

#### **April 2023**

## **FX Market Structure Monthly**

### CHANGES IN SPREAD AND VOLATILITY FOR MAJOR MARKET PAIRS

Has summer come early? If you've been monitoring the FX markets, you might think so. Average spreads for April during the 12:00-16:00 GMT pre-WMR trading window narrowed for 22 of the 23 pairs that we monitor, with only USD/CAD bucking the trend. Additionally, volatility was lower for 21 of the 23 pairs. Despite the absence of any notable reduction in geopolitical tensions, we are left wondering if the market has decided that the summer doldrums have already arrived.

#### READING THE RESULTS

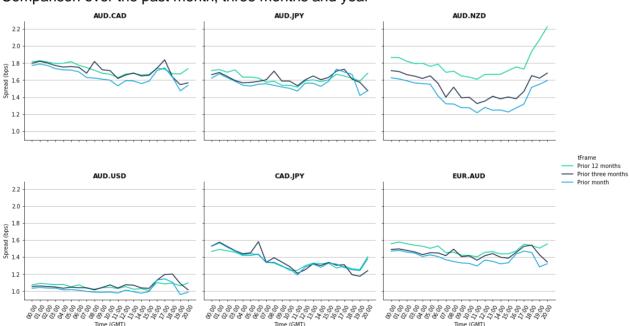
The intraday charts illustrate the average spread or volatility for the past 12 months with the green line, the past three months with the black line, and the past month with the blue line. Meanwhile, the daily charts, the green area represents the 95<sup>th</sup> percentile confidence interval for the spread and volatility, showing the stability of the calculated median value.

#### **SPREADS**

On an intraday basis, all pairs except USD/CAD had narrower spreads, with USD/CAD experiencing wider spreads during parts of the London and New York trading hours. Spreads were narrower for all pairs for 13 out of the 20 trading hours, and at most three pairs registered wider spreads during any given hour. Across the trading day, spreads were lower in April than they were six months ago for all pairs except USD/CAD and EUR/JPY. Overall, it was a quiet month.

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

Comparison over the past month, three months and year



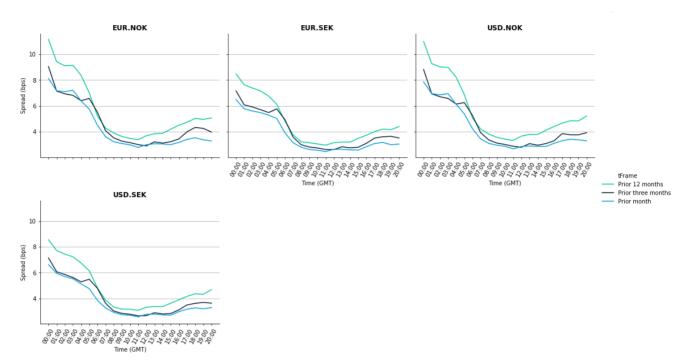
Continued next page...



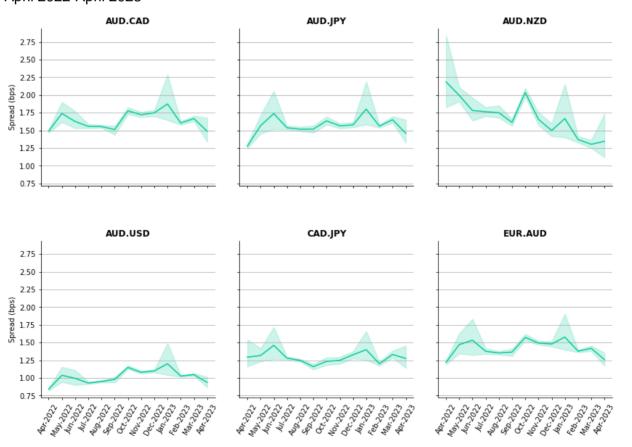




## Scandinavian G-10 Currencies: Average Hourly Spread, 00:00-20:00 GMT Comparison over the past month, three months and year

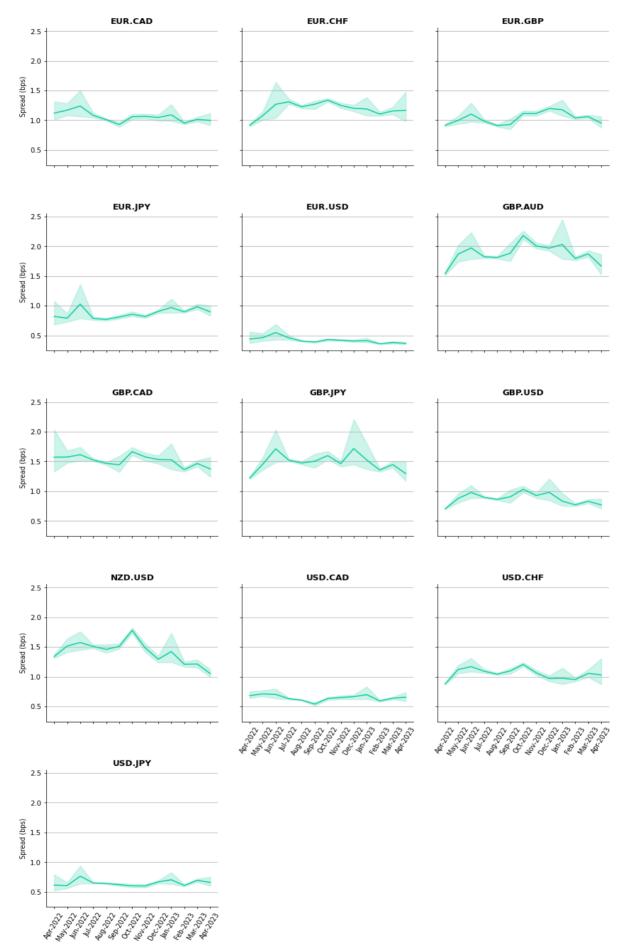


G-10 Currencies: Average Daily Spread, 12:00-16:00 GMT April 2022-April 2023



Continued next page...





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 separate exhibits.



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





#### **VOLATILITY**

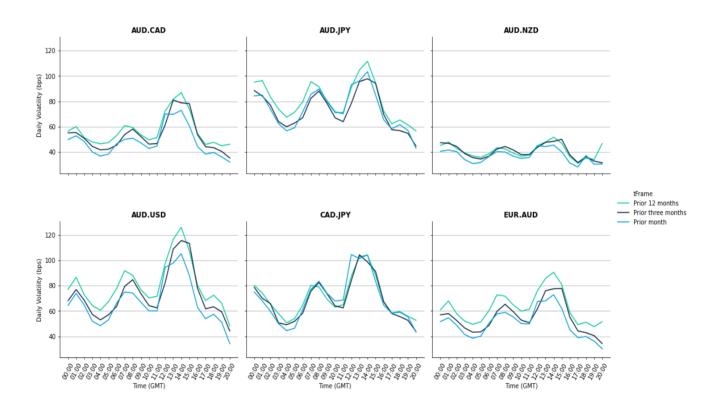
During the 12:00-16:00 GMT pre-WMR trading window, FX spot volatility decreased for 21 out of the 23 pairs we monitor, in line with the widespread narrowing of spreads in April. Over the past three, six, and 12 months, pre-WMR trading window volatility was lower for all pairs except one, two, and one, respectively.

On an intraday basis, the trend remained the same, with volatility decreasing throughout the Tokyo, London, and New York trading desk hours for all 23 pairs. In April, hourly FX rates showed lower volatility than they did three or six months ago.

Two noteworthy data points are worth mentioning: from 6:00-7:00 GMT, 18 pairs recorded higher volatility, while from 12:00-13:00 GMT, 21 pairs registered higher volatility than they did one or three months ago. The earlier time slot corresponds to 3 PM in Tokyo, while the latter is 8 AM in New York, which is prime time for companies to release earnings. The heightened volatility may reflect the FX market digesting that day's earnings announcements before returning to a quiet state.

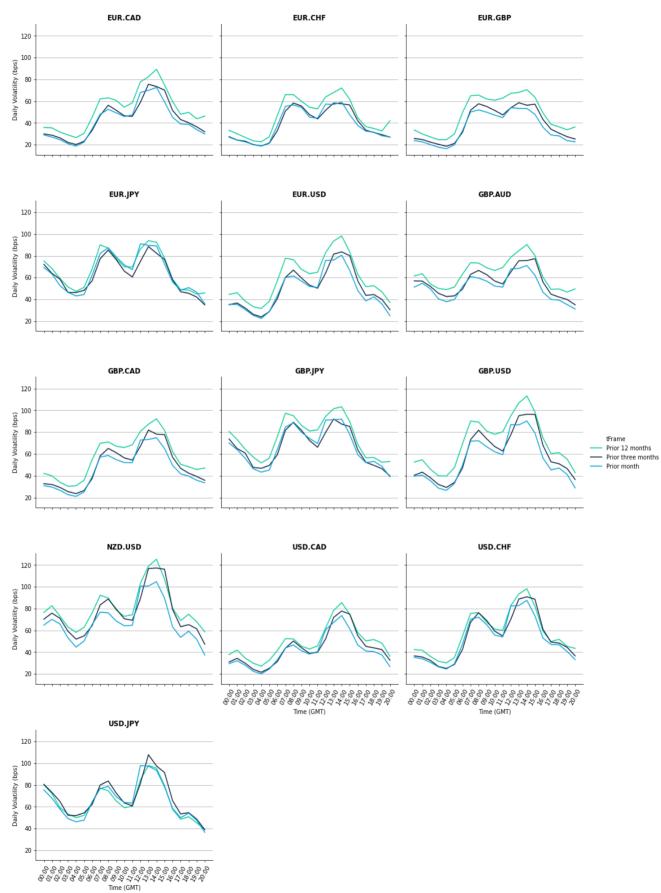
## G-10 Currencies: Average Hourly Volatility, 00:00-20:00 GMT

Comparison over the past month, three months and year



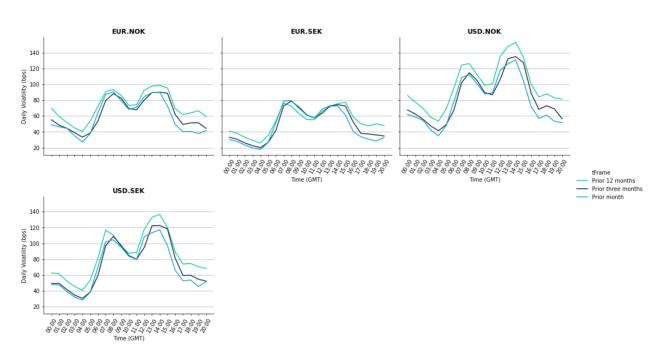
Continued next page...







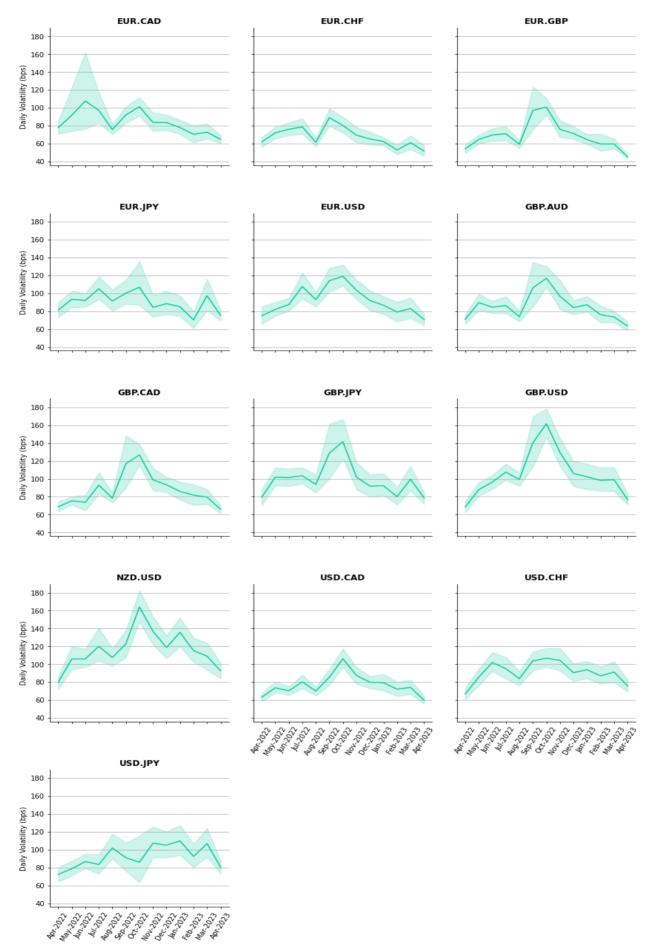
## Scandinavian G-10 Currencies: Average Hourly Volatility, 00:00-20:00 GMT Past month, three months and year



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



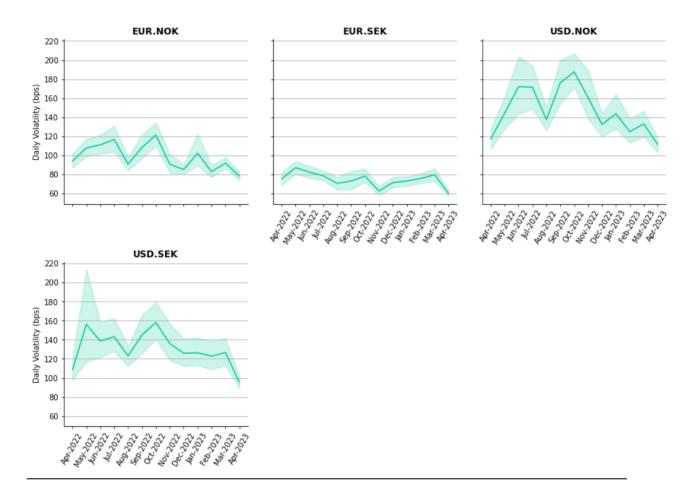




All chart sources: Virtu Financial, 2023. Spread and volatility calculations are derived from sources that Virtu believes to be reliable, but Virtu does not make any claims to its accuracy. USD.NOK, USD.SEK, EUR.NOK and EUR.SEK are shown in separate exhibits.



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



**Have questions?** To learn more, contact your regional Virtu Analytics representative. **AMERICAS** +1.866.265.4519 | **APAC** +852.3405.3755 | **EMEA** +44.20.7670.4000 analytics@virtu.com | www.virtu.com

© 2023 Virtu Financial, Inc. All rights reserved. Not to be reproduced or retransmitted without permission. These materials are for informational purposes and are not intended to be used to make trading or investment decisions, they are not intended as an offer to sell or the solicitation of an offer to buy any security or financial product, and are not intended as advice (investment, tax or legal). The information contained herein includes Virtu proprietary information and/or has been taken from sources we believe to be reliable, but we do not represent or warrant that such information is accurate or complete and it should not be relied upon as such.

Analytics products and services referenced herein may not be subject to oversight by regulatory authorities in one or more jurisdictions, including in Europe, where such products and services are offered by Virtu ITG Ventures Limited, registered in Ireland No. 295549 ("VIVL"). VIVL does not engage in regulated activity.

Securities products and services are offered by the following subsidiaries of Virtu Financial, Inc. In the U.S., Virtu Americas LLC, member FINRA and SIPC; in Canada, Virtu Canada Corp., member Canadian Investor Protection Fund and Investment Industry Regulatory Organization of Canada; in Europe, Virtu Europe Trading Limited, registered in Ireland No. 283940 ("VETL") (VETL is authorized and regulated by the Central Bank of Ireland), and Virtu Financial Ireland Limited, registered in Ireland No. 471719 ("VFIL") (VFIL is authorized and regulated by the Central Bank of Ireland). The registered office of VETL and VFIL is North Dock One, Fifth Floor, 91-92 North Wall Quay, Dublin 1, Ireland, D01 H7V7; in Asia, Virtu ITG Hong Kong Limited (SFC License No. AHD810), Virtu ITG Singapore Pte Limited (CMS License No. 100138-1), and Virtu ITG Australia Limited (AFS License No. 219582).