7%	3.6%	2.5%
YTD	2.0%	1.1%	1.1%	3.1%	-0.2%	4.8%	2.2%	1.0%	3.1%

Milliman Financial Risk Management

EuroZone Market Monitor – 30 September 2024

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

Liability Valuation Monitor

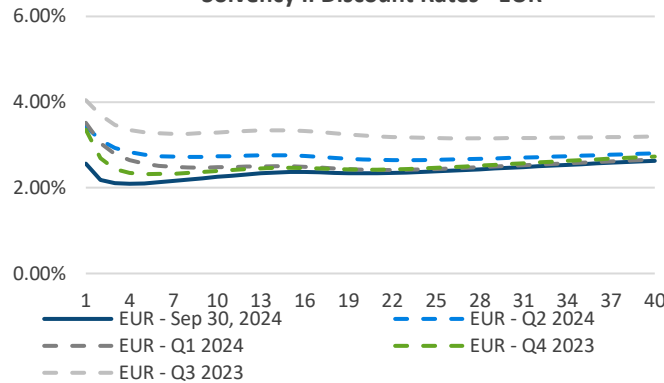
Risk Free Rates

- EUR risk-free rates fell at all terms in September, with the moves more pronounced at the short-term tenors.
- The 1 and 5-year risk-free rates fell by 38 and 29 basis points, respectively.

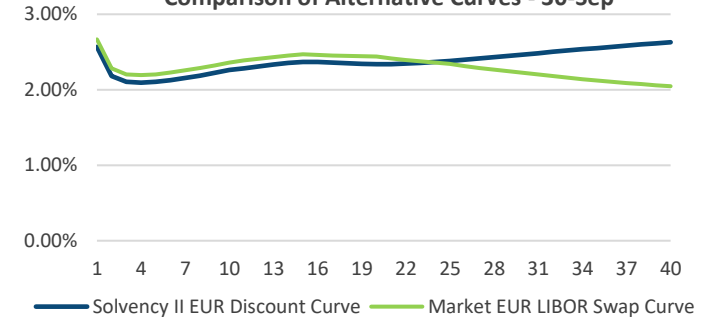
Corporate Bonds

- Global and European corporate bond yields fell by 22 and 25 basis points, respectively.
- Global spreads tightened by 2 basis points, whilst European corporate spreads were unchanged.
- The decline in risk-free rates, combined with the flat movement in European corporate bond spreads, resulted in gains for the European corporate bond index.

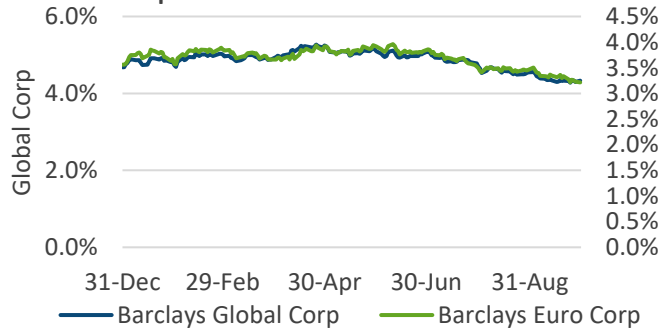
Solvency II Discount Rates - EUR



Comparison of Alternative Curves - 30-Sep



Corporate Bond Yields: 2024 YTD



Corporate Bond Spreads: 2024 YTD



	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 2024	-87	-67	-47	-32	-23	-17	-71	-61	-4	-3
Since Q1 2024	-95	-46	-22	-8	-4	-3	-55	-45	0	3
Since Q4 2023	-79	-21	-13	-8	-9	-10	-35	-34	-15	-21
Since Q3 2023	-148	-119	-103	-88	-69	-57	-133	-131	-35	-36

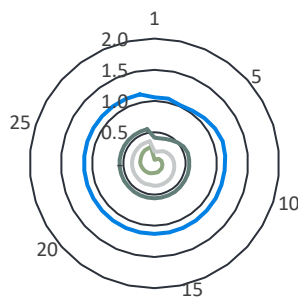
Solvency II Monitor - Spreads

Fundamental Spreads

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

Fundamental Spreads %

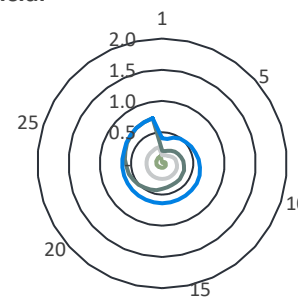
EUR: Financial



— AAA — AA — A — BBB

EUR Financial Fundamental Spread %					
	1Y	Y5	Y10	Y20	Y30
AAA	0.06	0.10	0.13	0.19	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	1.08	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	0.06	0.08	0.12
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	0.12
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	0.55	0.74

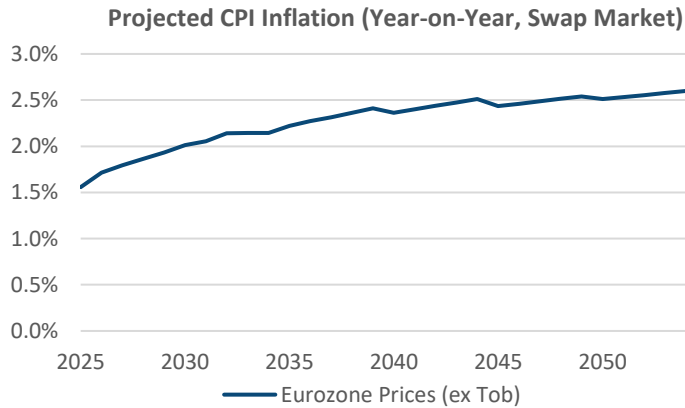
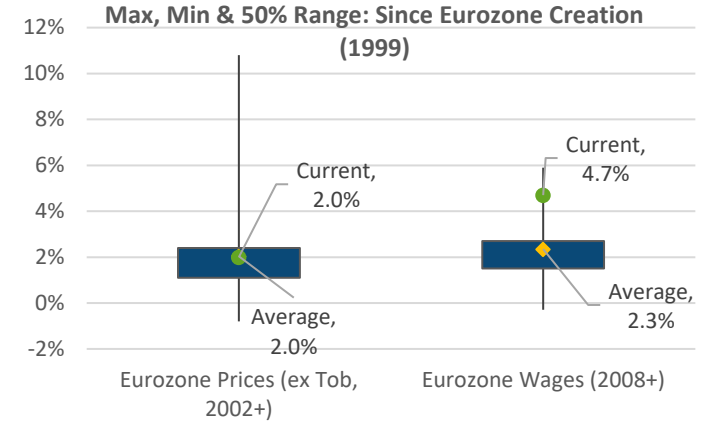
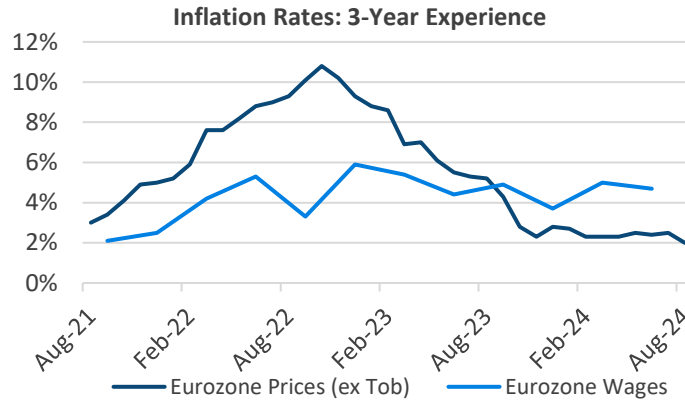
The **Solvency II risk-free discount rates** are based on applying the Smith-Wilson Extrapolation to LIBOR swap rates sourced from Bloomberg (current curve is for 30/09/24) and applying the Credit Risk Adjustment as defined in the Technical Specs. For the official published curves please refer to the [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 31/08/24. **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 decreased by 50 basis points to 2.0% in August.
- The Eurozone projected CPI curve was lower at the short-end, but the rest of the curve was relatively unchanged from the previous month.
- Eurozone Q2 2024 wage inflation fell by 30 basis points to 4.7% after the previous quarter's figure was revised lower by 10 basis points.



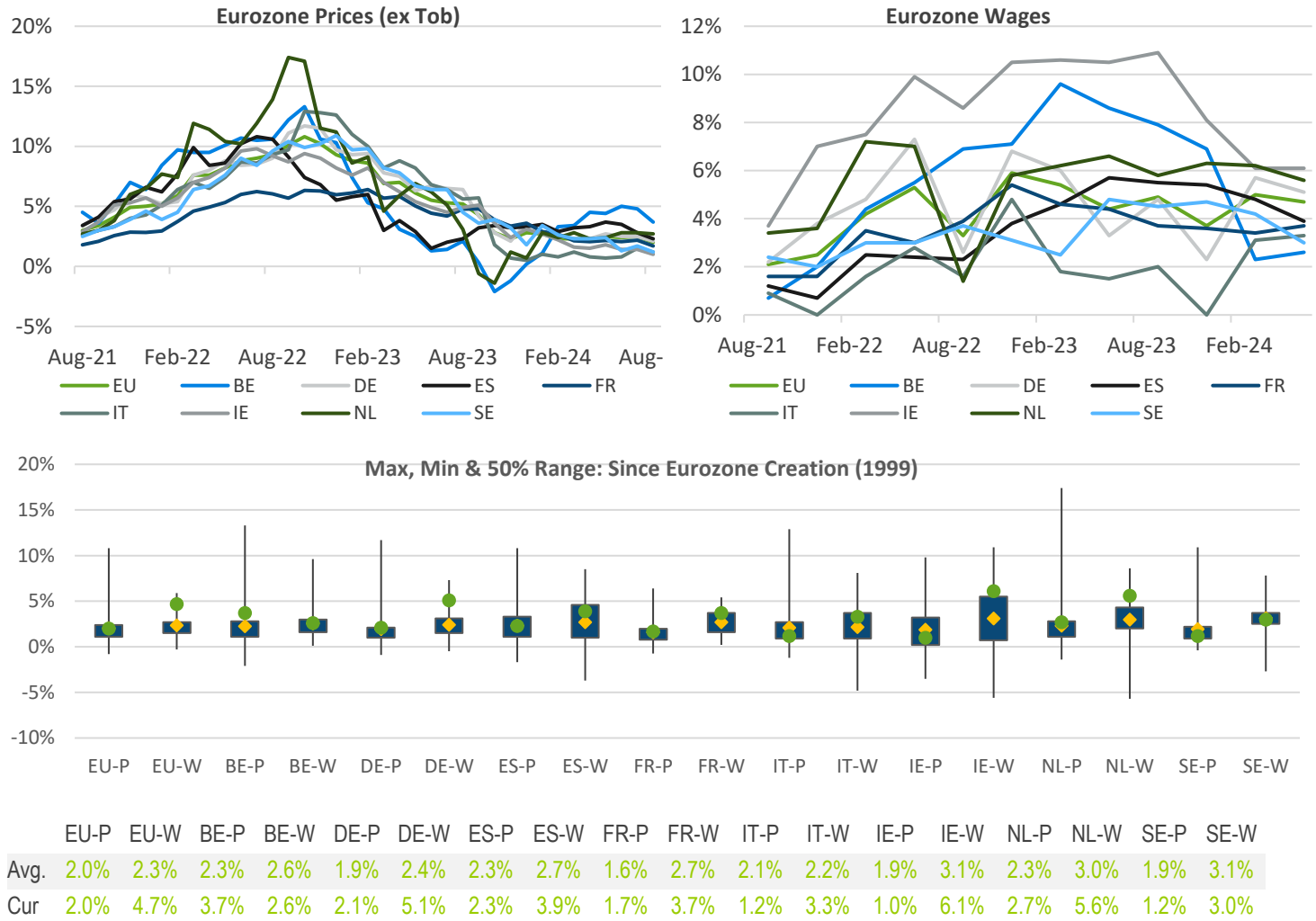
Milliman Financial Risk Management

EuroZone Market Monitor – 30 September 2024

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

Inflation Monitor

- All major European economies saw their price inflation drop in August.
- Belgium saw the largest decline in price inflation in August, falling by 110 basis points to 3.7%, which was the highest reading in the region.
- Netherlands had the smallest price inflation decline in the region, falling by 10 basis points to 2.7%.
- Ireland continued to post the lowest price inflation reading in the region at 1.0%.
- Changes in Q2 2024 wage inflation were mixed for the major European countries.
- France and Belgium witnessed the largest increase in Q2 wage inflation, both rising by 30 basis points to 3.7% and 2.6%, respectively. The previous quarter's figure for the former was revised higher by 70 basis points. Despite the increase the latter was the lowest reading in the region.
- Sweden saw the largest decline in Q2 2024 wage inflation, decreasing by 120 basis points to 3.0%, after the previous quarter was revised higher by 20 basis points.
- Ireland posted the highest reading of the region for Q2 2024 wage inflation at 6.1%.

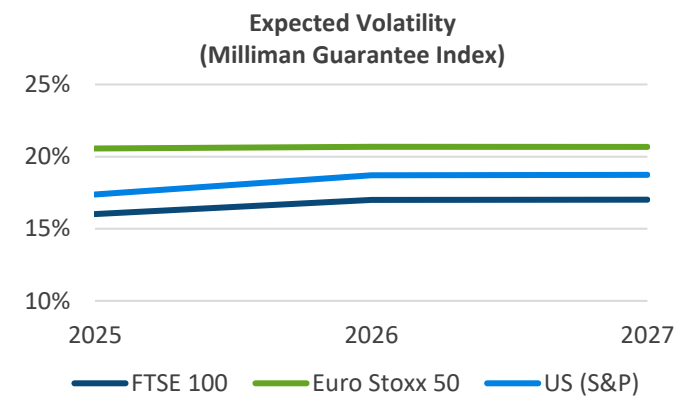
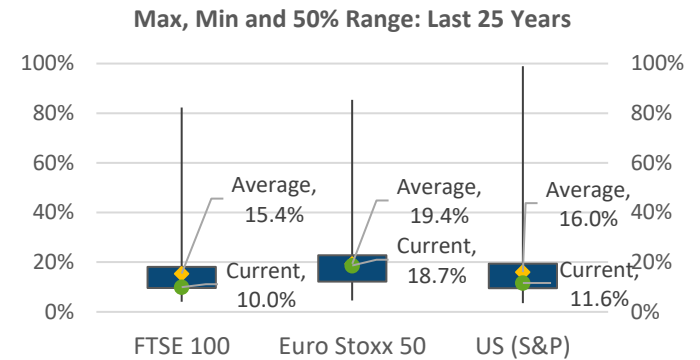
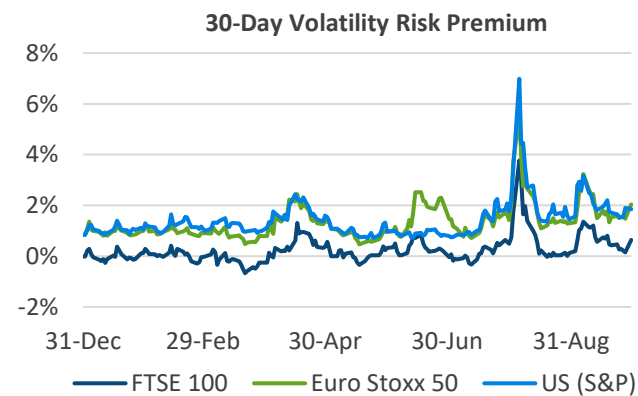
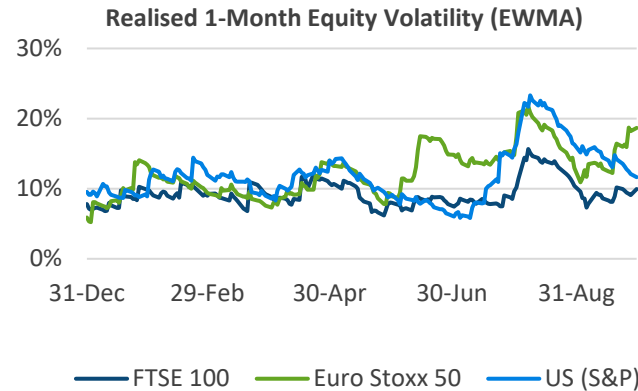


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Volatility and Hedging Cost Monitor

- Realised volatilities on major equity indices declined in September, with the exception of Euro Stoxx 50 which saw its realised volatility increase.
- The FTSE 100 ended the month with a realised volatility of 10.0%. The same measure stood at 18.7% and 11.6% on the Euro Stoxx 50 and the S&P 500, respectively.
- Volatility risk premiums on major indices increased. The FTSE 100 had a volatility risk premium of 0.6% at month-end. The volatility risk premium on the Euro Stoxx 50 was 2.0%, and 1.9% 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.

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

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