

August 2023

# FX Market Structure Monthly

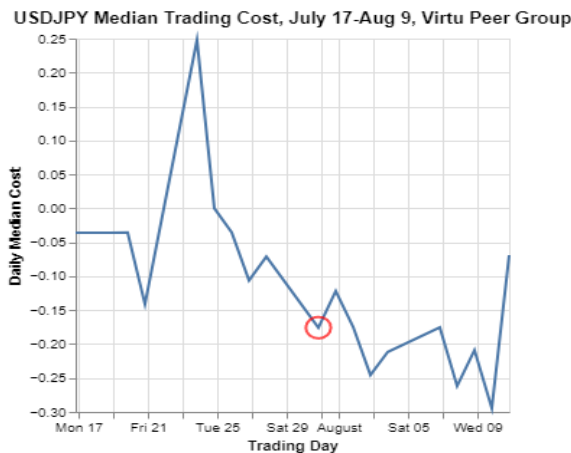
## CHANGES IN SPREAD AND VOLATILITY FOR MAJOR MARKET PAIRS

FX spreads remained stable in August, after widening in June and July with eight of the 23 pairs that we monitor recording wider spreads in the 12:00-16:00 GMT trading window. Volatility in the pre-WMR trading window remained constant, increasing for 15 of 23 pairs.

### READING THE RESULTS

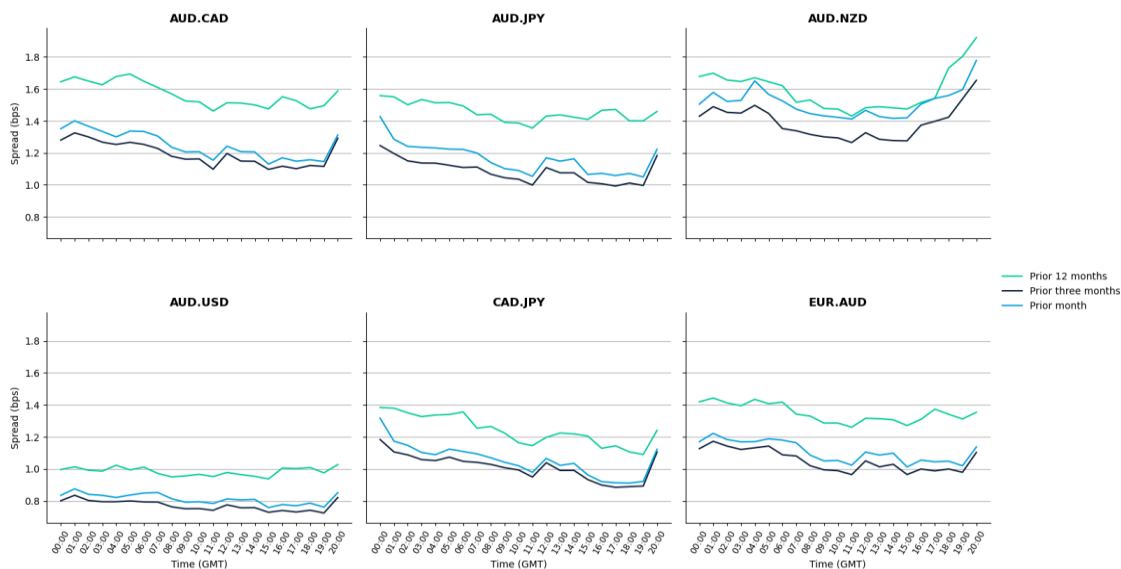
On the intraday charts, the green line represents the average spread or volatility for the past 12 months, the black line represents the past three months, and the blue line represents the past month. On the daily charts, the green area represents the 95<sup>th</sup> percentile confidence interval for the spread and volatility.

### SPREADS



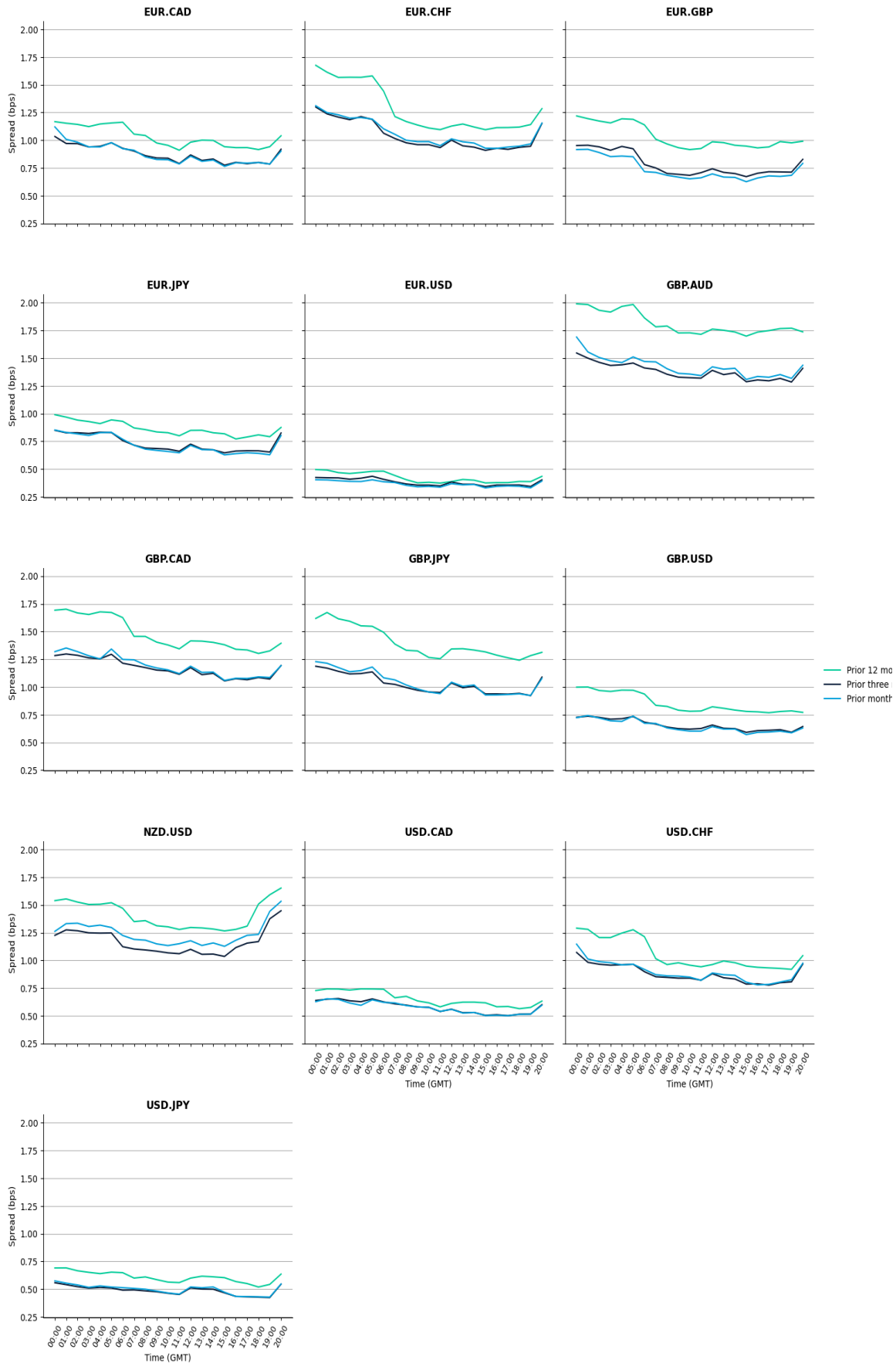
On July 28, Japan’s central bank announced a change to its yield curve control policy letting the interest rate on the Japanese ten-year government bond increase. In the Virtu Peer Group Database, our clients’ median performance dropped by -0.1 bps, while daily notional USD trading volume dropped by over 80% in the subsequent two weeks. We’ll soon publish an in-depth look at our client experience as central banks raise interest rates.

### G-10 Currency Pairs: Average Hourly Spread, 00:00-20:00 GMT Comparison over the past month, three months and year



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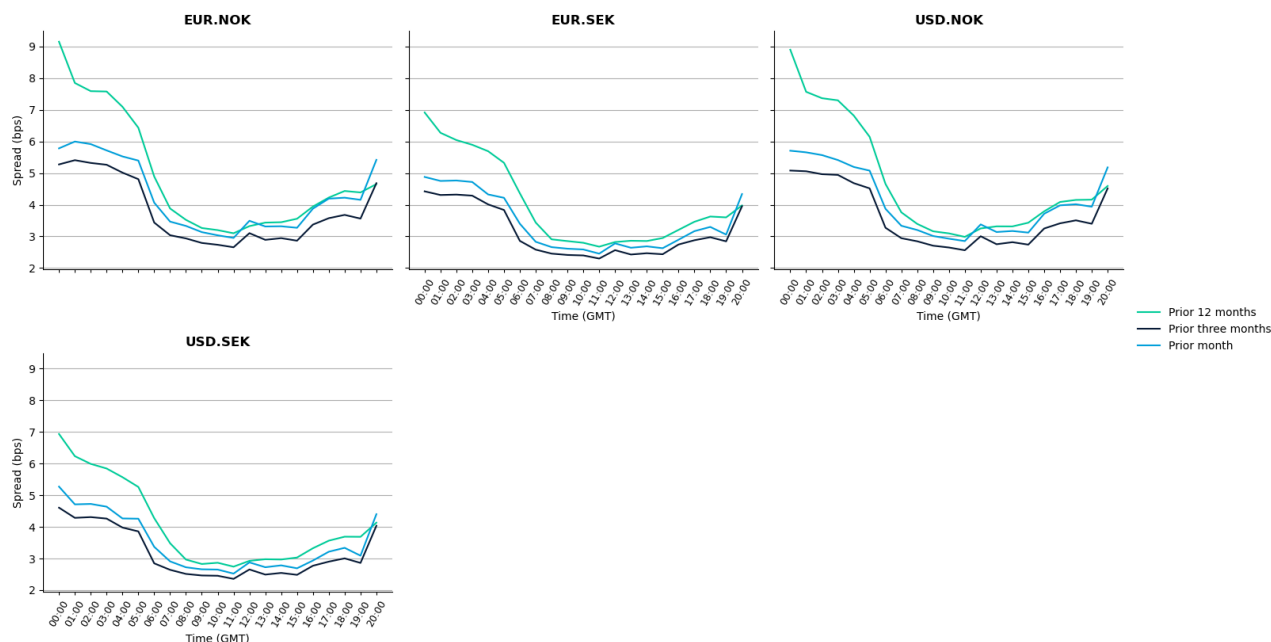
All chart sources: Virtu Financial, 2023. Spread and volatility calculations are derived from sources that Virtu believes to be reliable, but Virtu does not make any claims to its accuracy. USD.NOK, USD.SEK, EUR.NOK and EUR.SEK are shown in the separate exhibits



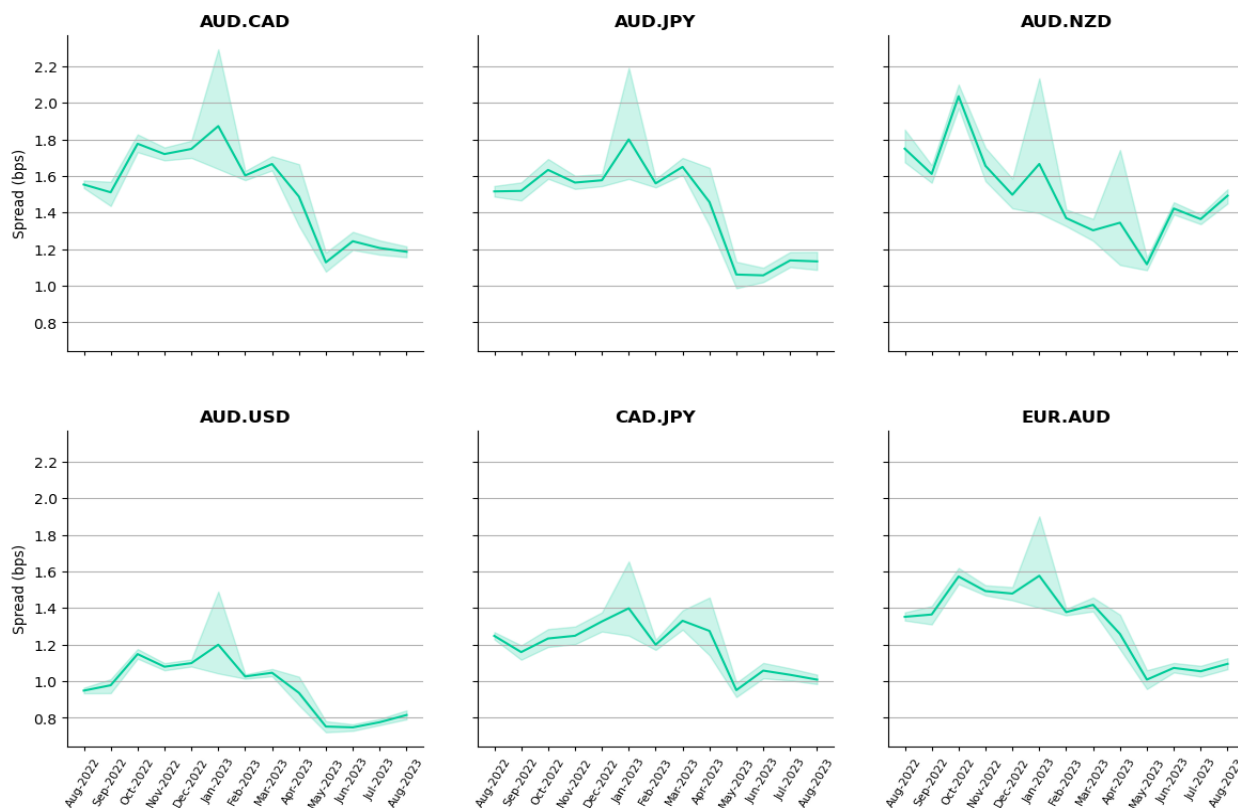
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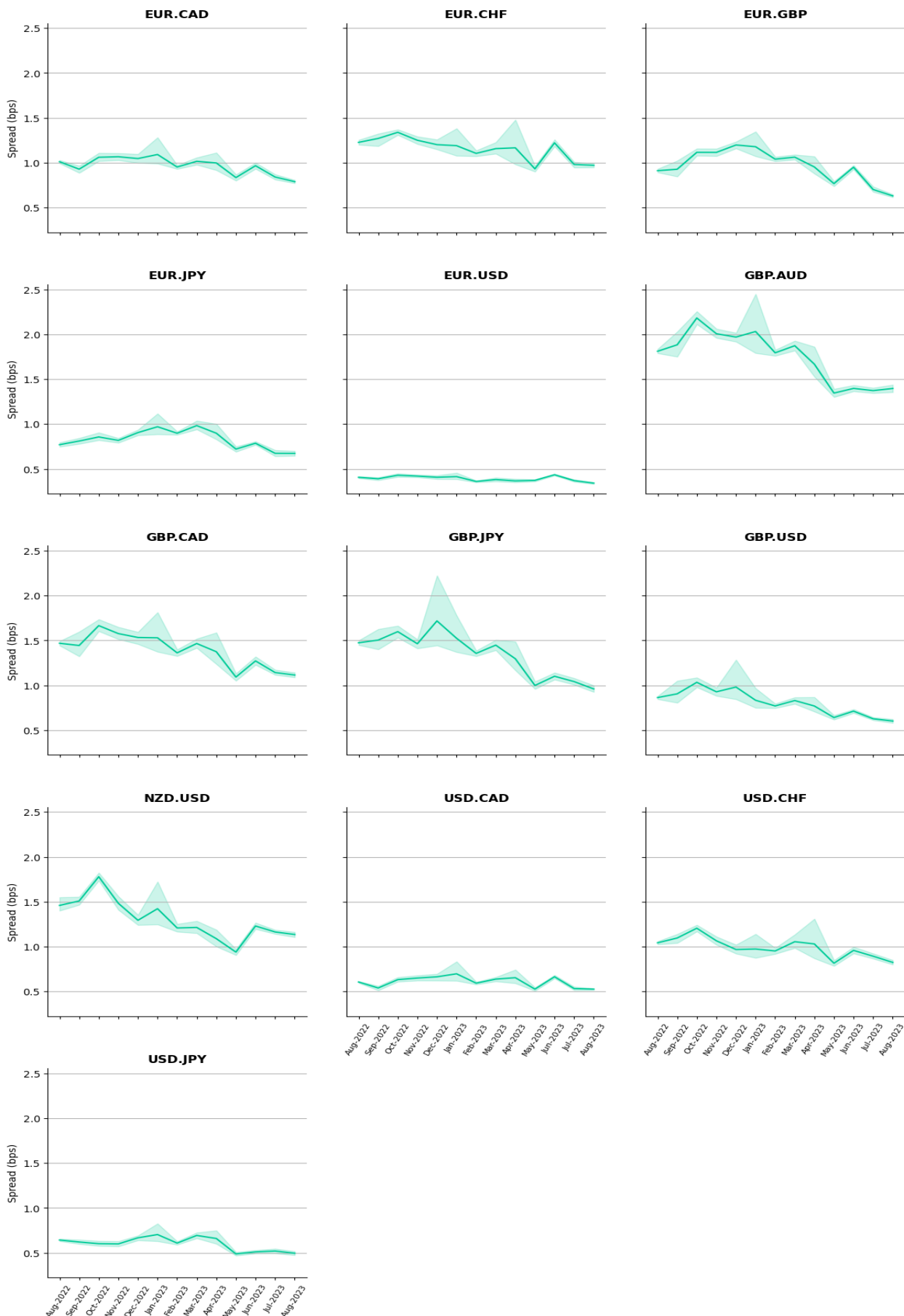
## Scandinavian G-10 Currencies: Average Hourly Spread, 00:00-20:00 GMT Comparison over the past month, three months and year



## G-10 Currencies: Average Daily Spread, 12:00-16:00 GMT August 2022-August 2023



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## Scandinavian G-10 Currencies: Average Daily Spread, 12:00-16:00 GMT August 2022- August 2023





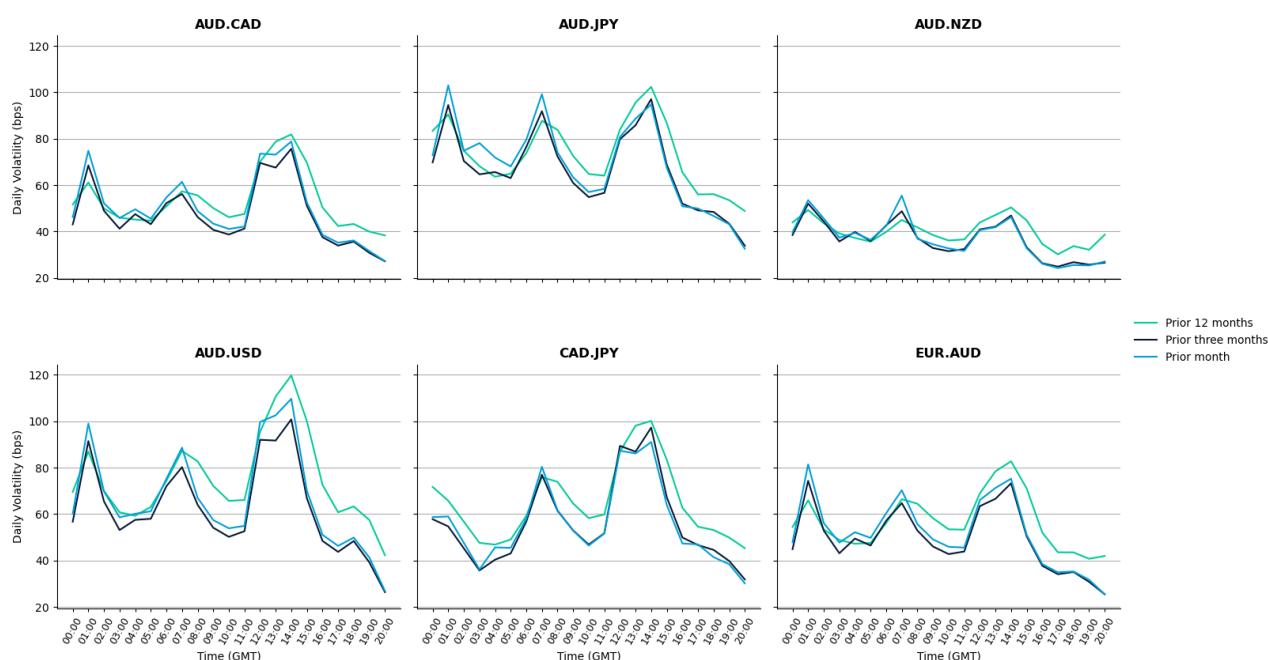
## VOLATILITY

Daily FX spread volatility increased for 15 of the 23 pairs in the 12:00-16:00 GMT pre-WMR trading window after increasing for 12 pairs in July. Among the majors, volatility rose for AUD.USD, EUR.USD, GBP.USD and USD.CHF when compared to one- and three-months ago. USD.JPY was the only major to record higher in August than 12 months ago.

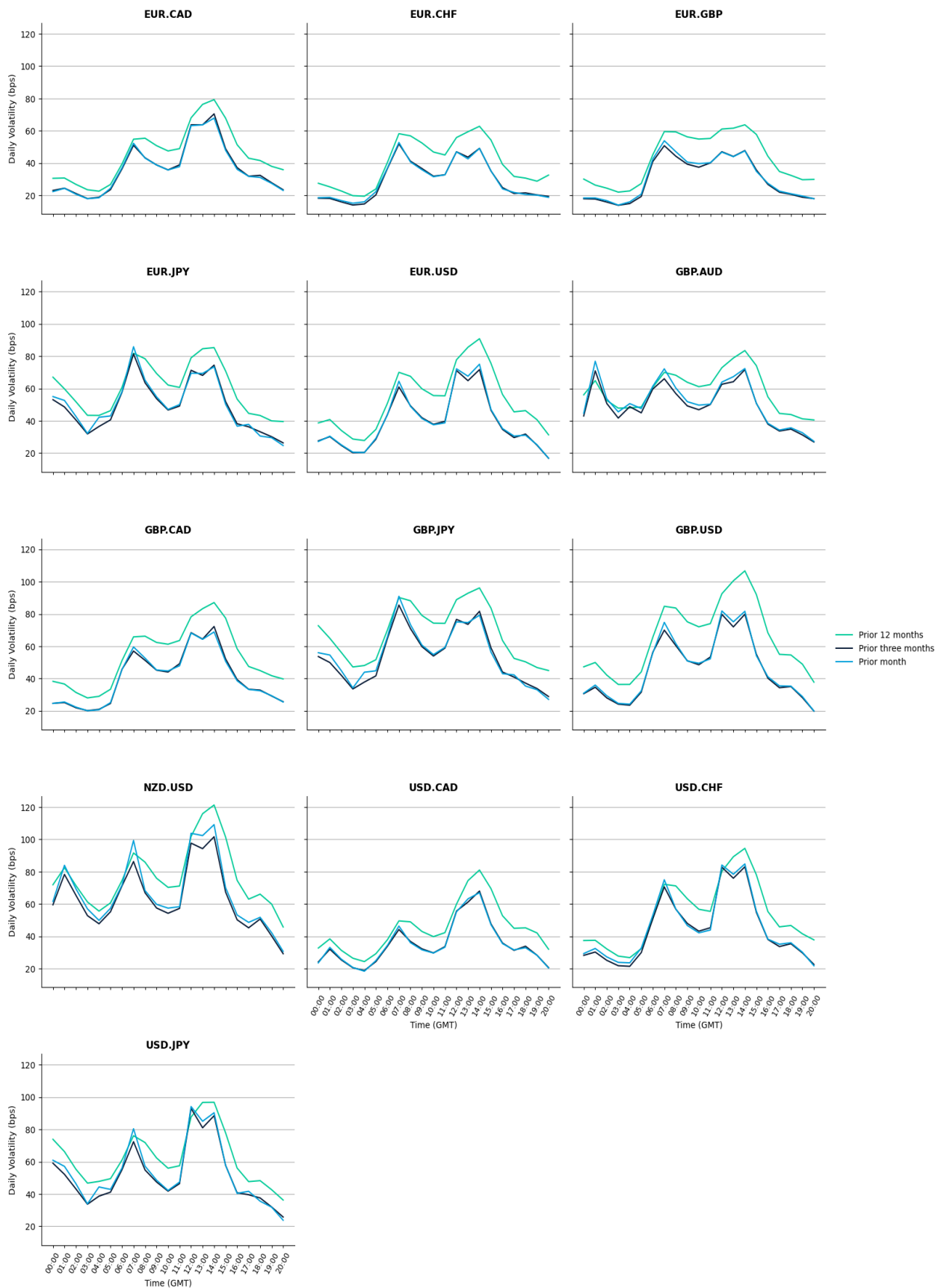
On an intraday basis, we observed an increase in intra-day volatility in Asian, European and North American trading hours for AUD.USD, NZD.USD, USD.CAD, USD.CHF and the four Scandinavian pairs. In contrast to what we expected, intra-day volatility fell for all of the JPY rates that we track – USD.JPY, EUR.JPY, CAD.JPY and GBP.JPY. This may reflect the sharp fall in traded volumes that we noted earlier.

### G-10 Currencies: Average Hourly Volatility, 00:00-20:00 GMT

Comparison over the past month, three months and year



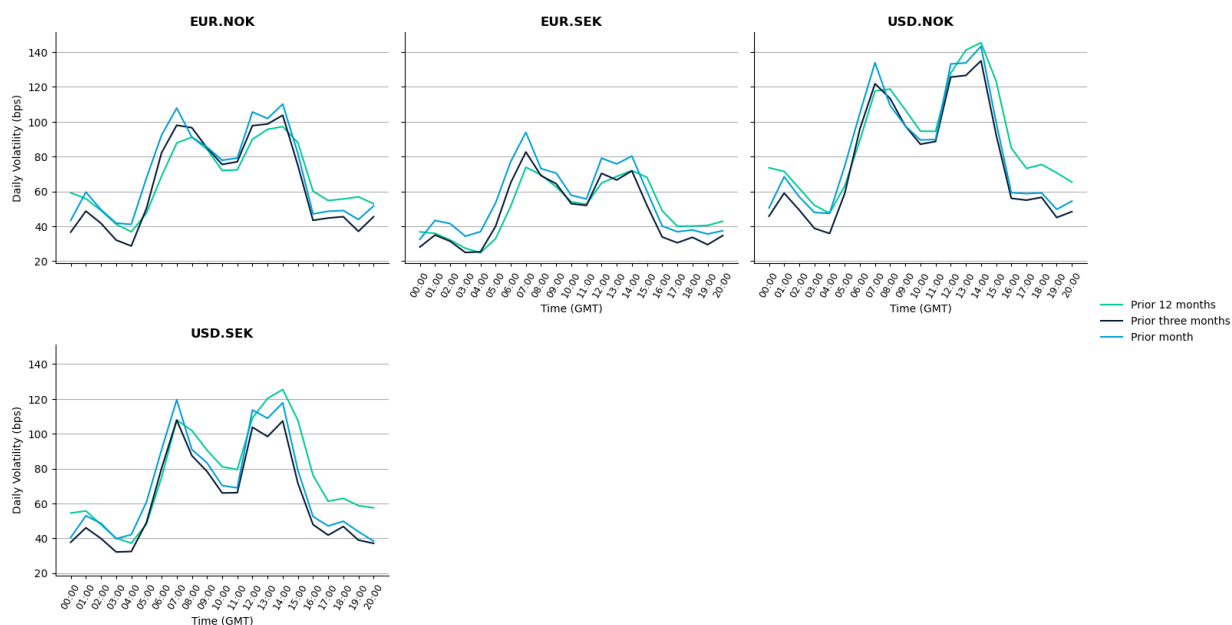
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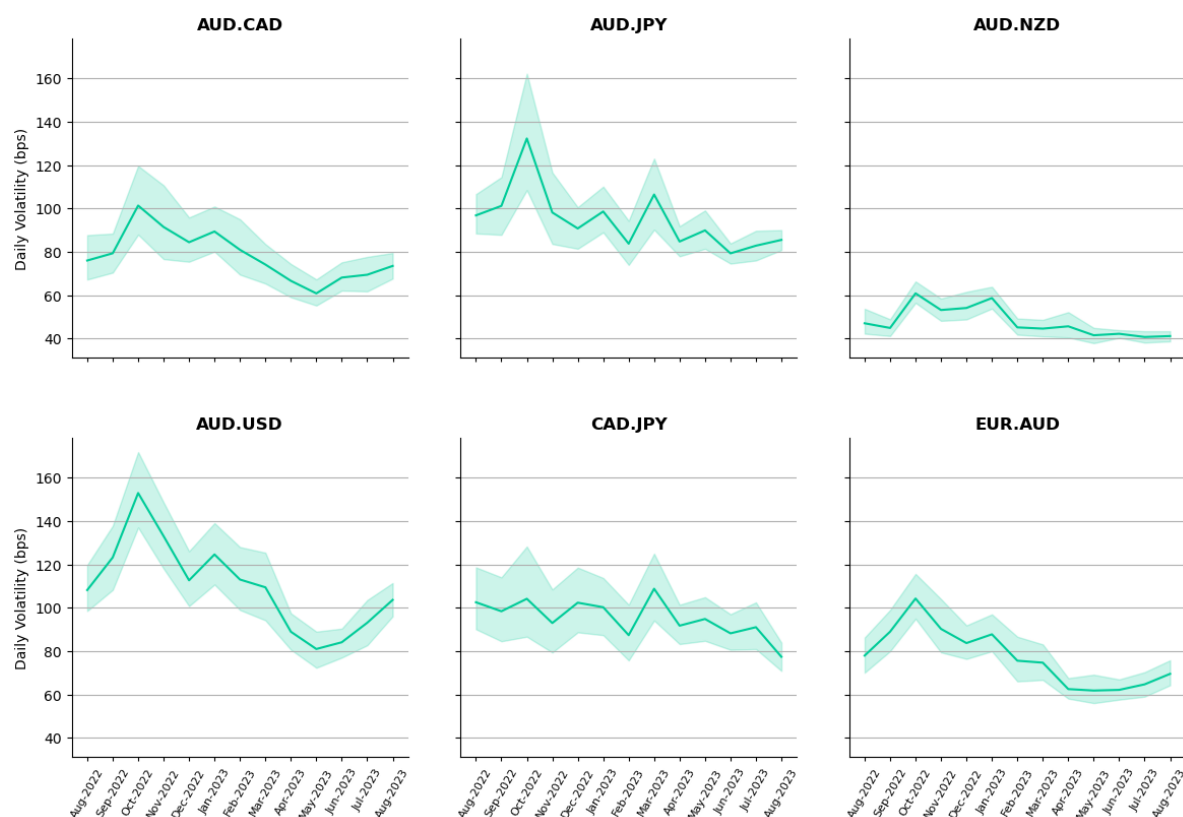
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## Scandinavian G-10 Currencies: Average Hourly Volatility, 00:00-20:00 GMT Past month, three months and year



## G-10 Currencies: Average Daily Volatility, 12:00-16:00 GMT August 2022-August 2023



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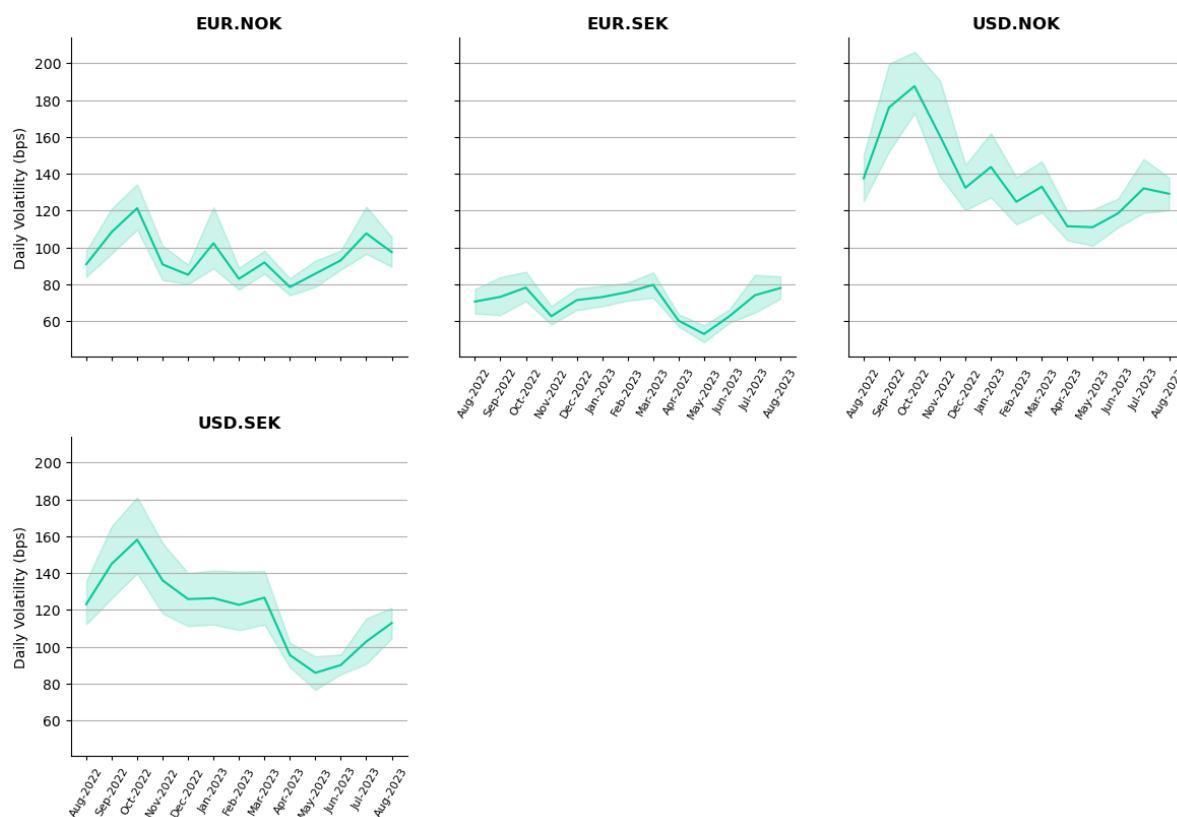




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## Scandinavian G-10 Currencies: Average Daily Volatility, 12:00-16:00 GMT August 2022-August 2023



**Have questions?** To learn more, contact your regional Virtu Analytics representative.  
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