

Liquid Cross Border Flows

Yielding to official pressure

Key takeaways

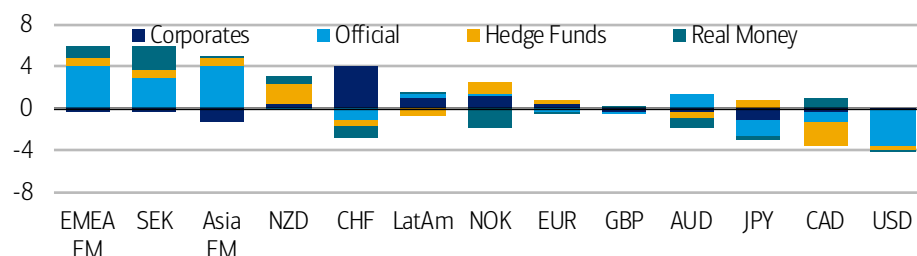
- Official USD selling vs Asia EM & EMEA EM FX stands out and could help explain USD muted recent response to data and rates.
- CHF investor supply has stopped as corporate demand picked up. Real Money continue paring back their SEK shorts.
- Investors continue reducing their long CAD and AUD exposures into this week's BoC meeting and AU 3Q CPI print.

A reason behind USD's muted response to data and rates

The persistent official USD selling, particularly vs. Asia EM and EMEA EM FX, stands out in recent weeks (Exhibit 1, Exhibit 2). With investors having moved to the sidelines, this could help explain the USD muted response to still strong US and higher US rates.

Exhibit 1: BofA proprietary flows in past 4 weeks, 4-week (2-year) z-score

With investors on the sidelines, the Official USD selling could help explain USD's muted response to rates

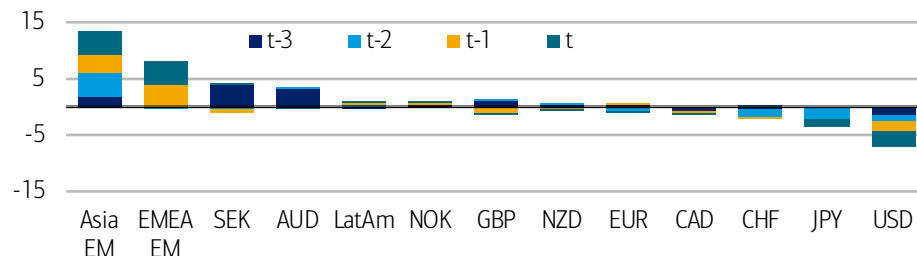


Source: BofA Securities. Currencies ranked on sum of 4-week (2-year) z-scores across all four client types.

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Exhibit 2: Official flows in past month, weekly (2-year) z-score

The persistent official USD selling, particularly vs. Asia EM and EMEA EM FX, stood out in the past month



Source: BofA Securities. Currencies ranked on sum of weekly (2-year) z-scores for the past four weeks.

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Refer to important disclosures on page 6 to 8.

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23 October 2023

Currency Strategy
Global

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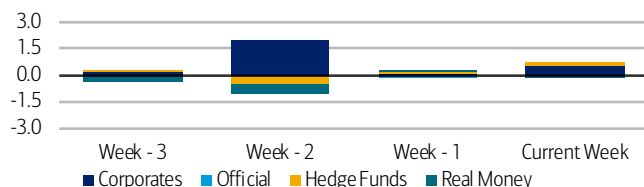
More corporate CHF buying & Real Money SEK buying

Amid short investor CHF positioning (shortest Hedge Funds G10 FX position) and higher geopolitical risks, the investor CHF supply has stopped as corporate demand picked up (Exhibit 3, Exhibit 9).

Meanwhile, Real Money have continued paring back their SEK shorts, with Hedge Funds now neutral (Exhibit 4, Exhibit 9). We remain tactically long EURSEK ([FX Alpha: Buy EURSEK via 3m collar 13 Oct 23](#)).

Exhibit 3: BofA CHF flow

Investor CHF supply has stopped as corporate demand picked up

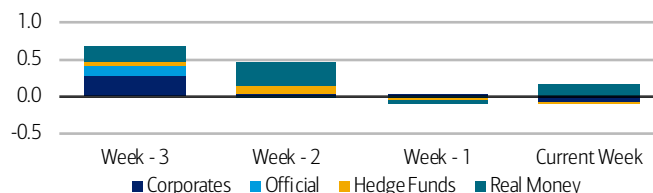


Source: BofA Securities

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Exhibit 4: BofA SEK flow

Real Money have continued paring back their SEK shorts



Source: BofA Securities

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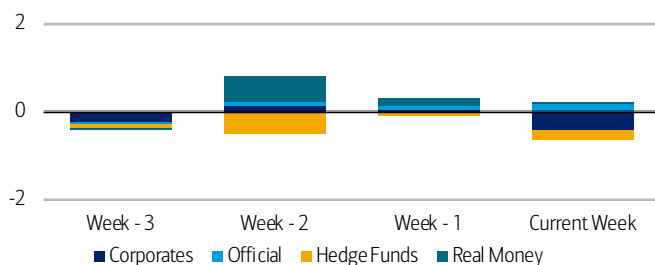
CAD and AUD selling continued into BoC and AU CPI

Hedge Funds have reduced their CAD longs in recent weeks as Real Money have remained short (Exhibit 5). But we expect a hawkish BoC hold this week and, while wary of geopolitical risks, we find CAD undervalued ([Bank of Canada preview 23 Oct 2023](#)) and are long CADMXN (see [FX Alpha: Long CAD/MXN 23 Oct 23](#)).

Investors have also continued reducing their AUD longs in recent weeks (Exhibit 6) but an upside CPI surprise could force a rethink ([Australia CPI preview 19 Oct 23](#)).

Exhibit 5: BofA CAD flow

Hedge Funds continued reducing their CAD longs ahead of the BoC

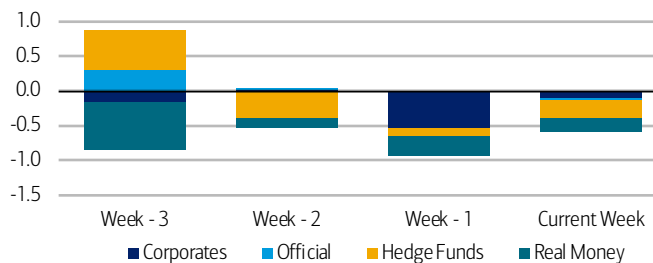


Source: BofA Securities

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Exhibit 6: BofA AUD flow

AUD selling continued into the release of the 3Q CPI inflation print



Source: BofA Securities

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For more information and data files on flows and positioning, please see

[Liquid Cross Border Flows: Flows data 23 October 2023](#)

[Liquid Cross Border Flows: Positioning data 23 October 2023](#)

[Liquid Cross Border Flows: Charts and Tables 23 October 2023](#)

Snapshot of flows

Exhibit 7: Snapshot G10 FX flows (z-score)

BofA proprietary FX flows in the past four weeks

| | Total | | | | Corporate | | | | Official | | | | Hedge funds | | | | Real money | | | |
|----------|-------|-------|-------|-------|-----------|-------|-------|-------|----------|-------|-------|-------|-------------|-------|-------|-------|------------|-------|-------|-------|
| | t-3 | t-2 | t-1 | t | t-3 | t-2 | t-1 | t | t-3 | t-2 | t-1 | t | t-3 | t-2 | t-1 | t | t-3 | t-2 | t-1 | t |
| USD | 0.80 | -1.39 | -0.87 | -0.68 | 1.90 | -1.21 | -0.31 | -0.41 | -1.45 | -1.16 | -1.64 | -2.73 | -1.09 | 0.06 | -0.42 | 0.80 | 0.00 | -0.08 | 0.03 | -0.03 |
| EUR | -0.62 | 0.54 | 0.51 | 0.05 | -1.27 | 0.85 | 0.53 | 0.61 | 0.16 | -0.88 | 0.19 | -0.15 | 1.01 | 0.58 | -0.37 | -0.42 | 0.05 | -0.23 | 0.31 | -0.52 |
| JPY | -0.36 | -0.05 | -0.77 | -0.10 | -0.90 | -0.45 | -0.38 | -0.25 | -0.12 | -2.09 | -0.11 | -1.34 | 0.43 | 1.77 | -0.51 | -0.07 | -0.14 | -0.20 | -0.43 | 0.31 |
| GBP | -0.40 | -0.07 | -0.15 | 0.34 | -1.21 | -0.25 | 0.12 | 0.73 | 0.93 | 0.12 | -0.98 | -0.11 | 0.84 | 0.31 | 0.00 | -0.88 | 0.01 | 0.00 | 0.18 | 0.07 |
| CAD | -0.60 | 0.29 | 0.18 | -0.67 | -0.45 | 0.45 | 0.17 | -0.88 | -0.57 | -0.28 | -0.18 | -0.07 | -0.55 | -2.28 | -0.50 | -1.12 | 0.20 | 1.50 | 0.57 | 0.26 |
| AUD | 0.10 | -0.64 | -1.19 | -0.72 | -0.09 | 0.34 | -1.04 | 0.08 | 3.09 | 0.16 | -0.04 | -0.46 | 2.33 | -1.59 | -0.49 | -1.07 | -1.11 | -0.34 | -0.49 | -0.37 |
| NZD | 2.62 | 1.10 | 0.62 | -0.05 | -0.06 | -0.26 | 0.36 | 0.93 | 0.26 | 0.15 | -0.23 | -0.44 | 3.09 | 0.52 | 0.22 | 0.03 | 0.74 | 0.90 | 0.54 | -0.16 |
| CHF | -0.87 | 2.98 | 0.34 | 2.16 | 0.53 | 4.00 | 0.18 | 1.67 | -0.52 | -1.44 | -0.25 | 0.11 | 0.19 | -2.63 | 0.18 | 1.31 | -1.44 | -1.84 | 0.17 | 0.14 |
| NOK | 1.31 | 0.14 | -0.76 | 0.05 | 0.39 | 0.29 | 1.28 | 0.68 | 0.23 | 0.05 | 0.24 | 0.09 | 2.24 | 0.32 | 0.05 | 0.46 | -0.54 | -0.24 | -1.59 | -0.68 |
| SEK | 2.74 | 1.58 | -0.68 | -0.06 | 0.83 | -0.43 | -0.33 | -0.86 | 4.00 | -0.25 | -0.71 | 0.02 | 0.64 | 1.49 | -0.41 | -0.03 | 1.50 | 1.95 | -0.22 | 1.00 |
| G10-xUSD | -0.55 | 0.79 | -0.17 | 0.00 | -1.51 | 1.35 | 0.26 | 0.68 | 0.64 | -1.15 | -0.46 | -0.53 | 2.14 | 0.16 | -0.64 | -0.82 | -0.42 | -0.04 | -0.03 | -0.18 |
| Asia | -0.79 | 1.34 | 2.35 | 1.18 | -1.43 | 0.13 | 0.17 | -0.53 | 1.83 | 4.00 | 3.45 | 4.00 | -0.39 | 0.01 | 1.97 | -0.16 | -0.13 | -0.07 | 0.45 | 0.10 |
| EMEA | 1.08 | 0.79 | 0.73 | 1.34 | 0.51 | 0.10 | 0.23 | -1.51 | -0.01 | -0.26 | 4.00 | 4.00 | 0.54 | 0.98 | -0.32 | 0.71 | 1.04 | 0.52 | -0.10 | 1.09 |
| LatAm | -0.22 | 0.18 | 0.14 | 0.30 | -2.19 | 1.50 | 1.17 | 1.34 | -0.23 | 0.45 | 0.39 | 0.14 | -0.13 | -0.33 | -0.57 | -0.41 | 1.58 | -0.71 | -0.28 | -0.24 |

Source: BofA Securities

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Exhibit 8: Snapshot of EM Flows (Z-score)

BofA proprietary FX flows in the past four weeks

| | Total | | | | Corporate | | | | Official | | | | Hedge funds | | | | Real money | | | |
|-------|-------|-------|-------|-------|-------------|-------|-------|-------|------------|-------|-------|-------|---------------|-------|-------|-------|---------------|-------|-------|-------|
| | t-3 | t-2 | t-1 | t | t-3 | t-2 | t-1 | t | t-3 | t-2 | t-1 | t | t-3 | t-2 | t-1 | t | t-3 | t-2 | t-1 | t |
| LatAm | -0.22 | 0.18 | 0.14 | 0.30 | -2.19 | 1.50 | 1.17 | 1.34 | -0.23 | 0.45 | 0.39 | 0.14 | -0.13 | -0.33 | -0.57 | -0.41 | 1.58 | -0.71 | -0.28 | -0.24 |
| BRL | 0.15 | 0.98 | 0.46 | 0.49 | -1.04 | 0.99 | 0.15 | 0.87 | - | 0.23 | 0.23 | - | -0.05 | 1.02 | -0.03 | 0.07 | 1.44 | -0.14 | 0.71 | -0.14 |
| MXN | -0.45 | 0.04 | 0.26 | -0.35 | -2.88 | 0.77 | 2.42 | 0.23 | -0.07 | 0.37 | 0.11 | -0.23 | 0.43 | 0.16 | -0.41 | -0.75 | 0.71 | -0.60 | -0.78 | 0.05 |
| CLP | 0.79 | -1.64 | -0.47 | 0.80 | 0.46 | -0.95 | -0.31 | 2.49 | 0.06 | 0.05 | 0.71 | 0.05 | 0.69 | -1.75 | -0.76 | 0.07 | 0.25 | -0.25 | 0.10 | 0.04 |
| COP | -0.43 | -0.45 | -0.26 | -0.36 | -0.98 | 3.55 | 0.76 | 0.24 | -0.63 | - | 0.13 | - | -0.83 | -1.16 | -0.07 | -0.03 | 1.10 | -1.11 | -0.72 | -0.71 |
| PEN | -1.60 | 0.00 | -0.71 | -0.58 | -0.41 | 0.61 | -0.08 | 0.25 | - | 0.16 | - | - | -1.98 | -0.41 | -0.37 | -0.65 | -0.44 | 0.12 | -0.52 | -0.28 |
| ARS | -0.06 | 0.86 | 0.09 | 1.24 | 0.02 | -1.12 | 0.51 | -2.23 | - | - | - | - | 0.26 | -0.92 | 0.27 | 0.27 | -0.21 | 1.93 | -0.22 | 2.17 |
| Asia | -0.79 | 1.34 | 2.35 | 1.18 | -1.43 | 0.13 | 0.17 | -0.53 | 1.83 | 4.00 | 3.45 | 4.00 | -0.39 | 0.01 | 1.97 | -0.16 | -0.13 | -0.07 | 0.45 | 0.10 |
| CNY | -1.96 | 0.32 | -0.17 | 0.38 | -1.30 | 0.23 | 0.40 | 0.37 | -2.18 | - | 0.21 | 0.19 | -0.28 | -0.30 | -2.10 | -1.44 | -0.30 | 0.26 | -1.25 | 0.53 |
| CNH | 0.26 | -0.17 | 1.84 | -0.71 | 0.00 | -0.75 | -0.05 | -2.91 | -0.38 | -0.18 | -0.39 | -0.12 | 0.36 | 0.28 | 2.03 | 0.46 | 0.32 | 0.08 | 0.64 | 1.04 |
| INR | 1.38 | 2.38 | 2.73 | 4.00 | -0.45 | -0.58 | -0.17 | 1.67 | 4.00 | 4.00 | 4.00 | 4.00 | -0.56 | -0.34 | 0.39 | -0.09 | 0.10 | 0.32 | 0.96 | -0.41 |
| KRW | -1.29 | 0.34 | 0.30 | 0.24 | -1.26 | 0.55 | 0.46 | 0.18 | - | - | - | 0.13 | -0.19 | -0.03 | -0.13 | 0.00 | -0.72 | -0.39 | -0.19 | 0.28 |
| IDR | -1.40 | -0.79 | 0.32 | -0.89 | -0.64 | 0.49 | 0.03 | -0.51 | - | 0.07 | 0.40 | 0.07 | -2.10 | -1.95 | 0.35 | -1.28 | -0.26 | -0.13 | 0.08 | -0.14 |
| MYR | 0.17 | -0.60 | 0.67 | -0.84 | 0.35 | -0.66 | 0.53 | -0.62 | -0.65 | 2.68 | -0.66 | - | 0.19 | -1.79 | 1.66 | -1.87 | -0.16 | 0.04 | 0.19 | -0.30 |
| SGD | -0.48 | 0.98 | 0.53 | -1.02 | -1.16 | 1.88 | -0.45 | -0.20 | 0.25 | 1.89 | 1.06 | 0.08 | -0.69 | -0.07 | 0.12 | -0.31 | 0.55 | -0.26 | 0.37 | -1.26 |
| TWD | 0.27 | 0.56 | 0.18 | -0.86 | 0.18 | 0.20 | -0.71 | -0.71 | - | -1.41 | - | 0.32 | 0.33 | 0.86 | 1.76 | -0.63 | -0.03 | 0.04 | -0.63 | -0.17 |
| THB | -1.43 | 0.16 | -0.47 | -0.93 | -1.27 | 0.49 | -0.35 | -1.30 | -0.13 | 1.13 | -1.94 | -0.09 | -1.03 | -0.28 | 0.68 | -0.84 | -0.51 | -0.44 | 0.06 | 0.06 |
| EMEA | 1.08 | 0.79 | 0.73 | 1.34 | 0.51 | 0.10 | 0.23 | -1.51 | -0.01 | -0.26 | 4.00 | 4.00 | 0.54 | 0.98 | -0.32 | 0.71 | 1.04 | 0.52 | -0.10 | 1.09 |
| TRY | 0.36 | 0.71 | 0.14 | 0.45 | 0.73 | 0.28 | 0.58 | 0.51 | 2.45 | -0.35 | -0.22 | 2.31 | -0.72 | 0.53 | -1.18 | -0.11 | -0.03 | 0.66 | 0.18 | 0.09 |
| HUF | 0.45 | -0.16 | 0.79 | 1.47 | -0.18 | 0.21 | 0.93 | 0.19 | - | 0.24 | 0.20 | 0.30 | 1.00 | -0.63 | -0.36 | 1.82 | 0.12 | 0.02 | 0.72 | 0.77 |
| PLN | 0.42 | 0.67 | -0.21 | 1.24 | -0.23 | -0.56 | -0.13 | -2.08 | -0.30 | -0.79 | 0.00 | 0.22 | 0.65 | 1.34 | -0.56 | 2.32 | 0.31 | 0.43 | 0.07 | 1.02 |
| ILS | 1.19 | 0.06 | 1.15 | -0.11 | 1.60 | 0.13 | -1.46 | -0.86 | -0.01 | 0.12 | 4.00 | 4.00 | 0.71 | 0.11 | -3.60 | -3.19 | 0.06 | -0.15 | -0.85 | -1.22 |
| CZK | 0.22 | -0.05 | 1.69 | 0.47 | 0.07 | -0.09 | 0.31 | -0.13 | - | 0.15 | 0.14 | 0.17 | 0.36 | 0.51 | 0.47 | -0.08 | -0.08 | -0.59 | 2.07 | 0.89 |
| ZAR | 0.89 | 0.95 | -0.65 | 0.24 | -1.44 | 0.38 | -0.16 | -1.58 | -0.02 | -0.11 | -0.53 | -0.06 | -0.64 | 0.40 | 1.92 | 0.30 | 2.09 | 0.91 | -2.23 | 0.49 |
| RUB | 0.19 | 0.18 | 0.22 | 0.22 | 0.21 | 0.19 | 0.21 | 0.21 | - | - | - | - | 0.15 | 0.16 | 0.18 | 0.19 | 0.14 | 0.14 | 0.16 | 0.16 |
| KEY: | Z > 2 | | | | 2 > Z > 1.5 | | | | 1 > Z > -1 | | | | -1 > Z > -1.5 | | | | -1.5 > Z > -2 | | | |
| | | | | | | | | | | | | | | | | | Z < -2 | | | |

Source: BofA Securities; Note: The z-score is calculated as the weekly flow minus the 2-year average flow, divided by the 2-year standard deviation of flows. A positive (negative) number does not necessarily suggest buying (selling), as it is expressed relative to the 2-year average flow and depends on whether the latter is a positive or a negative number. In this context, the arrows indicate whether our flow, and not the z-score, is positive or negative, suggesting buying or selling. Weeks with no flow are marked with '-'.
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Positioning Scorecard

Exhibit 9: G10 FX Positioning Scorecard

50 (-50) represents a max long (short) positioning relative to history

| Currency | BofA HF | BofA RM | FXRS | COT | TFF LF | TFF AM | EPFR | Aggregate Positioning Signal | Change in positioning | MAA Breadth |
|----------|---------|---------|------|-----|--------|--------|------|------------------------------|-----------------------|-------------|
| NOK | 34 | 20 | 16 | - | - | - | 43 | 23 | ↓ | -9 ↓↓ |
| EUR | -14 | 27 | -26 | 11 | 1 | 40 | 29 | 6 | ↓ | 2 ↔ |
| USD | 18 | -5 | 27 | 8 | 3 | -17 | 50 | 5 | ↑ | 8 ↑↑ |
| GBP | 32 | 13 | -24 | -6 | 14 | -32 | 45 | 1 | ↓ | -1 ↔ |
| JPY | 10 | 20 | 3 | -32 | -17 | -15 | 49 | 0 | ↓ | -6 ↓ |
| CAD | 7 | -19 | 39 | -26 | -19 | -19 | 49 | -2 | ↓ | 3 ↔ |
| AUD | 4 | 29 | 0 | -40 | -7 | -43 | 49 | -3 | ↓ | -5 ↓ |
| SEK | -1 | -10 | -28 | - | - | - | 38 | -13 | ↑ | 4 ↑ |
| CHF | -13 | -33 | - | -27 | 5 | -38 | 43 | -20 | ↑ | 8 ↑↑ |
| NZD | -23 | -25 | -48 | -8 | 8 | -30 | 49 | -24 | ↓ | -4 ↓ |

Source: BofA Global Research, Bloomberg, EPFR Global; See appendix for details; HF: Hedge Fund, RM Real Money, FXRS: FX and Rates Sentiment Survey

Note: Aggregate positioning is the unweighted average of BofA HF, BofA RM, FXRS, TFF LF and TFF AM

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Exhibit 10: EM FX Positioning Scorecard

50 (-50) represents a max long (short) positioning relative to history

| Currency | BofA HF | BofA RM | FXRS | COT | TFF LF | TFF AM | EPFR | Aggregate Positioning Signal | Change in positioning | MAA trend |
|----------|---------|---------|------|-----|--------|--------|------|------------------------------|-----------------------|-----------|
| CLP | 37 | 11 | - | - | - | - | 47 | 24 | ↑ | ↑ |
| CZK | 23 | 24 | - | - | - | - | 44 | 23 | ↑ | ↑ |
| INR | 32 | 10 | - | - | - | - | 37 | 21 | ↓ | ↑ |
| HUF | 19 | 16 | - | - | - | - | 21 | 18 | ↑ | ↑ |
| CNH | -4 | 30 | - | - | - | - | 0 | 13 | ↑ | ↑ |
| MXN | -23 | 9 | - | 13 | 12 | 38 | 46 | 9 | ↓ | ↑ |
| RUB | -9 | 0 | - | 25 | 28 | 17 | -34 | 9 | ↑ | ↓ |
| COP | 42 | -34 | - | - | - | - | 47 | 4 | ↓ | ↑ |
| MYR | 12 | -8 | - | - | - | - | 42 | 2 | ↓ | ↑ |
| PLN | -7 | 10 | - | - | - | - | -16 | 2 | ↑ | ↓ |
| THB | -22 | 18 | - | - | - | - | 34 | -2 | ↓ | ↑ |
| ILS | -27 | 21 | - | - | - | - | 50 | -3 | ↓ | ↑ |
| IDR | 15 | -24 | - | - | - | - | 21 | -5 | ↓ | ↓ |
| PEN | -33 | 23 | - | - | - | - | 39 | -5 | ↓ | ↑ |
| BRL | -43 | 5 | - | 4 | 9 | 0 | 45 | -7 | ↓ | ↑ |
| ARS | -44 | 15 | - | - | - | - | 49 | -15 | ↑ | ↑ |
| KRW | -17 | -26 | - | - | - | - | 46 | -22 | ↑ | ↑ |
| TWD | -23 | -23 | - | - | - | - | 36 | -23 | ↓ | ↑ |
| TRY | -43 | -6 | - | - | - | - | 13 | -25 | ↑ | ↑ |
| ZAR | -23 | -30 | - | - | - | - | 48 | -27 | ↑ | ↑ |
| CNY | -7 | -49 | - | - | - | - | 47 | -28 | ↓ | ↑ |
| SGD | -50 | -40 | - | - | - | - | 48 | -45 | ↓ | ↑ |

Source: BofA Global Research, Bloomberg, EPFR Global; See appendix for details; HF: Hedge Fund, RM Real Money, FXRS: FX and Rates Sentiment Survey

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Data appendix

BofA Securities Proprietary FX Flows represent the aggregated net base notional of spot and forward trades for sales-only data on a firm-wide basis for the 31 major currencies we track. We filter the data by customer type, which we categorize as Hedge Funds, Corporates, Real Money and Official Institutions. For the purposes of this report we exclude interbank flows, which would include commercial banks, proprietary trading, broker/dealer and affiliates. Indexed data is available upon request.

The currencies used in building this report are defined as:

- **G10:** USD, EUR, JPY, AUD, NZD, CAD, GBP, CHF, NOK, SEK
- **LatAm:** BRL, MXN, CLP, COP, PEN, ARS
- **ASIA:** CNH, CNY, INR, KRW, IDR, MYR, SGD, TWD, THB
- **EMEA:** TRY, HUF, PLN, ILS, CZK, ZAR, RUB

Emerging Markets is defined as the sum of LatAm, Asia and EMEA.

Public/Official: Central Banks, Government – including federal, state and local municipality clients – and Sovereign Wealth Funds.

Real Money: Pension Funds, REITs, Small Institutions/Trusts, Insurance, Asset Management and Finance Companies. RM clients will often trade FX to facilitate transactions in Fixed Income or Equities rather than to take a view on FX itself.

Hedge Funds: Usually limited-partnership funds with diverse, often leveraged strategies designed to maximize returns. HF flow is speculative in nature, and many HF trade FX as an asset class

Corporates: Businesses across all industries whose investment efforts focus mostly on operative activities, such as hedging and M&A. Corporate FX flow is not speculative in nature but arises as a ‘by-product’ of normal business operations.

EPFR GLOBAL data on country flows combine the respective fund flow and country weightings data to track the flow of money into world stock and bond markets. Fund flow reports track the amount of cash flowing into and out of the investment funds monitored world-wide. Country weightings reports track fund manager allocations at month-end across the various markets they invest in. By combining these two data sets we are able to estimate the flow of cash into and out of various stock and bond markets.

Note on Aggregate Positioning

We calculate aggregate positioning using a number of different inputs:

- (i) Proprietary BofA Securities FX flows data for hedge funds and real money
- (ii) Futures data, using the TFF (Traders in Financial Futures) data for leveraged funds and asset managers separately.
- (iii) BofA Global Research [FXRS: FX and Rates Sentiment Survey](#) data

The signals are all considered relative to the start of 2012 (i.e. an expanding window) and each signal is scaled to be between +50 and -50. The aggregate signal is the simple average of all the inputs.

+50 (-50) represents a max long (short) positioning *relative to history*.

For more detail on the construction and use of this report, please see our [LCBF Primer](#)



Disclosures

Important Disclosures

Due to the nature of strategic analysis, the issuers or securities recommended or discussed in this report are not continuously followed. Accordingly, investors must regard this report as providing stand-alone analysis and should not expect continuing analysis or additional reports relating to such issuers and/or securities.

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