

Liquid Cross Border Flows

To carry or not

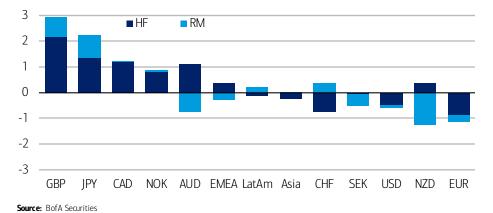
Key takeaways

- Investors, led by Hedge Funds, bought JPY & GBP vs. USD & EUR last week, amid a mix of rising JPY intervention and...
- risk-off fears, and higher UK rates despite hard landing risks. Real Money short USDJPY and Hedge Funds very long GBP.
- Ahead of the BoC, Hedge Funds added to their CAD longs. Ahead of the RBNZ, Real Money added to their NZD shorts.

Investors bought JPY & GBP vs. USD & EUR

Investors, led by Hedge Funds, bought JPY and GBP vs. USD and EUR last week (Exhibit 1), amid a mix of rising JPY intervention and risk-off fears—i.e. fears of potential limits to the JPY carry trade—and higher UK rates despite hard landing risks (cont'd on p. 2).

Exhibit 1: BofA weekly flows, 2-year z-scoreInvestors, led by Hedge Funds, bought JPY and GBP vs. USD and EUR last week



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10 July 2023

Currency Strategy Global

Data Analytics



Michalis Rousakis

FX Strategist MLI (UK) +44 20 7995 0336 michalis.rousakis@bofa.com

Athanasios Vamvakidis

FX Strategist MLI (UK) +44 20 7995 0279 athanasios.vamvakidis@bofa.com

See Team Page for List of Analysts

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Refer to important disclosures on page 6 to 8.

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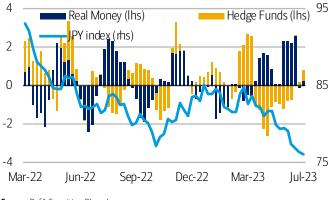
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Real Money short USDJPY, Hedge Funds like GBP

Real Money clients have been buying JPY (mainly vs USD) in recent weeks, but Hedge Funds joined them last week (Exhibit 2), likely on a mix of rising JPY intervention and risk-off fears, which could challenge the JPY carry trade. We now find Real Money to be short USDJPY and Hedge Funds flat (Exhibit 8).

GBP performed rather well last week on the back of higher UK rates and despite the higher risks of a harder UK landing, with this move likely driven by Hedge Funds (Exhibit 3). While we find the GBP risks to have become more balanced than earlier in the year, Hedge Funds GBP longs could be at risk if UK inflation proves way too sticky.

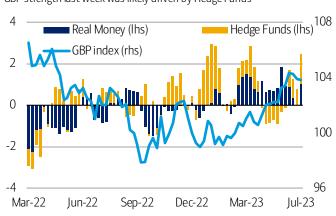
Exhibit 2: Investor 4-week JPY flows (z-score) and JPY TWIReal Money clients have been buying JPY (mainly vs USD) in recent weeks, but Hedge Funds joined them last week



Source: BofA Securities, Bloomberg

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Exhibit 3: Investor 4-week GBP flows (z-score) and GBP TWI GBP strength last week was likely driven by Hedge Funds



Source: BofA Securities, Bloomberg

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Ahead of the BoC and the RBNZ

Ahead of the BoC meeting, Hedge Funds continued buying CAD (Exhibit 4), with their CAD position now the longest since 2019. Real Money, meanwhile, remains short CAD, according to our estimates.

Ahead of the RBNZ meeting, Real Money sold NZD from a very short position, while Hedge Funds refrained from adding to their NZD shorts (Exhibit 5).

Exhibit 4: Investor 4-week CAD flows (z-score) and CAD TWIAhead of the BoC meeting, Hedge Funds continued buying CAD

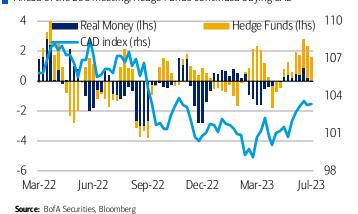
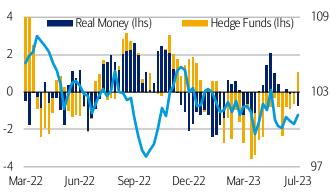


Exhibit 5: Investor 4-week NZD flows (z-score) and NZD TWIAhead of the RBNZ meeting, Real Money sold NZD from a very short position



Source: BofA Securities, Bloomberg

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

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Liquid Cross Border Flows: Flows data 10 July 2023

<u>Liquid Cross Border Flows: Positioning data 10 July 2023</u>

Liquid Cross Border Flows: Charts and Tables 10 July 2023

Snapshot of flows

Exhibit 6: 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	-0.50	-1.19	4.00	-0.52	0.21	-0.47	4.00	-0.36	1.16	0.64	0.22	0.35	-0.53	0.91	1.06	-0.48	-1.17	-2.36	0.26	-0.10	
EUR	-0.69	0.43	-4.00	0.15	-0.63	0.29	-4.00	0.67	-0.66	-0.09	-0.27	0.27	-1.24	-1.28	-0.64	-0.86	0.60	1.14	-0.28	-0.27	
JPY	0.18	1.23	0.82	1.17	1.76	0.19	4.00	-0.42	0.35	0.12	-0.01	-0.26	-0.01	0.50	-0.66	1.35	-0.54	0.99	-0.78	0.89	
GBP	1.09	0.88	-2.16	1.50	0.32	1.32	-3.68	0.16	-0.14	-0.02	-0.61	-0.02	1.64	-0.55	0.13	2.18	0.37	0.24	0.88	0.78	
CAD	-0.73	-0.20	0.07	-0.63	-1.65	-0.55	0.47	-1.36	-0.75	-0.76	0.61	-0.48	1.07	0.57	0.60	1.21	0.44	0.64	-1.18	0.02	
AUD	-0.85	3.38	-0.53	-0.30	-0.42	-0.35	-1.83	-0.17	-0.34	-0.03	-0.73	0.07	-1.58	-1.29	0.28	1.11	0.24	4.00	0.85	-0.75	
NZD	1.95	-1.05	-0.03	-0.82	-0.34	-0.89	0.25	0.62	0.42	0.02	1.03	-0.17	1.99	0.20	-0.33	0.37	0.80	-1.06	-0.13	-1.27	
CHF	0.09	-0.70	2.27	0.19	0.12	-0.05	2.91	0.34	-0.31	-0.27	-0.31	-0.14	-2.95	-0.78	0.04	-0.73	1.62	-0.34	0.49	0.37	
NOK	0.39	-0.87	1.79	0.16	-4.00	-0.20	1.50	-1.76	0.16	0.16	0.16	0.97	2.33	-0.02	1.37	0.82	0.36	-0.98	0.55	0.07	
SEK	0.59	0.13	-0.40	-1.34	-0.59	0.15	0.15	-0.88	0.03	0.03	-0.63	-1.85	0.65	-0.23	1.46	-0.03	1.15	0.10	-1.46	-0.47	
G10-xUSD	-0.30	1.52	-3.37	0.69	-0.66	0.51	-4.00	0.16	-0.80	-0.43	-0.16	-0.16	-0.33	-1.12	-0.24	1.16	0.87	2.60	-0.35	0.26	
EM																					
Asia	0.77	0.36	-2.66	0.04	0.73	0.49	-2.71	0.50	-0.54	-0.33	-0.20	-0.37	0.91	-0.34	-1.63	-0.23	-0.07	0.87	0.30	0.03	
EMEA	1.22	-0.40	-0.95	0.14	0.31	-1.01	-2.28	0.73	-0.18	1.31	0.29	0.05	1.39	-0.17	-0.57	0.37	0.78	-0.29	-0.32	-0.27	
LatAm	0.55	-1.16	-0.32	0.31	0.58	-0.60	-0.47	0.50	0.45	-0.76	0.48	0.02	0.58	-0.40	-0.65	-0.14	-0.23	-0.89	0.35	0.21	

Source: BofA Securities

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Exhibit 7: 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	0.55	-1.16	-0.32	0.31	0.58	-0.60	-0.47	0.50	0.45	-0.76	0.48	0.02	0.58	-0.40	-0.65	-0.14	-0.23	-0.89	0.35	0.21
BRL	0.79	-0.87	-0.18	-0.26	0.43	-0.72	-0.18	0.04	-	-	-	0.24	-0.19	0.01	-0.12	-0.82	1.10	-0.84	-0.08	0.04
MXN	-0.76	-1.01	-0.37	0.28	0.05	-0.40	-2.39	0.85	0.30	-1.46	0.39	-1.03	-0.10	-1.60	-0.62	-0.09	-1.00	0.46	1.17	0.20
CLP	0.16	0.01	0.88	1.87	0.06	0.81	1.81	0.57	0.18	-1.76	0.05	-	0.82	1.05	0.77	1.67	-0.49	-0.95	-0.18	0.88
COP	1.77	0.39	-0.43	-0.49	1.01	0.58	1.80	0.54	0.21	-	-	0.41	1.89	0.40	-1.19	0.03	0.04	-0.22	-0.32	-1.23
PEN	-0.44	-0.85	-0.90	-0.39	0.68	0.50	0.54	0.30	-	-	-	1.53	0.15	-0.32	-0.99	-0.84	-0.67	-0.79	-0.47	-0.12
ARS	-0.66	1.75	-1.98	1.93	0.25	0.27	0.29	1.10	-	-	-	-	0.14	0.14	-4.00	0.17	-0.94	1.96	-0.25	1.88
Asia	0.77	0.36	-2.66	0.04	0.73	0.49	-2.71	0.50	-0.54	-0.33	-0.20	-0.37	0.91	-0.34	-1.63	-0.23	-0.07	0.87	0.30	0.03
CNY	1.11	-0.21	-1.14	0.00	1.24	-0.43	-1.20	0.03	-0.28	0.18	0.26	-4.00	-0.66	-0.29	-1.68	-0.27	0.31	0.67	0.31	0.42
CNH	0.47	-1.51	-2.06	0.40	0.42	-2.39	-2.39	-0.02	-0.10	-0.22	-0.15	-0.19	0.74	-0.45	-1.92	0.86	-0.36	-0.19	0.71	-0.11
INR	-0.01	0.86	-0.83	-0.28	0.32	3.27	-1.51	-0.38	-0.48	-0.71	-0.47	-0.19	-0.43	-0.53	0.15	0.04	0.38	-1.15	0.37	-0.03
KRW	0.23	0.71	-1.62	0.39	0.36	0.68	-1.52	0.56	0.06	0.02	0.69	-	-0.02	-0.16	0.10	-1.02	-0.21	0.57	-1.19	0.88
IDR	-0.52	3.67	-0.44	-1.06	-0.29	-0.49	-0.35	-0.20	-2.84	0.95	0.08	-1.96	1.81	-0.57	-0.33	-1.87	-0.75	4.00	-0.18	0.26
MYR	-1.06	-0.26	-0.53	0.12	-1.73	-0.78	-0.97	-0.20	4.00	-0.68	-	-0.67	-0.06	0.39	-0.01	0.31	0.21	0.36	0.23	0.33
SGD	0.99	0.30	-0.52	-1.11	0.15	0.64	1.49	-0.27	0.11	0.30	-0.40	0.79	1.11	0.88	-1.17	-1.16	0.00	-1.21	0.19	-0.59
TWD	0.35	1.13	1.35	-0.20	-0.27	0.21	1.39	1.67	-4.00	-	0.08	-	0.73	0.19	0.27	-0.12	0.41	1.21	0.59	-1.38
THB	-0.38	-0.45	-0.56	1.08	-0.60	-0.94	-0.49	0.99	-0.13	-0.09	1.00	-1.05	-0.18	-0.16	-0.62	-0.19	0.01	0.08	-0.60	1.87
EMEA	1.22	-0.40	-0.95	0.14	0.31	-1.01	-2.28	0.73	-0.18	1.31	0.29	0.05	1.39	-0.17	-0.57	0.37	0.78	-0.29	-0.32	-0.27
TRY	0.53	1.46	-0.09	0.84	0.47	0.71	0.17	0.46	-	-	-	-	0.41	1.30	-0.04	0.36	0.04	0.98	-0.45	0.79
HUF	0.14	0.11	0.09	-0.71	-0.80	0.31	0.76	-0.05	0.00	0.72	0.16	-0.87	-0.0	-0.04	-0.37	-0.69	0.32	0.03	0.13	-0.40
PLN	0.54	-0.67	-0.84	0.35	0.93	-2.68	-3.37	0.73	0.21	0.24	0.24	0.24	0.23	-0.30	-0.04	0.23	0.24	0.10	-0.01	0.06
ILS	0.59	0.42	-0.99	-0.25	-0.82	-0.47	-1.23	-0.49	0.15	0.94	0.16	-	1.41	0.01	-0.52	0.11	0.11	0.51	-0.27	-0.22
CZK	-0.24	0.24	-0.41	0.17	-0.25	-0.10	-1.24	0.09	0.10	0.08	-	-	-0.69	0.12	-0.15	0.61	0.44	0.31	0.19	-0.42
ZAR	2.55	-1.37	-0.72	0.17	0.28	-0.05	0.53	0.60	-1.28	1.23	-0.02	-0.09	2.84	-0.63	-0.61	0.30	1.47	-1.49	-0.66	-0.11
RUB	-0.11	-0.10	-0.07	-0.05	0.34	0.32	0.32	0.30	-	-	-	-	-0.0	0.00	0.00	0.01	-0.19	-0.17	-0.14	-0.12
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 8: G10 FX Positioning Scorecard 50 (-50) represents a max long (short) positioning relative to the past history

Currency	BofA HF	BofA RM	FXRS	СОТ	TFF LF	TFF AM	EPFR	Aggregate Positioning Signal	Change in positioning	MAAI	Breadth
NOK	8	40	3	-	-	-	44	17	<u> </u>	0	\leftrightarrow
EUR	-7	25	-2	18	3	48	30	14	\downarrow	4	↑
GBP	35	15	-21	26	13	7	45	10	↑	9	↑ ↑
JPY	13	18	11	-37	-21	-16	46	1	↑	-9	$\downarrow\downarrow$
AUD	1	24	10	-28	6	-42	49	0	\downarrow	-4	\downarrow
USD	12	-3	11	-8	-1	-34	49	-3	\downarrow	-1	\leftrightarrow
CAD	31	-20	-27	3	-8	7	49	-3	↑	3	\leftrightarrow
CHF	-3	-1	-	-8	4	-34	44	-9	↑	6	↑
NZD	-22	-35	0	2	7	-21	49	-14	↑	-1	\leftrightarrow
SEK	-9	-20	-28	-	-	-	39	-19	\downarrow	-7	$\downarrow\downarrow$

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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Exhibit 9: EM FX Positioning Scorecard

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

Currency	BofA HF	BofA RM	FXRS	СОТ	TFF LF	TFF AM	EPFR	Aggregate Positioning Signal	Change in positioning	MAA trend
CLP	34	21	-	-	-	-	49	27	<u> </u>	↑
INR	39	-3	-	-	-	-	20	18	↑	↑
HUF	10	21	-	-	-	-	12	16	↓	\leftrightarrow
MXN	-25	23	-	24	13	44	50	14	↓ ↓	\downarrow
ILS	-5	31	-	-	-	-	50	13	\downarrow	↑
MYR	27	-4	-	-	-	-	46	12	†	↑
CZK	8	13	-	-	-	-	42	11	↑	↑
COP	47	-28	-	-	-	-	49	10	↓	\downarrow
IDR	38	-20	-	-	-	-	50	9	↓	\downarrow
CNH	-19	28	-	-	-	-	0	4	†	↑
PEN	-18	27	-	-	-	-	47	4	↓	\downarrow
PLN	-2	8	-	-	-	-	-12	3	†	\
THB	-17	17	-	-	-	-	42	0	1	↑
BRL	-41	3	-	28	13	18	42	-2	↓	\downarrow
RUB	-13	0	-	0	0	0	-34	-3	↓	\downarrow
KRW	-15	-10	-	-	-	-	49	-13	†	\downarrow
ARS	-47	12	-	-	-	-	50	-17	†	↑
CNY	0	-44	-	-	-	-	49	-22	†	↑
TWD	-33	-25	-	-	-	-	46	-29	↓ ↓	↑
TRY	-43	-30	-	-	-	-	14	-36	†	↑
ZAR	-35	-46	-	-	-	-	50	-41	1	↑
SGD	-50	-44	-	-	-	-	47	-47	\downarrow	↑

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 the past history.

For more detail on the construction and use of this report, please see our LCBF Primer



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Research Analysts

Athanasios Vamvakidis FX Strategist MLI (UK) athanasios.vamvakidis@bofa.com

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