

FX Quant Insight

Antipodean spikes

Key takeaways

- Pace of USD selloff too slow to overturn quant signals for now.
- Positioning still show USD uptrend continuation signals vs EUR, AUD, and NZD.
- Look for higher AUD/NZD while above 200d SMA on bullish rates factor signal.

FX Trade of the week: Buy AUD/NZD: 1.0826

Exhibit 1: Bullish AUD/NZD on rates factor from CARS

Top signals from quant models

Section	Insight	Rationale
Option Flow	CHF and MXN calls	Demand for CHF and MXN calls was the stand-out option flow last week.
Technical Matrix	Bullish USD	Bullish continuation signals for USD vs EUR, AUD, and NZD
CARS	Rates Regime	Bullish AUD and JPY vs bearish CAD and NZD on rates factor.
Time Zone	US-hour USD supply	US-based investors sold USD last week.

Source: BofA Global Research

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Pace of Oct USD selloff not turning trend signals yet

While the USD is grinding lower this month, the pace has been slow. Despite USD depreciation, positioning analysis still shows bullish USD signals vs EUR, AUD, and NZD (Exhibit 6). Trend strength for the USD remains resilient; low down vols vs up vols and lack of broad reduction in USD call skews also support the bullish USD positioning signals for now. Time-zone analysis shows US-based investors paring back long USD positions last week. While US 10y yield topping out at 5% could turn out to drive the next wave of USD selloff, a clear sell USD signal has not formed yet in our framework. There is also upside risk to the USD on strong Q3 GDP data this Thursday, where both consensus and our economists expect more than 4% QoQ saar ([Global Macro Watch: 22 October 2023](#)).

Bullish AUD/NZD as pair enters uptrend on rates factor

In the meantime, we prefer to focus more on the crosses and our CARS model is bullish AUD/NZD this week on rates signal. AU yields surged the most in G10 last week on hawkish RBA (Reserve Bank of Australia) minutes, while NZ yields dropped on weak inflation data. AUD/NZD spot spiked to above the 200d SMA, with room to rise as MAA neutral trend grows into an uptrend (currently still only at 50 out of 100, trend becomes bullish with MAA rising to above 60). The risk would be a weaker than expected AU Q3 CPI data this week.

23 October 2023

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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: decipher weekly FX signals 07 September 2022](#).

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

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Refer to important disclosures on page 7 to 8. Analyst Certification on page 6. 12615427

Timestamp: 23 October 2023 04:54PM EDT

Technical Matrix

The Technical Matrix is a table of technical indicators ([Get to know even more technical strategy. 24 January 2022](#)) and BoFA positioning analysis ([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 [Technicals Explained primer](#), as well as our Quantifying Technicals publications for [the ADX](#) and [Bollinger indicators](#).

Exhibit 5: Bullish continuation signals for USD vs EUR, AUD, and NZD

Technical matrix with positioning analysis and key levels to watch

		Spot	Positioning Trend	Bullish / Bearish	ADX Trend	Bollinger Bands	Next Support	Next Resistance
USD	EURUSD	1.0597	↓	Bearish	Transition	None	1.0503	1.0683
	USDJPY	149.93	↑	Slightly Bearish	Range	None	147.85	150.16
	GBPUSD	1.2156	↓	No Signal	Transition	None	1.2146	1.2381
	AUDUSD	0.6313	↓	Bearish	Range	None	0.6272	0.6402
	USDCHE	0.8940	↔	No Signal	Transition	None	0.8900	0.8963
	USDCAD	1.3719	↑	No Signal	Transition	None	1.3585	1.3862
	NZDUSD	0.5822	↓	Bearish	Range	None	0.5673	0.5929
	USDSEK	11.0512	↓	No Signal	Range	None	11.0175	11.2684
	USDNOK	11.1361	↑	Slightly Bearish	Range	None	10.7746	11.2986
EUR	EURGBP	0.8718	↑	No Signal	Range	None	0.8696	0.8736
	EURJPY	158.88	↑	No Signal	Range	None	157.94	159.76
	EURAUD	1.6786	↑	Bullish	Range	None	1.6687	1.7065
	EURCHF	0.94739	↓	Bearish	Downtrend	None	0.9417	0.9575
	EURCAD	1.4538	↓	No Signal	Uptrend	None	1.4530	1.4573
	EURNZD	1.8204	↑	Bullish	Uptrend	Upper	1.8021	1.8462
	EURSEK	11.7114	↔	No Signal	Uptrend	Upper	11.5027	11.7207
	EURNOK	11.8013	↑	No Signal	Range	Upper	11.5098	12.1064
G10 Cross	AUDJPY	94.646	↔	No Signal	Range	None	93.24	94.65
	AUDNZD	1.0845	↔	No Signal	Uptrend	None	1.0832	1.0907
	AUDCAD	0.8661	↓	No Signal	Range	None	0.8565	0.8697
	NOKSEK	0.9924	↓	Slightly Bullish	Downtrend	None	0.9498	0.9997
	CADJPY	109.281	↑	No Signal	Range	None	108.83	110.64
	GBPJPY	182.24	↑	No Signal	Range	None	182.18	183.28
	NZDJPY	87.27	↑	No Signal	Range	None	86.47	87.52
	GBPCHF	1.0867	↓	Bearish	Downtrend	None	1.0783	1.1087
EM	USDMXN	18.2778	↑	Slightly Bearish	Uptrend	None	17.9297	18.3323
	USDBRL	5.0274	↑	No Signal	Transition	None	5.0147	5.1130
	USDZAR	18.9653	↑	No Signal	Range	None	18.7127	18.9787
	EURPLN	4.4551	↓	Bearish	Downtrend	None	4.3986	4.4962
	EURHUF	382.05	↔	No Signal	Range	None	381.65	385.63
	USDKRW	1353.70	↑	Bullish	Range	None	1334.94	1357.37
	USDINR	83.19	↑	No Signal	Range	None	83.04	83.29
	USDCNH	7.3164	↑	Bullish	Range	None	7.3058	7.3749

Data as of 10/23/23. **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 lookahead 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.

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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 ([FX Viewpoint: CARS model: weekly FX cross-asset drivers 22 June 2022](#)).

Exhibit 6: Bullish AUD and JPY vs bearish CAD and NZD on rates factor

CARS signals for a trending week (no macro shock)

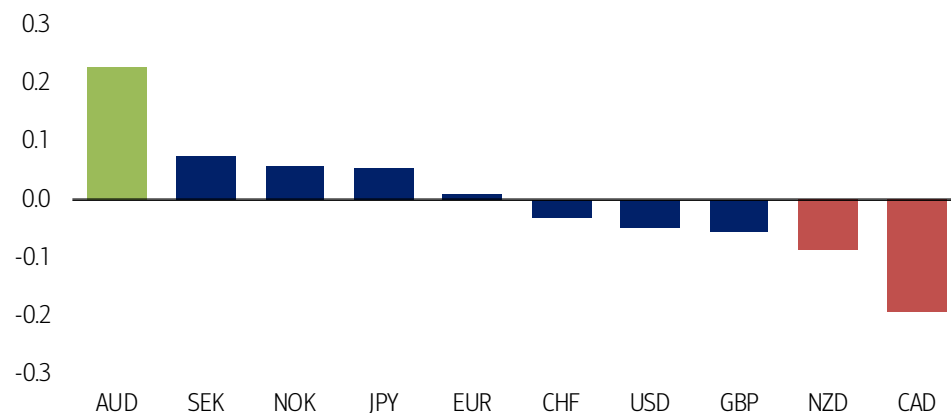
Currency	Bullish/Bearish	Equity	Rates	Commodity	Global regime	Values
EUR		3	5	4	Commodity z-score	0.1
JPY	Bullish	2	1	9	Performing factor	Rates
GBP		7	6	8		
AUD	Bullish	4	2	3		
CAD	Bearish	5	10	2	USD Equity	6
CHF		10	8	7	USD Rates	7
NZD	Bearish	1	9	6		
SEK		9	3	5		
NOK		8	4	1		

The Equity ranking is ordered by 5y z-score of 1-week equity return. The Rates ranking is ordered by 5y z-score of 1-week rate change and level of 2y swap rate. The Commodity ranking is ordered by 52-week FX correlation with BCOM. The Commodity z-score is the 1y z-score of 1-week BCOM Index return.

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Exhibit 7: NZ and CA yields declined the most last week on soft inflation data; AU yield surged on hawkish RBA meeting minutes

1-week global rate change



Source: BofA Global Research, Bloomberg

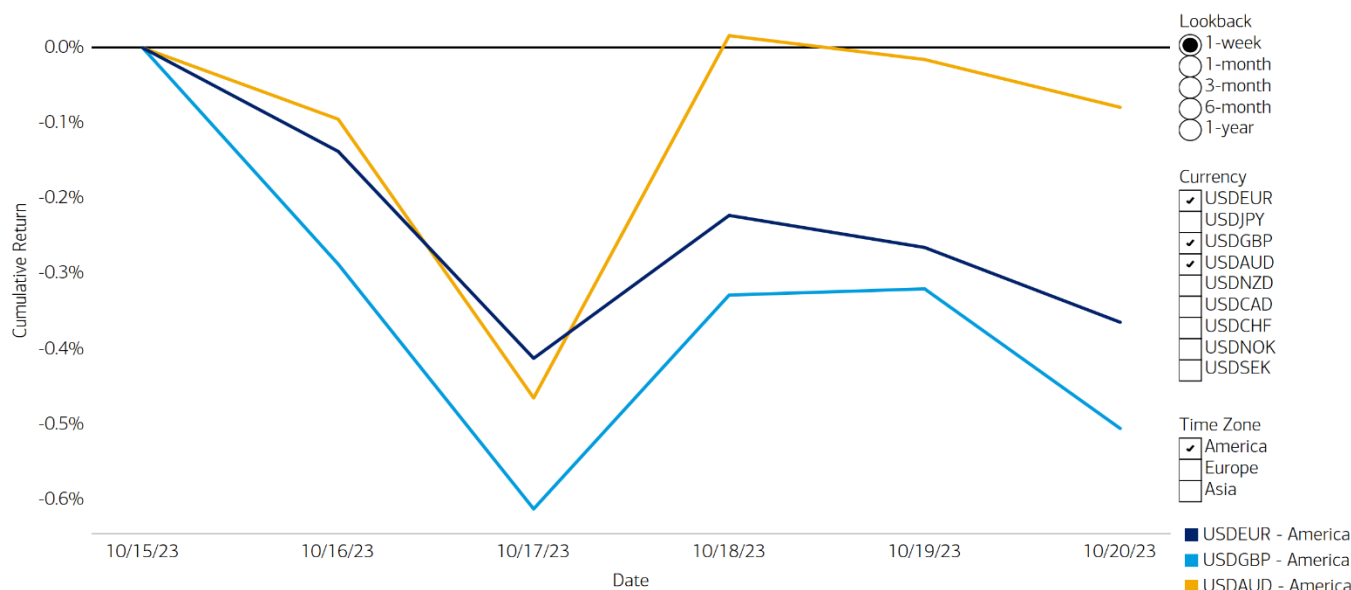
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Interactive Time Zone

Expanding exhibits in the HTML view shows cumulative FX returns at different lookback periods, currency groupings, and time zones ([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 (9am-8pm EDT), Europe time zone as between 8am-1pm UTC (4am-9am EDT), and Asia time zone as between 12am to 8am UTC (8pm-4am EDT).

Exhibit 8: US-based investors pared back long USD positions last week

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



Source: BofA Global Research, Bloomberg

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Exhibit 9: USD sold off most aggressively in US morning hours (2pm-5pm UTC) last week

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

	8am-11am	11am-2pm	2pm-5pm	5pm-8pm	8pm-11pm	11pm-2am	2am-5am	5am-8am	Lookback
USDEUR	-0.1%	-0.1%	-0.6%	-0.1%	0.1%	-0.5%	0.0%	-0.1%	1-week
USDJPY	-0.1%	0.2%	-0.1%	0.1%	0.0%	0.3%	-0.1%	0.2%	1-month
USDGBP	0.2%	-0.3%	-0.9%	0.2%	0.1%	0.2%	-0.1%	0.3%	3-month
USDAUD	0.0%	0.1%	-0.8%	0.4%	0.3%	0.0%	-0.4%	0.1%	6-month
USDNZD	0.3%	0.2%	-0.5%	0.2%	0.8%	1.4%	-0.3%	0.4%	1-year
USDCAD	-0.2%	0.2%	-0.1%	0.4%	0.1%	0.6%	-0.1%	0.0%	
USDCHF	-0.3%	-0.2%	-0.6%	-0.2%	-0.1%	-1.1%	0.0%	0.1%	
USDNOK	0.2%	0.5%	-0.5%	0.0%	-0.1%	0.9%	-0.2%	0.9%	
USDSEK	-0.4%	-0.1%	-0.7%	0.0%	0.1%	-0.4%	-0.2%	0.5%	

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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