

Liquid Cross Border Flows

When in doubt...

Key takeaways

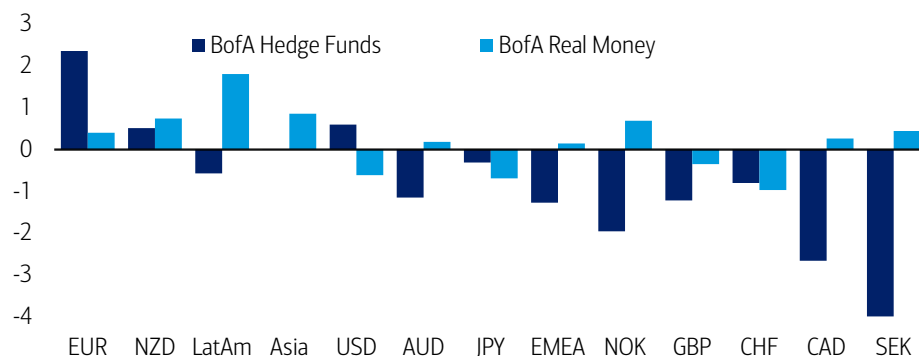
- Investors looked for non-USD expressions last week. HF pared back a little their EUR shorts v CAD, SEK, GBP but sold more CHF
- Changes in our aggregate G10 FX positioning measure this year well in line with the price action, in turn echoing rates moves
- EM FX flows turned modestly positive last week, driven by Real Money - they bought BRL, COP, IDR, MYR. Hedge Funds sold ZAR

...avoid USD expressions

Despite the slightly softer USD, our USD flows were non-directional last week and into the PCE data. BofA investors, led by Hedge Funds (HF), bought EUR vs. CAD, SEK and, to some extent, GBP and CHF (Exhibit 1). This was from short HF positions in all cases ex CHF (Exhibit 9), although CAD selling may have also been driven by the weak CPI data.

Exhibit 1: BofA investor weekly FX flows (2-year z-score)

BofA investors, led by Hedge Funds bought EUR vs. CAD, SEK and, to some extent, GBP and CHF



Source: BofA Securities

BofA GLOBAL RESEARCH

26 February 2024

Currency Strategy
Global

BofA

Data
Analytics



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Refer to important disclosures on page 6 to 8.

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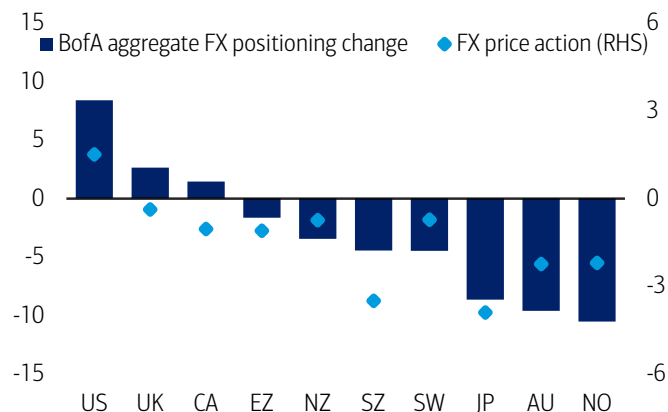
Timestamp: 26 February 2024 11:21AM EST

FX flows in line with price action, echoing front-end rates

This year's changes in our aggregate measure of G10 FX positioning have been strongly correlated with the FX price action (Exhibit 2), which in turn has broadly echoed changes in front-end rates (Exhibit 3).

Exhibit 2: YTD FX positioning change vs FX price action

FX positioning changes this year very well in line with the FX price action...

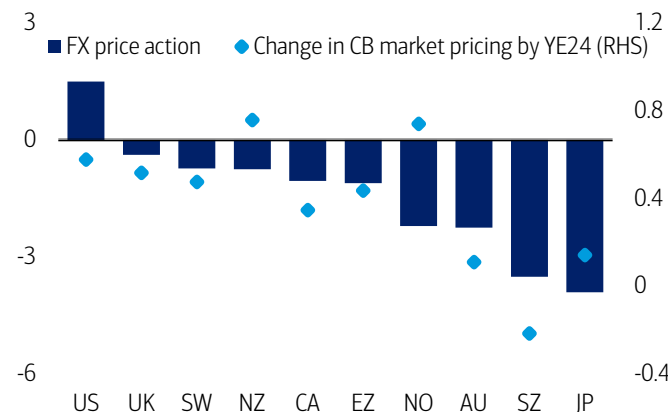


Source: BofA Securities, Bloomberg. Data are for the period Jan 5-Feb 23. +50 (-50) represents a max long (short) positioning level relative to history. We show returns vs USD (percent) and use the Dollar Index (DXY) in the case of USD. Currencies ranked on their YTD positioning change.

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Exhibit 3: YTD FX price action vs change in YE24 CB pricing

...which, in turn, has been broadly in line with moves in front-end rates



Source: BofA Securities, Bloomberg. Data are for the period Jan 5-Feb 23. We show returns vs USD (percent) and use the Dollar Index (DXY) in the case of USD. Changes in central bank market pricing are in percentage points. Currencies ranked on their YTD FX price action.

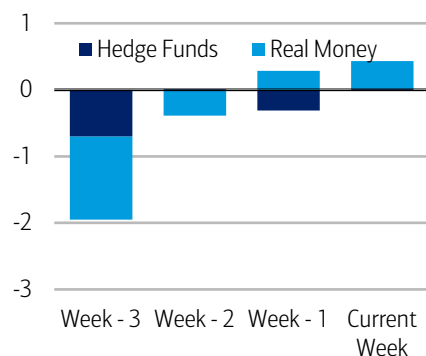
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EM FX: modest Real Money buying

EM FX flows turned modestly positive last week, led by Real Money clients (Exhibit 4-Exhibit 6). Their buying was mainly in LatAm (BRL & COP) and Asia (IDR & MYR), while the strong ZAR selling by Hedge Funds stood out in EMEA (Exhibit 8).

Exhibit 4: BofA Asia EM indexed flows

Real Money clients bought IDR & MYR last week

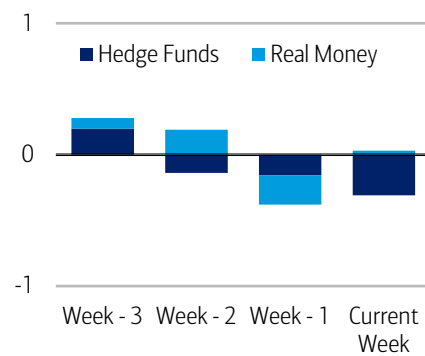


Source: BofA Securities

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Exhibit 5: BofA EMEA EM indexed flows

Hedge Funds' ZAR selling stood out last week

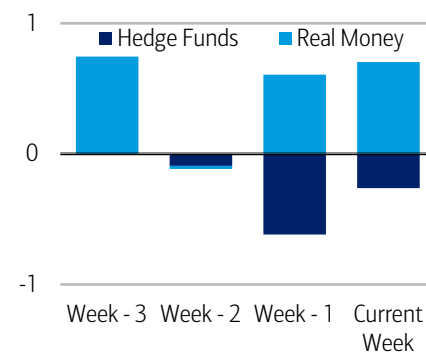


Source: BofA Securities

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Exhibit 6: BofA LatAm indexed flows

Real Money bought mainly BRL and COP



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 26 February 2024](#)

[Liquid Cross Border Flows: Positioning data 26 February 2024](#)

[Liquid Cross Border Flows: Charts and Tables 26 February 2024](#)

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	2.58	-0.31	0.66	0.50	2.53	-0.46	-0.75	0.33	0.08	0.02	0.52	0.98	0.97	-0.29	1.45	0.59	-0.46	0.46	1.11	-0.62
EUR	-2.65	0.39	0.40	-0.49	-3.42	0.21	0.29	-1.12	0.90	0.62	0.14	-1.23	-0.95	1.71	0.04	2.35	0.58	-0.67	0.23	0.40
JPY	0.57	-0.70	-1.33	-0.57	1.27	0.50	-0.34	0.44	0.58	0.85	-0.25	-0.10	0.11	-0.74	-1.00	-0.31	-0.14	-0.86	-0.83	-0.69
GBP	-1.22	0.38	0.65	-0.21	-1.47	0.12	1.10	0.41	-0.82	-0.40	0.27	0.09	0.66	0.58	-1.49	-1.22	0.14	0.40	0.14	-0.35
CAD	0.75	0.03	-0.43	-0.63	1.19	0.23	-0.32	-0.12	-0.27	-0.35	0.11	0.15	-0.65	-0.34	-0.78	-2.66	0.78	0.34	-0.14	0.26
AUD	-3.70	-0.11	0.71	-0.08	-4.00	0.00	0.69	0.43	-0.30	1.53	0.94	-0.73	-1.37	-1.59	0.54	-1.15	-0.36	0.29	0.03	0.18
NZD	-0.03	-0.05	-0.90	0.29	0.72	-0.20	0.46	-3.06	-2.09	-1.29	1.67	-0.65	0.40	0.27	-1.32	0.51	-0.12	0.01	-0.49	0.73
CHF	0.37	-1.07	-0.73	-1.23	0.00	0.09	0.08	-0.15	0.37	0.21	-1.52	0.01	-0.34	-0.93	-2.14	-0.80	0.57	-1.03	0.31	-0.97
NOK	0.21	-0.16	-4.00	0.01	0.58	0.63	0.66	0.28	0.26	0.27	-0.99	0.26	0.21	-0.11	0.04	-1.96	-0.26	-0.46	-4.00	0.68
SEK	-0.08	0.65	-0.90	-1.88	-0.68	0.24	-0.85	-0.72	-0.01	0.12	0.48	0.05	-0.53	0.74	0.58	-3.99	1.02	0.18	-0.57	0.44
G10-xUSD	-2.80	0.08	-0.82	-1.02	-3.43	0.34	0.51	-0.71	0.11	0.33	0.23	-0.72	-0.86	0.35	-1.30	-0.69	0.58	-0.72	-1.65	-0.03
Asia	-0.45	-0.08	0.31	0.42	1.07	0.37	0.48	0.59	-0.19	-0.53	-0.19	-0.83	-0.80	-0.01	-0.36	0.01	-1.64	-0.33	0.67	0.85
EMEA	0.64	0.09	-0.19	0.15	-0.22	-0.18	2.31	2.79	-0.10	-0.46	-0.02	-0.06	1.20	-0.43	-0.53	-1.27	0.29	0.62	-0.67	0.14
LatAm	0.75	0.07	-0.20	1.07	-0.69	0.27	1.41	-0.24	-0.62	0.46	-4.00	2.49	0.16	-0.10	-1.67	-0.57	1.91	-0.15	1.55	1.80

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	0.75	0.07	-0.20	1.07	-0.69	0.27	1.41	-0.24	-0.62	0.46	-4.00	2.49	0.16	-0.10	-1.67	-0.57	1.91	-0.15	1.55	1.80								
BRL	2.19	-0.54	-1.00	0.86	-0.08	-0.04	0.48	-0.66	1.54	0.18	-4.00	-	0.71	-0.22	-0.13	0.40	3.48	-0.82	-0.28	2.08								
MXN	-0.71	0.91	0.48	0.45	-1.67	0.45	1.27	0.29	-1.79	0.46	0.35	0.45	0.94	0.88	-2.14	-0.90	-0.15	0.15	1.30	0.97								
CLP	-1.35	-0.09	0.41	0.12	0.04	0.69	-0.32	0.79	-1.08	0.02	0.02	4.00	-0.73	-0.59	-0.16	-1.06	-1.09	0.15	0.83	-0.78								
COP	0.29	0.35	-0.21	0.85	0.60	0.10	4.00	0.11	-	-	-2.51	-	-0.13	0.13	-1.25	-0.50	0.20	0.21	0.55	1.63								
PEN	-0.98	0.16	1.07	0.20	0.16	0.02	0.50	1.39	-4.00	-	-	-	-2.24	-1.00	-1.03	0.73	0.55	0.73	1.62	-0.45								
ARS	0.01	0.00	4.00	-0.05	0.28	0.27	0.24	0.22	-	-	-	-	0.22	0.22	0.22	0.22	-0.20	-0.20	4.00	-0.22								
Asia	-0.45	-0.08	0.31	0.42	1.07	0.37	0.48	0.59	-0.19	-0.53	-0.19	-0.83	-0.80	-0.01	-0.36	0.01	-1.64	-0.33	0.67	0.85								
CNY	0.18	-0.69	0.22	0.03	0.23	0.26	0.27	-0.84	-	-1.88	-	1.06	-0.31	-0.31	-1.11	1.77	0.02	0.56	0.24	-0.35								
CNH	0.44	-0.64	-0.03	0.39	0.36	-0.64	0.22	0.40	1.27	1.91	0.06	-0.12	0.12	-0.60	-0.49	-0.07	-0.46	-0.69	0.60	0.66								
INR	-0.15	-0.88	-0.42	0.38	1.11	-0.03	-0.30	0.39	-0.53	-0.51	-0.53	-0.51	-0.57	-0.16	-0.10	0.85	-0.30	-1.16	0.35	0.68								
KRW	-1.36	1.00	0.52	0.21	0.41	0.47	0.39	0.71	-0.52	-	0.44	-	-2.36	1.54	0.86	-0.93	-3.11	0.57	-0.15	-0.37								
IDR	-0.20	2.55	0.56	1.73	0.67	0.46	0.58	0.47	0.11	-0.33	0.12	-0.39	0.67	0.09	0.09	0.41	-0.95	2.67	0.29	1.59								
MYR	-1.70	-0.21	-1.66	0.76	-1.74	-0.65	-0.81	-0.54	-0.60	-	-	1.03	0.09	0.10	0.05	0.07	-0.44	0.38	-1.34	1.53								
SGD	0.41	-0.57	0.38	-0.84	-0.77	0.03	0.51	-0.30	0.44	-0.33	1.12	-3.90	0.49	-0.31	-0.48	0.70	0.19	-0.40	0.38	-0.05								
TWD	0.93	0.85	1.12	-0.58	2.38	1.62	1.03	0.33	3.39	-	-	-	-1.04	1.02	0.07	-1.12	0.80	-0.78	0.78	-0.13								
THB	-1.53	-0.33	-0.93	0.02	-0.49	1.00	-0.10	0.50	-0.92	-0.49	-0.01	-0.19	-1.26	-0.45	-0.52	-0.16	-0.29	-0.39	-0.91	0.00								
EMEA	0.64	0.09	-0.19	0.15	-0.22	-0.18	2.31	2.79	-0.10	-0.46	-0.02	-0.06	1.20	-0.43	-0.53	-1.27	0.29	0.62	-0.67	0.14								
TRY	-0.22	0.59	0.76	-0.82	-1.43	0.55	0.07	0.28	-0.27	-0.27	-0.29	4.00	0.39	-0.22	0.23	-0.78	0.69	0.66	1.00	-1.27								
HUF	0.40	0.36	-1.29	-0.15	0.88	-0.29	0.19	-0.63	0.32	-1.62	0.18	0.24	1.10	-0.38	0.16	-0.35	-0.40	0.82	-1.69	0.21								
PLN	0.52	0.32	0.53	1.02	-0.14	0.52	0.93	1.57	0.16	-0.48	1.72	0.19	-0.08	0.02	0.42	0.76	0.73	0.26	-0.05	0.30								
ILS	0.38	0.33	-0.35	0.46	-0.27	-0.45	-0.37	2.74	-0.17	-0.17	-0.17	-0.17	1.22	0.80	-0.40	-0.92	0.10	0.53	0.17	0.21								
CZK	-0.57	-0.58	0.73	-0.04	-0.64	-0.04	4.00	0.87	0.16	-0.57	0.24	0.11	-0.02	-0.62	0.05	-0.30	-0.59	-0.16	-0.60	-0.10								
ZAR	0.98	-0.53	-0.87	-0.92	1.40	-1.08	0.98	1.56	-0.12	-0.12	-1.60	-0.85	1.08	-0.62	-1.52	-2.09	0.17	0.04	-0.15	0.03								
KEY:																												
	Z>2				2>Z>1.5				1.5>Z>1				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	30	-6	34	-	-	-	41	19	↓	5 ↑
EUR	-6	8	-14	9	2	37	26	5	↑	-1 ↔
GBP	15	22	-7	27	14	-21	44	5	↓	3 ↔
USD	31	-2	3	3	1	-17	50	3	↑	-1 ↔
AUD	-25	27	23	-38	4	-49	47	-4	↓	-5 ↓
JPY	2	9	10	-33	-22	-21	50	-4	↓	-9 ↓↓
CAD	3	-10	7	-1	-12	-13	49	-5	↓	-4 ↓
NZD	-24	-32	7	12	15	-13	46	-9	↑	7 ↑↑
SEK	4	-20	-13	-	-	-	36	-10	↓	9 ↑↑
CHF	-27	-19	-	-16	0	-12	41	-14	↓	-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
INR	32	20	-	-	-	-	50	26	↑	↓
HUF	27	22	-	-	-	-	22	25	↓	↑
PLN	4	30	-	-	-	-	-11	17	↑	↓
CZK	16	18	-	-	-	-	43	17	↓	↑
CLP	25	-3	-	-	-	-	46	11	↓	↑
CNH	-9	27	-	-	-	-	0	9	↑	↓
MXN	-50	25	-	22	9	47	48	8	↑	↓
MYR	20	-5	-	-	-	-	38	8	↑	↑
ILS	-1	9	-	-	-	-	50	4	↓	↔
BRL	-42	33	-	17	-3	26	42	3	↑	↑
IDR	23	-21	-	-	-	-	8	1	↑	↓
THB	-15	15	-	-	-	-	30	0	↓	↑
COP	31	-32	-	-	-	-	46	0	↑	↔
PEN	-49	32	-	-	-	-	36	-8	↑	↑
ARS	-38	14	-	-	-	-	50	-12	↑	↑
TRY	-42	17	-	-	-	-	11	-13	↓	↑
TWD	-22	-14	-	-	-	-	31	-18	↓	↑
CNY	-2	-44	-	-	-	-	44	-23	↑	↔
KRW	-17	-39	-	-	-	-	44	-28	↓	↑
ZAR	-37	-21	-	-	-	-	47	-29	↓	↑
SGD	-31	-35	-	-	-	-	45	-33	↑	↔

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](#)



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