VIRTU FINANCIAL

June 2022

FX Market Structure Monthly

CHANGES IN SPREAD AND VOLATILITY FOR MAJOR MARKET PAIRS

After reaching a 12-month high in May, G10 FX spreads and volatility widened further in June. During the 12:00-16:00 GMT trading window, spreads and volatility widened for 17 of the 23 pairs we track. The intraday spreads widened for nearly all pairs from 03:00 to 07:00 GMT and from 12:00-14:00 GMT. Intraday volatility changes were more subdued, but 20 of 23 pairs registered increased volatility from 12:00-13:00 GMT.

The most liquid currency pairs exhibited consistent widening of spreads in June. Given the state of the world and economy, are we seeing a flight to quality to the most liquid FX pairs? Next month we'll see if the less liquid pairs follow with notably wider spreads.
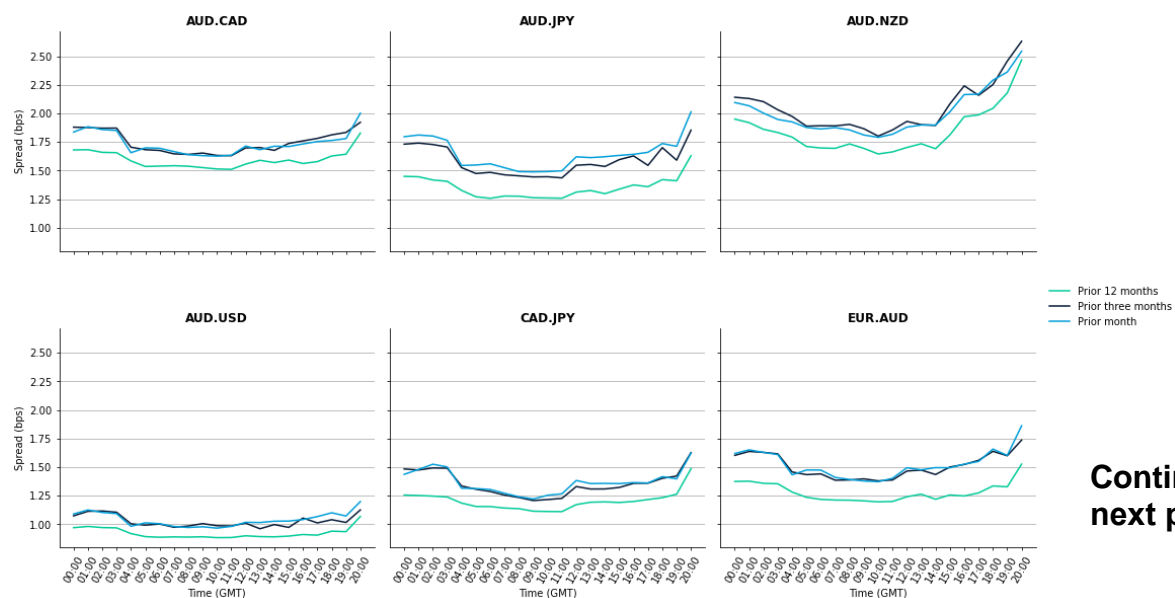
READING THE RESULTS

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, giving a sense of the stability of the calculated median value.
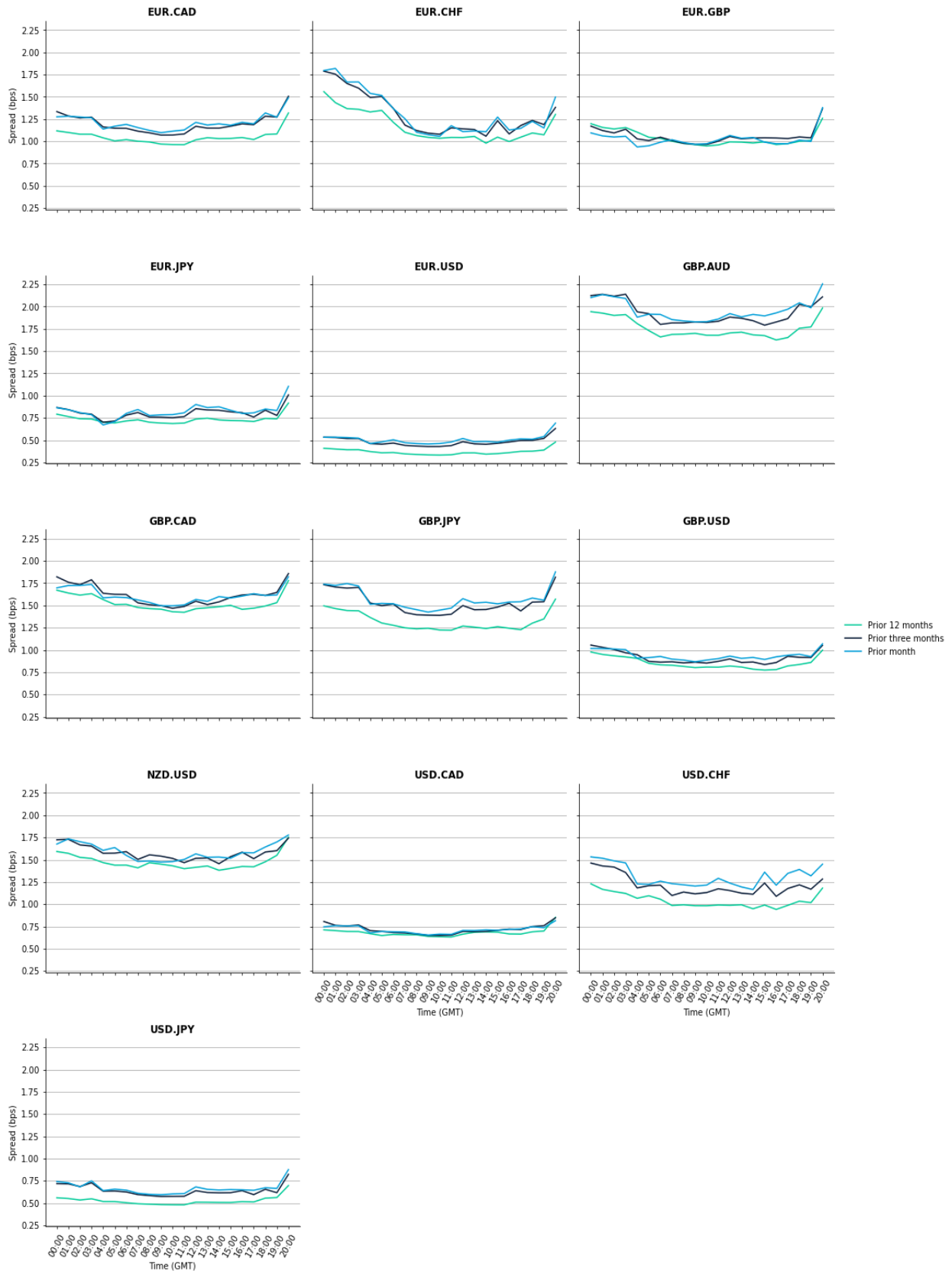
SPREADS

- Only one major pair, AUD.USD, recorded a narrower spread than one month ago during the 12:00 to 16:00 GMT trading window. In fact, AUD.USD traded narrower on average every hour of the trading day.
- GBP.USD and GBP.JPY traded wider every hour of the trading day.
- EUR.NOK and USD.NOK traded wider for most of the day, although EUR.SEK and USD.SEK traded narrower during London trading hours.

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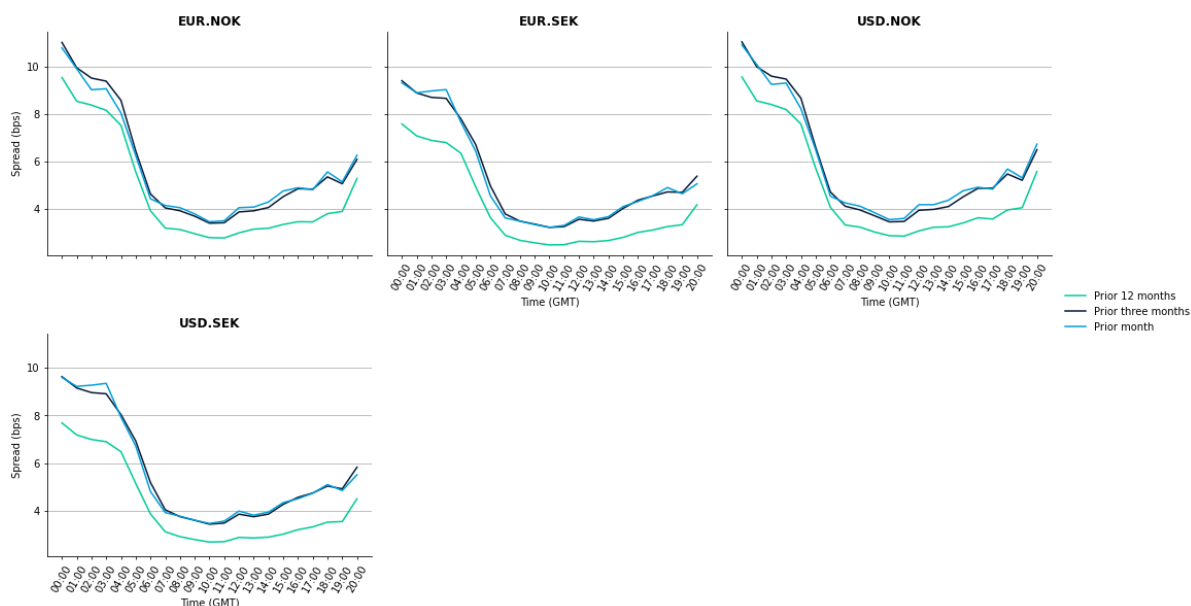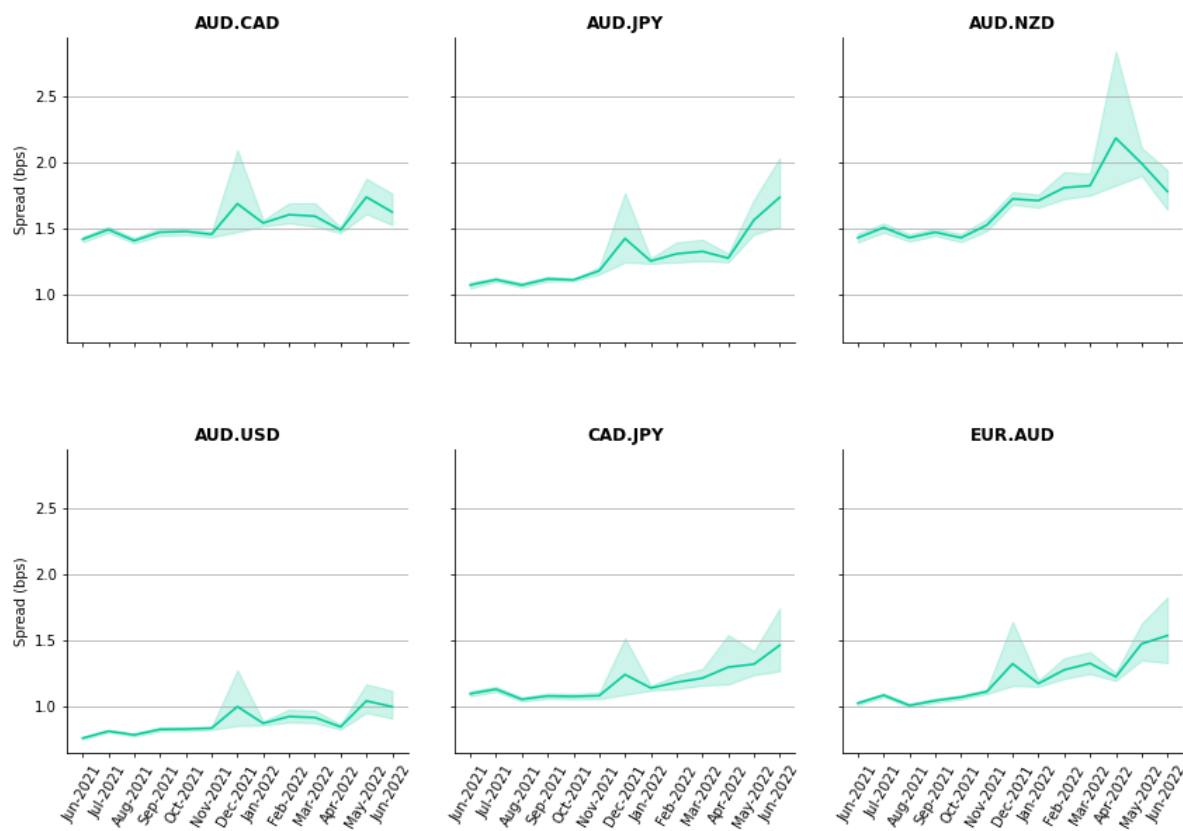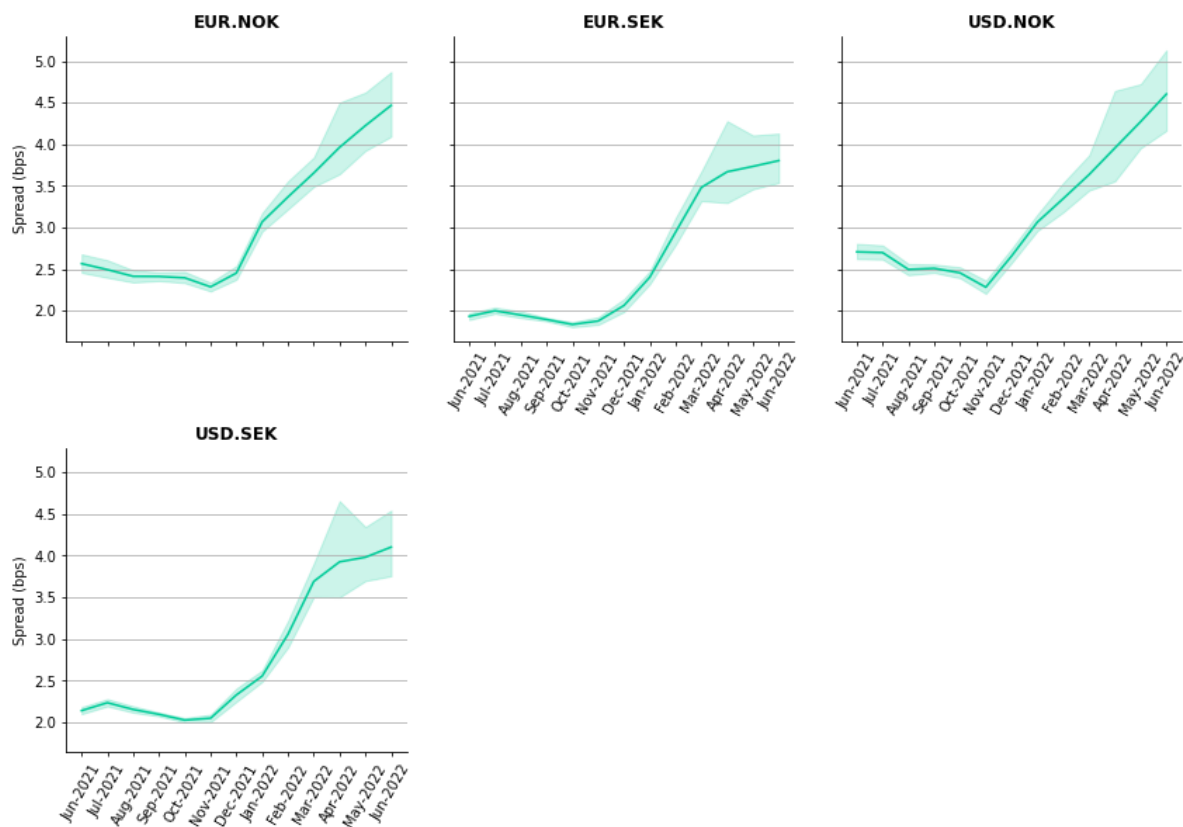Comparison over the past month, three months and year

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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

The chart panel shows spread (bps) versus Time (GMT) for multiple currency pairs: EUR.CAD, EUR.CHF, EUR.GBP, EUR.JPY, EUR.USD, GBP.AUD, GBP.CAD, GBP.JPY, GBP.USD, NZD.USD, USD.CAD, USD.CHF, and USD.JPY. Legend: Prior 12 months, Prior three months, Prior month.

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

EUR.NOK

EUR.SEK

USD.NOK

USD.SEK

Legend:
- Prior 12 months
- Prior three months
- Prior month

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

AUD.CAD

AUD.JPY

AUD.NZD

AUD.USD

CAD.JPY

EUR.AUD

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Charts showing Spread (bps) over time (Jun-2021 to Jun-2022) for the following currency pairs: EUR.CAD, EUR.CHF, EUR.GBP, EUR.JPY, EUR.USD, GBP.AUD, GBP.CAD, GBP.JPY, GBP.USD, NZD.USD, USD.CAD, USD.CHF, USD.JPY.

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
June 2021-June 2022

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VOLATILITY

- Volatility increased marginally in June, but only during London desk hours. In eight of the nine-hour trading window, EUR.USD, GBP.USD, USD.CHF, USD.JPY, EUR.JPY and GBP.CAD traded with wider spreads.

- Despite subdued volatility changes intraday, 20 of 23 pairs registered an increase from 12:00-13:00 GMT.

- Meanwhile, all six AUD pairs tracked, AUD.USD, AUD.CAD, AUD.JPY, EUR.AUD, GBP.AUD and AUD.NZD recorded lower volatility throughout the trading day.

- Volatility remained high in comparison to recent historical levels. In the 12:00-16:00 GMT trading window, 19 pairs experienced higher volatility than three months ago. June's volatility was higher than six or 12 months ago for all 23 pairs.

- Among the Scandinavian pairs, EUR.SEK and USD.SEK experienced smaller volatility increases than EUR.NOK and USD.NOK continuing a trend we've observed since the start of the year.

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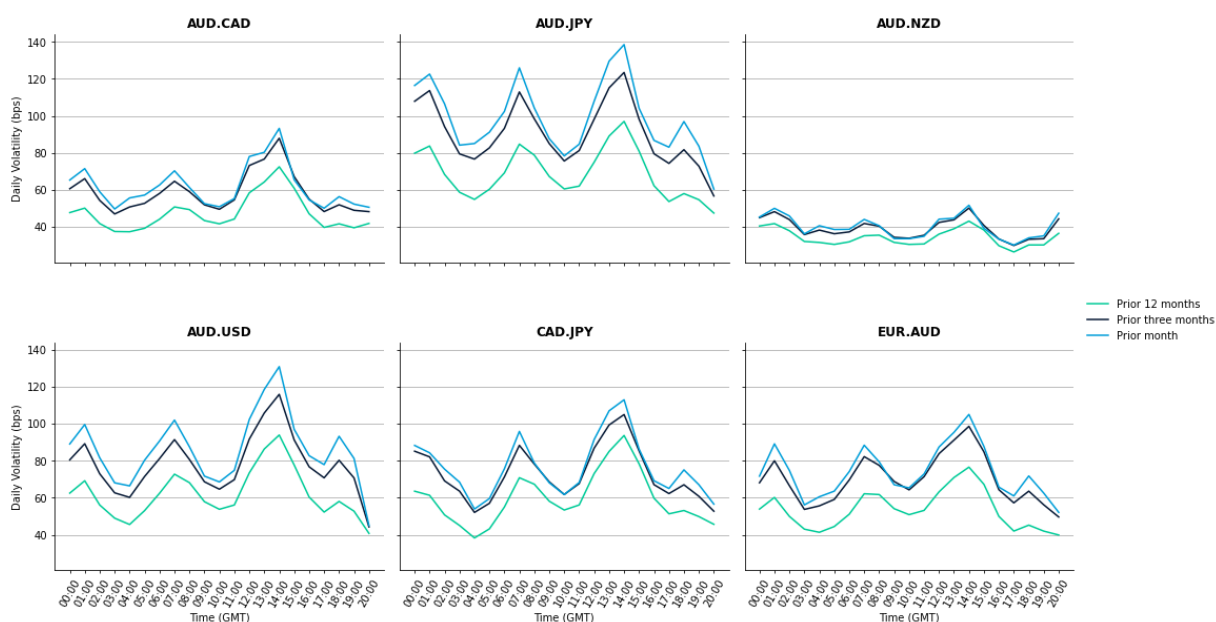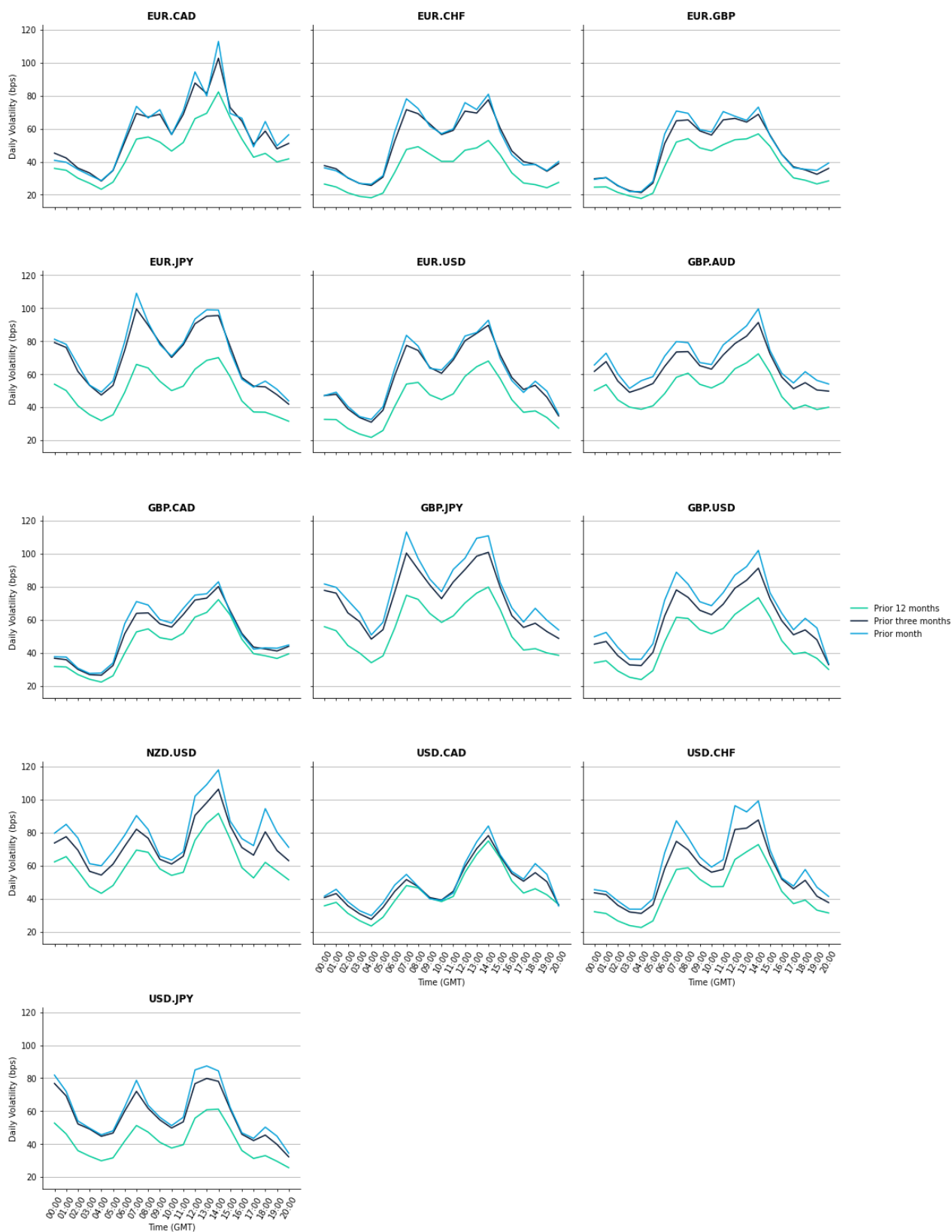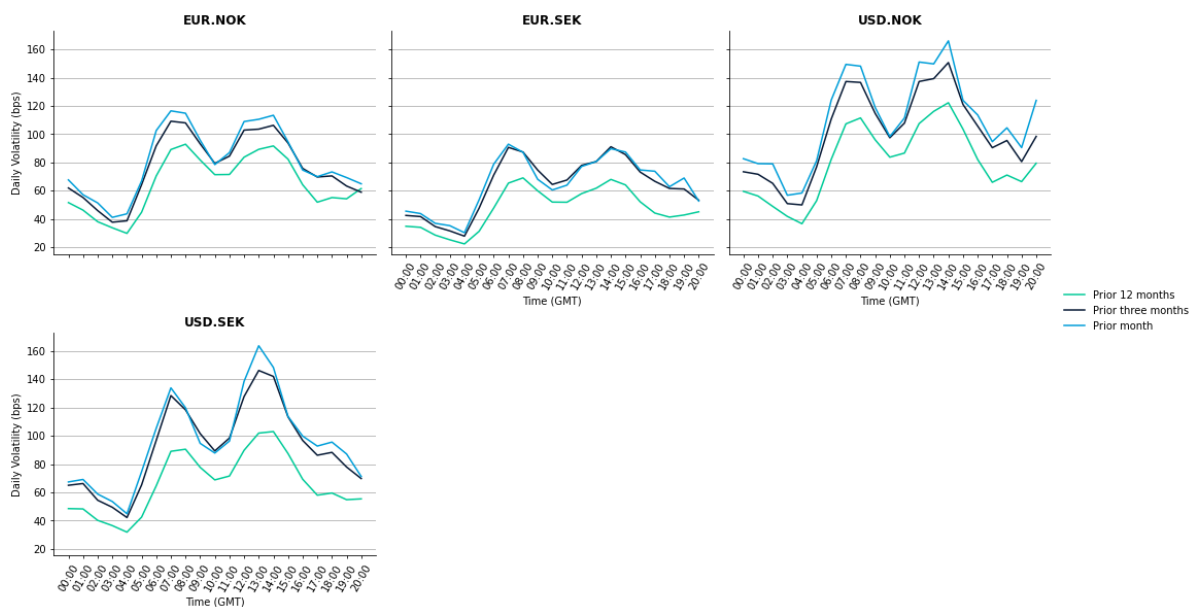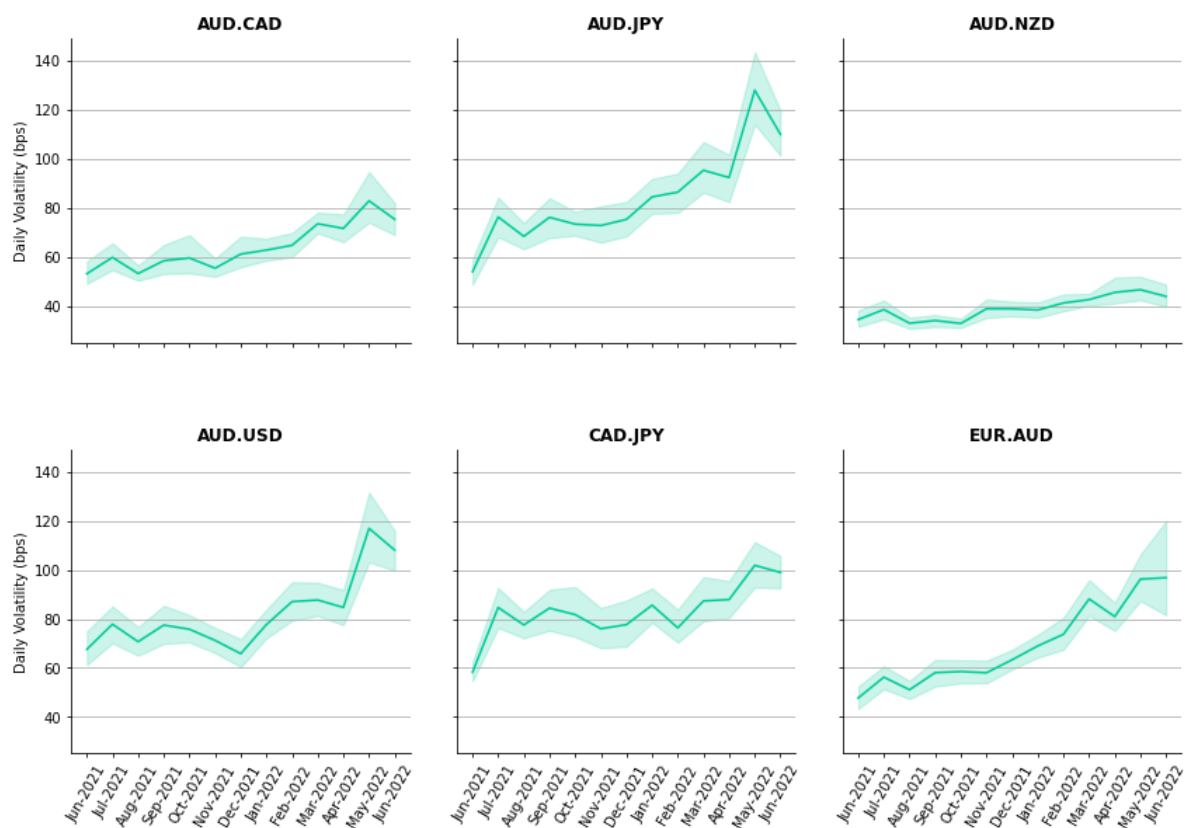

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Chart series legend:
- Prior 12 months
- Prior three months
- Prior month

Charts shown (each with Daily Volatility (bps) on y-axis and Time (GMT) on x-axis):
EUR.CAD, EUR.CHF, EUR.GBP, EUR.JPY, EUR.USD, GBP.AUD, GBP.CAD, GBP.JPY, GBP.USD, NZD.USD, USD.CAD, USD.CHF, USD.JPY

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
June 2021-June 2022

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EUR.CAD

Daily Volatility (bps)

EUR.CHF

EUR.GBP

EUR.JPY

Daily Volatility (bps)

EUR.USD

GBP.AUD

GBP.CAD

Daily Volatility (bps)

GBP.JPY

GBP.USD

NZD.USD

Daily Volatility (bps)

USD.CAD

Jun-2021 Jul-2021 Aug-2021 Sep-2021 Oct-2021 Nov-2021 Dec-2021 Jan-2022 Feb-2022 Mar-2022 Apr-2022 May-2022 Jun-2022

USD.CHF

Jun-2021 Jul-2021 Aug-2021 Sep-2021 Oct-2021 Nov-2021 Dec-2021 Jan-2022 Feb-2022 Mar-2022 Apr-2022 May-2022 Jun-2022

USD.JPY

Daily Volatility (bps)

Jun-2021 Jul-2021 Aug-2021 Sep-2021 Oct-2021 Nov-2021 Dec-2021 Jan-2022 Feb-2022 Mar-2022 Apr-2022 May-2022 Jun-2022

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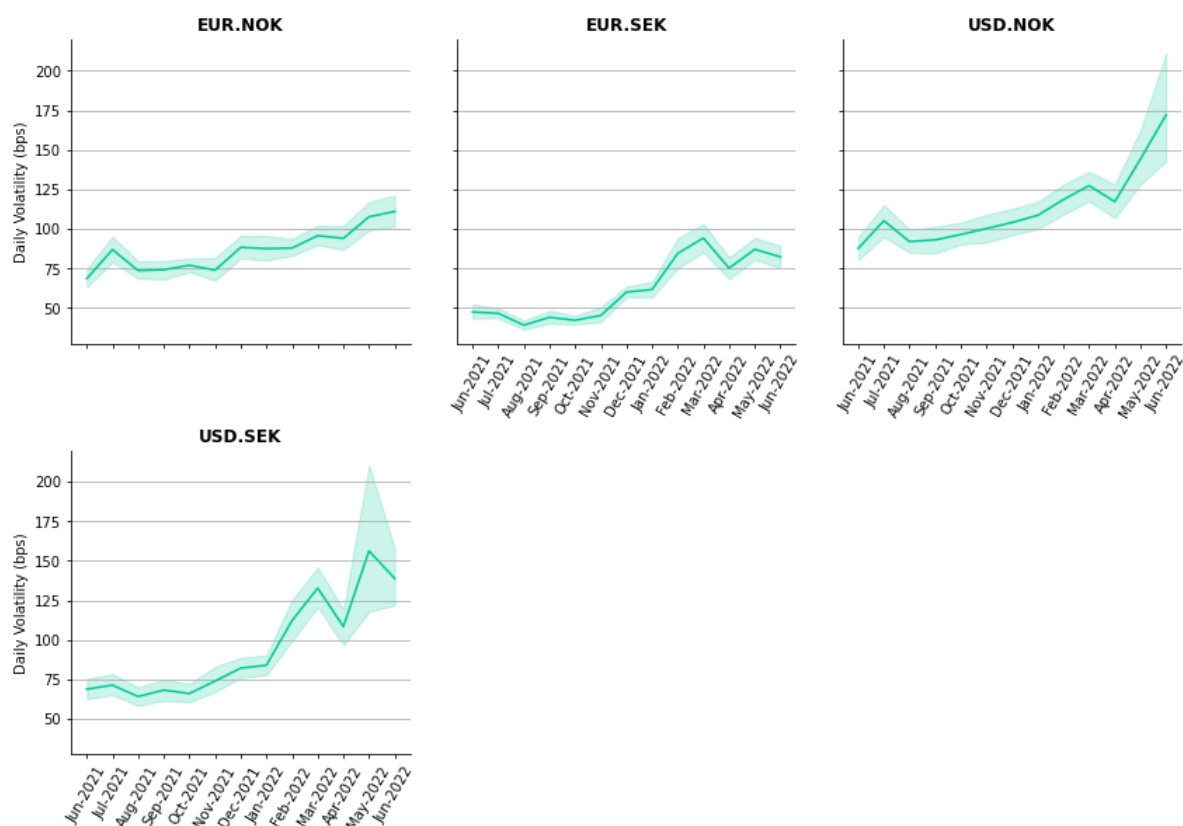
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