

## FX Vol Insight

## EURUSD vol is cheap ahead of FOMC

## Key takeaways

- USD vols have fallen in the front-end and entry levels are now attractive.
- FX dashboard shows EURUSD vol is cheap into FOMC relative to realized, implied history and its PCA fair value.
- 1m EURCHF put is rich given upward pull on spot from rates differential and skew change.

## Recent trends in FX vol: USD vols have sold off last week

As the USD broke out of the range lower in August, its vols have picked up from a trough in early July. However, the past week, several USD/G10 pairs' volatilities have fallen in the front-end. We remain bullish USD vols into the fall as we are approaching Fed policy action after two years of staying on hold.

## Vol Dashboard highlights: Bullish USD vol

The recent USD/G10 vol sell-off offers a better entry level to own optionality. We consider EURUSD gamma attractive outright with [our FX Vol dashboard](#) showing 1) realized vol is rising vs. implied, 2) implied is quite cheap vs. own history and estimated G10 FX implied vol PCA fair value.

## Crosses: fade EURCHF vol with short OTM put

EURCHF spot has had round trip price action this year. With spot now around the 2023 year-end level amid rich front-end vol, 1m EURCHF put with OTM strikes below the 2023 year-end close could appeal to vol sellers.

## Special theme: what is priced in for FOMC

We find that the risk premium for the upcoming FOMC event is the highest for USDJPY, AUDUSD and EMFX and lowest for EURUSD and USDCAD volatilities. For investors looking to hedge FOMC, EURUSD vol offers an attractive entry level. Overnight EURUSD vol is near the lower end of its historical Fed range, while the forward vol term structure is less steep than for other USD pairs.

13 September 2024

G10 FX Strategy  
Global

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## USD/G10 vols have sold off last week as VIX declined

As the USD broke out of the range lower in August coupled with a spike in equities vol, G10 USD vols has picked up from a trough in early July. However, the past week, several USD/G10 pairs' volatilities have fallen in the front-end as VIX declined. 1m EURUSD implied vol fell by 0.95 (Exhibit 1), 1m USDJPY (-1.44), 1m GBPUSD (-0.94), 1m USDCAD (-0.65), 1m USDCHF (-1.08) and 1m USDSEK (-1.00). We remain bullish USD vol into the fall as we are approaching Fed policy action after two years of staying on hold. In our view, the recent USD/G10 vol sell-off offers a better entry level to own optionality.

### Exhibit 1: 1m USD vols have seen the largest decline since 1w ago

Changes for 1m vol tenor in G10 vs. 1d, 1w, 1m and 3m lookback periods

1M Implied Vol Changes (Cell Color Shows Magnitude of Change in Vol)						
Category	Currency	Implied Vol	1-day Vol Change	1-week Vol Change	1-mth Vol Change	3-mth Vol Change
G10	EURUSD	5.2	-0.39	-0.95	-0.33	-1.85
	USDJPY	11.6	-0.67	-1.44	-0.40	3.68
	GBPUSD	6.0	-0.50	-0.94	-0.45	-0.74
	AUDUSD	8.5	-0.73	-0.90	-0.43	0.15
	NZDUSD	9.2	-0.78	-0.71	0.10	0.57
	USDCAD	4.5	-0.08	-0.65	-0.06	-0.28
	USDCHF	7.4	-0.50	-1.08	-0.83	0.99
	USDNOK	10.9	-0.57	-0.68	-0.53	-0.36
EUR-pairs	USDSEK	9.3	-0.65	-1.00	-0.95	-1.73
	EURJPY	10.5	-0.58	-0.66	-0.13	1.28
	EURGBP	3.7	-0.36	-0.50	-0.95	-2.35
	EURAUD	6.6	-0.45	-0.35	-1.06	0.10
	EURNZD	7.1	-0.51	-0.26	-0.66	0.38
	EURCAD	4.6	-0.32	-0.50	-0.80	-1.42
	EURCHF	6.0	-0.31	-0.41	-1.10	-1.53
	EURNOK	8.3	-0.31	-0.11	-0.37	0.86
G10-crosses	EURSEK	5.7	-0.58	-0.54	-1.20	-1.20
	AUDJPY	13.2	-0.76	-0.16	-1.02	4.25
	AUDNZD	5.7	-0.38	-0.08	0.45	1.05
	AUDCAD	6.3	-0.37	-0.21	-0.41	0.70
	NOKSEK	6.9	-0.29	-0.18	-0.81	0.40
	CADJPY	11.7	-0.18	-0.40	0.18	4.07
	GBPJPY	11.5	-0.09	-0.11	-0.17	3.26
	NZDJPY	13.4	-0.79	0.22	-0.73	4.19
	GBPCHF	7.4	-0.42	0.08	-0.93	0.40

Source: BofA Securities, BofA Global Research

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## Vol Dashboard highlight: EURUSD gamma is cheap

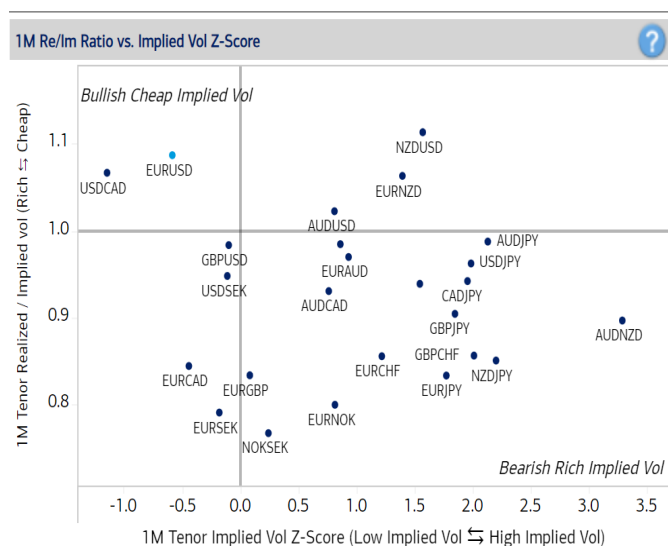
### Bullish EURUSD gamma ahead of FOMC

Last week we highlighted EURUSD RV funded by EURCHF ([FX Vol Insight: USD optionality is trendy, 6 Sep '24](#)). After the recent sell-off in USD vols, we consider EURUSD gamma attractive outright for two reasons: 1) realized vol is rising vs. implied, 2) implied is quite cheap vs. own history and PCA fair value. The risk to this view is a quiet rest of the month.

- 1m EURUSD vol is cheap vs. its own history and below realized vol (Exhibit 2). The 1m realized/implied vol ratio is 1.1 with realized above implied. The 1y z-score of 1m implied vol is -0.6 with the level of implied vols below its 1y average. EURUSD lands in the top-left quadrant (Exhibit 2), which is bullish.
- 1m EURUSD implied vol is 2 vol below its PCA Fair value (Exhibit 3). Unlike the z-score of its own time-series, the PCA model considers movements of the G10 vol cross-section as represented by a 3-factor regression. Given where all the other 1m implied vols are in G10, the model expects 1m EURUSD to be 2% higher.

#### Exhibit 2: 1m EURUSD and USDCAD vols are cheap and performing

1m Realized/Implied vs. 1m implied z-score (G10)

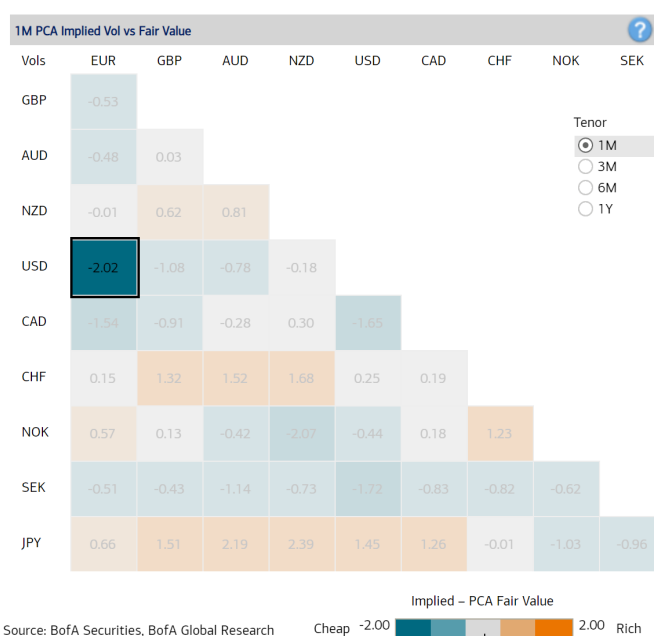


Source: BofA Securities, BofA Global Research. For more FX vol visualizations, see the [BofA FX Vol Dashboard](#).

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#### Exhibit 3: 1m EURUSD implied vol is 2 vol below its PCA Fair value

1 month implied vol - PCA Fair Value



Source: BofA Securities, BofA Global Research. For more FX vol visualizations, see the [BofA FX Vol Dashboard](#).

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## G10-crosses: fade EURCHF vol with short OTM put

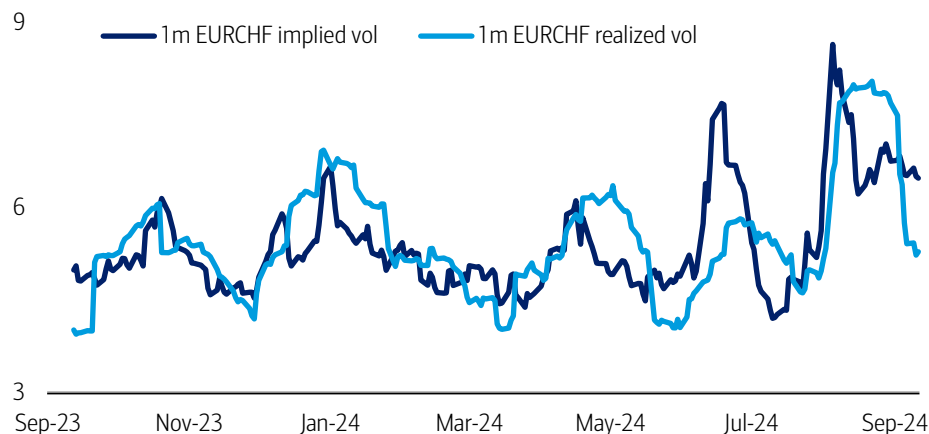
### Front-end EURCHF vol remains elevated

As FX market's focus remains on the USD into next week's FOMC and the upcoming US election, we believe opportunities to short FX vol in the near-term should continue to lie on the crosses instead of USD-pairs. We had discussed short front-end AUDNZD put at strikes below 1.08 support last week ([Global FX weekly: 06 September 2024](#)). 1m EURCHF implied vol, now sitting above 6.0 and more than 1 vol above the 1m realized, should also appeal to vol sellers.



**Exhibit 4: 1m EURCHF implied vol has settled above 6-handle but realized vol has fallen to 5.2**

1m EURCHF implied vs realized vol



Source: BofA Global Research, Bloomberg

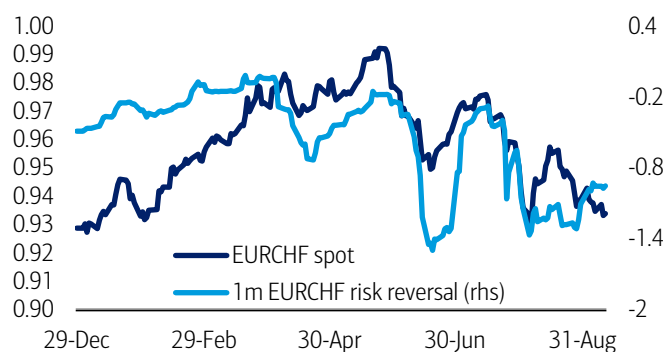
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**Value in short OTM EURCHF put at strike below 2023 year-end close**

2023 year-end spot close for EURCHF was at 0.9289. Given our expectation of four SNB and three ECB rate cuts this year, we believe it's unlikely that EURCHF spot in 2024 should persistently fall below where it closed at in 2023. After round trip price action so far in 2024, EURCHF spot is now back to around the 2023 year-end closing level. Given elevated front-end EURCHF implied vol, we believe investors could consider shorting 1m OTM EURCHF puts at strikes below the 2023 close. Short-dated risk reversal is widening for EUR calls amid the latest round of spot selloff (Exhibit 5). We also believe current EURCHF spot level is already pricing-in a substantial amount of risk premium relative to the 2y OIS rate differential (Exhibit 6). The risk to the view would be weak Eurozone data forcing market to price even more ECB rate cuts in the near-term.

**Exhibit 5: 1m EURCHF risk reversal has widened for EUR calls despite falling spot**

EURCHF spot vs 1m 25d risk reversal

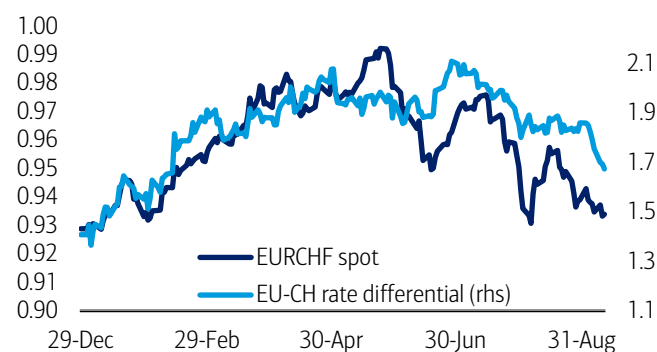


Source: BofA Global Research, Bloomberg

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**Exhibit 6: EURCHF spot is already pricing in more risk premium relative to rate differential**

EURCHF spot vs 2y EU-CH OIS rate differential



Source: BofA Global Research, Bloomberg

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**Special theme: what is priced in for FOMC?**

We find that the risk premium for the 18-Sep FOMC event is the highest for USDJPY, AUDUSD and EMFX vs lowest for EURUSD and USDCAD. Our economists expect 25bp price cut and the decline in US rates should weigh on the USD going forward. In our view the USDJPY volatility is propped up by (i) recent spike in its realized volatility following rapid spot moves and equity fluctuations, (ii) adjacent BOJ meeting on 20-Sep. We look at two measures of uncertainty priced by the market:

1. The excess forward vol in front-end volatility term-structure: 1w1w forward vol on 10-Sep minus four-week average of 1w atm vol (Exhibit 7). This measure

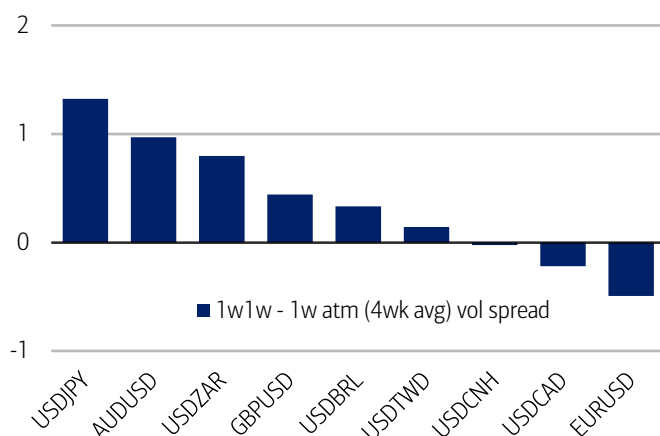


shows 1.3 vols premium in USDJPY, 0.97 vols premium in AUDUSD, 0.80 vols in USDZAR and discounts of 0.22 for USDCAD and 0.49 for EURUSD. There is less forward volatility priced in 1w1w EURUSD relative to recent levels of its 1w atm vol.

- Comparative overnight implied volatility from 7d1d FVA taken one week before each FOMC meeting year-to-date. The heatmap shows whether the Fed day pricing is high or low for a given currency, relative to previous Fed meetings in 2024 (Exhibit 8). In this measure USDJPY overnight vol is about 4 vols above average, while EURUSD is near the low end of its historic range. EMFX also shows more sensitivity to this meeting than previous as the Fed is about to provide more global liquidity by cutting rates.

#### Exhibit 7: EURUSD forward vol is cheap post-FOMC, JPY is rich

1w1w – 1w atm vol (4w avg) spread



Source: BofA Global Research, Bloomberg. Data as of September 10, 2024

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## Options Risk Statement

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#### Exhibit 8: FOMC EURUSD vol is cheap, JPY and EMFX vol rich vs. history

Overnight vol (1d FVA) on FOMC priced 7d before each meeting YTD

FOMC	EUR	JPY	GBP	AUD	CAD	MXN	BRL	ZAR	CNH	TWD
31-Jan	7.9	11.1	8.8	12.0	6.4	12.8	13.7	15.4	5.2	7.9
20-Mar	6.2	9.0	7.1	9.2	5.3	8.1	10.3	13.6	3.2	5.2
1-May	7.6	11.2	8.4	11.3	6.5	14.4	12.8	15.4	4.1	6.5
12-Jun	6.4	12.5	7.0	10.6	6.1	14.9	12.6	19.9	4.1	6.3
31-Jul	6.7	12.8	8.4	11.5	5.8	16.9	17.1	14.6	4.0	6.5
18-Sep	6.5	16.6	8.3	11.7	5.6	18.8	17.5	14.6	6.1	8.6

Source: BofA Global Research, Bloomberg. The heatmap is shaded for each currency's own history.

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