

FX Quant Insight

Renewed EURUSD upside

Key takeaways

- EURUSD option skews reached a new high for calls despite a brief consolidation for the spot price last week.
- Market has formed a bullish EURUSD consensus and we now follow the uptrend toward 1.10.
- More bullish indicators should form if EURUSD spot can withstand US tariffs risks this week.

FX Signal of the Week: Bullish EUR/USD at 1.0800

Exhibit 1: Option flow was bid for EURUSD calls despite spot consolidation

Top signals from quant models

Section	Insight	Rationale
Option Flow	Bullish EURUSD	Option flow was sharply bid for EURUSD calls despite range bound spot price.
Technical Matrix	Bearish USD	USD downtrends remain strong vs European currencies.
CARS	Shock regime	Shock regime intensified and is now driven by both equity and rates.
Time Zone	USD supply	Europe-based investors continued to sell USD last week.
EM FX	Bullish USDZAR	Rising call skew and equity risk-off is bullish USDZAR.

Source: BoFA Global Research

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Option market was unfazed by EURUSD consolidation

EURUSD spot price consolidated lower in the first half of last week but bounced quickly back to 1.08, after falling to its 200d SMA. In the meantime, option flow was bid for EURUSD calls as market consensus is now centered around buying EURUSD dips. Exhibit 2 shows the sharp dislocation between the rising 1m EURUSD option skew for calls vs the rangebound spot price last week. It is notable that the 25-delta EURUSD risk reversals beyond the 1m tenor have all reached a new high, surpassing the previous peak from March 5.

Follow EURUSD uptrend toward 1.10

After last week's consolidation, bullish momentum for EURUSD is not as stretched as it was around mid-March (Exhibit 2). Given current EURUSD spot level and our preference to fade the Q1 risk-off sentiment (see our report: [FX Vol Insight, 20 March 2025](#)), we like to follow the EURUSD uptrend now and look for a near-term bullish breakout toward 1.10. We estimate trend-follower who are currently long EURUSD are unlikely to take profit until 1.1043 (Exhibit 7). With spot price currently above both the 50d and 200d SMAs, a so-called "golden cross" bullish signal should also form for EURUSD around the second half of April if the current uptrend maintains its shape. The risk to our bullish EURUSD view would be substantially hawkish US tariffs announcements this week.

31 March 2025

G10 FX Strategy
Global

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For more details on the construction of the quant signals, please refer to the [Global Rates and FX Primer: FX Quant Insight primer - 2024 15 July 2024](#).

CARS (model): Cross-Asset Regime Switching

SDR: Swap Data Repository

MAA: Moving Average Aggregator

UD: Up/Down volatility

RS: Residual Skew

ADX: Average Directional Movement Index

DMI: Directional Movement Index

SMA: Simple Moving Average

RV: relative value

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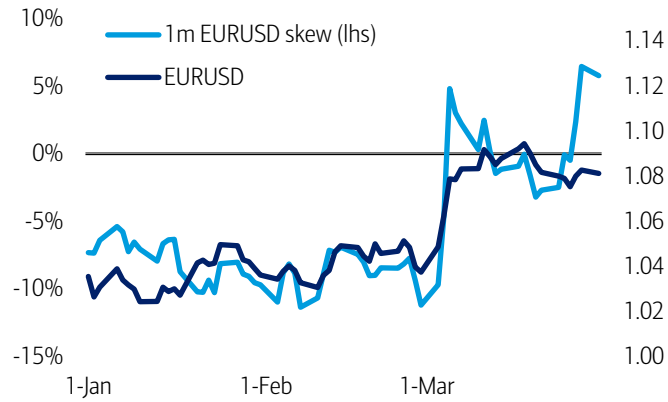
Refer to important disclosures on page 7 to 8.

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Exhibit 2: 1m EURUSD skew rose to a new high despite consolidating spot price last week

1m EURUSD option skew vs spot price

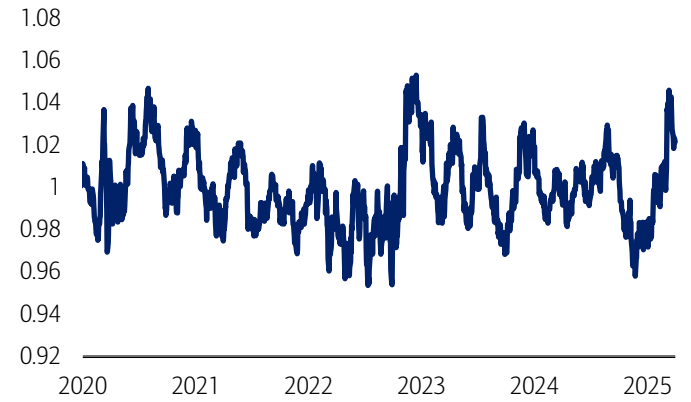


Source: BofA Global Research, Bloomberg

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Exhibit 3: EURUSD uptrend is no longer as stretched as it was around mid-March

EURUSD spot vs 50d SMA ratio



Source: BofA Global Research, Bloomberg

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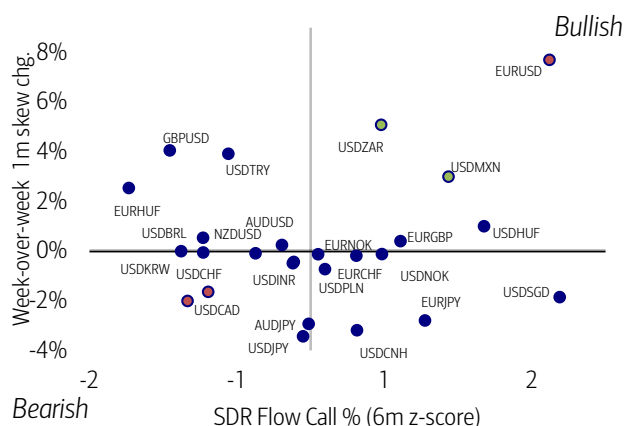
Option Flow Signals

Our options flow signals combine Event analysis framework (see our report: [FX Viewpoint: Vol-guided decisions 18 March 2021](#)) with SDR flows data (see our report: [FX Viewpoint: SDR: What do FX options flows tell us? 01 February 2021](#)) to gauge bullish and bearish sentiments.

To learn more about FX volatility and options please refer to our report: [FX Volatility Dashboard](#) as well as the FX Vol Dashboard Primer: [Global Rates and FX Primer: 09 March 2022](#).

Exhibit 4: Option flow moved for USD puts vs G10 currencies and calls vs EM currencies

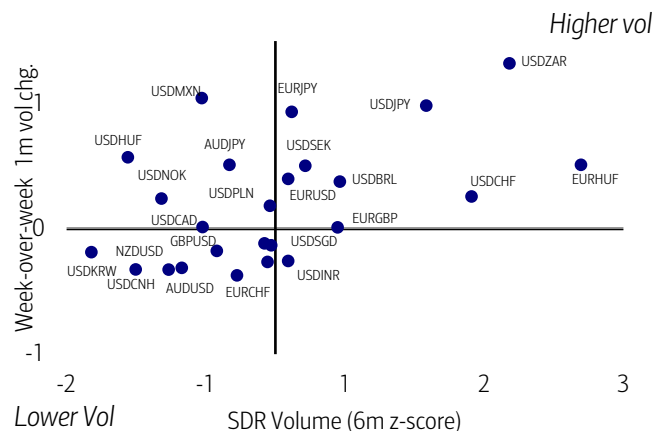
1m skew change vs call percentage z-score



Source: BofA Global Research, DTCC. Note: CNH flows are proxied by "CNY" flows in SDR.
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Exhibit 5: Implied vols rose as risk premium builds up toward April 2 tariffs announcement

1m implied vol change vs volume z-score



Source: BofA Global Research, DTCC. Note: CNH flows are proxied by "CNY" flows in SDR.
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Exhibit 6: Short-dated G10 FX option skews led by EURUSD broadly moved for USD puts last week

Event analysis signals after last week's spot and vol moves

Pair	Old spot	New spot	1m vol	1m vol chg	1y vol	1y vol chg	1y - 1m chg	Currency	Return vs USD	1m skew % chg vs USD	Signals
EURUSD	1.0801	1.0811	8.05	0.40	7.56	0.27	-0.13	EUR	0.09%	7.83	EUR No Signal
USDJPY	150.70	149.48	10.43	0.99	9.95	0.20	-0.79	JPY	0.81%	2.23	JPY No Signal
GBPUSD	1.2923	1.2941	7.09	-0.18	7.70	-0.06	0.11	GBP	0.14%	3.89	GBP No Signal
USDCHF	0.8831	0.8815	6.87	0.26	7.19	0.04	-0.22	CHF	0.18%	1.29	CHF No Signal
AUDUSD	0.6286	0.6244	9.14	-0.31	9.60	-0.10	0.21	AUD	-0.67%	-0.01	AUD No Signal
USDCAD	1.4318	1.4370	6.86	0.02	6.05	-0.08	-0.10	CAD	-0.36%	2.15	CAD No Signal
USDSEK	10.1001	10.0296	11.55	0.51	10.92	0.16	-0.35	SEK	0.70%	0.55	SEK No Signal
USDNOK	10.5239	10.5550	10.68	0.24	11.21	0.22	-0.03	NOK	-0.30%	0.18	NOK No Signal
NZDUSD	0.5728	0.5680	9.33	-0.34	9.70	-0.13	0.21	NZD	-0.84%	-0.31	NZD No Signal
USDSGD	1.3386	1.3428	5.27	-0.13	5.37	-0.01	0.12	SGD	-0.31%	1.73	SGD No Signal
USDKRW	1469.2	1474.1	8.51	-0.18	8.90	0.04	0.22	KRW	-0.33%	-0.15	KRW No Signal
USDMXN	20.0371	20.3840	13.32	1.05	13.26	0.12	-0.92	MXN	-1.72%	-1.32	MXN No Signal
USDTRY	37.9761	37.9414	21.71	-2.67	26.33	1.86	4.53	TRY	0.09%	-11.06	TRY No Signal
USDZAR	18.2539	18.3803	12.48	1.32	14.16	0.24	-1.09	ZAR	-0.69%	-3.60	ZAR No Signal
USDHUF	369.4	372.1	11.99	0.57	12.17	0.42	-0.16	HUF	-0.71%	-0.47	HUF No Signal
USDPLN	3.8669	3.8682	11.02	0.19	11.10	0.19	0.00	PLN	-0.03%	0.94	PLN No Signal

Source: BofA Global Research, Bloomberg.

The table shows the 1-year percentile and 1-week change in 1m and 1y implied vol, the 1y-1m spread, and the 1m 25 delta risk reversal as a percentage of the ATM. For a currency with a put skew, the rules for generating the signal column are the following:

[1] Bearish Continuation: Spot change < -1%, 1m vol change > 0.5%, 1y vol change > 0%, 1m skew chg. < -2; [2] Bearish Contrarian: Spot change > 1%, 1m skew change < -2; [3] Bullish Continuation: Spot change > 2%, 1y-1m change < -0.1%, 1m skew change > 2; [4] Bullish Contrarian Spot change < -1%, 1m vol change < -0.2%, 1m skew chg. > 1.

Parameters that triggered a bearish condition are colored in red; parameters that triggered a bullish condition are colored in green.

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Technical Matrix

The Technical Matrix is a table of technical indicators (see our report: [Get to know even more technical strategy, 24 January 2022](#)) and BofA positioning analysis (See our report: [Global Rates and FX Primer: 01 October 2018](#)) that look at trend following and reversal signals. To learn more about a variety of technical strategies, please see our report: [Technicals Explained primer](#), as well as our Quantifying Technicals publications: for [the ADX](#) and [Bollinger indicators](#).

Exhibit 7: USD downtrend remains strong vs EUR, GBP, CHF and NOK

Technical matrix with positioning analysis and key levels to watch

		Spot	Positioning Trend	Bullish / Bearish	ADX Trend	Bollinger Bands	Next Support	Next Resistance	Trigger Level	Take-profit Level
USD	EURUSD	1.0810	↑	Bullish	Transition	None	1.0804	1.1214	1.0809	1.1043
	USDJPY	149.53	↓	No Signal	Range	None	148.13	150.77	150.11	141.52
	GBPUSD	1.2940	↑	Bullish	Uptrend	None	1.2924	1.3434	1.2840	1.3305
	AUDUSD	0.6243	↓	No Signal	Range	None	0.6170	0.6297	0.6313	0.6004
	USDCHE	0.8817	↓	Bearish	Downtrend	None	0.8812	0.8900	0.8818	0.8502
	USDCAD	1.4367	↑	No Signal	Transition	None	1.4336	1.4467	1.4310	1.4759
	NZDUSD	0.5678	↓	No Signal	Range	None	0.5516	0.5700	0.5714	0.5408
	USDSEK	10.02	↓	No Signal	Downtrend	None	9.9488	10.4735	10.43	9.72
	USDNOK	10.55	↓	Bearish	Downtrend	None	10.3916	10.8269	10.94	10.24
EUR	EURGBP	0.8354	↔	No Signal	Range	None	0.8349	0.8379		
	EURJPY	161.65	↔	No Signal	Range	None	160.89	162.45		
	EURAUD	1.7315	↑	Slightly Bearish	Uptrend	None	1.7184	1.7419	1.6781	1.7472
	EURCHF	0.9532	↑	Bullish	Range	None	0.9483	0.9568	0.9489	0.9724
	EURCAD	1.5530	↑	Slightly Bearish	Uptrend	None	1.5335	1.5857	1.5167	1.5717
	EURNZD	1.9037	↑	Slightly Bearish	Uptrend	None	1.8649	1.9169	1.8550	1.9342
	EURSEK	10.83	↓	Slightly Bullish	Downtrend	None	10.7676	11.1538	11.29	10.62
	EURNOK	11.40	↓	No Signal	Downtrend	None	11.2625	11.5953	11.67	11.14
G10 Cross	AUDJPY	93.36	↓	Slightly Bullish	Transition	None	90.15	95.20	95.21	89.31
	AUDNZD	1.0994	↓	No Signal	Range	None	1.0957	1.1010	1.1016	1.0840
	AUDCAD	0.8969	↓	Bearish	Range	None	0.8782	0.9009	0.9034	0.8791
	NOKSEK	0.9500	↓	Slightly Bullish	Range	None	0.9497	0.9598	0.9605	0.9181
	CADJPY	104.08	↓	No Signal	Downtrend	None	101.38	105.48	105.09	99.25
	GBPJPY	193.50	↑	No Signal	Range	None	193.05	194.00	193.44	203.00
	NZDJPY	84.91	↓	Slightly Bullish	Range	None	83.07	86.18	85.99	81.05
	GBPCHE	1.1410	↑	Bullish	Range	None	1.1352	1.1678	1.1368	1.1699
EM	USDMXN	20.39	↔	No Signal	Range	None	20.3826	21.2932		
	USDBRL	5.7826	↓	Bearish	Range	None	5.7230	5.7950	5.7832	5.4831
	USDZAR	18.39	↔	No Signal	Range	None	18.2109	18.3907		
	EURPLN	4.1835	↓	No Signal	Range	None	4.1272	4.1840	4.1839	4.0400
	EURHUF	402.04	↓	No Signal	Uptrend	None	399.69	402.04	402.07	391.14
	USDKRW	1474	↑	No Signal	Range	None	1450.78	1486.85	1446	1524
	USDINR	85.46	↓	No Signal	Downtrend	None	85.30	85.82	85.47	85.46
	USDCNH	7.2605	↔	No Signal	Range	None	7.2208	7.2682		

Data as of 03/31/25. Source: BofA Global Research, Bloomberg.

Positioning uptrend has MAA > 60, downtrend MAA < 40. Positioning uptrend reversal likely if MAA/UD/RS > 80, continuation likely if UD, RS < 50. Positioning downtrend reversal likely if MAA/UD/RS < 20, and continuation likely if UD, RS > 50. UD and RS are 1y percentile and MAA is in %.

Positioning is bullish (green) if matrix shows downtrend reversal or uptrend continuation; Positioning is bearish (red) if matrix shows uptrend reversal or downtrend continuation.

Positioning is slightly bullish or slightly bearish (yellow) if only one of UD or RS supports the signal.

ADX downtrend if ADX > 25 and DMI+ is below DMI-. ADX uptrend if ADX > 25 and DMI+ is above DMI-. ADX shows Transition if ADX is between 20 and 25, and Range if ADX < 20. Cells in the ADX Trend column are colored with more intensity if the ADX trend signal matches the positioning signal. 14-day lookback is used for the ADX indicators.

The Bollinger Bands column shows 'Upper' if spot is above the +2 std bollinger band, and 'Lower' if spot is below the -2 std band. 20-day SMA is used for Bollinger indicators.

Cells in Next Support and Next Resistance columns are colored if spot is within 0.5% of the support or resistance level.

For pairs in an existing uptrend or downtrend according to MAA, the Trigger Level shows the hypothetical spot level that would neutralize the existing trend in the next 2 weeks. The Take-profit Level shows the hypothetical spot level in the next 2 weeks that would suggest the trend has become too stretched according to the 2y z-score of the spot vs 50d SMA ratio.

For pairs current not in a prominent MAA trend, the Trigger Level shows the hypothetical spot level that would form a trend for the pair in the next two weeks. Pairs currently not in a prominent MAA trend would not have a Take-Profit Level.

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CARS Signals

CARS ("cross-asset regime-switching") is a systematic model that makes weekly buy/sell decisions for G10 currencies based on cross-asset factors (equity, rates, and commodities). FX's relationship with other asset classes is not constant over time, and investors could flock to own haven currencies during shock periods. The CARS model chooses the most performing factor for the appropriate macro regime of the week (See our report: [FX Viewpoint: CARS model: weekly FX cross-asset drivers 22 June 2022](#)).

Exhibit 8: Shock regime intensifies and is now driven by both global equity and rates factors

CARS signals for a macro-shock week

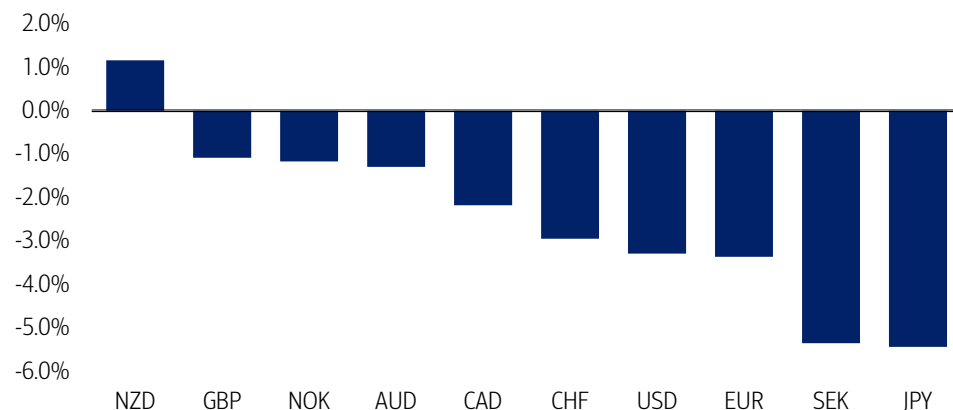
Currency	Bullish/Bearish	Equity Shock	Rates Shock	Global regime	z-score
EUR	Bearish	-0.2	-1.0	Commodity Shock	0.7
JPY	Bullish	-1.5	-1.2	S&P 500	-1.6
GBP	Bearish	-0.3	-0.6	US Treasury	-1.2
AUD	Bearish	-1.5	-0.6		
CAD	Bearish	-0.7	-0.6		
CHF	Bullish	-0.1	-1.1		
NZD	Bearish	-1.0	-0.6		
SEK	Bearish	-1.2	-0.8		
NOK	Bearish	0.0	-0.7		

Source: BofA Global Research, Bloomberg. The chart shows bull/bear signals for G10 FX versus the USD based on cross-asset shocks. Factor cells are colored in red if equity/rates z-scores are below -1 and commodity z-score is below -2.

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Exhibit 9: Global equities were broadly lower last week

1-week global equity market returns



Source: BofA Global Research, Bloomberg

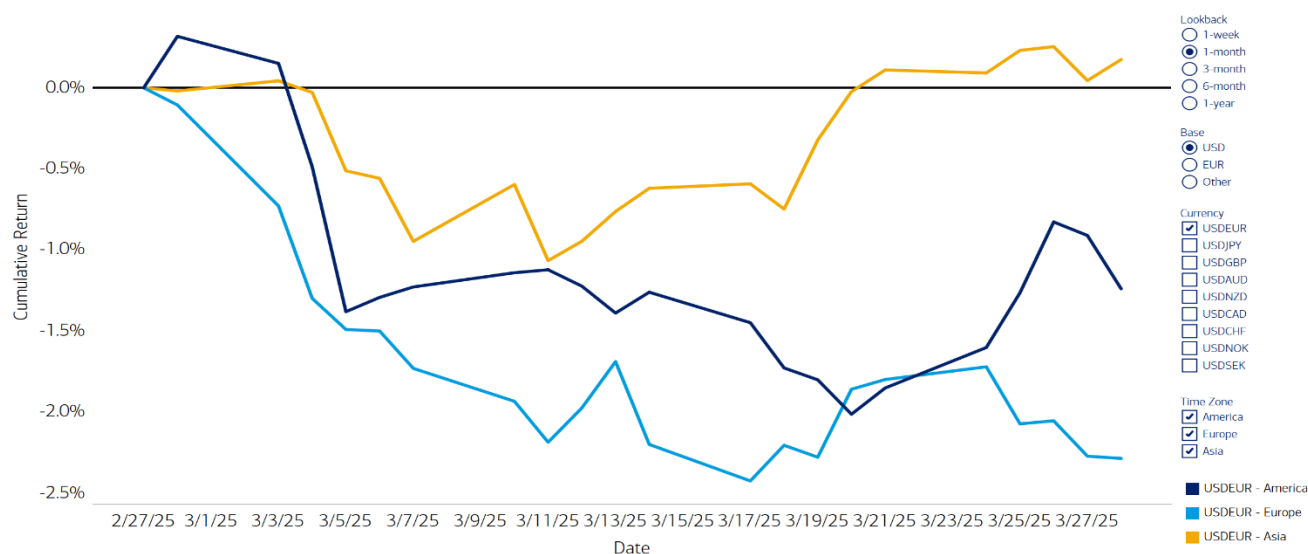
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Interactive Time Zone

Expanding exhibits in the HTML view shows cumulative FX returns at different lookback periods, currency groupings, and time zones (see our report: [FX Watch: Interacting with time zones 06 July 2022](#)). Hours are shown in Coordinated Universal Time (UTC). We define America time zone as 1pm-12am UTC (8am-7pm EST), Europe time zone as between 8am-1pm UTC (3am-8am EST), and Asia time zone as between 12am to 8am UTC (7pm-3am EST).

Exhibit 10: USD retraced some loss at the onset of last week but resumed lower after March 26

Interactive time zone plot. For readers of the web-formatted version of this report, access interactive features of the visualization by clicking on the image. Use Google Chrome or Microsoft Edge browsers for the best experience



We denote America time zone as between 1pm to 12am UTC, Europe time zone as between 8am to 1pm UTC, and Asia time zone as between 12am to 8am UTC.

Source: BofA Global Research, Bloomberg

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Exhibit 11: Europe-based investors continued to sell USD last week (6am-12pm UTC)

Interactive time zone plot. For readers of the web-formatted version of this report, access interactive features of the visualization by clicking on the image. Use Google Chrome or Microsoft Edge browsers for the best experience

	0am-3am	3am-6am	6am-9am	9am-12pm	12pm-3pm	3pm-6pm	6pm-9pm	9pm-0am
USDEUR	-0.2%	0.1%	-0.1%	-0.1%	-0.1%	0.5%	-0.1%	0.2%
USDJPY	0.1%	-0.2%	0.0%	0.3%	-0.1%	0.0%	0.3%	-0.1%
USDGBP	-0.2%	0.1%	-0.1%	0.0%	-0.2%	0.2%	0.0%	0.2%
USDAUD	-0.5%	-0.4%	-0.2%	0.2%	0.9%	-0.1%	0.4%	-0.5%
USDNZD	0.0%	0.1%	-0.4%	-0.4%	0.3%	0.7%	-0.1%	0.4%
USDCAD	-0.1%	0.0%	-0.1%	-0.4%	0.2%	0.2%	-0.2%	0.3%
USDCHF	0.1%	0.0%	0.1%	-0.2%	-0.2%	0.2%	-0.1%	0.0%
USDNOK	-0.3%	0.1%	-0.2%	-0.6%	-0.2%	0.5%	0.2%	0.3%
USDSEK	-0.1%	0.1%	-0.8%	-0.5%	0.0%	0.5%	-0.2%	-0.3%

Hours are as of UTC. Currency pairs with greater loss over the lookback period are colored in darker red. Currency pairs with greater gain over the lookback period are colored in darker green. We denote America time zone as between 1pm to 12am UTC, Europe time zone as between 8am to 1pm UTC, and Asia time zone as between 12am to 8am UTC.

Source: BofA Global Research, Bloomberg

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