

Asset Price Monitor

Local Equity Markets

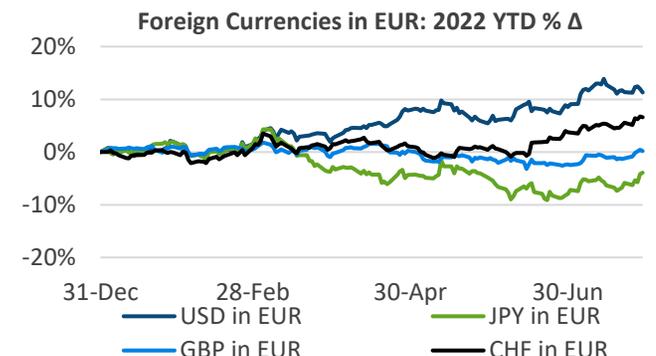
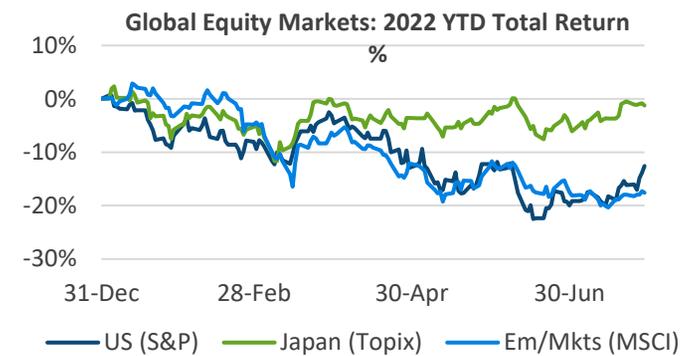
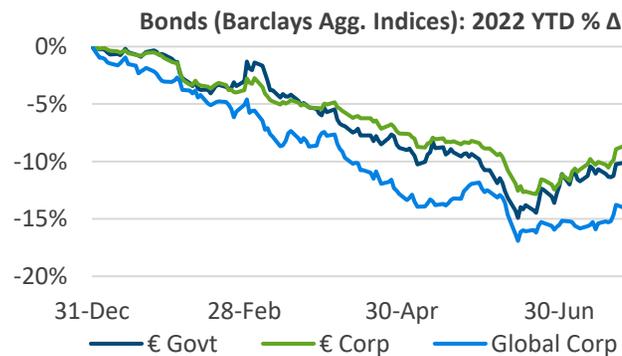
- Global equity markets had a strong performance in July, with markets anticipating central banks will ease monetary tightening sooner on the back of weak global PMI data and a negative quarterly GDP growth figure out of the US. Risk assets are perceived to benefit from the change in policy.
- During the month, the ECB delivered its first rate hike in over a decade, raising rates by 50 basis points, as the Eurozone came out of the negative rate era.
- The Euro Stoxx 50 index gained 7.5%.
- The FTSE 100 ended the month up 3.7%.

Global Equity Markets

- Developed economies outperformed their emerging market counterparts, as the S&P 500 and the Japanese Topix index returned 9.2% and 3.7%, respectively.
- In contrast, the MSCI Emerging Markets index ended the month relatively flat.

Bond/FX Markets

- The European government bond index was up 4.1% and the European corporate bond index gained 4.7%.
- The Euro weakened during the month, as it briefly traded below parity against the Dollar. It ended the month 2.6% lower against both the US Dollar and British Pound, meanwhile losing 4.4% against the Japanese Yen.



Total Returns as of July 29, 2022

	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	7.5%	3.7%	3.8%	9.2%	3.7%	-0.2%	4.1%	4.7%	2.7%	2.6%	4.4%	2.6%
3 Month	-0.7%	-1.0%	-7.9%	0.4%	2.4%	-6.3%	0.3%	-0.2%	5.5%	3.2%	0.5%	-0.1%
1 Year	-6.3%	9.6%	-5.4%	-4.6%	4.5%	-19.8%	-10.6%	-9.3%	10.4%	16.1%	-4.5%	1.7%
YTD	-11.3%	2.7%	-11.1%	-12.6%	-1.2%	-17.6%	-8.5%	-7.7%	6.6%	11.3%	-3.9%	0.2%

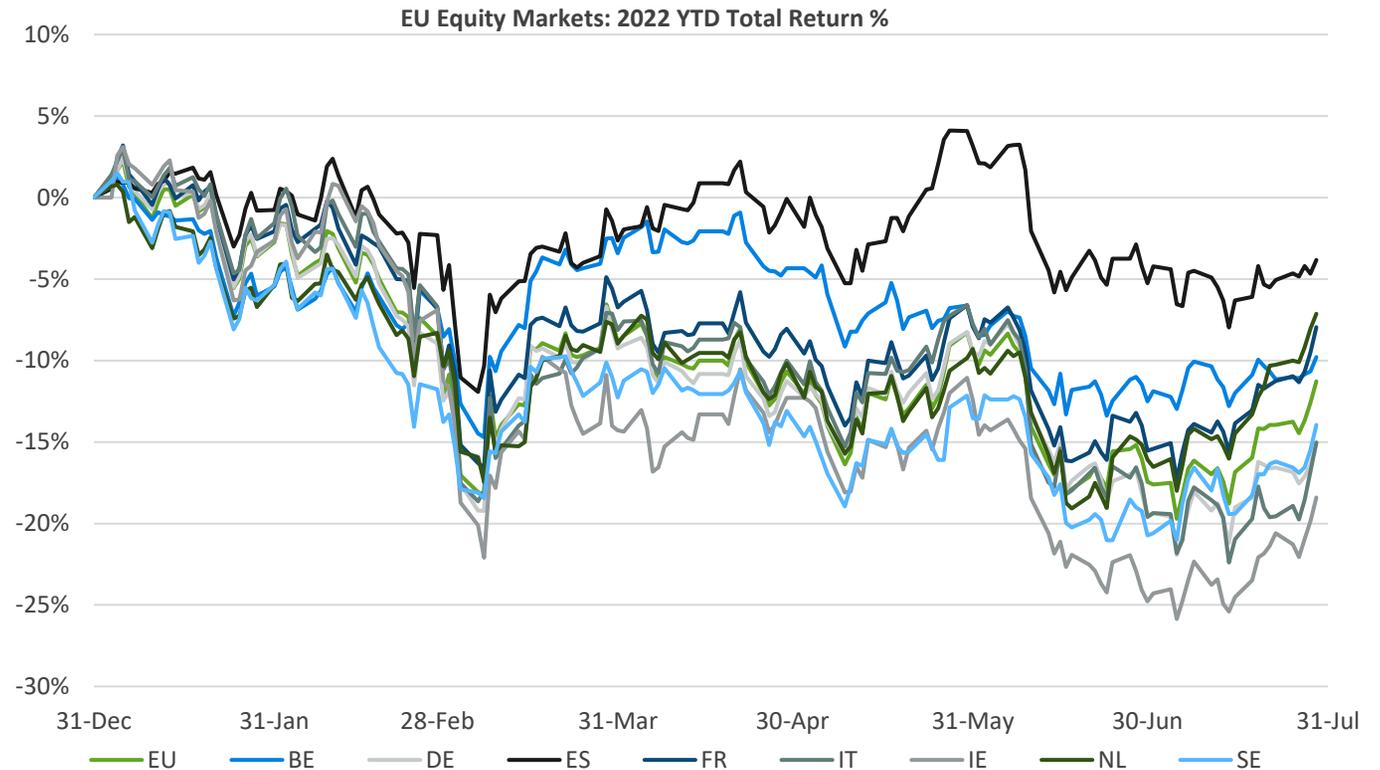
Milliman Financial Risk Management

EuroZone Market Monitor – 29 July 2022

Data sources: Bloomberg; Barclays; EuroStat; Oxford-Man Institute; Milliman FRM

Eurozone Equity

- All major European equity markets made gains in July.
- The Dutch equity index was the best performer of the month, up 10.7%.
- The Spanish equity market saw the smallest gains, returning 1.5%.
- Despite the smaller comparable returns in July, the Spanish equity index has suffered the smallest losses in the region year-to-date, down only 3.8%.
- The Irish equity market remains the worst performing equity market in the region year-to-date, down 18.4%.



Equity Returns as of July 29, 2022

	EU	Belgium	Germany	Spain	France	Italy	Ireland	Netherlands	Sweden
1 Month	7.5%	3.1%	5.5%	1.5%	9.0%	5.7%	8.5%	10.7%	8.5%
3 Month	-0.7%	-5.7%	-4.4%	-3.8%	0.1%	-5.6%	-7.0%	3.4%	-1.0%
QTD	7.5%	3.1%	5.5%	1.5%	9.0%	5.7%	8.5%	10.7%	8.5%
YTD	-11.3%	-9.8%	-15.1%	-3.8%	-8.0%	-15.0%	-18.4%	-7.1%	-14.0%

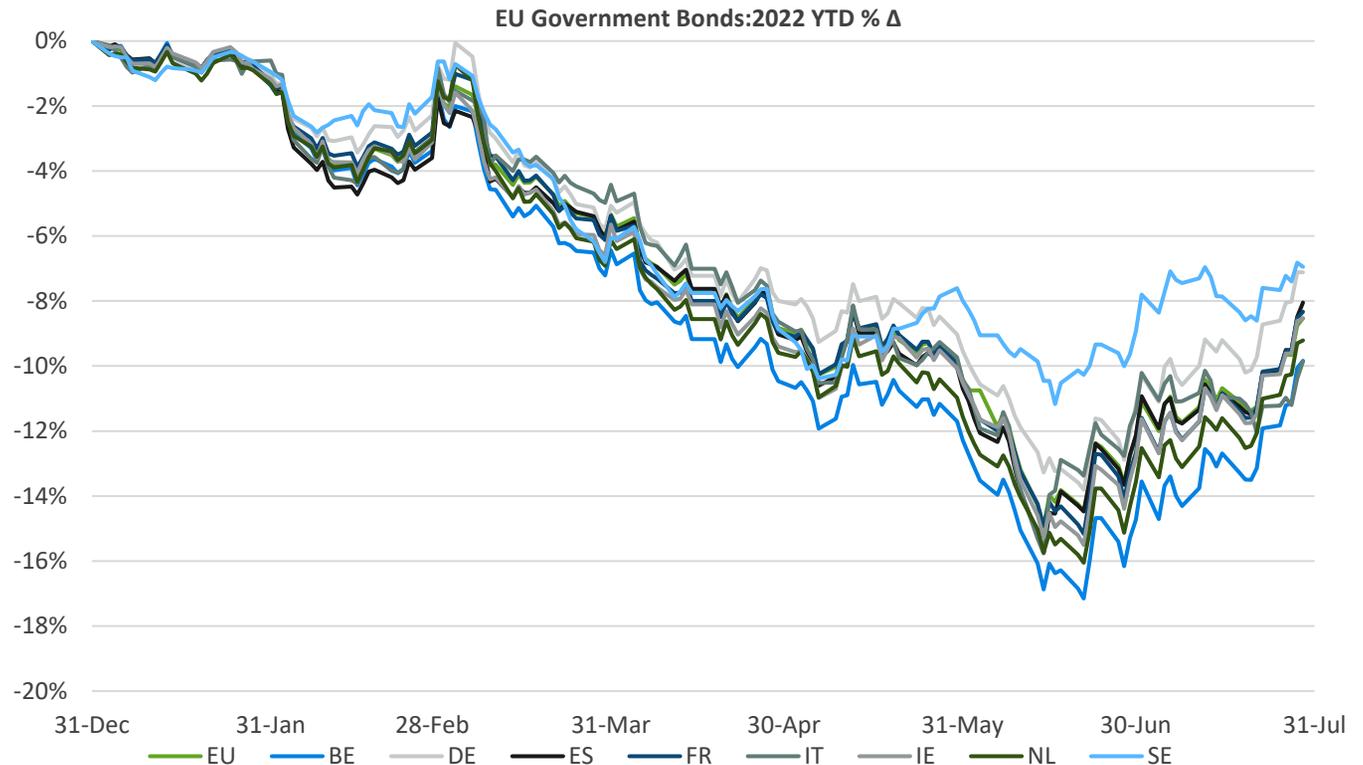
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EuroZone Market Monitor – 29 July 2022

Data sources: Bloomberg; Barclays; EuroStat; Oxford-Man Institute; Milliman FRM

Eurozone Government Bonds

- European government bond indices made positive returns in July.
- The Belgian government bond index outperformed its peers in July, gaining 5.7%.
- Italian government bonds were the underperformers of the month, up 1.7%.
- Despite the gains, all major European government bond indices remain down for the first seven months of the year.
- The Italian government bond index has seen the largest losses year-to-date, falling by 9.9%.
- The Swedish government bond index has lost 6.9% year-to-date, remaining the best performer in the region for the year.



Bond Returns as of July 29, 2022

	EU	Belgium	Germany	Spain	France	Italy	Ireland	Netherlands	Sweden
1 Month	4.1%	5.7%	4.6%	4.6%	5.0%	1.7%	4.9%	5.0%	2.2%
3 Month	0.3%	0.7%	1.0%	1.1%	0.7%	-1.3%	0.9%	0.4%	2.1%
QTD	4.1%	5.7%	4.6%	4.6%	5.0%	1.7%	4.9%	5.0%	2.2%
YTD	-8.5%	-9.8%	-7.1%	-8.0%	-8.3%	-9.9%	-8.5%	-9.2%	-6.9%

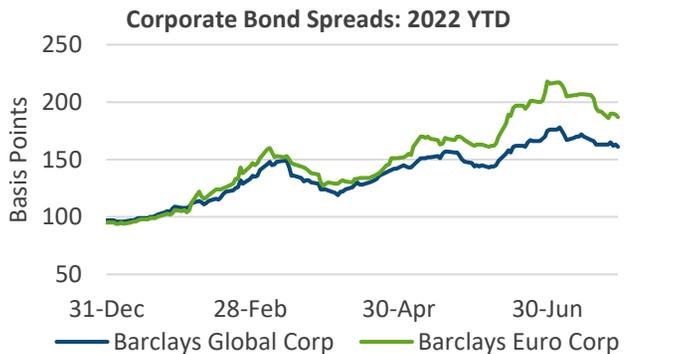
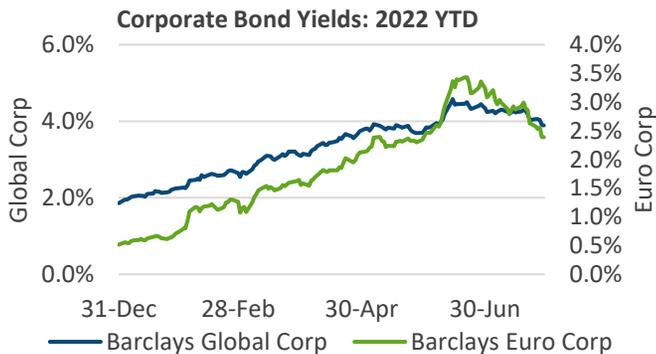
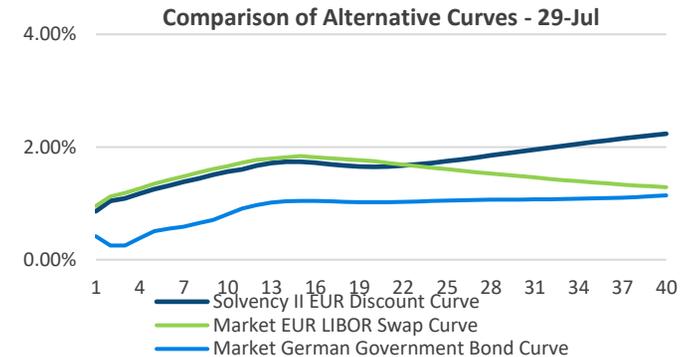
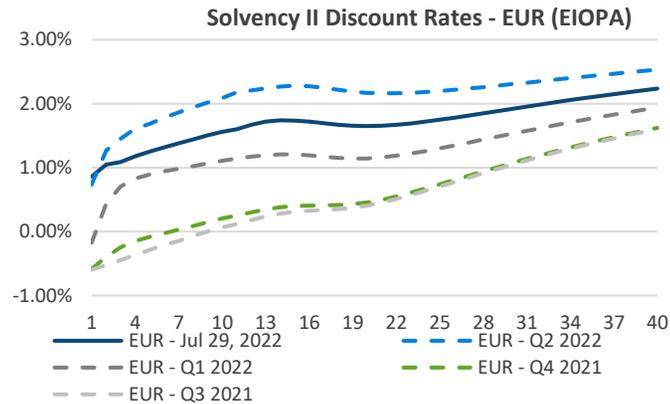
Liability Valuation Monitor

Risk Free Rates

- EUR risk-free rates declined at all terms in July, with the exception of the 1-year rate which witnessed a 12 basis points rise.
- The 10 and 20-year risk-free rates dropped by 53 and 52 basis points, respectively.

Corporate Bonds

- European and global corporate bond yields declined in July. The former fell by 85 basis points and the latter by 45 basis points.
- Credit spreads tightened in July, with the global and European corporate spreads tightening by 14 and 31 basis points, respectively.
- The fall in risk-free rates combined with the tightening in the European 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 Q2 2022	12	-44	-53	-52	-39	-30	-45	-85	-14	-31
Since Q1 2022	104	36	45	51	39	30	80	83	37	58
Since Q4 2021	145	134	136	119	85	61	203	187	64	92
Since Q3 2021	146	154	150	124	87	63	224	204	73	103

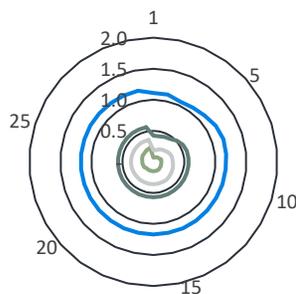
Solvency II Monitor - Spreads

Fundamental Spreads

- There were no material changes since the last report.

Fundamental Spreads %

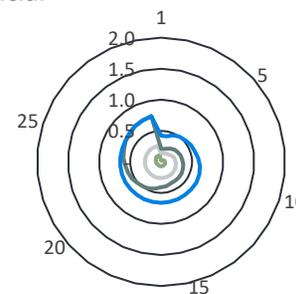
EUR: Financial



— AAA — AA — A — BBB

EUR Financial Fundamental Spread %					
	1Y	Y5	Y10	Y20	Y30
AAA	0.07	0.10	0.13	0.15	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	1.11	1.11	1.17	1.17	1.17
EUR Financial 'Before Floor' %					
	1Y	Y5	Y10	Y20	Y30
AAA	0.00	0.04	0.08	0.15	0.23
AA	0.04	0.07	0.11	0.18	0.26
A	0.06	0.12	0.18	0.31	0.42
BBB	0.15	0.24	0.33	0.47	0.58

EUR: Non-Financial



— AAA — AA — A — BBB

EUR Non-Financial Fundamental Spread %					
	1Y	Y5	Y10	Y20	Y30
AAA	0.02	0.03	0.07	0.07	0.11
AA	0.14	0.17	0.25	0.26	0.26
A	0.21	0.29	0.37	0.51	0.75
BBB	0.42	0.52	0.65	0.66	0.75
EUR 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	0.09	0.17	0.26
A	0.04	0.15	0.27	0.51	0.75
BBB	0.11	0.21	0.34	0.55	0.75

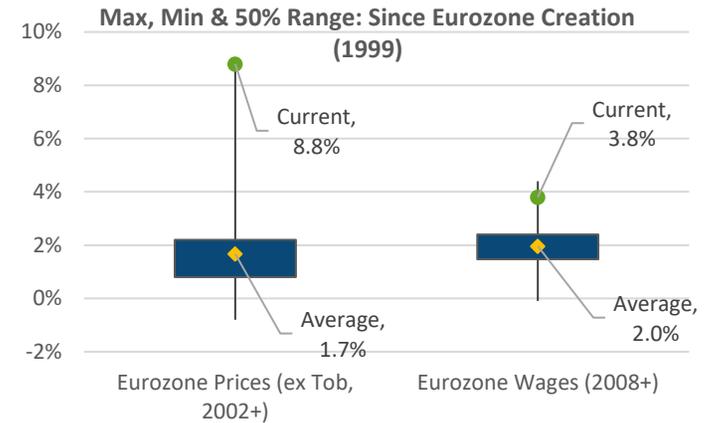
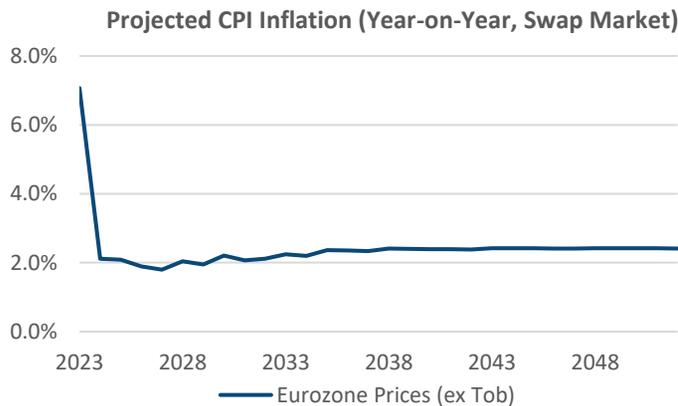
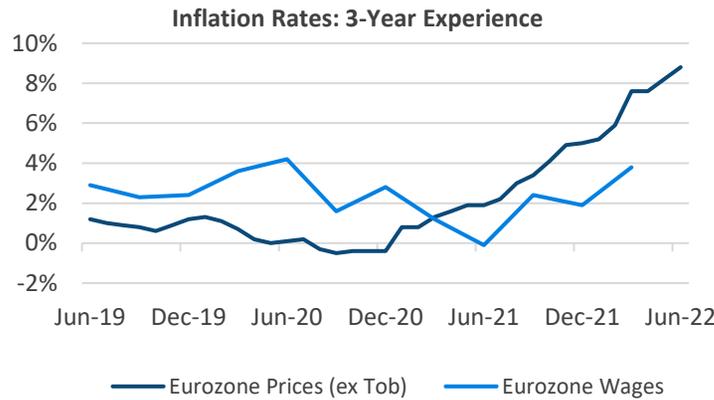
The **Solvency II risk-free discount rates** are based on applying the Smith-Wilson Extrapolation to LIBOR swap rates sourced from Refinitiv and applying the Credit Risk Adjustment as defined in the Technical Specs. The data is provided by EIOPA and as of 31/07/22.

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 31/07/22. **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 rose to 8.8% in June, an increase of 60 basis points from the previous month.
- The Q2 2022 GDP growth figure for the Eurozone came in at 4.0%, a fall of 140 basis points from the previous quarter.
- The Eurozone projected CPI curve rose at the very near-term, whilst the rest of the curve remained broadly unchanged from the month before.
- There were no updates to the wage inflation figure this month.



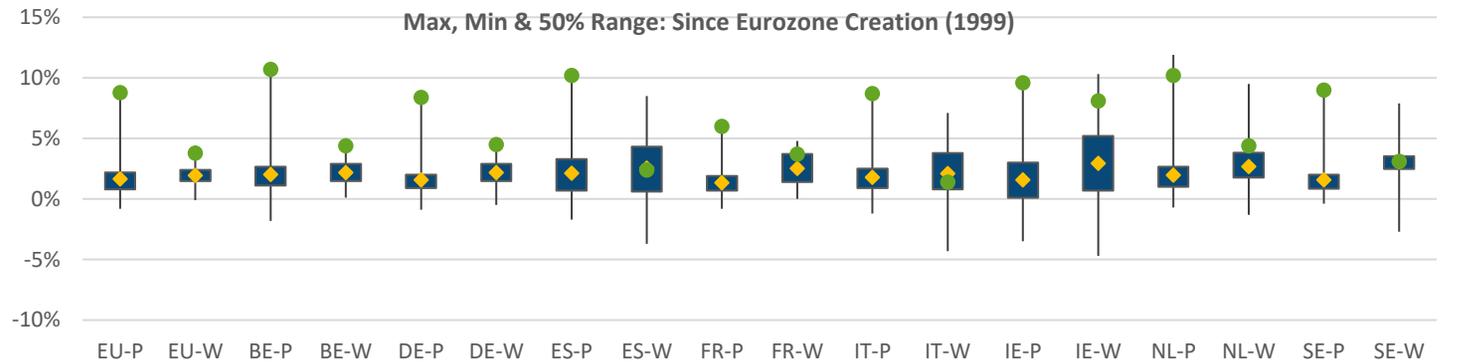
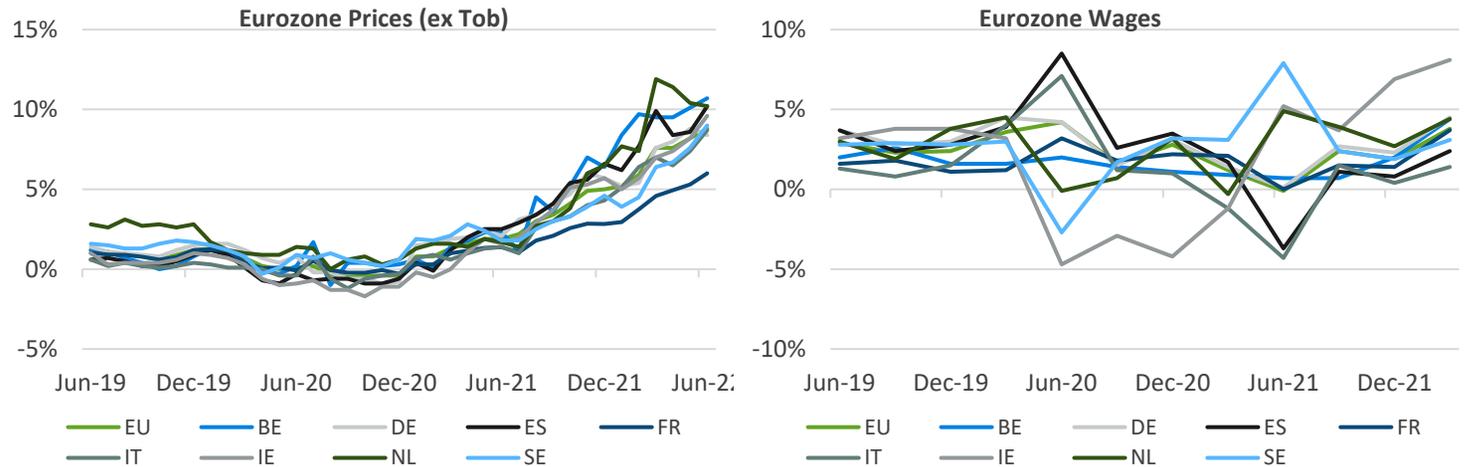
Milliman Financial Risk Management

EuroZone Market Monitor – 29 July 2022

Data sources: Bloomberg; Barclays; EuroStat; Oxford-Man Institute; Milliman FRM

Inflation Monitor

- All major European economies saw their price inflation rise in June, with the exceptions of the Netherlands and Germany, with the latter witnessing a 40 basis points drop in its price inflation, posting a headline figure of 8.4%.
- Spanish price inflation rose the most in June, increasing by 160 basis points to 10.2%.
- France remained the country with the lowest price inflation in the Eurozone, coming in at 6.0%.
- Belgium now has the highest price inflation in the region, with a headline figure at 10.7%.
- There were no updates to the wage inflation figures this month.

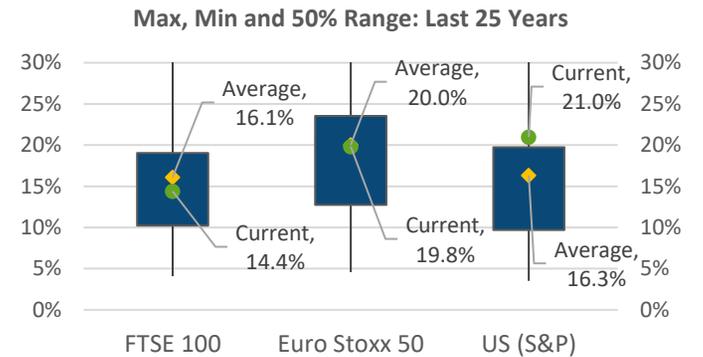
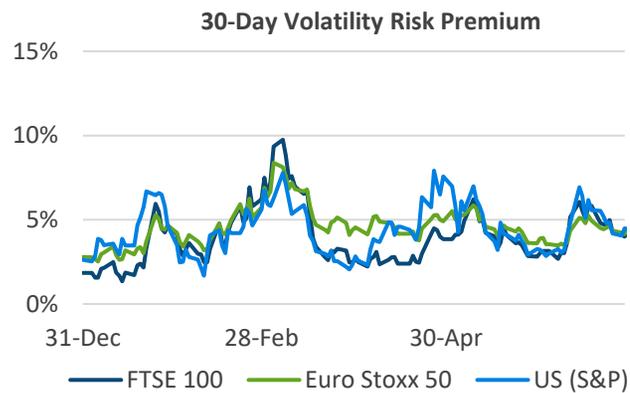
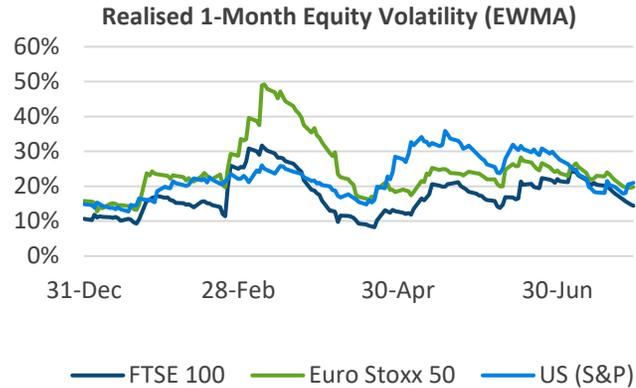


	EU-P	EU-W	BE-P	BE-W	DE-P	DE-W	ES-P	ES-W	FR-P	FR-W	IT-P	IT-W	IE-P	IE-W	NL-P	NL-W	SE-P	SE-W
Avg.	1.7%	2.0%	2.0%	2.2%	1.6%	2.2%	2.1%	2.6%	1.3%	2.5%	1.8%	2.1%	1.6%	3.0%	2.0%	2.7%	1.6%	3.1%
Cur	8.8%	3.8%	10.7%	4.4%	8.4%	4.5%	10.2%	2.4%	6.0%	3.7%	8.7%	1.4%	9.6%	8.1%	10.2%	4.4%	9.0%	3.1%

Volatility and Hedging Cost Monitor

- Realised volatilities of major indices eased in July, as equity markets rallied. The FTSE 100 ended the month with a realised volatility of 14.4%. The same measure stood at 19.8% and 21.0% on the Euro Stoxx 50 and the S&P 500.
- ** Please note that due to some missing data the volatility risk premiums have only been updated to the 28th of June. **

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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