

September 2022

FX Market Structure Monthly

CHANGES IN SPREAD AND VOLATILITY FOR MAJOR MARKET PAIRS

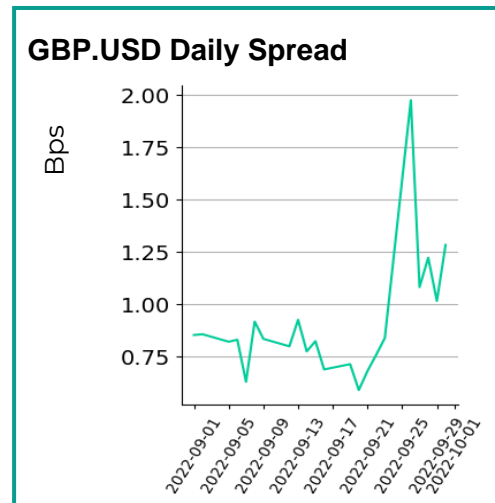
September saw no material change in spreads, but volatility spiked. In the 12:00-16:00 GMT trading window, ten of the 23 pairs we track recorded wider spreads while 20 pairs had wider volatility. On an intra-day basis, spreads for AUD.USD, GBR.AUD, NZD.USD and EURJPY recorded wider spreads throughout the day.

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.

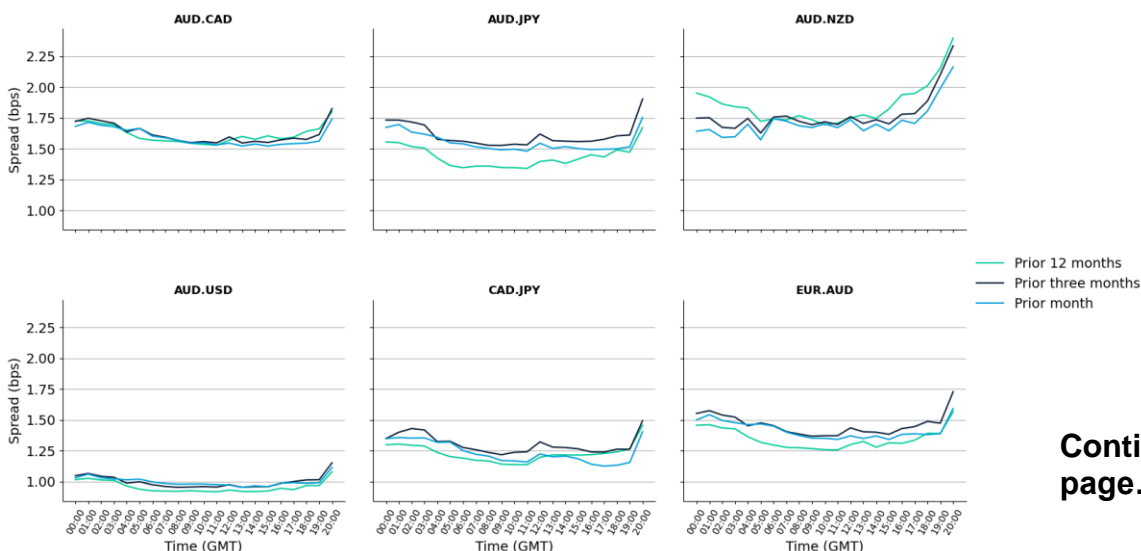
SPREADS

Considering the market’s reaction to the British mini-budget, we were surprised to see that the monthly average GBP.USD spread did not materially widen. On the right, we have plotted the change in GBP.USD spread over the 12:00-16:00 GMT trading window. Although the monthly average did not change much, the daily spread shot up by 1.2 bps on the date after the plan was announced. The spreads remained about 0.4 bps wider than earlier in the month after the initial shock, and spreads remained about 0.4 bps wider than earlier in the month.



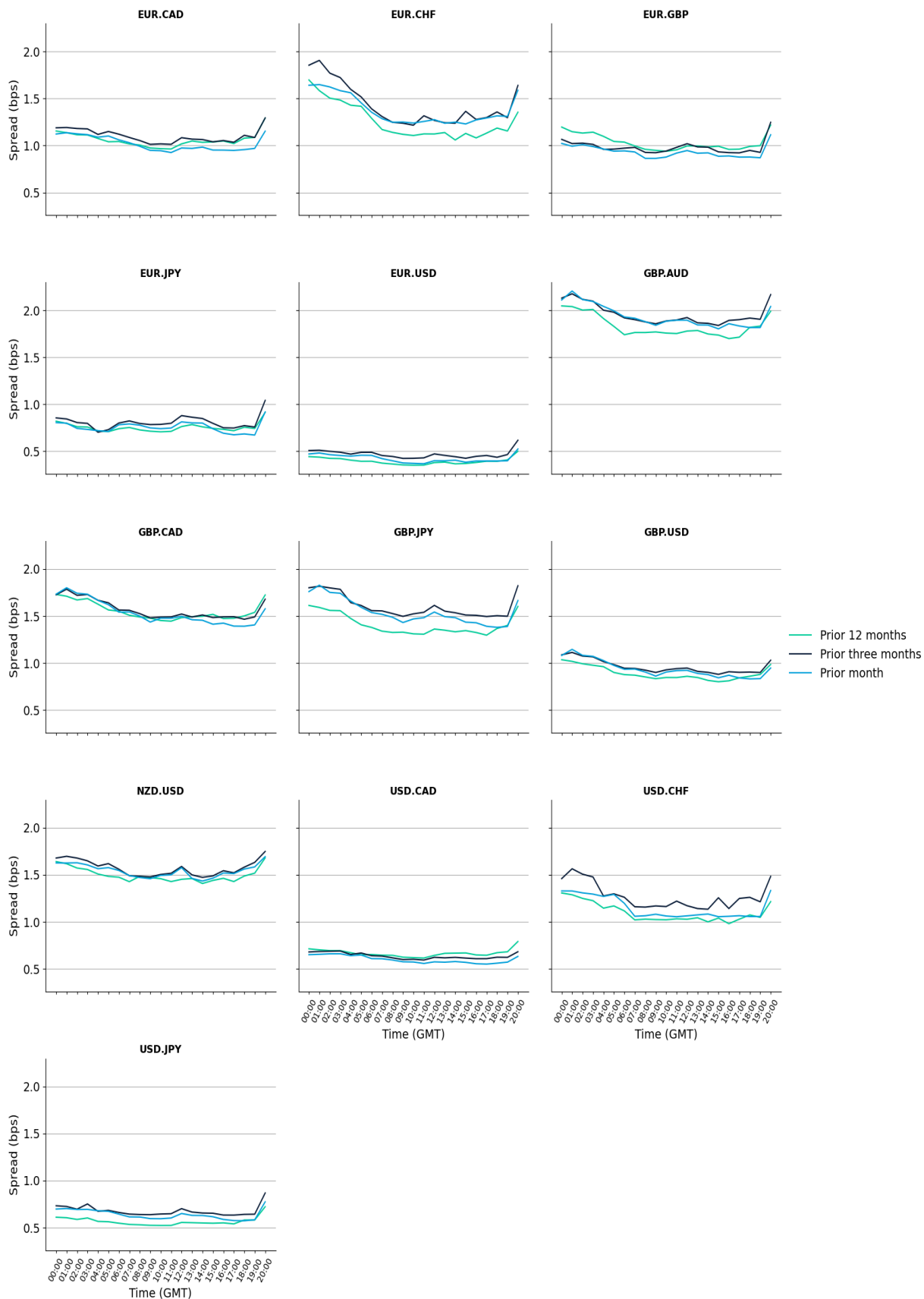
G-10 Currency Pairs: Average Hourly Spread, 00:00-20:00 GMT

Comparison over the past month, three months and year



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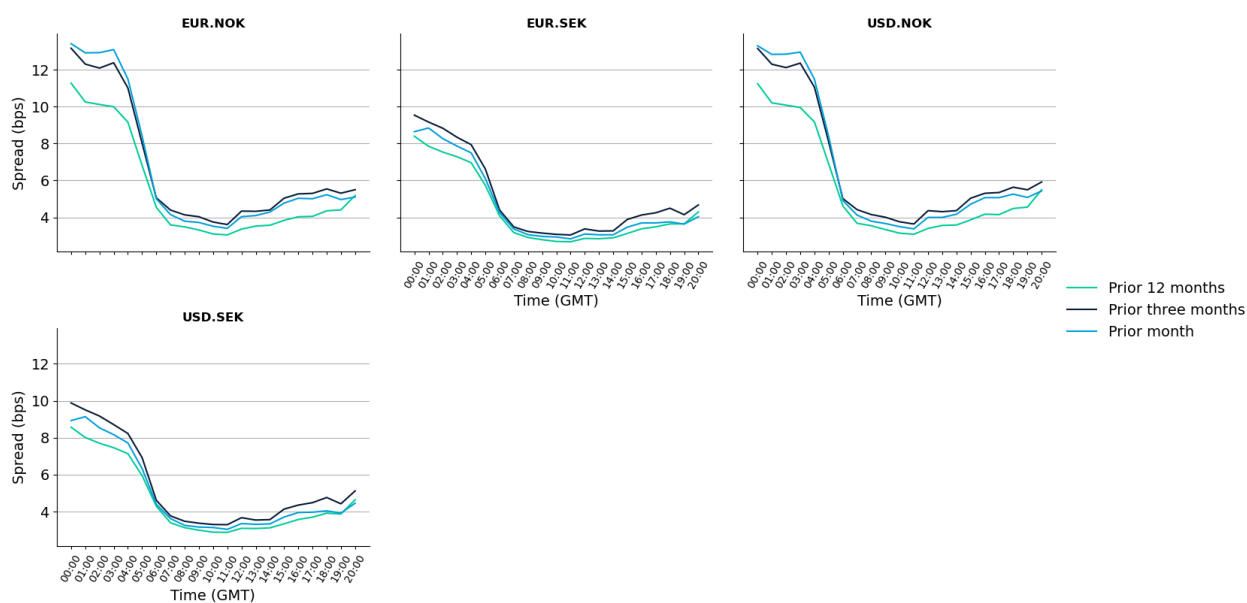
All chart sources: Virtu Financial, 2022. Spread and volatility calculations are derived from sources that Virtu believes to be reliable, but Virtu does not make any claims to its accuracy. USD.NOK, USD.SEK, EUR.NOK and EUR.SEK are shown in the separate exhibits



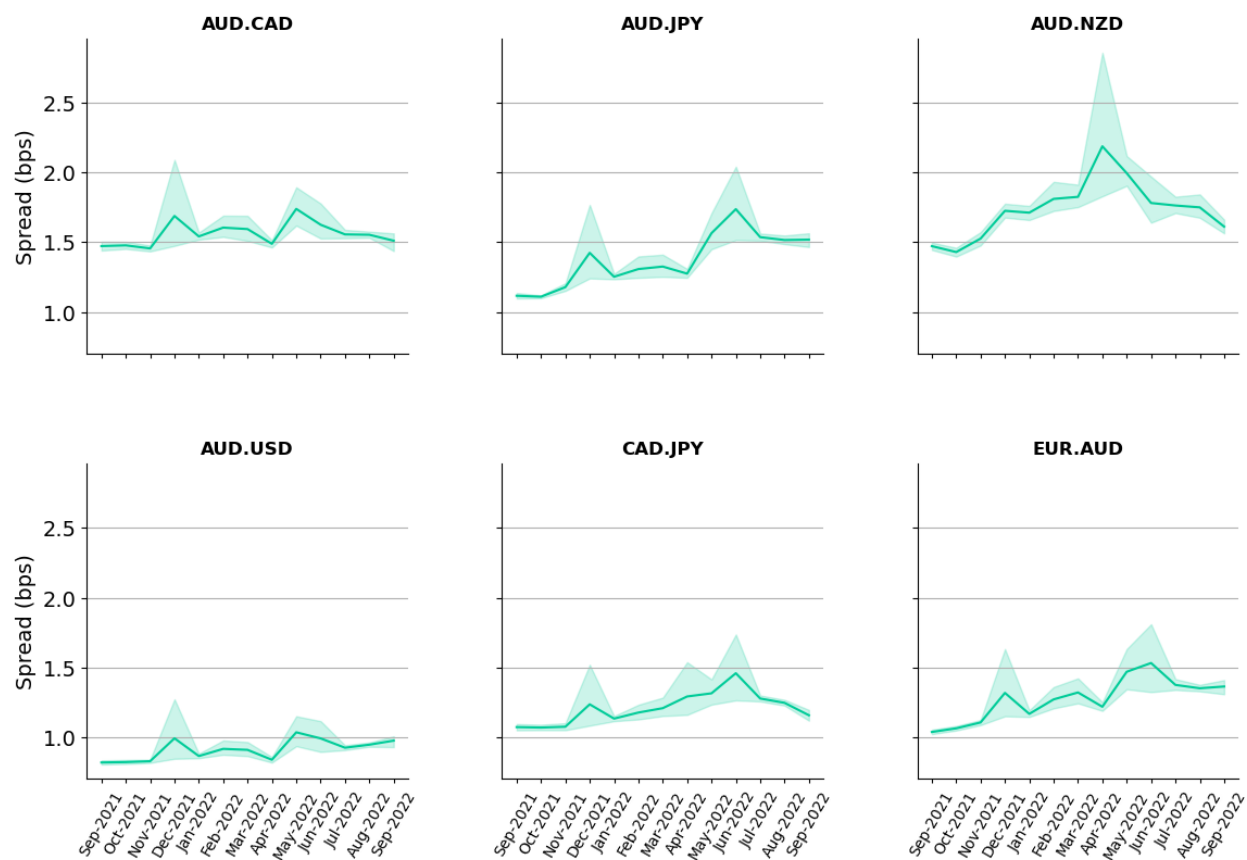
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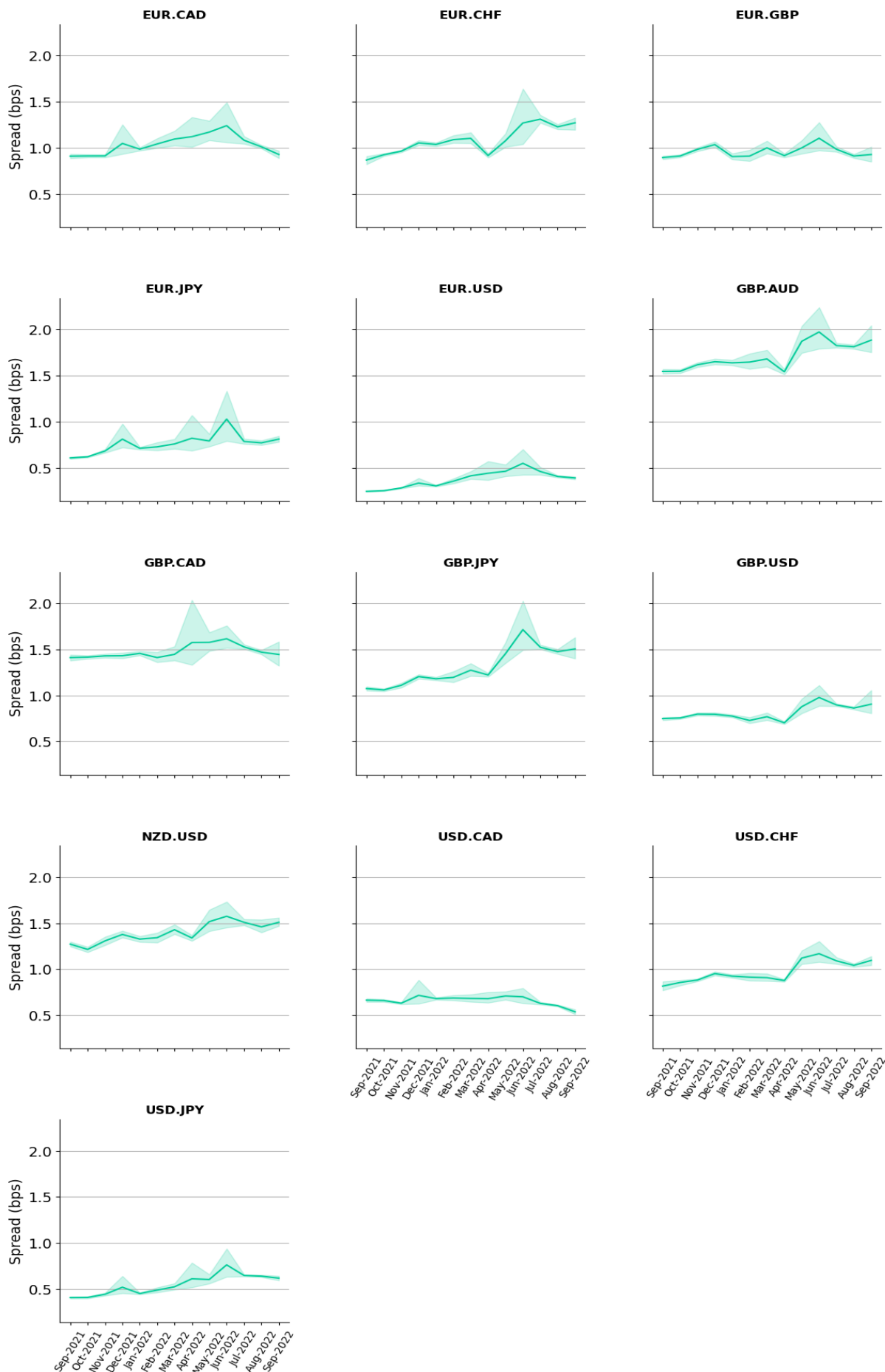
Scandinavian G-10 Currencies: Average Hourly Spread, 00:00-20:00 GMT Comparison over the past month, three months and year



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



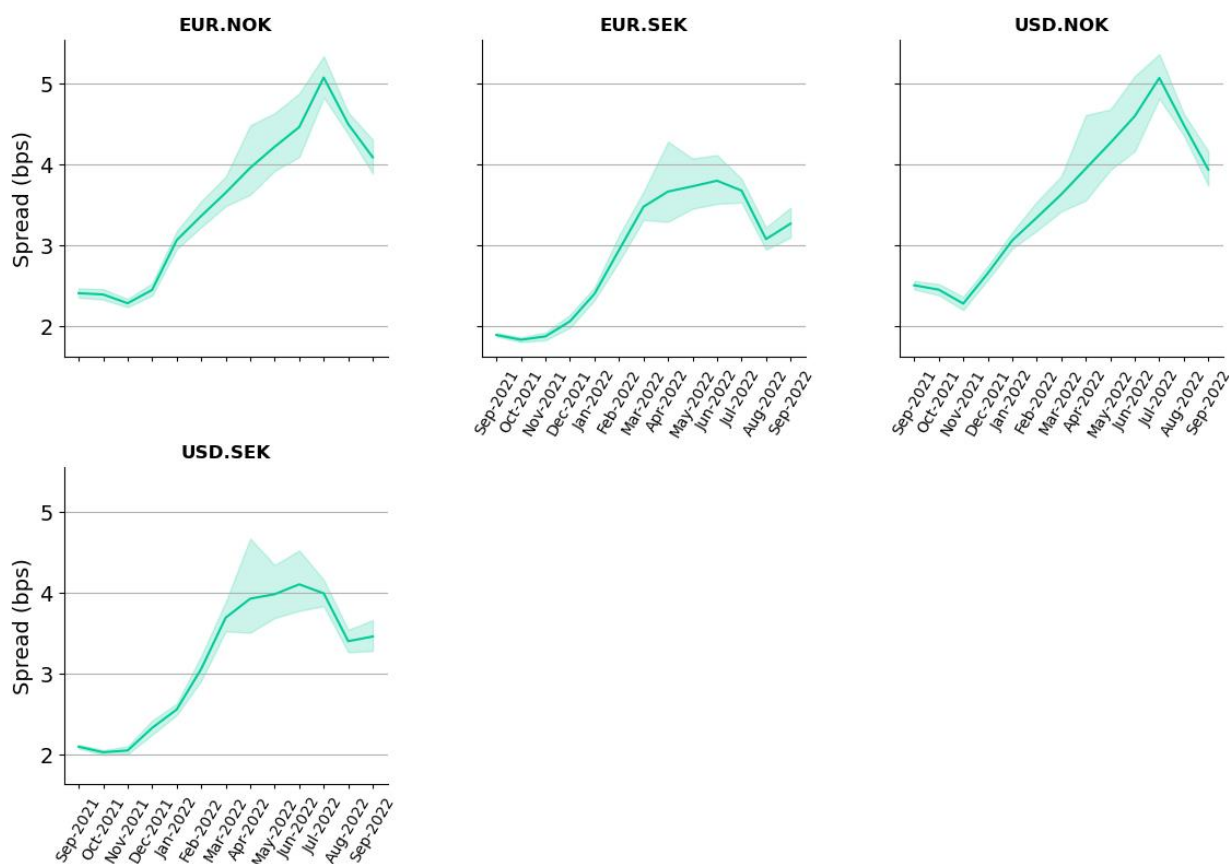
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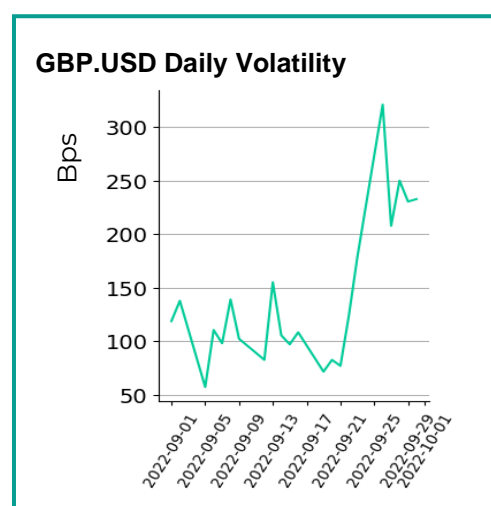


Scandinavian G-10 Currencies: Average Daily Spread, 12:00-16:00 GMT September 2021-September 2022



VOLATILITY

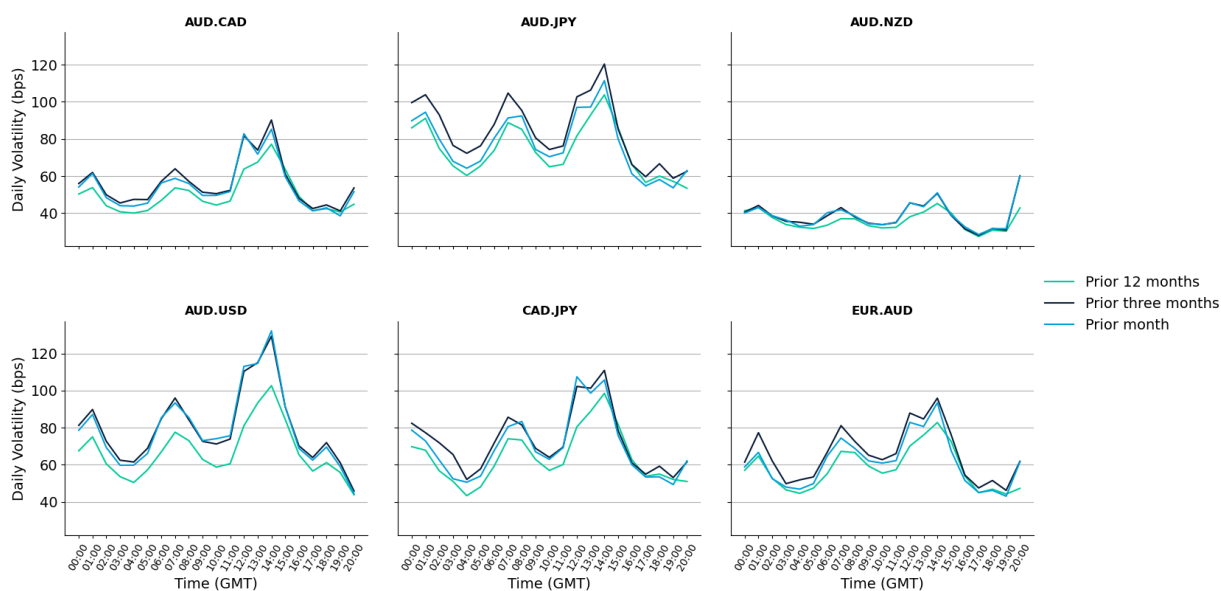
- For 20 of the 23 pairs monitored, volatility increased in September during the 12:00-16:00 GMT trading window. Of the majors, only the USD.JPY volatility did not increase on average for the month.
- The UK government announced a mini-budget on September 23, sending GBP.USD into a tizzy. After the announcement, the spread widened by 1.2 bps before dropping back. Even more pronounced was the increase in daily volatility, which increased by nearly 250 basis points. Annualized, that's an increase from 13% to over 36% in just one day. After that, GBP.USD remained volatile, but the daily volatility decreased by about 250 bps or 30% annually.



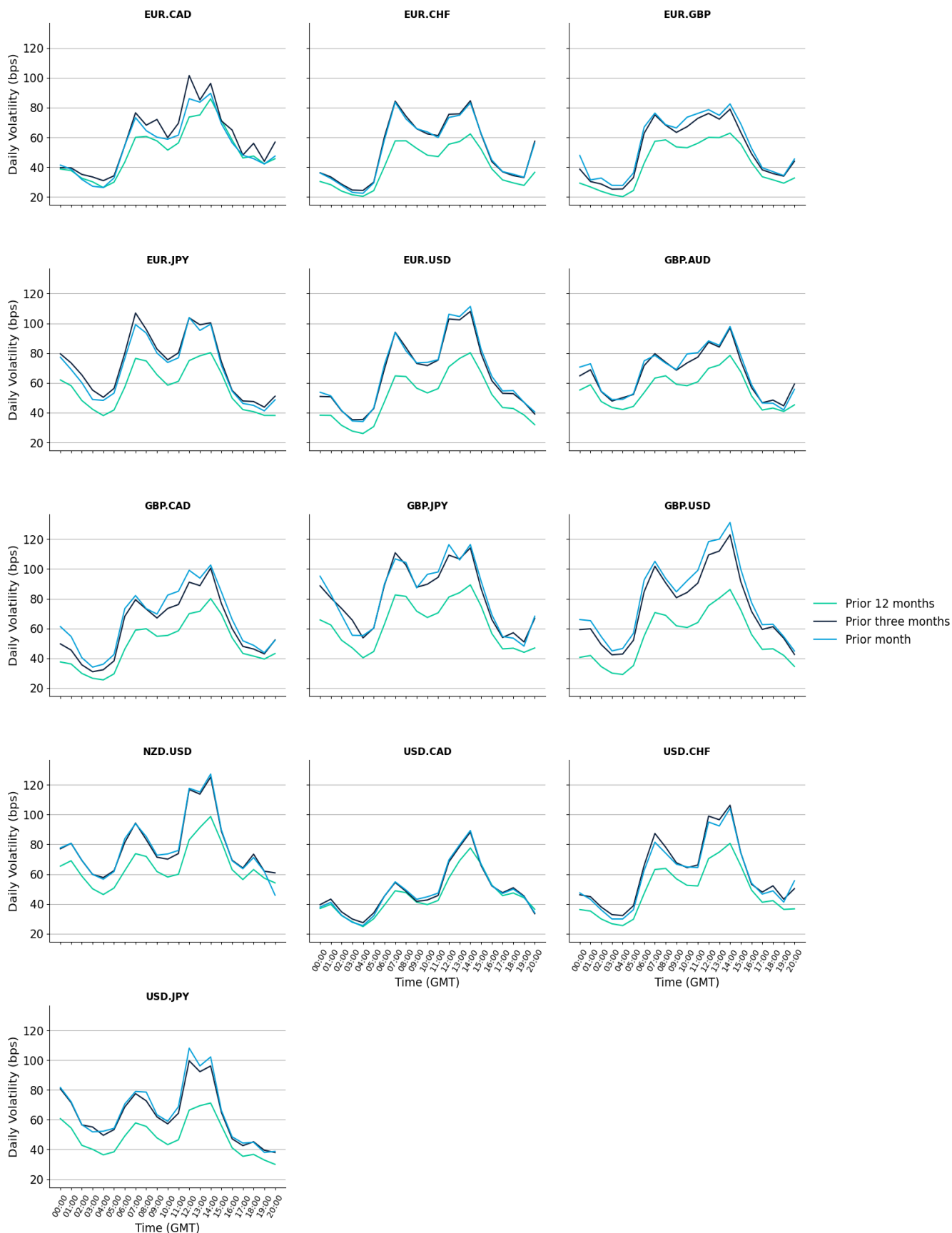
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G-10 Currencies: Average Hourly Volatility, 00:00-20:00 GMT Comparison over the past month, three months and year



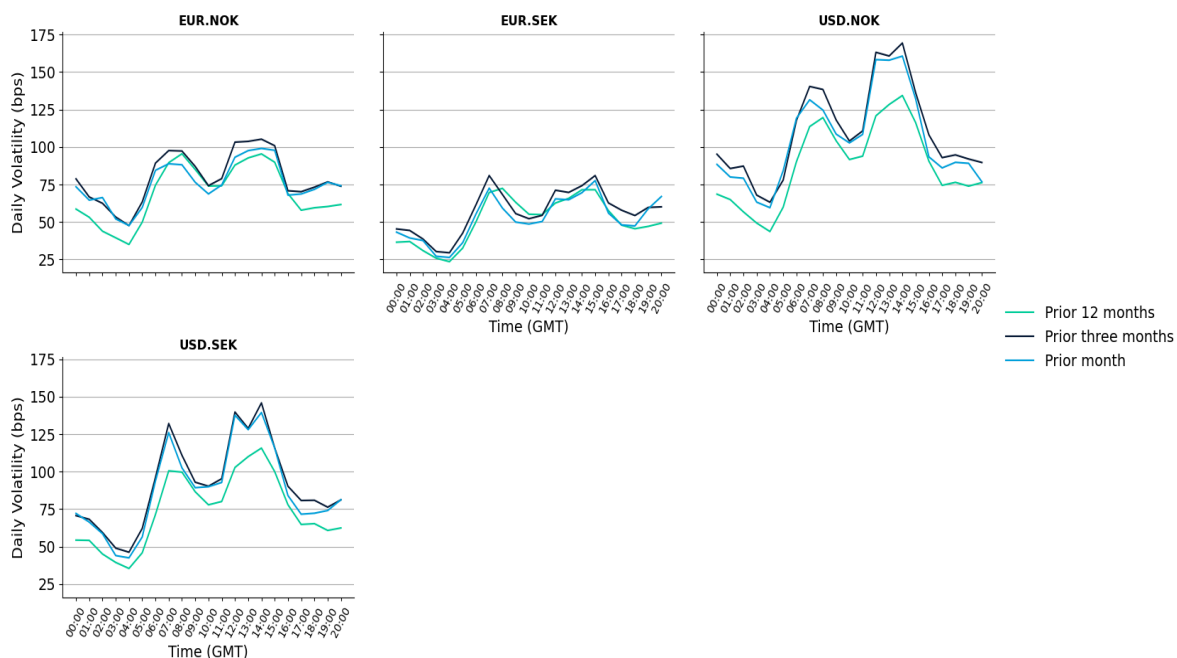
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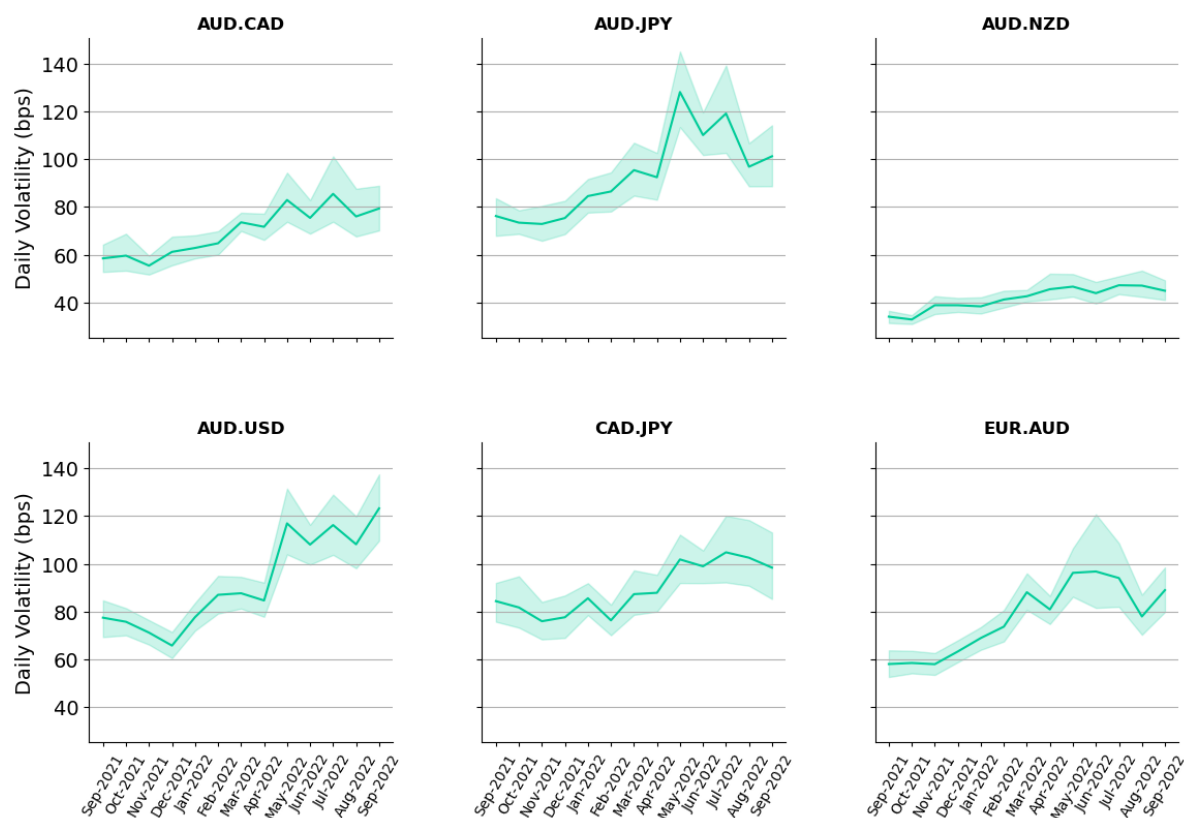
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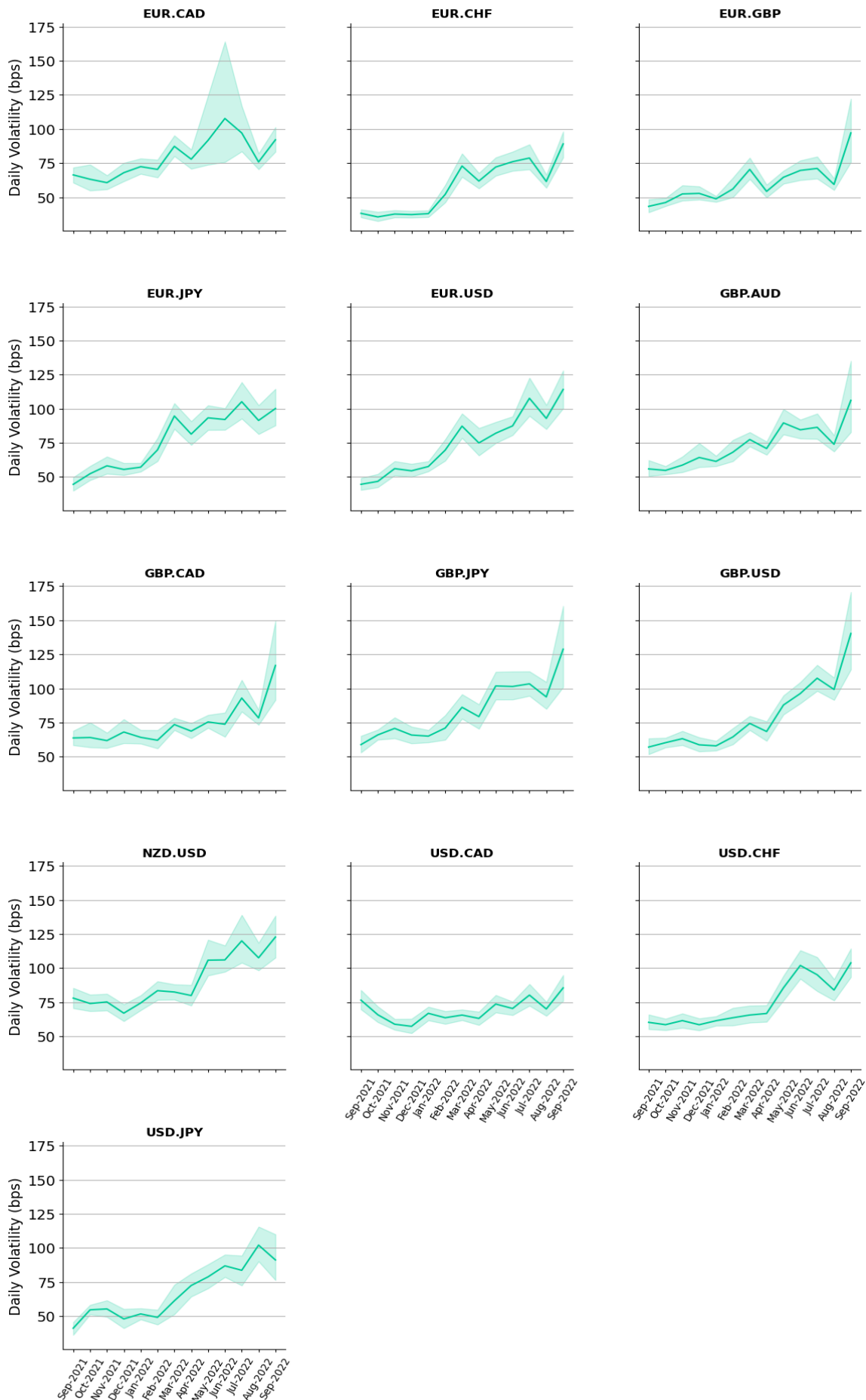
Scandinavian G-10 Currencies: Average Hourly Volatility, 00:00-20:00 GMT Past month, three months and year



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



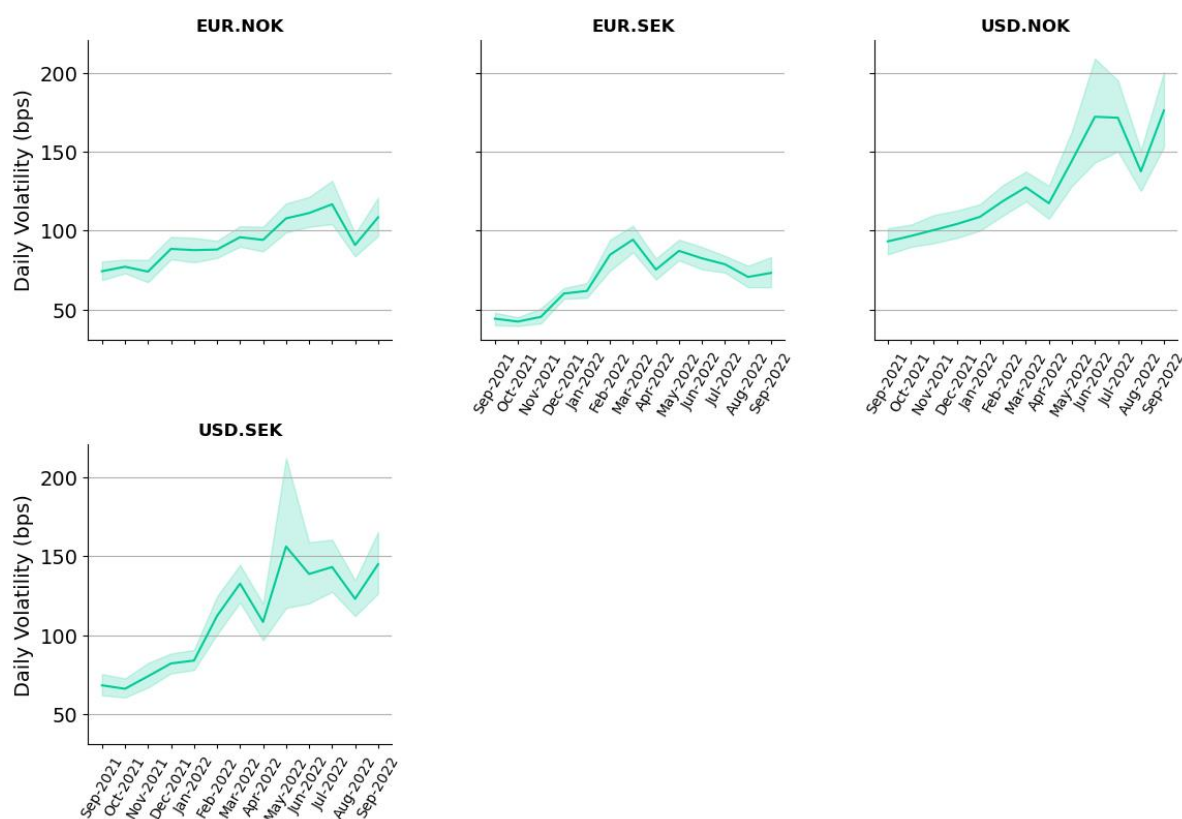
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Scandinavian G-10 Currencies: Average Daily Volatility, 12:00-16:00 GMT September 2021-September 2022



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