

August 2022

FX Market Structure Monthly

CHANGES IN SPREAD AND VOLATILITY FOR MAJOR MARKET PAIRS

Spreads and volatility narrowed in August, reversing a three-month trend. In the 12:00-16:00 GMT trading window, 22 of the 23 pairs we track narrowed their spreads and volatility. On an intra-day basis, only one pair experienced wider spreads or volatility during Tokyo, London and New York desk hours. Movements were small, however, and may simply reflect the end-of-summer lull. Spreads and volatility have both returned to their trailing three-month average from July's highs but remain elevated from 12 months ago.

READING THE RESULTS

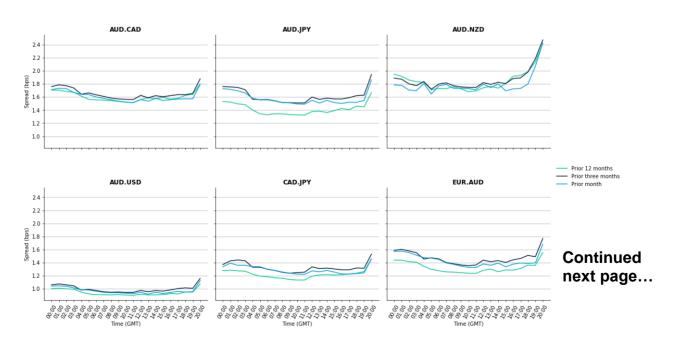
In the intraday charts, the green line presents the average spread or volatility for the past 12 months, the black line is for the past three months and the blue line is for the past month. On the daily charts, the green area represents the 95th percentile confidence interval for the spread and volatility, showing the stability of the calculated median value.

SPREADS

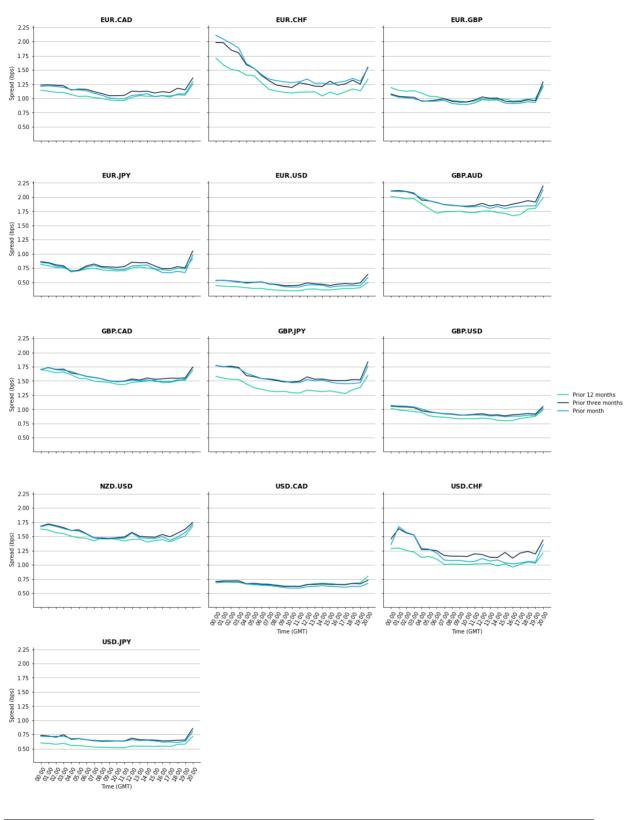
In August, spreads narrowed a bit, returning to their trailing three-month average. The only currency that recorded a wider spread throughout the trading day globally and during the 12:00-16:00 GMT trading window we monitor was AUD.USD.

- Two major pairs, GBP.USD and USD.JPY had wider spreads in August than for the prior three months. Only the USD.CAD recorded a narrower spread in August than it did six or 12 months ago.
- In absolute terms, spreads narrowed the most for the four Scandinavian pairs. EUR.NOK and USD.NOK spreads were tighter in August than the prior three-month average.

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

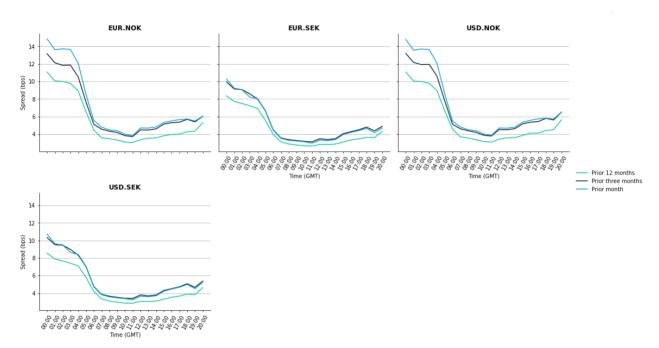




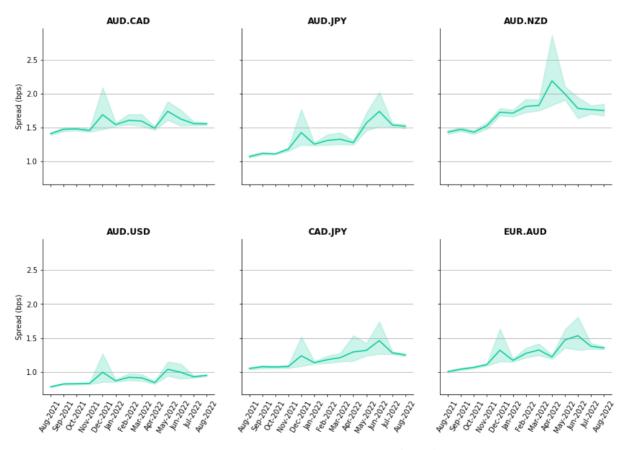




Scandinavian G-10 Currencies: Average Hourly Spread, 00:00-20:00 GMT Comparison over the past month, three months and year



G-10 Currencies: Average Daily Spread, 12:00-16:00 GMT August 2021- August 2022



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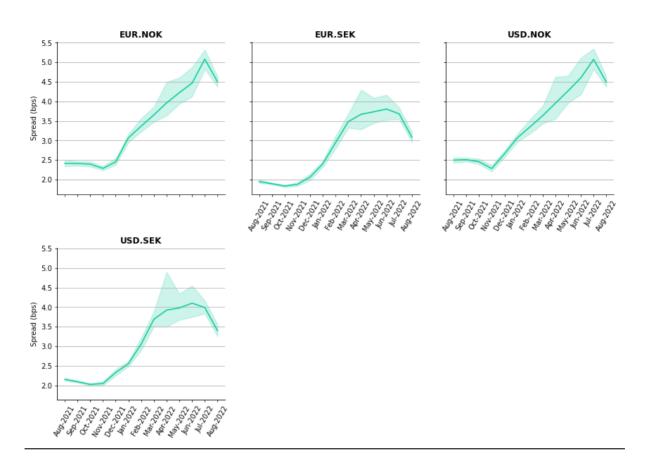




All chart sources: Virtu Financial, 2022. Spread and volatility calculations are derived from sources that Virtu believes to be reliable, but Virtu does not make any claims to its accuracy. USD.NOK, USD.SEK, EUR.NOK and EUR.SEK are shown in separate exhibits.



Scandinavian G-10 Currencies: Average Daily Spread, 12:00-16:00 GMT August 2021-August 2022

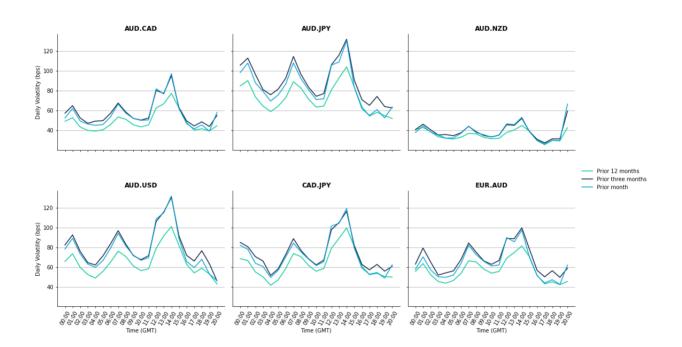




VOLATILITY

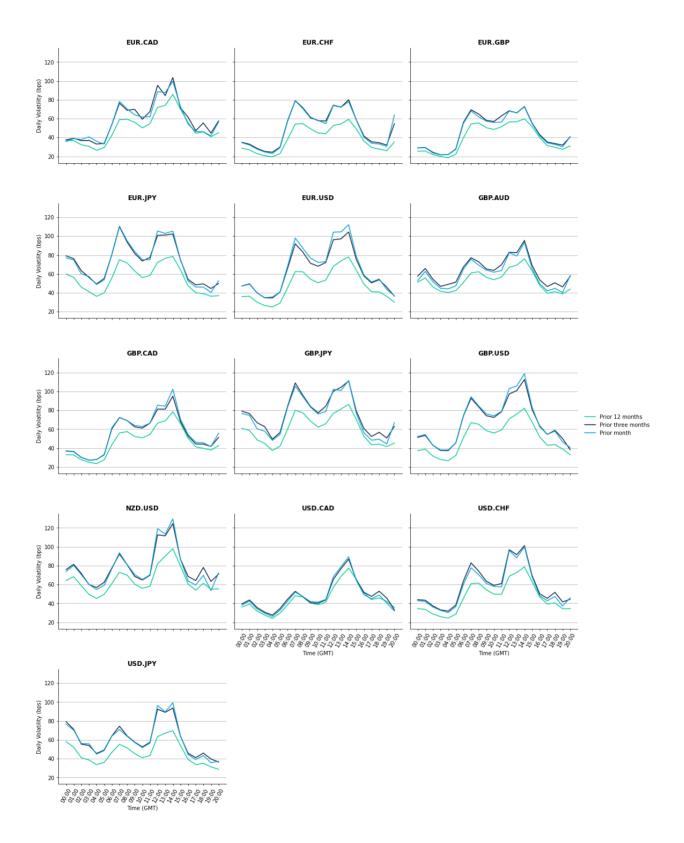
- For 22 of the 23 pairs monitored, volatility decreased in August. Only USD.JPY volatility increased across all three regions globally as well as during the 12:00-16:00 GMT trading window.
- Compared to three months ago, August volatility was higher for six pairs. Six months ago, 22 of 23 pairs had lower volatility while 12 months ago all pairs had volatility.
- Over the past six months, intra-day volatility increased most at the start of the London and New York trading days, from 5:00-8:00 GMT and from 12:00-15:00 GMT, respectively.

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



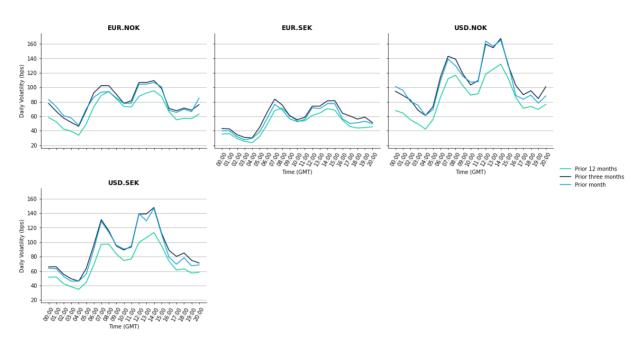
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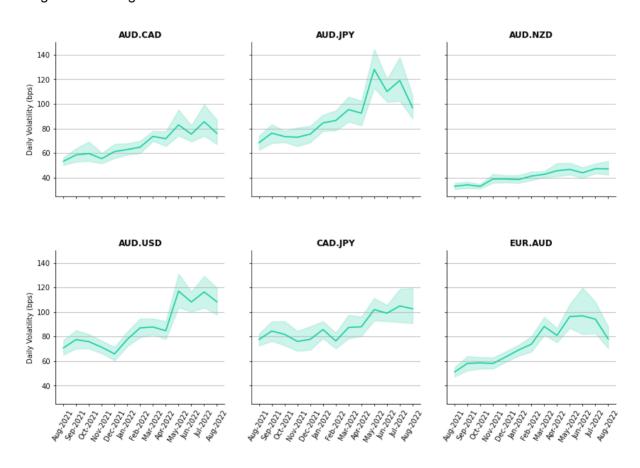




Scandinavian G-10 Currencies: Average Hourly Volatility, 00:00-20:00 GMT Past month, three months and year

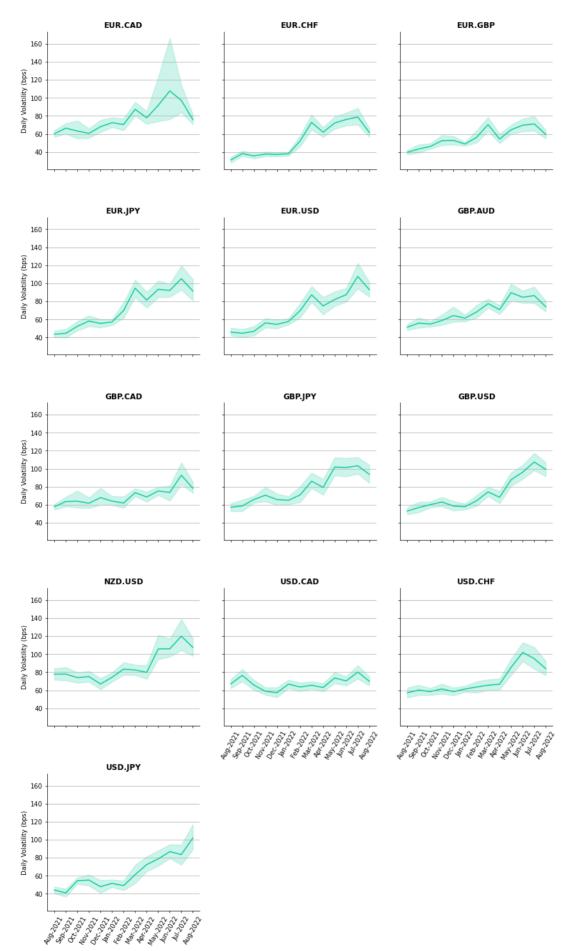


G-10 Currencies: Average Daily Volatility, 12:00-16:00 GMT August 2021-August 2022



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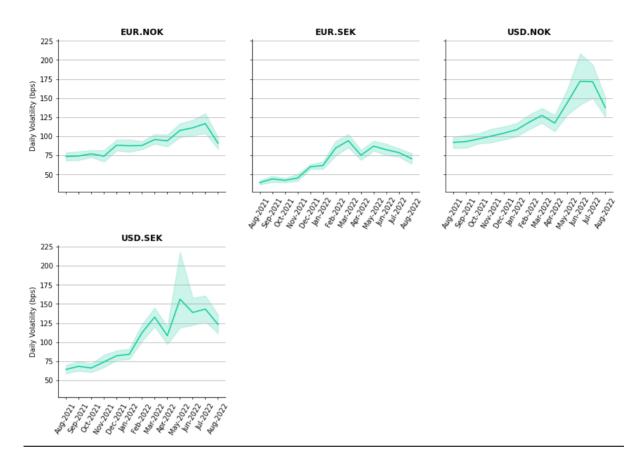




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Scandinavian G-10 Currencies: Average Daily Volatility, 12:00-16:00 GMT August 2021-August 2022



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