

October 2021

# FX Market Structure Monthly

## CHANGES IN SPREAD AND VOLATILITY FOR MAJOR MARKET PAIRS

In October, FX spreads tightened for fifteen of the 23 pairs during the four hours pre-WMR Fixing trading window, continuing the tightening of spreads from July and August.

Compared to October 2020, spreads are wider for 15 of the 23 pairs. Confirming the modest change in spreads, volatility also fell for fifteen of the 23 pairs last month. Among the majors, both spreads and volatility have increased from October 2020 for AUD.USD, USD.CAD, USD.CHF and USD.JPY.

Intraday spreads increased consistently during Tokyo, London and New York trading desk hours for just two pairs, EUR.USD and GBP.USD.

## READING THE RESULTS

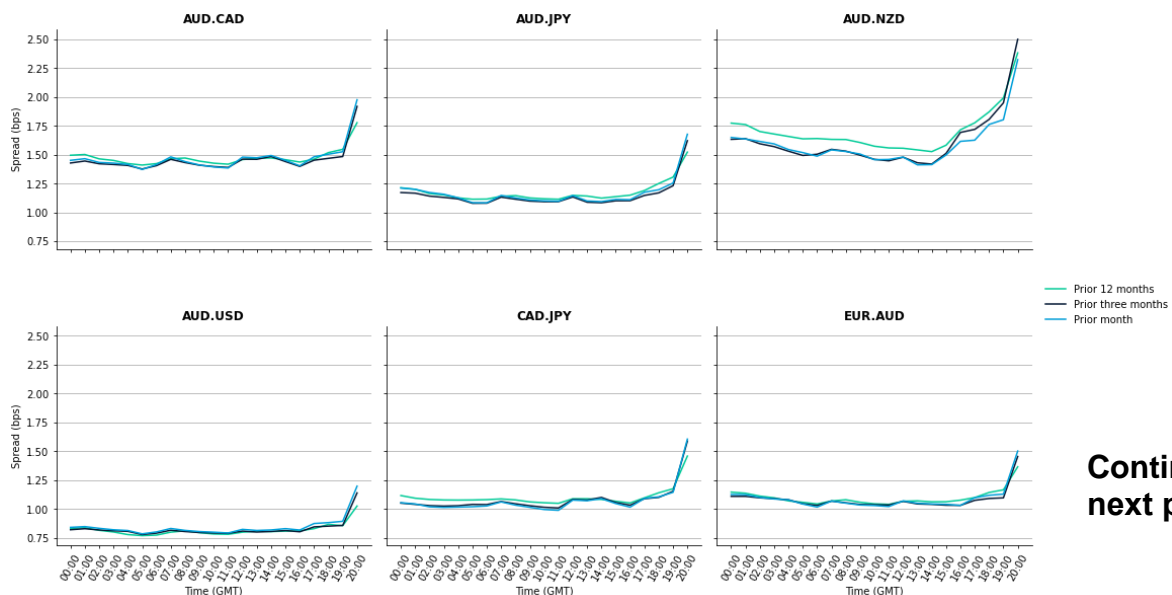
In the intraday charts, the green line presents the average spread or volatility for the past 12 months, the black line is the past three months and the blue line is for the past month. On the daily charts, the green area represents the 95<sup>th</sup> percentile confidence interval for the spread and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

## SPREADS

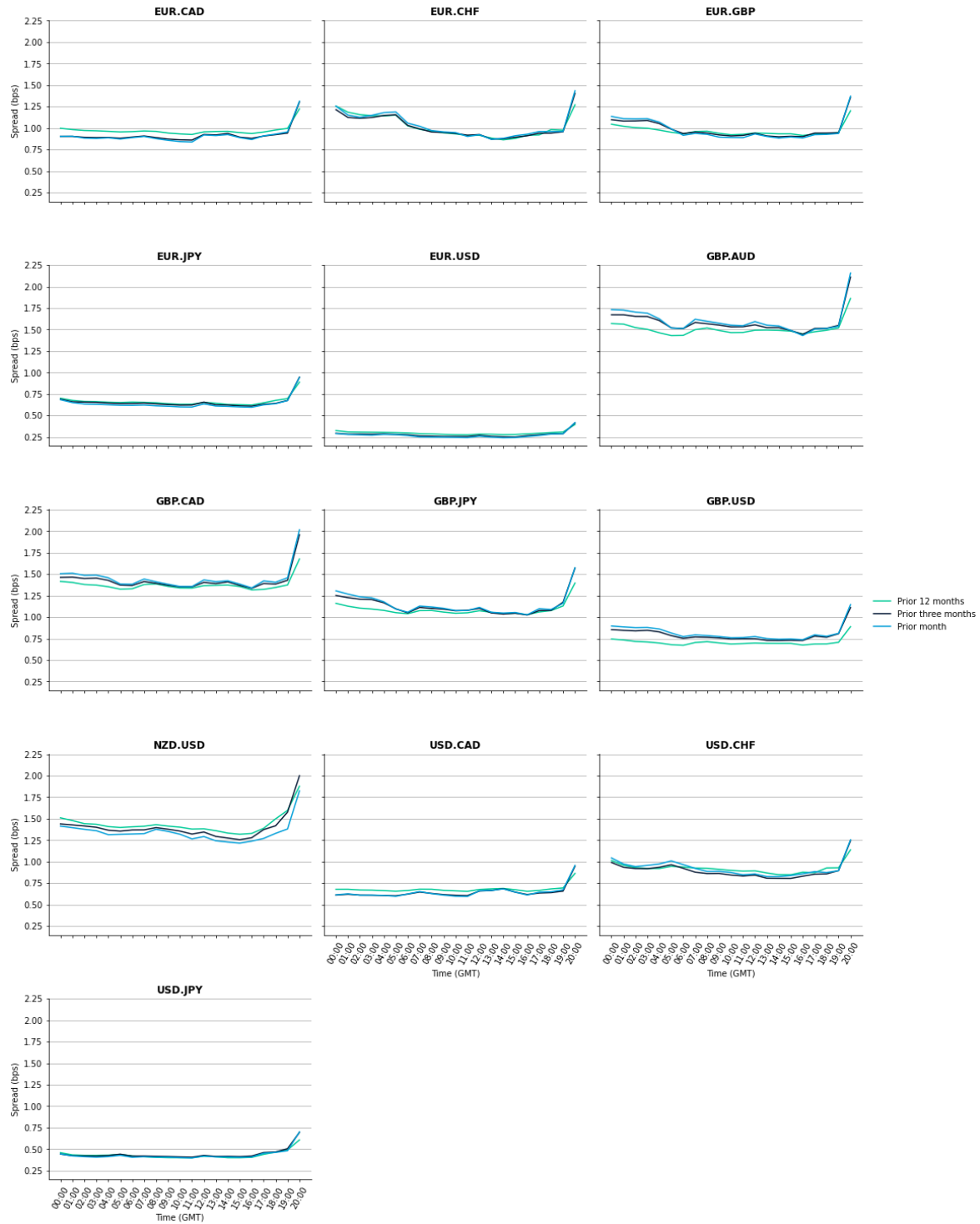
- Average hourly spreads increased consistently for EUR.USD and GBP.USD only. We also observed wider spreads for Canadian pairs – USD.CAD, AUD.CAD, EUR.CAD and GBP.CAD during non-New York trading hours.
- In a first, spreads during the 12:00-16:00 GMT trading period were narrower in October for the four Scandinavian pairs than they were one-, three-, six- and 12-months ago. The volatility of all Scandinavian pairs was also narrower than one-, three- and 12-months ago.

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

Comparison over the past month, three months and year



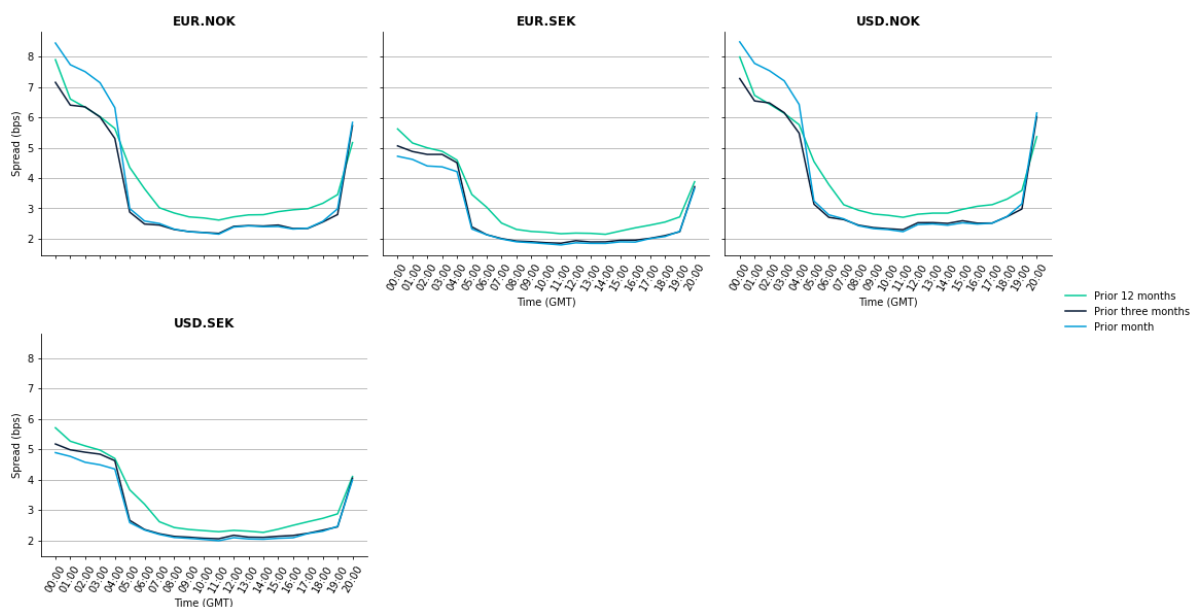
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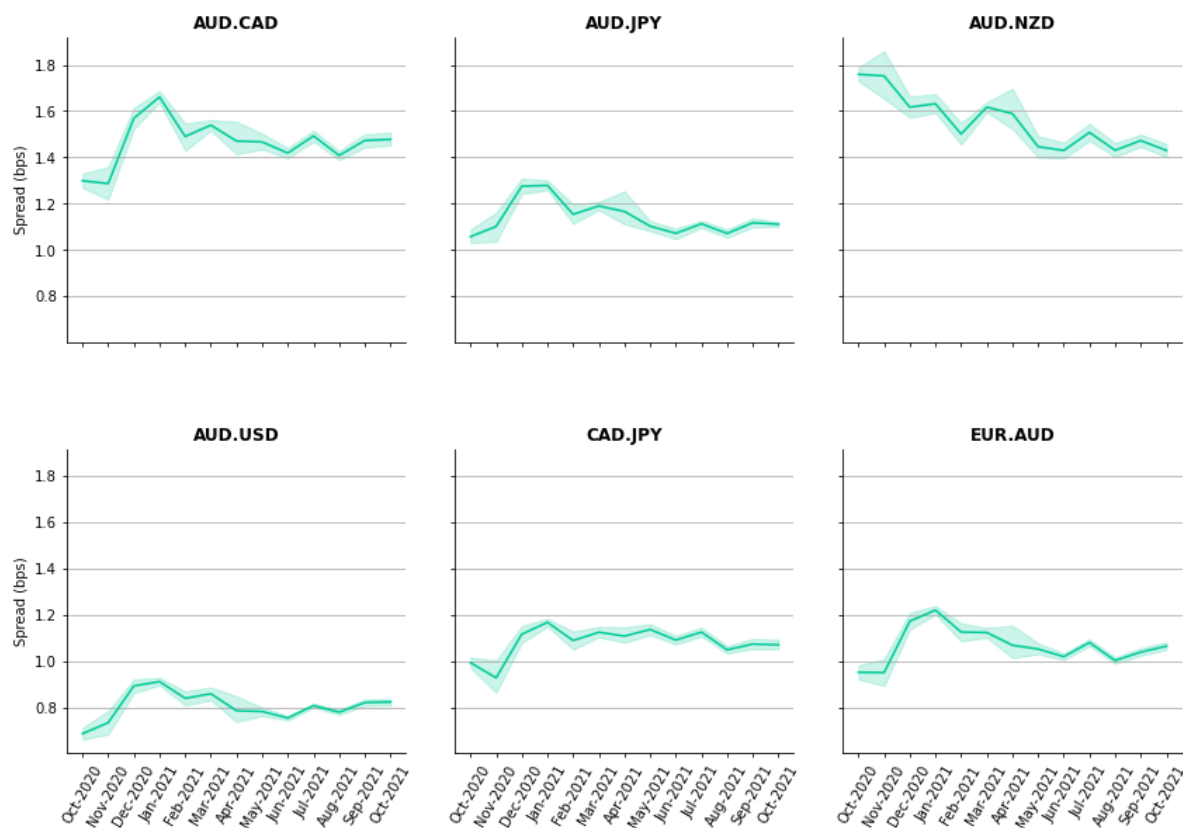
All chart sources: Virtu Financial, 2021. Spread and volatility calculations are derived from sources that Virtu believes to be reliable but Virtu does not make any claims to its accuracy. USD.NOK, USD.SEK, EUR.NOK and EUR.SEK are shown in separate exhibits.



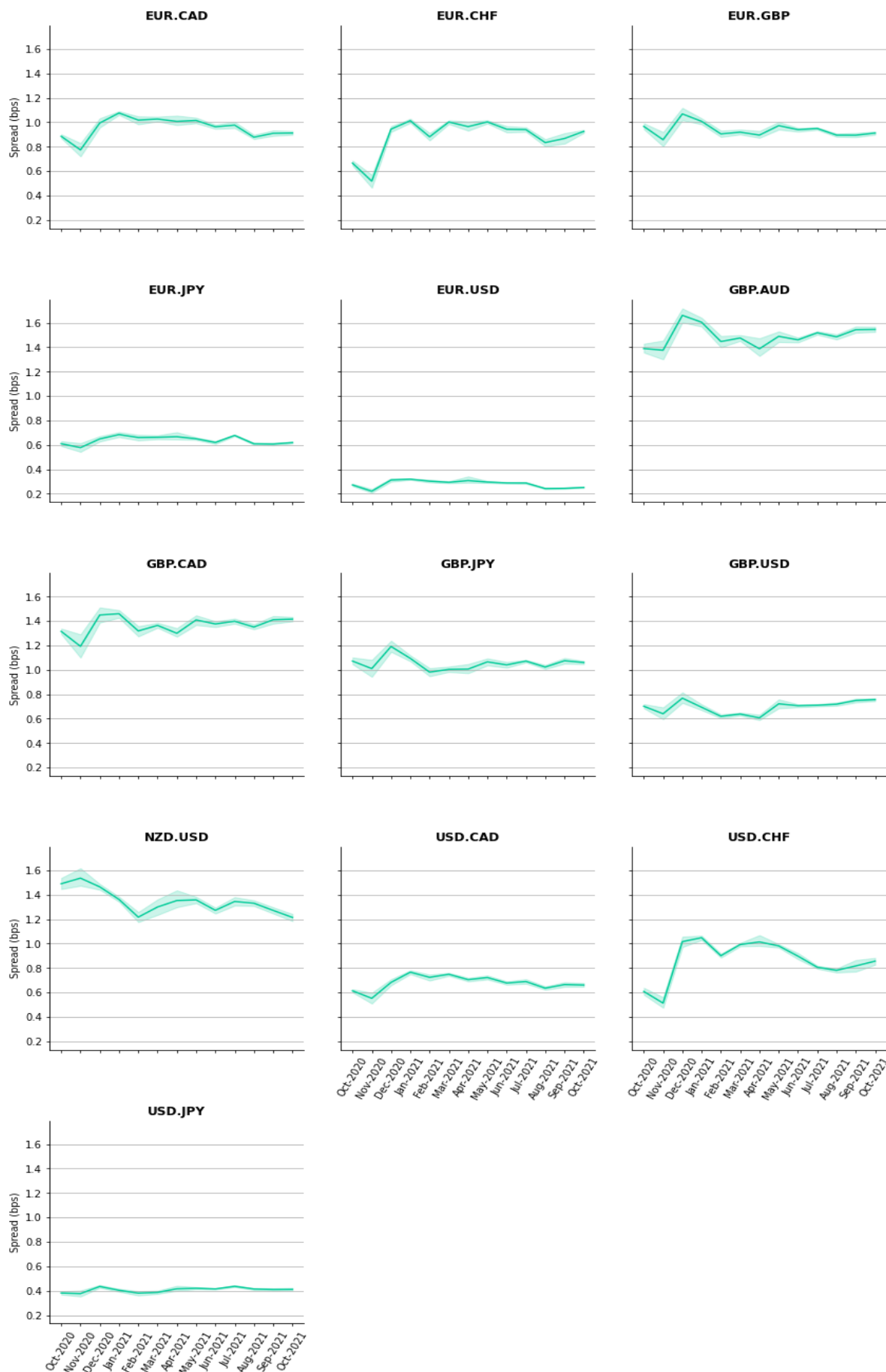
## Scandinavian G-10 Currencies: Average Hourly Spread, 00:00-20:00 GMT Comparison over the past month, three months and year



## G-10 Currencies: Average Daily Spread, 12:00-16:00 GMT October 2020-October 2021



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## Scandinavian G-10 Currencies: Average Daily Spread, 12:00-16:00 GMT October 2020- October 2021



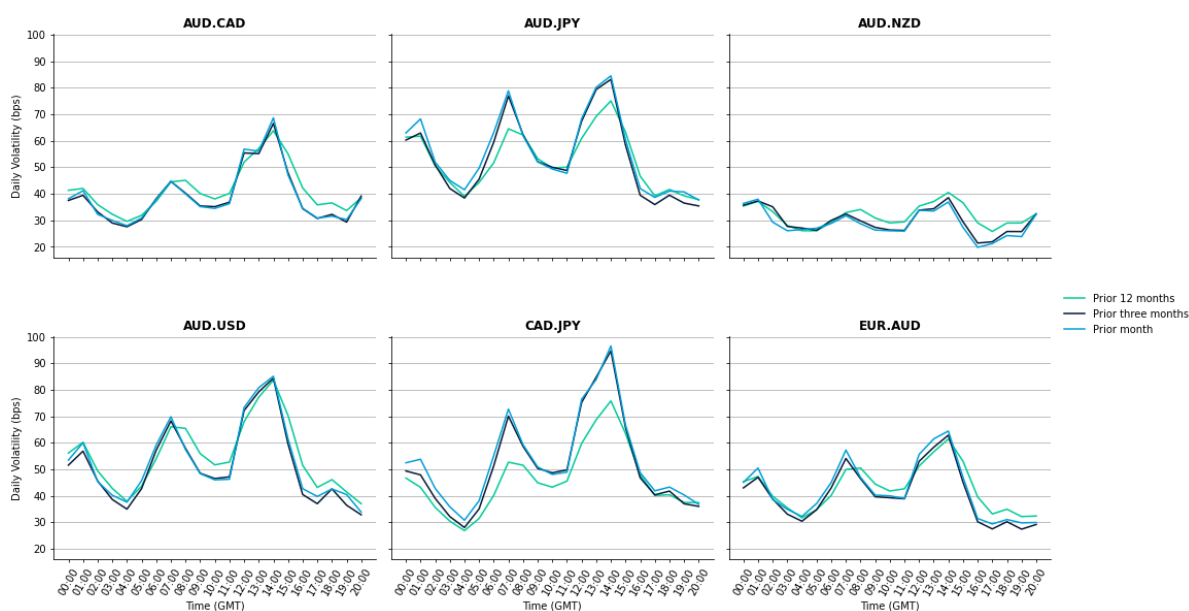


## VOLATILITY

- Intraday volatility increased for EUR.USD, GBP.USD, USD.JPY, GBP.JPY, and EUR.JPY in Tokyo, London and New York trading. This moderates the see-saw pattern observed lately in volatility which increased in September, dropped in August and increased in July.
- Hourly volatility increased the most during Tokyo trading hours. Eighteen of 23 pairs recorded a one-month increase in volatility for at least six Tokyo desk hours. In comparison, London had only eight pairs and New York had six pairs that recorded six or more hours of increased volatility during trading hours.
- Over the 12:00-16:00 GMT pre-WMR Fixing trading window, volatility increased for eight of 23 pairs, proving to be less chaotic than in September when volatility increased for 21 of 23 pairs. In August, volatility ticked up only for EUR.CHF. Compared to 12 months ago, volatility has evened out, up for one-half of the G-10 pairs.
- Among the Scandinavian pairs, volatility fell for all four pairs both during pre-WMR Fixing trading. But on an hourly basis, volatility for EUR.NOK and USD.NOK increased throughout the trading day.
- In October, from 01:00 – 05:00 GMT, volatility rose for more pairs than at any other point in the day while falling for more pairs from 12:00 – 16:00 GMT.

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

Comparison over the past month, three months and year

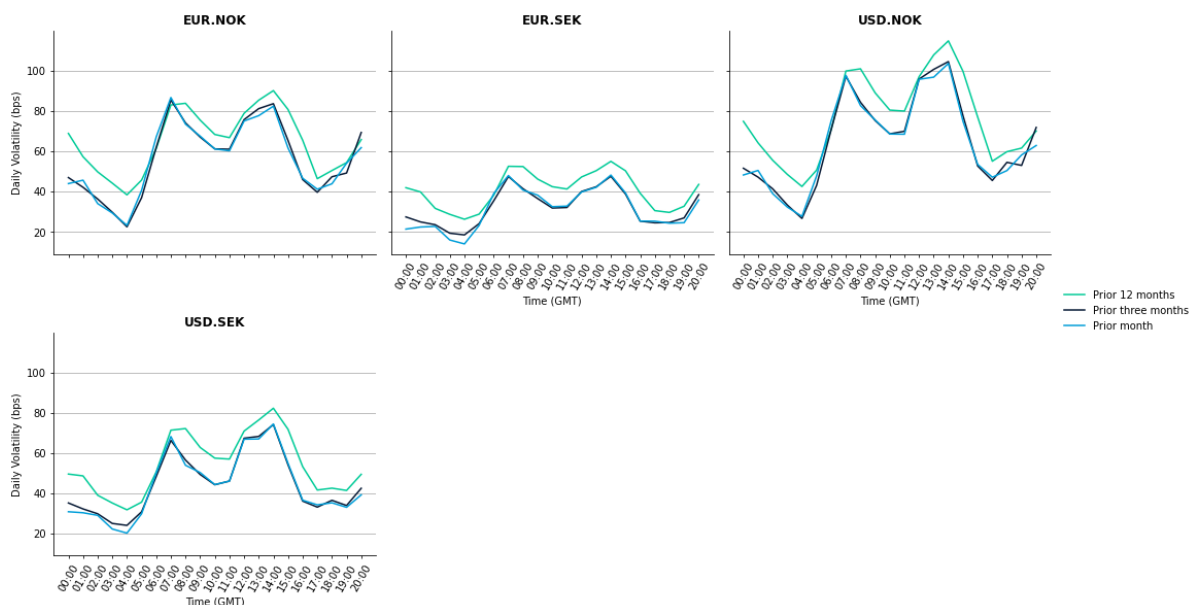


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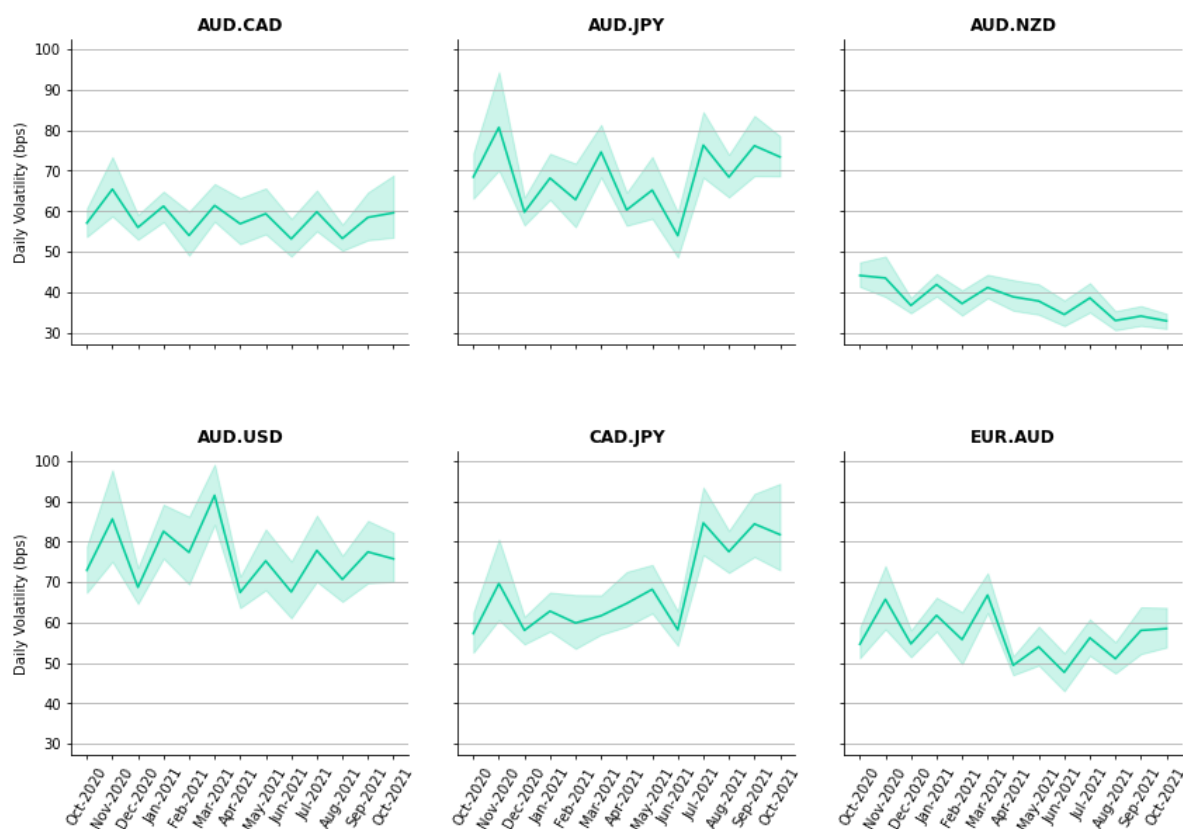




## Scandinavian G-10 Currencies: Average Daily Volatility, 00:00-20:00 GMT Past month, three months and year

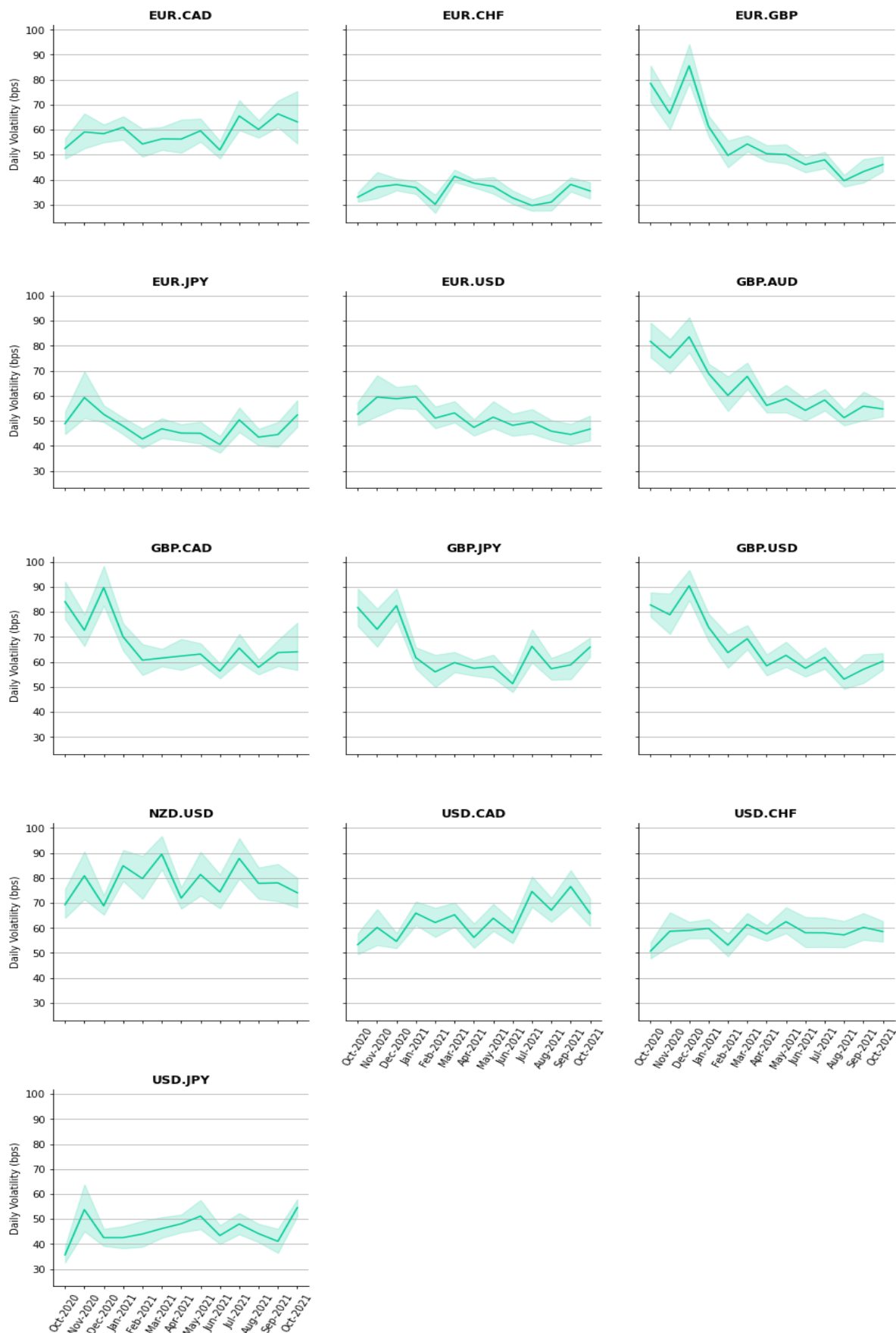


## G-10 Currencies: Average Daily Volatility, 12:00-16:00 GMT October 2020-October 2021



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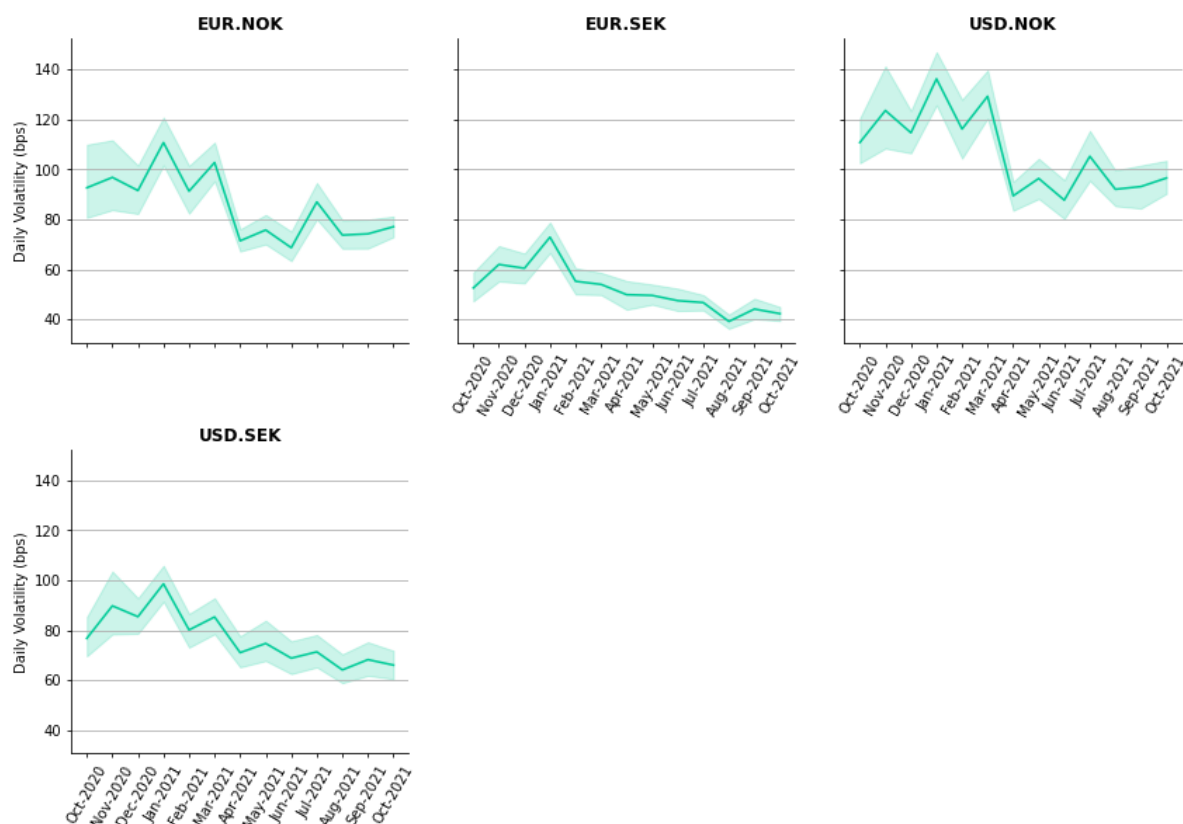




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## Scandinavian G-10 Currencies: Average Daily Volatility, 12:00-16:00 GMT October 2020-October 2021



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

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