

Liquid Cross Border Flows

Dollar dependence

Key takeaways

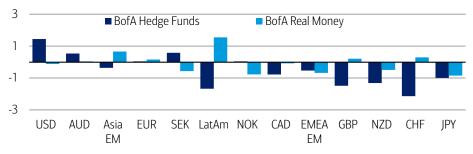
- USD demand amid hawkish US inflation data, driven by Hedge Funds (HF) as Real Money (RM) remained skeptical to engage
- USD demand expressed mainly vs JPY & CHF within the G10, also amid the soft JP GDP and the very soft Swiss CPI data
- EM FX flows were neutral to negative last week. HF sold in all regions but RM offset some of their Asia and LatAm selling

USD demand amid sticky US inflation

Investors bought the USD amid the hawkish US inflation data, in line with the upward-repriced Fed near term (Exhibit 1). USD demand was mainly vs. JPY & CHF (see also page 2) and driven by Hedge Funds—Real Money remained reluctant to buy USD (Exhibit 2).

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

Hedge Fund-led investors bought the USD amid the hawkish US data last week mainly vs JPY and CHF

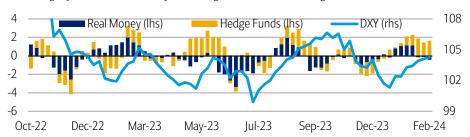


Source: BofA Securities. We rank currencies by the sum of weekly z-scores across Hedge Funds and Real Money

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Exhibit 2: BofA Hedge Fund and Real Money 4-week USD flows (z-score) and DXY

USD strength year-to-date has mainly been Hedge Fund-driven, according to our own FX flows



Source: BofA Securities, Bloomberg

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Refer to important disclosures on page 7 to 9. Analyst Certification on page 6.

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Currency Strategy Global

Data Analytics



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Low yielders under pressure

BofA investors reduced further their JPY longs and – in the case of Fedge Funds – added to their CHF shorts last week (Exhibit 3, Exhibit 4), also amid the soft GDP print in Japan and, especially, the very soft Swiss CPI print. We remain long EURCHF (<u>FX Alpha 2 Jan 24</u>) and *tactically* short EURJPY (<u>FX Alpha 26 Jan 24</u>).

Exhibit 3: BofA investor 4-week JPY flows (z-score) and JPY TWI

BofA investors reduced further their JPY longs last week

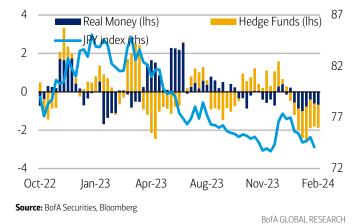
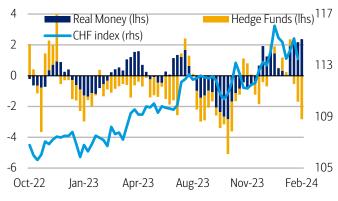


Exhibit 4: BofA investor 4-week CHF flows (z-score) and CHF TWI Hedge Funds added to their CHF shorts likely amid the soft Swiss CPI



Source: BofA Securities, Bloomberg

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EM FX: mostly neutral to negative flows

Hedge Funds sold in all EM regions last week, but some of their LatAm and Asia EM FX selling was met by Real Money demand.

- Asia: THB, MYR, CNY supplied, while TWD and KRW were bought (Exhibit 5)
- LatAm: MXN and COP under some pressure but ARS was in demand (Exhibit 7)
- EMEA: the ZAR and HUF selling stood out, while TRY was in demand (Exhibit 6)

Exhibit 5: BofA Asia EM FX flow (z-score) THB, MYR, CNY were supplied, while TWD and KRW were bought

BofA HF BofA RM

1

0

-1

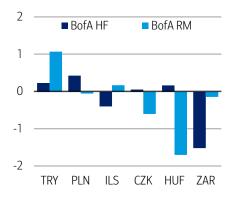
-2

THO SEN DR HR CH' GO CH' ARR THO

Source: BofA Securities. Currencies ranked by the sum of HF and RM weekly z-scores

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Exhibit 6: BofA EMEA EM FX flow (z-score) ZAR and HUF selling stood out, while TRY was in demand



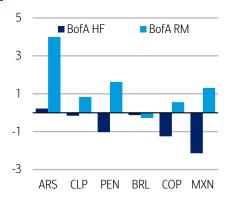
Source: BofA Securities. Currencies ranked by the sum of HF and RM weekly z-scores

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Exhibit 7: BofA LatAm FX flow (z-score)

MXN and COP came under some pressure by

MXN and COP came under some pressure but ARS was in demand



Source: BofA Securities. Currencies ranked by the sum of HF and RM weekly z-scores

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

Liquid Cross Border Flows: Flows data 19 February 2024

Liquid Cross Border Flows: Positioning data 19 February 2024

Liquid Cross Border Flows: Charts and Tables 19 February 2024

Snapshot of flows

Exhibit 8: 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	-0.46	2.54	-0.31	0.00	-0.40	2.53	-0.46	-0.75	-0.42	0.08	0.02	0.54	0.95	0.97	-0.29	1.45	-0.75	-0.55	0.46	-0.12	
EUR	0.45	-2.66	0.37	0.37	0.83	-3.42	0.21	0.29	0.34	0.90	0.62	0.15	-1.62	-0.95	1.71	0.04	0.15	0.58	-0.72	0.16	
JPY	-0.03	0.58	-0.72	-1.35	-0.04	1.27	0.50	-0.34	-0.12	0.58	0.85	-0.25	-0.93	0.11	-0.74	-1.00	0.42	-0.14	-0.89	-0.85	
GBP	0.14	-1.01	0.40	0.70	0.15	-1.47	0.12	1.10	0.45	-0.82	-0.40	0.27	0.33	0.66	0.58	-1.49	-0.39	0.46	0.42	0.21	
CAD	0.33	0.75	0.07	-0.42	-0.13	1.19	0.23	-0.32	0.41	-0.27	-0.35	0.05	1.12	-0.65	-0.34	-0.78	-0.30	0.79	0.40	-0.08	
AUD	-0.71	-3.71	-0.12	0.72	-1.14	-4.00	0.00	0.69	0.39	-0.30	1.53	0.94	-0.48	-1.37	-1.59	0.54	0.03	-0.38	0.28	0.04	
NZD	0.26	-0.03	-0.05	-0.90	-0.91	0.72	-0.20	0.46	0.52	-2.09	-1.29	1.67	-0.19	0.40	0.27	-1.32	0.55	-0.12	0.01	-0.49	
CHF	3.84	0.34	-0.96	-0.74	-0.14	0.00	0.09	0.08	-0.26	0.37	0.21	-1.52	-1.31	-0.34	-0.93	-2.14	4.00	0.53	-0.90	0.30	
NOK	0.60	0.15	-0.20	-0.51	1.45	0.58	0.63	0.66	0.14	0.26	0.27	-0.99	0.60	0.21	-0.11	0.04	-0.51	-0.33	-0.51	-0.77	
SEK	0.07	-0.10	0.64	-0.90	-0.41	-0.68	0.24	-0.85	0.08	-0.01	0.12	0.48	-0.08	-0.53	0.74	0.58	0.64	0.99	0.18	-0.57	
G10-xUSD	0.80	-2.76	0.08	-0.09	0.47	-3.43	0.34	0.51	0.62	0.11	0.33	0.21	-1.27	-0.86	0.35	-1.30	1.09	0.68	-0.74	-0.35	
EM																					
Asia	0.53	-0.45	-0.08	0.31	0.94	1.07	0.37	0.48	-0.11	-0.19	-0.53	-0.19	0.19	-0.80	-0.01	-0.36	-0.35	-1.65	-0.33	0.67	
EMEA	0.47	0.63	0.11	-0.19	1.89	-0.22	-0.18	2.31	-0.10	-0.10	-0.46	-0.02	-0.06	1.20	-0.43	-0.53	0.17	0.27	0.65	-0.68	
LatAm	-1.93	0.73	0.07	-0.19	-3.77	-0.69	0.27	1.41	0.84	-0.62	0.46	-4.00	0.12	0.16	-0.10	-1.67	-0.37	1.87	-0.14	1.55	

Source: BofA Securities

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Exhibit 9: 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	-1.93	0.73	0.07	-0.19	-3.77	-0.69	0.27	1.41	0.84	-0.62	0.46	-4.00	0.12	0.16	-0.10	-1.67	-0.37	1.87	-0.14	1.55
BRL	-2.84	2.19	-0.54	-1.00	-4.00	-0.08	-0.04	0.48	0.74	1.54	0.18	-4.00	0.61	0.71	-0.22	-0.13	-0.96	3.48	-0.82	-0.28
MXN	0.48	-0.76	0.93	0.48	-0.60	-1.67	0.45	1.27	0.31	-1.79	0.46	0.35	-0.21	0.94	0.88	-2.14	1.10	-0.22	0.17	1.31
CLP	0.23	-1.35	-0.09	0.41	1.23	0.04	0.69	-0.32	0.01	-1.08	0.02	0.02	0.56	-0.73	-0.59	-0.16	-0.67	-1.09	0.15	0.83
COP	-0.93	0.29	0.35	-0.21	0.05	0.60	0.10	4.00	-	-	-	-2.51	-0.69	-0.13	0.13	-1.25	-0.75	0.20	0.21	0.55
PEN	-0.04	-0.98	0.16	1.07	1.77	0.16	0.02	0.50	1.77	-4.00	-	-	-1.07	-2.24	-1.00	-1.03	0.09	0.55	0.73	1.62
ARS	-0.51	0.01	0.00	4.00	0.27	0.28	0.27	0.24	-	-	-	-	0.24	0.22	0.22	0.22	-0.82	-0.20	-0.20	4.00
Asia	0.53	-0.45	-0.08	0.31	0.94	1.07	0.37	0.48	-0.11	-0.19	-0.53	-0.19	0.19	-0.80	-0.01	-0.36	-0.35	-1.65	-0.33	0.67
CNY	-0.21	0.18	-0.69	0.22	-0.95	0.23	0.26	0.27	0.06	-	-1.88	-	-0.33	-0.31	-0.31	-1.11	1.58	0.02	0.56	0.24
CNH	1.21	0.44	-0.64	-0.03	2.23	0.36	-0.64	0.22	0.60	1.27	1.91	0.06	0.04	0.12	-0.60	-0.49	-0.45	-0.46	-0.69	0.60
INR	-0.18	-0.15	-0.88	-0.42	0.11	1.11	-0.03	-0.30	-0.51	-0.53	-0.51	-0.53	0.47	-0.57	-0.16	-0.10	-0.12	-0.30	-1.16	0.35
KRW	0.20	-1.36	1.00	0.52	0.28	0.41	0.47	0.39	0.32	-0.52	-	0.44	0.46	-2.36	1.54	0.86	-0.51	-3.11	0.57	-0.15
IDR	-0.11	-0.20	2.55	0.56	-0.41	0.67	0.46	0.58	0.29	0.11	-0.33	0.12	-0.38	0.67	0.09	0.09	0.22	-0.95	2.67	0.29
MYR	-0.41	-1.70	-0.21	-1.66	-1.03	-1.74	-0.65	-0.81	0.41	-0.60	-	-	0.26	0.09	0.10	0.05	0.48	-0.44	0.38	-1.34
SGD	0.70	0.39	-0.58	0.38	0.12	-0.77	0.03	0.51	1.00	0.44	-0.33	1.12	0.49	0.49	-0.31	-0.48	-0.09	0.15	-0.41	0.38
TWD	-0.55	0.93	0.85	1.12	0.35	2.38	1.62	1.03	-2.74	-3.39	-	-	-0.63	-1.04	1.02	0.07	-0.28	0.80	-0.78	0.78
THB	0.02	-1.53	-0.33	-0.93	1.90	-0.49	1.00	-0.10	-0.08	-0.92	-0.49	-0.01	-0.55	-1.26	-0.45	-0.52	-0.53	-0.29	-0.39	-0.91
EMEA	0.47	0.63	0.11	-0.19	1.89	-0.22	-0.18	2.31	-0.10	-0.10	-0.46	-0.02	-0.06	1.20	-0.43	-0.53	0.17	0.27	0.65	-0.68
TRY	-0.37	-0.24	0.74	0.80	-0.14	-1.43	0.55	0.07	-0.30	-0.27	-0.27	-0.28	-0.45	0.39	-0.22	0.23	-0.12	0.66	0.90	1.07
HUF	0.09	0.41	0.36	-1.30	0.55	0.88	-0.29	0.19	0.21	0.32	-1.62	0.18	-0.52	1.10	-0.38	0.16	0.14	-0.39	0.82	-1.70
PLN	0.42	0.51	0.33	0.52	1.86	-0.14	0.52	0.93	0.22	0.16	-0.48	1.72	-0.49	-0.08	0.02	0.42	0.11	0.71	0.26	-0.06
ILS	0.01	0.38	0.32	-0.35	1.53	-0.27	-0.45	-0.37	-0.17	-0.17	-0.17	-0.17	0.43	1.22	0.80	-0.40	-1.22	0.10	0.51	0.17
CZK	0.54	-0.56	-0.58	0.73	-0.21	-0.64	-0.04	4.00	0.15	0.16	-0.57	0.24	0.31	-0.02	-0.62	0.05	0.65	-0.58	-0.16	-0.60
ZAR	0.24	0.97	-0.54	-0.88	-0.26	1.40	-1.08	0.98	-0.01	-0.12	-0.12	-1.60	0.14	1.08	-0.62	-1.52	0.29	0.14	0.04	-0.15
KEY:																				·
	Z>2			2 > Z	> 1.5	1.5 >	Z > 1	1 > Z > -1				-1 > 2	.' > -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 10: G10 FX Positioning Scorecard

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

Currency	BofA HF	BofA RM	FXRS	сот	TFF LF	TFF AM	EPFR	Aggregate Positioning Signal	Change in positioning	MAA	Breadth
NOK	34	0	34	-	-	-	41	23	\downarrow	8	↑ ↑
GBP	18	24	-7	29	16	-23	44	6	\downarrow	3	\leftrightarrow
EUR	-13	7	-14	7	-1	39	26	4	\downarrow	-3	\leftrightarrow
USD	29	-4	3	3	3	-20	50	2	↑	0	\leftrightarrow
AUD	-20	27	23	-38	3	-48	47	-3	↑	-6	\downarrow
JPY	3	11	10	-30	-21	-17	50	-3	\downarrow	-9	$\downarrow\downarrow$
CAD	12	-11	7	-3	-17	-8	49	-3	\downarrow	0	\leftrightarrow
SEK	11	-21	-13	-	-	=	36	-8	\downarrow	7	↑ ↑
CHF	-25	-12	=	-10	6	-12	41	-11	↑	-5	\downarrow
NZD	-25	-33	7	6	11	-15	47	-11	↑	5	↑

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 11: EM FX Positioning Scorecard

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

Currency	BofA HF	BofA RM	FXRS	сот	TFF LF	TFF AM	EPFR	Aggregate Positioning Signal	Change in positioning	MAA trend
INR	31	19	-	-	-	-	50	25		
HUF	29	21	-	-	-	-	22	25	i	†
CZK	17	18	-	-	-	-	43	18	Ĭ	<u>'</u>
PLN	2	29	-	-	-	-	-13	16	*	i.
CLP	27	-1	-	-	-	-	46	13	<u>'</u>	†
CNH	-9	26	-	-	-	-	0	8	i	<u>,</u>
MXN	-50	23	-	22	9	46	48	7	Ĭ	i.
MYR	20	-6	-		-	-	38	7	Ĭ.	*
ILS	2	11	-	_	_	-	50	6	Ĭ	→ →
BRL	-43	29	-	21	-1	27	43	3	Ť	↑
THB	-14	15	-	-	-	-	30	0	Ĭ	<u> </u>
COP	32	-34	_	_	-	=	47	-1	¥ 	
IDR	22	-25	_	_	-	=	7	-1	*	Ĭ
PEN	-50	33	-	=	_	-	36	-9	<u> </u>	*
ARS	-38	14	-	=	_	-	50	-12	<u>,</u>	<u> </u>
TRY	-40	15	_	_	_	=	10	-12	† ↑	↑ ↑
TWD	-20	-14	_	_	-	=	31	-17	<u> </u>	→ →
CNY	-4	-44	_	_	_	=	44	-24	i	\leftrightarrow
ZAR	-33	-21	_	_	_	-	47	-27	* 	↑
KRW	-16	-39	-	=	_	-	44	-27	†	<u> </u>
SGD	-33	-34	=	=	=	-	45	-34	i	· →

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 <u>LCBF Primer</u>



Analyst Certification

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