

Global FX weekly

Little else matters

The View: Large sell-off in USD on mostly second-tier negative data surprises suggests long positioning is a risk ahead of US payrolls. Beyond that, we remain constructive USD but much depends upon the resilience of the US service sector (watch ISM next week) and credibility of China stimulus (September is a crucial window).

China & USD: We are bullish USD but a lot hinges on whether China rolls out meaningful, coordinated stimulus in coming weeks. USD has lagged the deterioration in China sentiment since February (peak reopening optimism), mainly vs. CHF, GBP, EUR.

Rates & USD: The USD has rallied notably in recent weeks, occurring amid rising real rate differentials and proxies for the neutral rate. We remain focused on these key rate measures to assess the USD going forward. We view market pricing of 2024 Fed cuts as excessive relative to the G10, offering scope for possible further USD support.

CAD after the August sell-off: We expect short-term CAD rebound to 1.33 from oversold level. Long-term valuation still bullish CAD. We like owning cheap 6m CAD vol to position for an earlier BoC vs Fed rate cut.

CNY: USD/CNY risks are to the upside, unless a more credible fiscal policy response is forthcoming in the coming weeks.

Asia FX: In 4Q, we expect better strength in KRW, remain bearish on TWD and tighter HKD funding as China may announce fiscal stimulus.

EMEA FX: The best time to be long EEMEA FX is when monetary policy is tight, but the policy rate remains unchanged.

LatAm FX: We are neutral BRL, UYU and DOP, while we are bearish ARS, CLP, COP, MXN and PEN.

Vol Insights: 3m G10 FX implied vols broadly declined except for GBP. Rising option demand for lower GBP on weak UK PMI forms bearish GBP signals in quant framework.

Technical: Month end USD dip underway. In the short-term we favor lower USD vs CAD, JPY, ILS, INR. After, we assess whether to buy USD vs CHF, GBP, CLP, PLN.

01 September 2023

FX Research
Global

G10 FX Strategy
MLI (UK)
+1 646 855 9342

Adarsh Sinha
FX Strategist
Merrill Lynch (Hong Kong)
+852 3508 7155
adarsh.sinha@bofa.com

Claudio Piron
Emerging Asia FI/FX Strategist
Merrill Lynch (Singapore)
+65 6678 0401
claudio.piron@bofa.com

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

[See Team Page for List of Analysts](#)

Trading ideas and investment strategies discussed herein may give rise to significant risk and are not suitable for all investors. Investors should have experience in relevant markets and the financial resources to absorb any losses arising from applying these ideas or strategies.

BofA Securities does and seeks to do business with issuers covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.

Refer to important disclosures on page 26 to 28. Analyst Certification on page 25. 12598825

Timestamp: 31 August 2023 11:00PM EDT

Our medium-term views

Michalis Rousakis

MLI (UK)

michalis.rousakis@bofa.com

Claudio Piron

Merrill Lynch (Singapore)

claudio.piron@bofa.com

Exhibit 1: Our medium-term views

G10 and EM FX medium-term views

G10	We remain modestly positive for USD near-term despite finding it overvalued, with our year-end EUR/USD forecast remaining at 1.05. This is in line with the weaker Eurozone data and, more broadly, our view that the market pricing of 2024 Fed cuts is excessive vs. the rest of G10. China's outlook remains key but, so far, USD has lagged the deterioration in China sentiment since February, esp. vs. CHF, GBP, EUR. We expect a weaker for longer JPY on carry and with Japan's basic BoP balanced—we forecast USD/JPY at 150 by year-end. For GBP, we see bearish near-term risks vs. USD but find them more symmetric vs. EUR. CHF may have overshoot, but we expect it to stay below parity this year, supported by the hawkish SNB policies. Regarding the "high beta" G10 FX, we continue to favor CAD, AUD and NOK over NZD and SEK.
EM	In Asia we are long IDR on bond inflows and export proceed repatriation. Additionally, we are in the camp that Indonesia is undergoing positive structural macro transformation. We are bearish PHP risk premium and are long NDF points. We remain bearish CNY and forecast USD/CNY 7.40 end 3Q, but prefer to be long USD/TWD via options. In EEMEA we like short EUR/HUF. In LatAm we remain bullish MXN and BRL and look for better levels to add long positions. We also enter short CNH/CLP to position for a stabilization and relative outperformance in Chile's growth and position for the theme of CNH underperformance relative to EM FX.

Source: BofA Global Research

BofA GLOBAL RESEARCH

Our key forecasts

Exhibit 2: Key BofA G10 and EM FX forecasts

Forecasts as of 31-Aug-2023

(EOP)	YE 2020	YE 2021	YE 2022	1Q23	2Q23	3Q23	YE 2023	YE 2024
EUR/USD	1.22	1.14	1.07	1.08	1.09	1.08	1.05	1.15
USD/JPY	103	115	131	133	144	147	150	135
GBP/USD	1.37	1.35	1.21	1.23	1.27	1.27	1.24	1.35
AUD/USD	0.77	0.73	0.68	0.67	0.67	0.63	0.64	0.71
USD/CNY	6.53	6.36	6.90	6.87	7.25	7.40	7.20	6.70
USD/BRL	5.20	5.58	5.29	5.06	4.79	4.90	4.90	5.10
USD/INR	73.07	74.34	82.74	82.18	82.04	83.00	82.00	80.00
USD/ZAR	14.69	15.94	17.04	17.80	18.85	19.00	18.00	17.50

Source: BofA Global Research. Forecasts as of 31-Aug-2023.

BofA GLOBAL RESEARCH

What we particularly like right now

Exhibit 3: Our latest G10 and EM FX trade recommendations

What we particularly like right now

G10	
<u>Buy 1y 25-delta AUD/USD risk reversal</u>	AUD stands to benefit from broad-based USD sell-off and China reopening in 2023.
EM	
<u>Sell CNH/CLP</u>	We like risk-reward of selling CNH/CLP (entry: 111.74, target: 108, stop: 113.6). The trade allows to leverage our stable Chilean peso view and earn carry while minimizing direct exposure to the dollar.
<u>Long USD/TWD</u>	We revised our 3Q23 USDTWD forecast to 31.9 and we recommend buying USDTWD 6m 25-delta call option
<u>Sell EUR/HUF</u>	We re-enter a HUF carry trade by shorting EURHUF (open: 391.7, target: 372.1, stop: 403.5, carry: 0.8% per month).

For complete list of open trades, and those closed over the past 12 months, please see

[here](#)

Calls at a glance

Michalis Rousakis

MLI (UK)

michalis.rousakis@bofa.com

Thematic calls

- **Growth-inflation trade-off and FX:** Soft landing better than hard landing for FX.
- **China & USD:** We are bullish USD but a lot hinges on whether China rolls out meaningful, coordinated stimulus in coming weeks. The USD has lagged the deterioration in China sentiment since Feb mainly vs. CHF, GBP, EUR.
- **Rates & USD:** We view market pricing of 2024 Fed cuts as excessive relative to the G10, offering scope for possible further USD support.
- **Energy is hot again:** We keep our \$90/bbl 2024 Brent forecast as higher prices would need larger supply cuts or disruptions, or stronger demand.
- **Mortgage structure matters for monetary policy:** FX implications go against high beta currencies, because of faster policy transmission through housing.
- **FX by time zone:** USD price action in 2023 largely driven by activity in US hours.

Central Bank calls

Exhibit 4: G10 Central Bank calls

RBA and BoC are meeting next week

Country	Next Meeting	BofA	Consensus	Prior	Narrative
US	20-Sep	5.38%	5.38%	5.38%	We expect the last Fed hike in November. We expect the first rate cut in June 2024, with QT to end at the same time but risks for a longer runoff period. Importantly, we look for quarterly 25bp reductions in the policy rate, for a total of 75bp of rate cuts in 2024 and 100bp of cuts in 2025.
Eurozone	14-Sep	4.00%	4.00%	3.75%	25bp in September has become our base case following the July inflation data, but this remains a close call. We continue to not expect rate cuts until June-24.
Japan	28-Jul	-0.10%	-0.10%	-0.10%	Having flexibilised YCC, we think the next step will be to end negative interest rate policy (NIRP). We continue to think that the outlook for next year's spring wage negotiations is critical. Should the BoJ gain confidence that this year's strong wage hikes will be repeated in FY24, it is also likely to conclude that underlying inflation is likely to be sustained at 2%. Given the BoJ's cautious stance, our base case was that NIRP would be removed in mid-CY24, when BoJ could confirm the initial results of the spring wage negotiations. However, we see growing risks that the move happens earlier, i.e., in 1Q CY24.
UK	21-Sep	5.50%	5.50%	5.25%	We expect one more 25bp rate hike at the next meeting in September followed by a prolonged pause. We see the first rate cut in February 2025. We see risks to that profile skewed up because of the strength of wage growth.
Canada	6-Sep	5.00%	5.00%	5.00%	We expect the BoC on hold in Sep despite the increase in inflation provided that the 2Q GDP print shows a clear deceleration. In any case, the BoC will likely continue with a hawkish language and risk will continue to the upside for rates. We expect the first cut in April 2024 followed by five 25bp additional cuts to reach a rate of 3.50% by end-24.
Australia	5-Sep	4.10%	4.10%	4.10%	We do not expect further hikes at this stage but see risk for a further hike in Nov as 3Q inflation data will be strong. Active Quantitative Tightening could address upside risk to CPI and financial stability.
New Zealand	4-Oct	5.50%	-	5.50%	We see the OCR on hold for the rest of the year., with the economy in recession and near-term upside risks for CPI. We expect four rate cuts in 2024.
Switzerland	21-Sep	1.75%	-	1.75%	We think the SNB is done with rates hikes also given the active role of the balance sheet. But it's a close call and we can't rule out another hike.
Norway	21-Sep	4.25%	4.25%	4.00%	We look for 25bp in September and another 25bp after then, for a 4.50% with balanced risks.
Sweden	21-Sep	4.00%	4.00%	3.75%	We expect 25bp in September and a 4% terminal, with risks skewed up. We look for 3 rate cuts in 2024.

Source: BofA Global Research, Bloomberg consensus forecasts as of 31-Aug-2023.



The view

Adarsh Sinha

Merrill Lynch (Hong Kong)

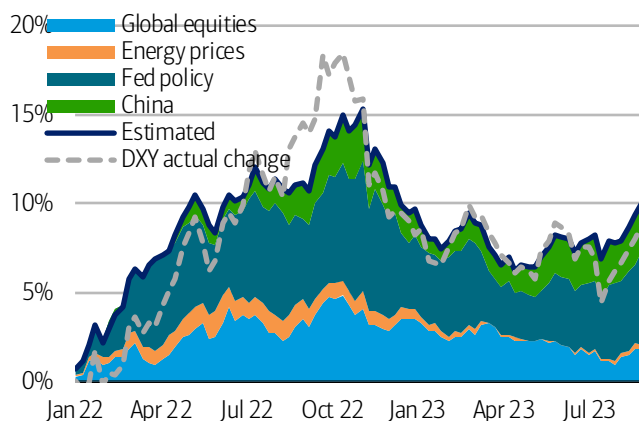
adarsh.sinha@bofa.com

Little else matters

Our key driver framework implies ~80% of USD appreciation since the beginning of 2022 can be attributed to two factors – Fed policy (vs. rest of the world) and China (Exhibit 5). Using 2023 as the starting point changes the relative contribution (China>Fed) but not the conclusion that little else has driven USD strength (Exhibit 6). The range bound nature of the dollar in recent months is likely linked to outstanding questions of whether the US can achieve a soft landing and will meaningful stimulus be delivered in China. September may prove a crucial month toward addressing these issues.

Exhibit 5: DXY index - actual vs. estimated move (& contributions) based on key drivers

2022-to-date: Fed policy + China explain ~80% of DXY appreciation since '22

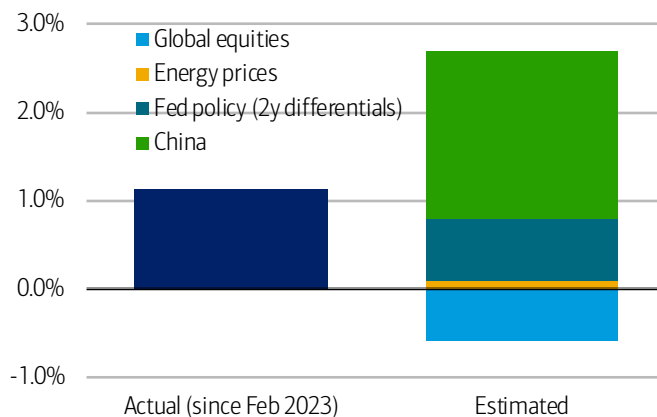


Source: Bloomberg, Note: China - reflation PCA, Fed policy - 2y rate differentials, Energy prices - BCOMEN Index, Global equities - MSCI World

BofA GLOBAL RESEARCH

Exhibit 6: DXY index – actual vs. estimated

Feb 2023-to-date: China has been dominant contributor to DXY strength since peak reopening optimism



Source: Bloomberg, Note: China - reflation PCA, Fed policy - 2y rate differentials, Energy prices - BCOMEN Index, Global equities - MSCI World

BofA GLOBAL RESEARCH

Weak US data the near term pain trade for USD longs...

The sizeable fall in US rates and USD following negative surprises to mostly second-tier (or backward looking) US data this week was notable. This was partly due to the large magnitude of surprises but may also reflect somewhat crowded near-term positioning (short US rates & long USD). The pain for residual USD longs may not yet be done as our US economists see downside risk to Friday's payroll data ([August employment preview 24 August 2023](#)). However, this is unlikely to change the fact that US economic resilience is at odds with the deep easing cycle priced in relative to G10 counterparts ([Navigating FX by the R-stars 30 August 2023](#)).

... but service sector resilience persists for now

This resilience, whether looking at jobs growth, sticky inflation or consumer spending, is predominantly driven by services. In our view, a meaningful slowdown in the service sector is necessary if not sufficient for sustained USD depreciation. In this context, next week's ISM services, which has remained above 50 through 2023, could prove as important as payrolls. The US services PMI surprised weaker in August but there is little monthly correlation with the ISM due to different sampling methodology. For now, our economists continue to see signs of expanding activity in the services sector, including increased recreational spending ([At your service 23 August 2023](#)).

China – now is the time to ease

The USD outlook also depends upon whether China rolls out meaningful, coordinated stimulus in coming weeks, especially after likely weak August data (released mid-September). Our economists believe that failing to do so could imply a potential delay of effective easing by another 4-5 months ([China Watch 28 August 2023](#)). On one hand, China reflation sentiment is close to 2022 lows, suggesting a low hurdle for policymakers to deliver a positive surprise. On the other hand, we have shown the USD has lagged the recent deterioration in China sentiment ([China clouds USD outlook 29 August 2023](#)) implying further upside if China sentiment does not improve.

Varying risk reward in FX

With considerable uncertainty around China policy stimulus, an important question is which currencies offer best risk-reward under different scenarios. We use 2022 betas of G10 & EM currency pairs (vs. USD) to China reflation sentiment (first principal component of major China asset prices) to compare actual vs. expected moves since February 2023 (Exhibit 7).

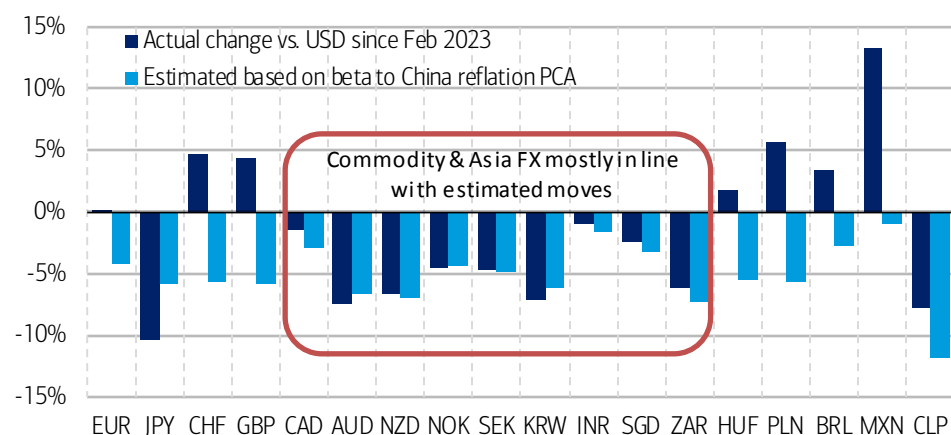
Commodity & Asia FX moves have largely been in line with beta-implied changes – these offer the most reliable upside if China delivers credible policy stimulus. However, if sentiment remains weak, we would focus on the laggards for USD longs. For instance, European currencies (both DM & EM) have lagged the deterioration in China sentiment. Meanwhile, MXN outperformance makes sense relative to other currencies (low beta to China) but this is far less evident in absolute terms.

Technical jury also out on medium-term USD path

The technical jury is also out on the medium-term path of USD. Our technical strategist expects the BBDXY to return toward 1225, after which it should become clearer if the dip is bought or the lows retested ([FX Technical Advantage: The greenback turning red 29 August 2023](#)). He flags the risk of short-term depreciation in USD (especially vs. CAD, JPY, ILS, INR) but on watch for levels at which the correction may be bought into (vs. CHF, GBP, CLP, PLN) – the latter mostly consistent with our analysis in Exhibit 7.

Exhibit 7: G10 & EM FX (vs. USD) - actual vs. estimated based on China beta

Only commodity & Asia FX mostly in line with estimated moves



Source: Bloomberg

BofA GLOBAL RESEARCH

China clouds USD outlook

Adarsh Sinha

Merrill Lynch (Hong Kong)

adarsh.sinha@bofa.com

- We are bullish USD but a lot hinges on whether China rolls out meaningful, coordinated stimulus in coming weeks.
- USD has lagged the deterioration in China sentiment since February 2023 (peak reopening optimism) but less vs commodity FX...
- ... instead more evident against CHF, GBP, EUR. These offer better risk-reward USD longs if China sentiment remains weak.

Link to the full report: [Liquid Insight: China clouds USD outlook 29 August 2023](#)

Chart of the Day: DXY vs. China reflation sentiment

DXY has lagged the deterioration in China sentiment



Source: Bloomberg, China reflation sentiment = first PCA component across HSCEI, 10y CGB, CNY, iron ore, high yield credit

BofA GLOBAL RESEARCH

Clearing the China risk-reward cloud for USD

We are bullish USD but a lot hinges on whether China rolls out meaningful, coordinated stimulus in coming weeks. China reflation sentiment is close to 2022 lows and we show this has been the dominant driver of USD since the February 2023 (peak reopening optimism), even more so than Fed policy. Despite this, our analysis suggests the USD has lagged the deterioration in China sentiment albeit far more within G5 than commodity currencies. CHF, GBP and EUR in particular account for the bulk of DXY underperformance and consequently offer better risk-reward USD longs if China sentiment remains weak.

Navigating FX by the R-stars

Alex Cohen

BofAS

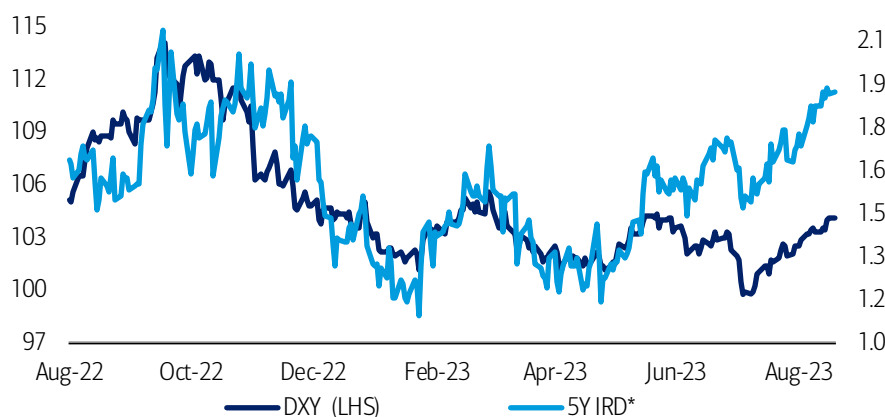
alex.cohen2@bofa.com

- The USD has rallied notably over recent weeks, occurring amid rising real rate differentials and proxies for the neutral rate
- Despite limited policy guidance at Jackson Hole, we remain focused on these key rate measures to assess the USD going forward
- We view the market pricing of 2024 Fed cuts as excessive relative to the G10, offering scope for possible further USD support

Link to the full report: [Liquid Insight: Navigating FX by the R-stars 30 August 2023](#)

Chart of the Day: DXY & 5Y Sov. real rate differential (US - foreign)

USD appreciation amid real IRD approaching widest level since March



Source: Bloomberg; BfA Global Research. *IRD= -DXY weights: Ger (7y), UK (5y), Can (5y), Japan (5y)

BofA GLOBAL RESEARCH

Resilient growth = rate support for the USD

With Jackson Hole (JH) now in the rearview mirror ([US Watch: Jackson Hole: a Rorschach test 25 August 2023](#)), the USD looks to close out August by posting its biggest 6-week rally since last September, driven by a number of global factors (see: [Liquid Insight: Summer strength in G10 FX 28 August 2023](#))

In a recent note ([Liquid Insight: China clouds USD outlook 29 August 2023](#)) we looked at the impact that deterioration in China sentiment has had on the dollar's recent rally. Here we turn back to the US, to look at the dollar's rally in the context of recent US and global rate moves, including widening real rate differentials, the upward move in the perceived "neutral rate" and the pricing of the Fed and other G10 central bank policy curves through next year.



CAD after the August sell-off

Howard Du, CFA
BofAS
yuhao.du@bofa.com

Carlos Capistran
BofAS
carlos.capistran@bofa.com

Link to the full report: [FX Viewpoint: CAD after the August sell-off 29 August 2023](#)

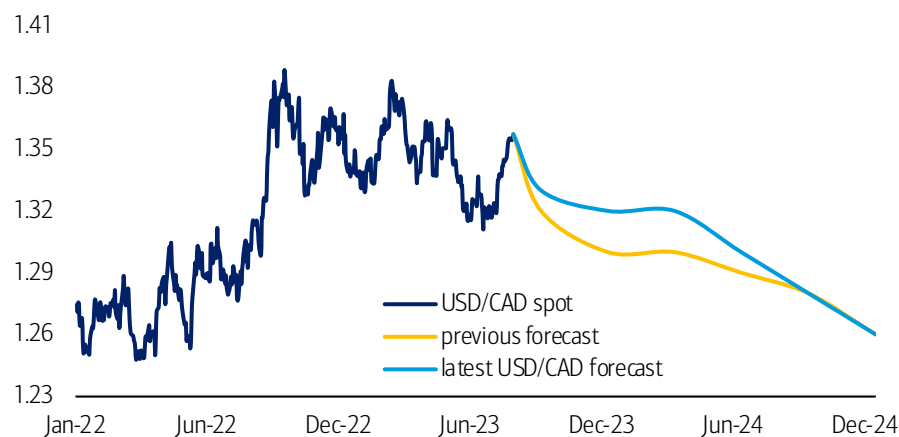
Short-term to long-term CAD views after the August rout

USD/CAD has sharply rallied in August. The pace of the rally from July 31 would rank at 94th percentile since 1999. While we expected USD/CAD to move higher after the July Bank of Canada (BoC) meeting ([FX Watch: 12 July 2023](#)), the magnitude of the rally is still a bit of a surprise. In light of the latest price actions, we provide an updated CAD view for various horizons.

- **Short-term:** August USD/CAD rally has overshoot vs cross-asset factors and we expect the pair to normalize lower over the next month.
- **Medium-term:** USD/CAD could see higher volatility as market expectation converges to our economist's view of an earlier BoC rate cut than Fed in 2024.
- **Long-term:** Purchasing power parity (PPP) and real effective exchange rate (REER) drivers still support the CAD vs USD in the long run; relatively more prudent fiscal measure than US also favors CAD.

Exhibit 8: We slightly revised USD/CAD forecast higher until Q2 2024

Current vs previous USD/CAD forecast



Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Update USD/CAD forecast path

On the back of the latest views, we had slightly revised the USD/CAD forecast path in the [August World At a Glance publication](#). Specifically, we see the pair decline to 1.33 by the end of Q3. Amid the transition phase from a rate hike to rate cut cycle for both the BoC and Fed, we would expect the USD/CAD downtrend to stall with heightened volatility around 1.32 between Q4 23 to Q1 24. More material CAD appreciation would likely occur later in 2024 eventually to 1.26 by year-end 2024, in our view. The risk is a sharper growth downturn in Canada to the point of decoupling from a resilient US economy.

CNY - Stress tests and the fear of floating

Claudio Piron

Merrill Lynch (Singapore)

claudio.piron@bofa.com

Full Report: [Asia FI & FX Strategy Viewpoint: CNY - Stress tests and the fear of floating](#)
29 August 2023

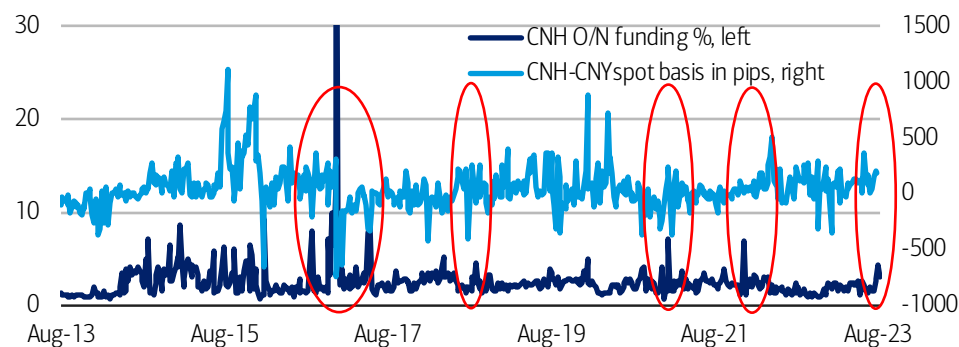
The question is how long can the PBoC pursue this FX policy defense?

When compared against previous episodes of defending USD/CNY, such as October/November last year, 2017 and 2015, it seems to us that the PBOC could sustain this for another month. This is because that during these episodes measures of FX stress such as CNY-CNH basis, volatility curve inversion, portfolio outflows and FX reserve drawdowns were more significant.

For example, the recent CNY-CNH basis wide was 378pips on August 16 compared with the peak of 636pips last October or 1110pips in 2015 – see the highlighted episodes encircled in red in Exhibit 9. Another notable difference is that during the 2015 mini-devaluation, China FX reserves fell by USD1tn, this time around they have hardly moved. This brings us back to the bigger issue of macro policy sustainability.

Exhibit 9: As CNH spot trades weaker than onshore CNY, risks of a CNH funding squeeze rise

One way to bring excess CNH weakness back in line with onshore CNY is to squeeze o/n funding



Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

The macro dimension of FX policy sustainability

China's central bank FX reserves currently stand at USD3.1trillion as of July. Moreover, they have been remarkably stable, despite a sizeable and sustained current account surplus during the COVID years and sizable portfolio and capital outflows.

One reason for this is that China's foreign asset accumulation is occurring less on the central banks' balance sheet and more on the corporate balance sheet, both banks and non-banks. This is not necessarily peculiar to China.

A current account surplus reflects excess savings, which can be recycled or invested overseas by a country's central bank, insurance and pension sector or corporate sector. Indeed, the insurance, pension fund and sovereign wealth funds are a key source of overseas investments in Korea, Singapore, and Taiwan.

In China's case, it is the corporate sector that is increasingly investing overseas in direct investments due to a combination of slower growth in China and incentives to drive the Belt Road Initiative. Consequently, the net foreign assets of China's banks that extend FX loans and FX deposits held by the private and corporate sector that support this balance sheet have risen considerably and are having an increasing influence on USD/CNY dynamics.

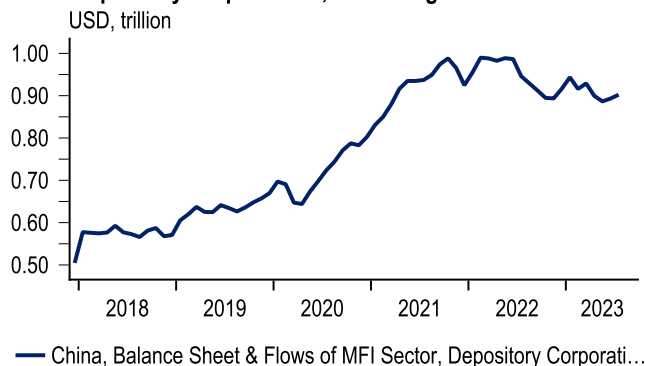


Exhibit 10 shows the Net Foreign Assets of banks, which grew from USD500bn in 2018 to a peak of USD989bn in May 2022. Since this peak they have fallen by USD87bn. Also of note are FX deposits – see Exhibit 11, which reached a peak of USD1.05tn and have subsequently fallen by USD228bn. It is this supply and selling of USD, rather than the central bank FX intervention and USD selling that appears to be supporting CNY until July at least. This compares with the behavior of EM Asia ex-China FX deposits that saw a much more modest drawdown in 2023 and modest rise in so far in 2023.

Exhibit 10: China banks' net foreign assets peak at \$989bn in May 2022

They have since fallen by USD87bn to USD902bn as of July 2023

Other Depository Corporations, Net Foreign Assets

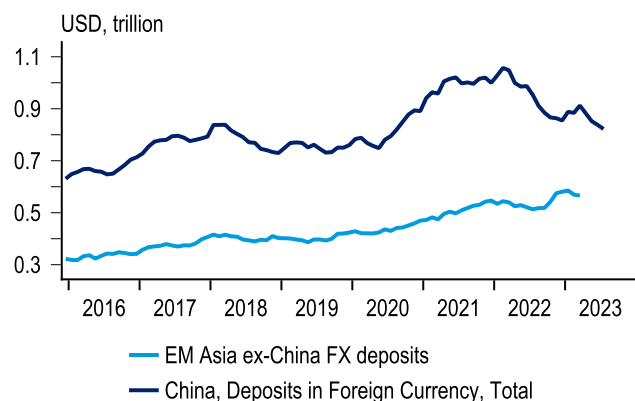


Source: Macrobond, People's Bank of China

BofA GLOBAL RESEARCH

Exhibit 11: FX deposits in China peak at \$1.05tn Feb 2022

China FX deposits fall USD228bn to USD822bn as of July '23. By contrast, the rest of EM Asia excluding China FX deposits continue to hold up



Source: Macrobond, People's Bank of China, Asian central banks

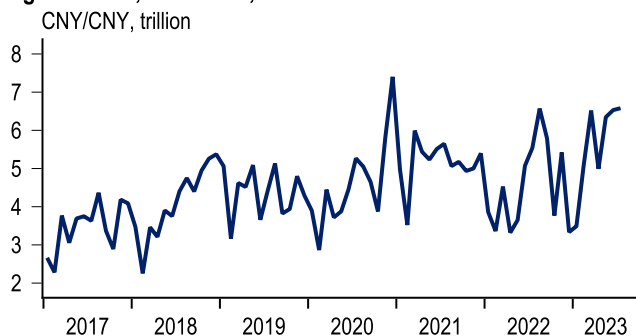
BofA GLOBAL RESEARCH

We will need to examine the release of August FX reserve data that will come due on September 7, to gauge whether the People's Bank of China (PBoC) is resorting to a more interventionist stance. Daily data on USD/CNY volumes from China Foreign Exchange Trading system no longer appear available. However, taking the monthly time series on FX volumes and adjusting for the rising trend in FX volumes over time, does suggest FX volumes were usually high in July and likely to have sustained in August – see Exhibit 12 and Exhibit 13. This would be more suggestive that direct central bank intervention to manage volatility is picking up.

Exhibit 12: China FX volumes show trend growth with spikes

Typically, spikes in FX volumes coincide with suspected FX intervention

China, FX Trading Volume, China FX Trade System, Spot, USD against CNY, Base Rate, CNY

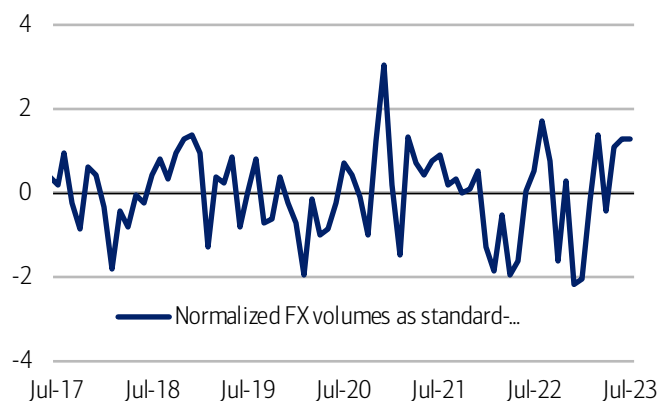


Source: BofA Global Research, People's Bank of China, State Administration for Foreign Exchange

BofA GLOBAL RESEARCH

Exhibit 13: Detrending series in exhibit 3 and scaling standard deviation

July shows relatively high FX volumes, indicative of possible smoothing



Source: BofA Global Research, People's Bank of China, State Administration for Foreign Exchange

BofA GLOBAL RESEARCH

The CNH cover for North Asian macro

Chun Him Cheung, CFA
Merrill Lynch (Hong Kong)
chunhim.cheung@bofa.com

David Hauner, CFA >>
MLI (UK)
david.hauner@bofa.com

Full Report: [Emerging Insight: The CNH cover for North Asian macro 30 August 2023](#)

Defending the USDCNH level becomes counterproductive, after a certain point.

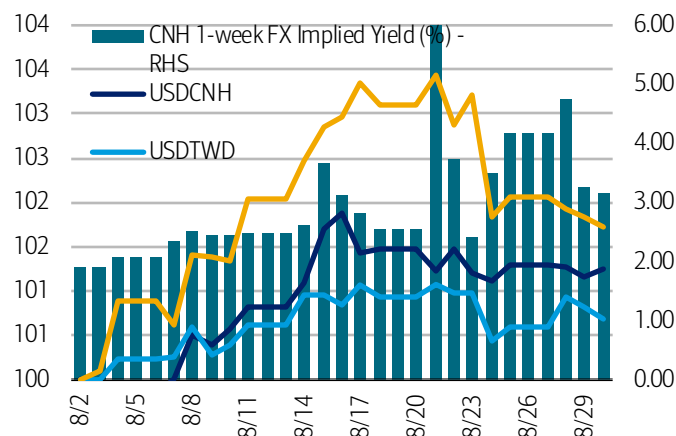
In [Asia FI & FX Strategy Viewpoint: CNY - Stress tests and the fear of floating 29 August 2023](#), we estimated that Chinese monetary authorities can likely sustain this level of CNH funding squeeze for another month. Moreover, we note that focus on defending the USDCNH can result in overall appreciation of the CFETS RMB Index and will make the RMB less competitive against a majority of China's trading partners. A stronger FX will make matters relating to export competitiveness and imported deflation worse.

The impact of the CNH funding squeeze is felt across North Asia region.

The CNH funding squeeze also has implications for FX pairs across North Asia. It is unlikely to be a coincidence that when 1-week CNH implied yield squeezed to 6%, USDKRW reached the recent high of 1,342, meanwhile USDTWD touched 31.96 and declined thereafter (**Exhibit 14**). The CNH funding squeeze was the PBoC's signal to stop the latest RMB depreciation trend, and we are seeing the result of RMB stability reverberate across North Asia region. It is unclear whether additional FX support can break the year-to-date correlation between USDCNH and Chinese equity price (**Exhibit 15**). However, at the very least, the latest round of CNH funding squeeze has stopped the RMB depreciation trend, coupled with the PBoC's actions, in addition to using rhetoric, to fight one-way speculative flows.

Exhibit 14: CNH funding cost and USD-Asia

USDKRW began to decline once CNH funding cost spiked

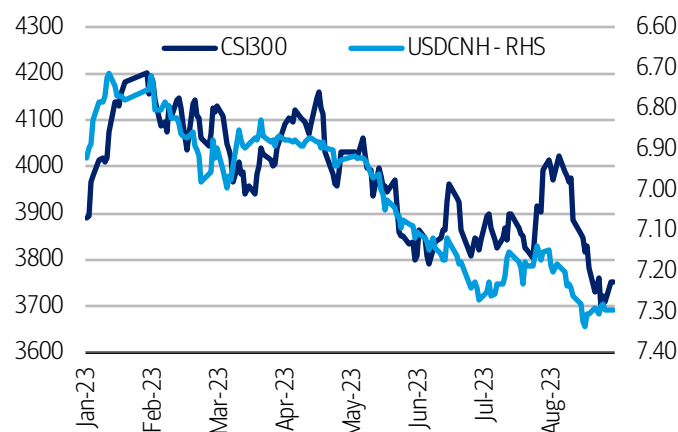


Source: Bloomberg

BofA GLOBAL RESEARCH

Exhibit 15: USDCNH and Chinese equity prices

Year-to-date, the RMB has followed the negative sentiment of Chinese equity prices



Source: Bloomberg

BofA GLOBAL RESEARCH

Expect USDKRW to stabilize and decline if USDCNH remains stable

Our current USDKRW forecast is 1,340 in 3Q and 1,330 by year-end. Stabilization in CNH sentiment will naturally support KRW valuation, especially if the support arrives in the form of increased expected Chinese demand for Korean exports. Moreover, the strong beat in revenue expectation for Nvidia's 2Q results (see: [NVIDIA Corporation: Transformative AI pipeline, still in early stages, 23 August 2023](#)) is supporting global valuation for semiconductor companies (SOX Index) and can bring additional net equity inflow into Korea. In the past two weeks, we have seen net portfolio flow to Korea stabilize, mirroring the improvement in the performance of the SOX Index (**Exhibit 16**).



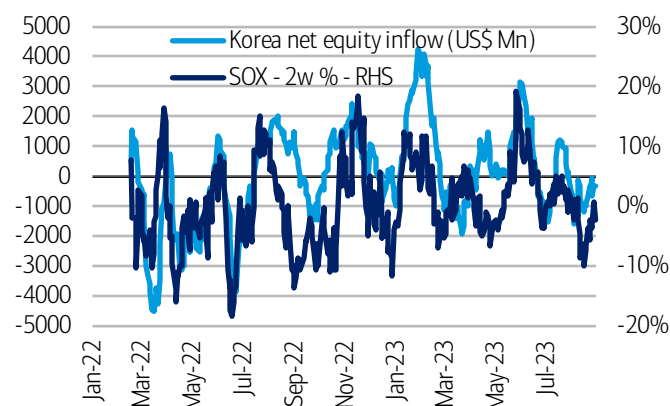
Expect better trade and current account outlook for Korea for the remainder of 2023. Exhibit 17 shows that Korea's 2022 trade balance sharply declined due to rising commodity prices and weak demand from China. In 2023, year-to-date, the trade balance has improved and has returned to a surplus and the KRW nominal effective exchange rate (NEER) has also broadly strengthened. We think this trend of current account improvement can continue.

Three reasons to expect stronger current account for Korea in 4Q

Firstly, our Korea electronics team expects dynamic random access memory (DRAM) prices to stabilize and recover in September, despite the ongoing macro risk from China. Secondly, in the service sector, we expect some improvement in inbound tourist numbers in Korea, as mainland China lifted the ban on group tours to Korea. Lastly, our commodities team does not see upside pressure for global commodity prices with oil averaging at US\$80/barrel, relative to the current spot price of US\$84/barrel. These three reasons make us more optimistic on the Korean won on a trade-weighted basis.

Exhibit 16: Equity portfolio flow to Korea (US\$ Bn)

Net equity portfolio flow to Korea mirrors performance of the SOX Index

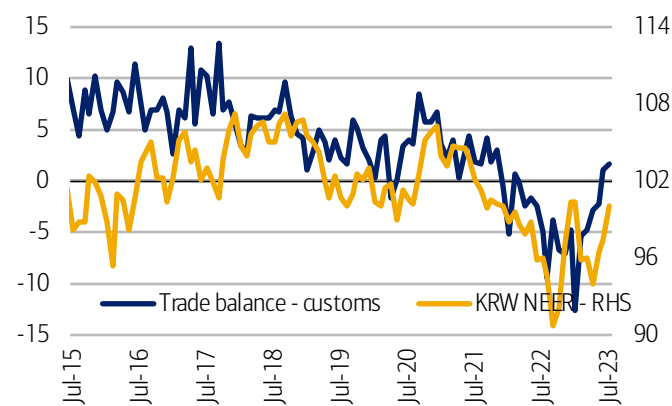


Source: Bloomberg

BofA GLOBAL RESEARCH

Exhibit 17: Korea's trade balance (US\$ Bn) and the KRW NEER

The KRW NEER is beginning to rebound along with Korea's trade balance



Source: Bloomberg

BofA GLOBAL RESEARCH

Expect continued weakness in the Taiwanese dollar. Despite Taiwan sharing similar tech exposure as Korea from both the current and financial account perspective, overall, we retain a bearish outlook on the Taiwanese dollar. A primary reason for our bearish stance on the Taiwanese dollar remains the sell-off in US long-end duration and the strong inflows it has drawn from Taiwan's bond exchange-traded funds (ETFs). With the USD broadly stable and high US rates, we see little alternative for the Taiwanese lifers but to continue buying US bonds (and increasingly on FX-unhedged basis and through the bond ETFs). This will likely continue to result in strong spot USDTWD buying flows and keep USDTWD elevated.

Gou enters the race for Taiwan's Presidential election. Moreover, on 28 August, Terry Gou, the owner of FoxConn, announced his intention to run for Taiwan's Presidential election in January 2024. Gou will be the fourth major candidate to enter the race. We believe uncertainty and noise around the election have likely increased along with the number of popular candidates. In [FM Alpha: Six reasons to buy USDTWD vol 01 August 2023](#), we entered into a 6-month 25-delta call option on USDTWD. We continue to like holding topside exposure on USDTWD in 4Q23 and 1Q24 during the period immediately prior to the election. USDTWD 6-month 25-delta risk reversal, the price of USDTWD call versus put, has declined and has nearly returned to levels prior to the outbreak of the Ukraine war indicating that calls on USDTWD are not overly expensive right now. A risk to the trade is further rally in global tech stocks, resulting in stronger inflow into Taiwanese equities and lower USDTWD.

EEMEA FX: Monetary cycles matter

Mikhail Liluashvili

MLI (UK)

mikhail.liluashvili@bofa.com

David Hauner, CFA >>

MLI (UK)

david.hauner@bofa.com

Full Report: [Emerging Insight: EEMEA FX: local monetary cycles also matter 28 August 2023](#)

Go long EEMEA FX when the stance is tight and on hold

Many different factors drive EEMEA FX; the main ones (such as global nominal growth and the broader dollar) are outside of the control of local central banks. We focus only on local monetary policy, given that all EEMEA central banks are done hiking. The NBH is already cutting, and the NBP and the CNB are likely to start soon.

Our Chart of the Day shows the risk-adjusted returns of EEMEA FX along different phases of the monetary policy cycle. On average, the best performance of EEMEA FX is observed during on-hold periods with a tight monetary policy stance. We explain this by: 1) the carry of EEMEA FX in these periods tends to be higher than usual; and 2) rates stability makes carry trades attractive. Moreover, sometimes central banks in our region hike rates as the exchange rate comes under pressure because of external factors (for example, Hungary last year and Israel this year). As a result, a central bank on hold might be an indication that external pressures on the exchange rate are not strong.

Cutting cycles not always worse than hiking for EEMEA FX

Counterintuitively, Sharpe ratios for being long EEMEA FX during hiking cycles are not as high as one might have thought, even for DM-like currencies such as the CZK. We think this is often due to central banks hiking because the exchange rate sells off, raising inflation expectations.

Sharpe ratios for being long the CZK and PLN during cutting cycles are higher than during tightening cycles, while for HUF and ZAR they are lower and negative during the cutting cycles. There is not much difference for the ILS.

During an on-hold and easy stance for monetary policy, Sharpe ratios for being long EEMEA FX are zero, except for the ILS where they are positive. We believe the ILS is a unique currency in our region because the Bol was keeping the policy rate at the zero lower bound, while the current account and FDI were driving the ILS stronger.

Note the results of our simulations are sensitive to assumptions regarding the cut-off periods and real neutral rates which are taken from central banks' estimations.

Implications: ZAR and CZK are likely to be supported

In South Africa, we are moving to an on-hold and tight stance, which is usually associated with a stronger rand. We remain bullish the rand (see our report: [The EEMEA FX Strategist: Buying opportunity approaching after August correction 22 August 2023](#)) and will be looking to re-enter our short USDZAR position at more attractive levels.

At the same time, the Sharpe ratio for being long the CZK remains positive even during cutting cycles, which means that being short CZK is a premature trade. As a result, Czechia is more a rates play for us, as the cutting cycle is approaching. We keep a FRA flattener trade in Czechia (current: -2.31, open: -2.44). For more details, see: [EM Alpha: Cuts are around the corner: enter a FRA flattener in Czechia 16 August 2023](#). The risk to the trade is a delay in the CNB's easing cycle. At the same time, we should be careful with HUF carry trades as the Sharpe ratio for being long the HUF during cutting cycles is negative. This is one of the reasons that we closed our short EURHUF trade recently ([EM Alpha: Close short EURHUF and short USDZAR ahead of Jackson Hole 23 August 2023](#)).



Exhibit 18-Exhibit 19 show different historical monetary policy regimes for EEMEA countries.

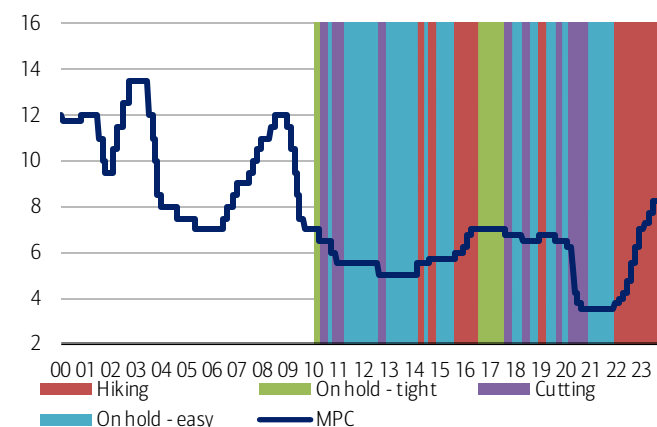
Characterizing the monetary policy cycle

To explore the conditional performance of different asset classes, we define four different stages of the monetary policy cycle. We identify monetary policy rate (MPR) regimes in two steps. First, we define the "hiking" and "cutting" phases. The "hiking" stages are periods during which the policy rate has gone up over the previous 6.5 weeks. Conversely, "cutting" phases are periods during which the policy rate has gone down over the same period. We use 6.5 weeks for those central banks that tend to have eight monetary policy meetings each year. If there are 11 meetings a year, then we use a 4.5-week cut-off. The cut-off is effectively the number of weeks in the year (52) divided by the number of meetings that each central bank has in a year on average.

Second, we define all non-hiking and non-cutting periods as "on-hold" regimes and divide them into easy and tight. "On-hold tight (easy)" phases are periods during which the central bank has not raised nor lowered interest rates in the last 6.5 weeks (or in any other cut-off threshold depending on the number of meetings), and the monetary policy rate is above (below) neutral.

Exhibit 18: South Africa

We remain bullish ZAR as the monetary policy stance is tight

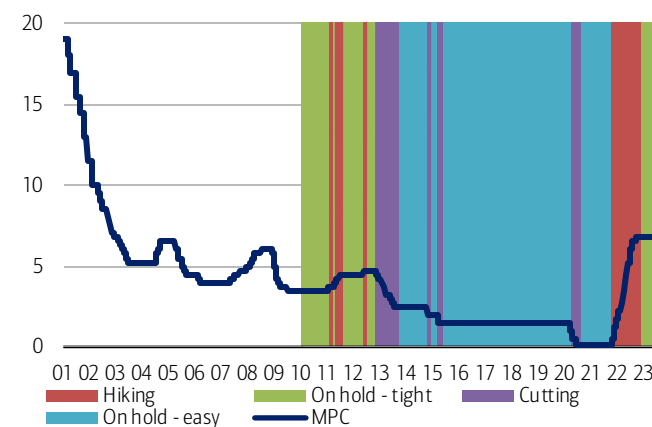


Source: Bloomberg, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 19: Poland

We are moving into the cutting phase

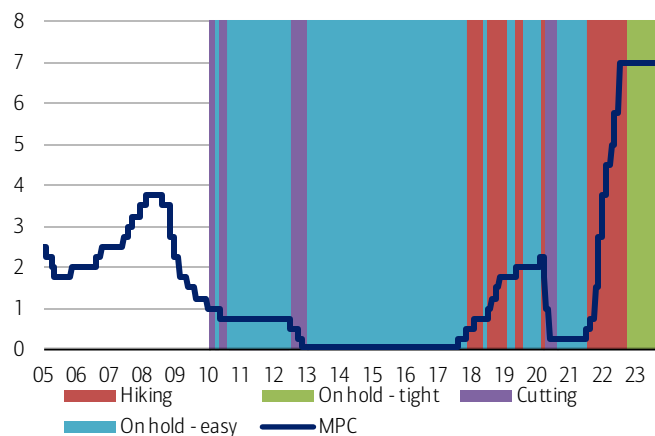


Source: Bloomberg, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 20: Czechia

The Sharpe ratio of being long CZK is positive during the cutting phase

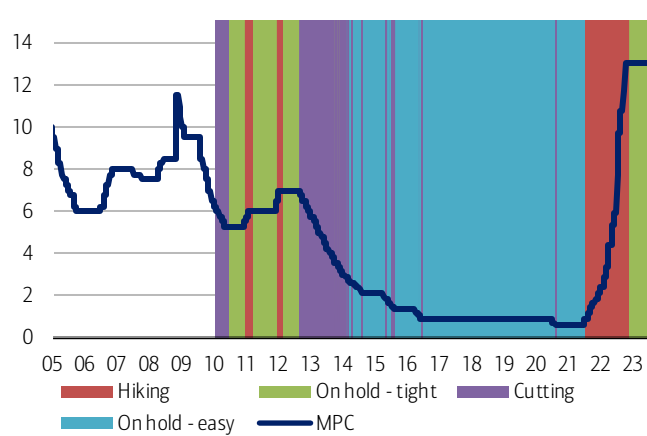


Source: Bloomberg, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 21: Hungary

Be careful of being long HUF during the cutting phase



Source: Bloomberg, BofA Global Research

BofA GLOBAL RESEARCH

LatAm Monthly FX Overview

Christian Gonzalez Rojas
BofAS
christian.gonzalezrojas@bofa.com

Antonio Gabriel
BofAS
antonio.gabriel@bofa.com

Full Report: [The LatAm FX Strategist: LatAm Monthly FX Overview 28 August 2023](#)

Summary of FX views

The LatAm FX rally earlier in the quarter has been left behind. Higher US rates are a headwind for carry trades, more so as some LatAm central banks started cutting rates and others soon may follow. Underperformance from China is yet another headwind given its negative impact on commodity prices and their impact on the terms of trade.

ARS (bearish*): Net FX reserves continue in negative territory and the parallel gap widened despite the recent devaluation. We see USD/ARS at 615 by 2023-end.

BRL (neutral*): With the fiscal framework approved, focus has shifted to revenue measures and BCB's easing cycle. We see USD/BRL at 4.90 by 2023-end.

CLP (bearish*): CLP depreciated following the easing cycle but paired back losses on the back of more government USD selling. We see USD/CLP at 870 by 2023-end.

COP (bearish*): An early start of Colombia's easing cycle may put pressure on COP. Yet, we believe there are significant upside risks. We see USD/COP at 4,350 by 2023-end.

MXN (bearish*): Our revisions favoring a soft-landing in the US and Mexico suggest MXN resilience may continue, but risks remain. We see USD/MXN at 18.0 by 2023-end.

PEN (bearish*): We expect BCRP to begin cutting rates in October, with risks for an earlier start, which should put pressure on PEN. We see USD/PEN at 3.78 by 2023-end.

UYU (neutral*): UYU has appreciated amid upcoming FDI flows, sovereign rating upgrades and a resilient macro. We see USD/UYU at 38.1 by 2023-end.

DOP (neutral*): A substantial economic slowdown, coupled with a fiscal deterioration and monetary policy easing represent risks. We see USD/DOP at 57.0 by 2023-end.

Exhibit 22: BofA quarter-end FX forecasts

We are bearish ARS, neutral BRL, bearish CLP, bearish COP, bearish MXN, bearish PEN

Currency	View/bias	Forecasts			
		3Q '23	4Q '23	1Q '24	2Q '24
USD/ARS (official)	bearish*	363	615	775	962
USD/ARS (blue chip)	--	780	1076	1201	1443
USD/BRL	neutral*	4.90	4.90	4.95	5.00
USD/CLP	bearish*	870	870	873	875
USD/COP	bearish*	4,200	4,350	4,400	4,450
USD/DOP	neutral*	56.8	57.0	57.4	57.7
USD/MXN	bearish*	17.5	18.0	18.3	19.0
USD/PEN	bearish*	3.75	3.78	3.80	3.82
USD/UYU	neutral*	37.4	38.1	38.7	39.0

Source: BofA Global Research

BofA GLOBAL RESEARCH

Vol Insights

Howard Du, CFA

BofAS

yuhao.du@bofa.com

Vadim Iaralov

BofAS

vadim.iaralov@bofa.com

- 3m G10 implied vols broadly declined last week except for GBP.
- Rising vol amid falling UK PMIs forms bearish breakout signals for GBP.

GBP in focus for vol market on weak UK PMI

Over the past week, 3m USD/G10 FX implied vols all declined except for GBP (Exhibit 23). The average decline was 0.3 vols, but demand for GBP optionality increased on the back of weaker than expected August UK preliminary PMI. On top of the downside surprise, all 3 UK PMI indices are now below 50, showing the UK economy is broadly contracting (Exhibit 24). Our economists have persistently flagged stagflationary risks for the UK; latest economic data further supports our view that the Bank of England terminal rate level is likely below what the rates market currently prices ([UK Viewpoint: 26 July 2023](#)).

Exhibit 23: 3m implied vols broadly declined last week except for GBP

G10 FX 3m implied vol change

Tenor
☐ 1M
☒ 3M
☐ 6M
☐ 1Y

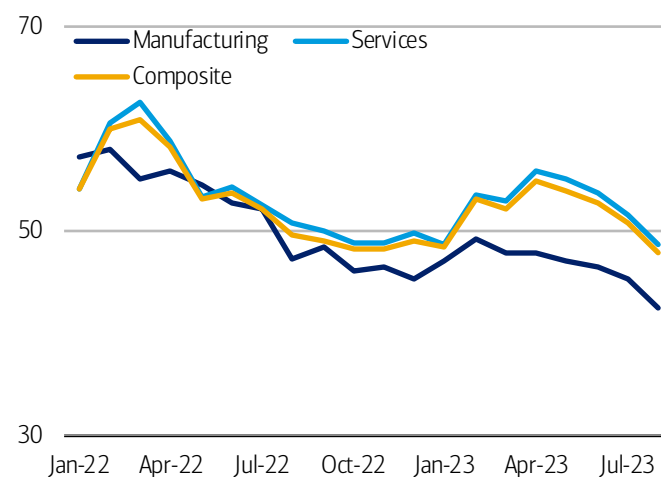
Category	Currency	Implied Vol	1-day Vol Change	1-week Vol Change	1-mth Vol Change	3-mth Vol Change
G10	EURUSD	6.8	-0.18	-0.21	0.20	-0.03
	USDJPY	9.0	0.11	-0.41	-0.51	-1.30
	GBPUSD	8.0	-0.11	0.15	0.13	-0.12
	AUDUSD	10.4	-0.13	-0.31	0.34	0.10
	NZDUSD	10.3	-0.14	-0.43	0.19	0.03
	USDCAD	5.9	-0.12	-0.16	0.04	-0.26
	USDCHE	7.2	-0.03	-0.24	-0.42	0.10
	USDNOK	13.1	-0.18	-0.48	0.39	0.30
	USDSEK	11.4	-0.18	-0.20	0.26	0.51

Source: BofA Global Research. For more details see [BofA FX Vol Dashboard](#).

BofA GLOBAL RESEARCH

Exhibit 24: All 3 PMI indices are now below 50 for the UK

UK PMI



Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Bearish continuation FX quant signals for GBP

GBPUSD broke below 100d SMA on the back of the PMI disappointment last week. As we discussed in [FX Quant Insight](#) earlier this week, we see bearish continuation signals for GBP on the back of rising vol and short-dated put skew, with the strongest convictions against the USD and CHF. The risk is UK August final PMI revising higher in the coming week.



Technical Strategy

Paul Ciana, CMT

Technical Strategist

BofAS

paul.ciana@bofa.com

- The USD stalled near its YTD highs into Jackson Hole. Data on Aug 29 is starting a selloff. In the short-term we favor lower USD vs CAD, JPY, ILS and INR. After, we assess whether to buy USD vs CHF, GBP, CLP and PLN.
- We remain on watch in 2H23 for the US unemployment rate to rise above 3.7% to confirm a technical bottom and confirm USD weakness in September.
- For more, please see the [FX Technical Advantage \(29 August 2023\)](#).

View: The greenback turning red

At the index level (Bloomberg US dollar index (BBDXY)), price action this year continues to swing sharply sideways and fails to sustain any new/brief highs or lows. We think Tuesday's (August 29th) price action following US data (such as Job Openings and Labor Turnover Survey (JOLTS)) marks the start of a USD correction back into the YTD range. We're sympathetic to the fact that the BBDXY broke above trend line resistance and 200d Simple Moving Average (SMA) resistance in the August rally (Chart 1). Therefore we present four bearish USD charts to engage in the short-term now including vs CAD, JPY, ILS and INR. And four USD charts where the correction may be bought into vs CHF, GBP, CLP and PLN. Non-farm payrolls (NFP) on September 1st is technically a key event if the U-rate exceeds 3.7%.

Four charts to consider selling the USD

A correction in the USD looks ideal to express vs CAD, JPY, ILS and INR while Tuesday's USD high point holds as resistance.

1. USDCAD: Is overbought, turning down from resistance in the 1.36s, the oil dip is stabilizing with a golden cross, spot could mean revert into the 1.33s.
2. USDJPY: Bearish reversal day at resistance, bearish divergences from RSI and MACD, correction beginning and could test the daily cloud in the 142s.
3. USDILS: Testing resistance at the top of its channel, mean reversion to 3.70/3.68 looks possible alongside a USD selloff.
4. USDINR: Already back to mid-range, however a broad USD correction likely pushes it back to the lows of the range at 82.00-81.80.

Four charts to consider buying USD dip

Depending on how much the USD sells off, some charts look as if the dip may be bought. We monitor setups over the next couple weeks to consider dip buying on:

1. USDCHF: Wedge bottom completed in August rally/breakout. First a dip to about .8690 then potential for a rally to .9050.
2. GBPUSD: Head and shoulders top pattern and breaks of support make it look like the trend has turned down with 1.24/1.21 possible while below 1.2820.
3. USDCLP: Summer bottom, bullish range breakouts and golden cross favor buying the dip for upside to 885/900.
4. USDPLN: Looks like USDCHF, however a dip to 4.00 and then a rip higher could form the right shoulder of a head and shoulders bottom with upside to 4.30.

JOLTS started USD weakness, will NFP on Sept 1 too?

We remain on watch for the US unemployment rate to rise above 3.7%. This would favor a technical bottom for the cycle. The initial reaction is probably bearish for the USD as less hikes or cuts may be priced in.

BBDXY

Data continues to drive the dollar, a correction lower is beginning

The cumulative market reaction to US data through Tuesday August 29th as well as the headlines from Jackson hole are turning the USD lower. Emphasis on Tuesday's data which produced bearish engulfing patterns on many charts. We look to US non-farm payroll data on Friday Sept 1 to add confirmation of a softening labor market to favor more tactical USD weakness in September before reconsidering longs. For more, please see the [FX Technical Advantage: The greenback turning red 29 August 2023](#).

Chart 1: Bloomberg US dollar index – daily chart

August 29th signaled the start of a USD correction back into its range. RSI divergence and a bearish MACD cross support this. The August rally produced two bullish trend breaks (trend line and 200d SMA were broken). It remains to be seen if this dip is shallow, bought and new highs follow in Q4 or if the USD revisits the lows, again. Ending Tuesday August 29th it looks like a turn down is beginning and in the short term we follow the USD lower such as to 1225.



BBDXY Index (Bloomberg Dollar Spot Index) BC: BBDXY Daily Daily 01JAN2022-31AUG2023

Copyright© 2023 Bloomberg Finance L.P.

31-Aug-2023 08:40:56

Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Trade Recommendations G10

Michalis Rousakis

MLI (UK)

michalis.rousakis@bofa.com

Exhibit 25: Open trades G10

Current G10 FX trade recommendations. Prices as of 31-Aug-2023.

Trade Description	Open Date	Entry Price	Expiry Date	Current Price	Rationale	Risks
Buy 1y 25-delta AUD/USD risk reversal (call strike 0.7391, put strike 0.6049)	17-Nov-22	Zero cost (spot ref: 0.6693, vol refs: 12.253 and 14.892)	17-Nov-23	0.6488	AUD stands to benefit from broad-based USD sell-off and China reopening in 2023	Prolonged systemic shock to the US equity market in 2023

BofA GLOBAL RESEARCH

Source: BofA Global Research

Exhibit 26: G10 Closed trades

Recently closed trades in G10 FX. Note: Zero-cost options trade recommendations expiring worthless are also marked in green.

Trade Description	Entry date	Entry Level	Target	Stop	Close date	Level closed
Sell 2m 0.89 USD/CHF put	23/06/23	1.0126% USD (spot ref: 0.8967, vol ref: 6.44)			24/08/23	0.8845
Sell 2m 25-delta OTM EUR/GBP put	23/06/23	Receiving 0.31% EUR.s(trike ref 0.8472, vol ref 5.584, spot ref 0.8592, expiry August 24)			03/08/23	Spot ref 0.86470, vol ref :4.214)
Buy USD/SEK via 3m collar (buy 3m 10.73 call and sell 3m 9.8960 put)	19/07/23	Zero cost (spot ref: 10.2724, vol refs: 12.296% and 10.202%, expiry Oct 19)			01/09/23	1.3316% USD (spot ref: 10.6109, vol refs: 11.777% and 10.377%)
Buy 3m USD/CHF vol swap	14/04/23	8.15%	9.5%	7.5%	14/07/23	Accumulated 7.6319%
Sell 1y 1.04 EUR/USD put	11/04/23	1.1445% EUR (spot ref: 1.0857, vol ref: 8.517)			23/06/23	0.5238% EUR (spot ref: 1.0960, vol ref: 7.42)
Buy NOK/SEK	28/04/23	0.9638	1.06	0.9280	21/06/23	1.0045
Enter 2m/6m USD/CAD put spread (sell 2m 1.40 put, buy 6m 1.40 put)	13/03/23	0.96% USD (spot ref: 1.3782, vol refs: 8.123/7.877)			07/06/23	1.66% USD (spot ref: 1.3381)
Buy AUD/CAD	14/04/23	0.9028		0.89	25/05/23	0.89
Sell 3m 1.00/1.02905 EUR/CHF call spread	08/03/23	Receive 0.4784% EUR (spot ref: 0.9935, vol refs: 5.651/6.606)			20/04/2023	-0.04% EUR (spot ref 0.98085, vol refs: 5.376/8.971)
Buy 4m USD/JPY KI put with American barrier level at 131.50 and strike 128.11	23/01/23	1.8629% USD (spot ref: 130.27, vol ref: 12.312)			24/03/23	1.93% USD (spot ref 130.00,, vol ref: 13.85)
Buy 3m 10.2466/10.70 USD/SEK call spread	20/01/23	1.4689% USD (spot ref: 10.2971, vol refs: 12.752 and 13.307)			07/03/23	2.82% USD (spot ref: 10.7008, vol refs: 12.18/11.943)
Buy 1m 1.00075 EURCHF call	30/01/23	0.8031% EUR (spot ref: 1.00192, vol ref: 7.154)			24/02/23	0.99218
Buy 3 GBP/USD collar (sell 1.2850 call and buy 1.2000 put)	24/01/23	0.19% GBP (spot ref: 1.2400, vol refs: 9.4% and 11.0%)			17/02/23	1.6128% GBP (spot ref: 1.1991, vol refs: 9.961 and 10.287)
Sell USD/NOK via 6m collar (buy 6m 9.0227 put and sell 6m 10.10 call)	11/08/22	Zero cost (spot ref: 9.5063, vol refs: 12.481% and 13.890%)			13/02/23	10.0955
Sell EUR/CHF via 3m collar (long 0.98 put and short 1.00 call)	01/11/22	0.5619% EUR (spot ref: 0.9879)			01/02/23	Spot ref: 0.99833
Buy 3m6m 25D USD/JPY put calendar spread (short 3m 25D OTM USD/JPY put, long 6m USD/JPY put; strike 132.70)	17/11/22	1.0185% USD (spot ref: 140.1, vol refs: 12.510 and 11.553)			17/01/23	1.8764% USD (spot ref 128.25, vol refs 15.591 and 13.069)
Buy AUD/NZD via 3m ATMF 1.0608/1.09 call spread	12/12/22	0.9638% AUD (spot ref: 1.0582, vol refs: 6.721% and 6.28%)			13/01/23	1.9730% AUD (spot ref: 1.0917, vol refs 6.929% and 6.504%)
Sell GBP/USD via 3m 1x2 1.1107/1.0405 put spread	11/10/22	0.6470% GBP (spot ref: 1.1085, vol refs: 16.89% and 19.09%)			11/01/23	Spot ref: 1.2146
Buy NOK/SEK	03/10/22	1.0234 (raised stop/loss to 1.0380 at spot level 1.0592)	1.11	0.9880 (new stop: 1.0380)	7/12/22	1.0380
Buy USD/JPY	03/11/22	147.3	155	143.4	10/11/22	143.4
Buy 3m EURGBP implied via vol swap	15/08/22	35.6116% EUR premium (expiry Nov 15, 2022, atm strike for 6.67%, spot ref 0.84388)			08/09/22	Strike 8.336%
Buy USD/CAD via 3m ERKO call (strike 1.2903, barrier 1.35, exp. Oct 18)	18/07/22	0.6614% USD (spot ref 1.2901, vol ref 8.61%)			22/08/22	0.9027% USD (spot ref 1.3039)
Buy 6m EUR/NOK collar (buy 6m 9.6886 put and sell 6m 10.50 call, exp. Jan 30)	28/07/22	Zero cost (spot ref 9.9241, buy 6m 9.6886 put for 1.3512% EUR with vol ref 9.789%; sell 6m 10.50 call for the same price with vol ref 10.778%)			11/08/22	0.6488% EUR (vol refs 9.555% and 10.765%, spot ref 9.8154)
Buy EUR/CHF via 6m ATMF 1.05592/1.08 call spread	04/02/22	0.8832% EUR (spot ref: 1.05689, vol refs: 5.166% and 5.036%)			04/08/22	Spot ref: 0.97860
Buy USD/JPY RKO call (strike 136, barrier 141)	07/07/22	0.3603% USD (spot ref 135.91, vol ref 12.2%, expiry)			21/07/22	0.6833% USD (spot ref 138.70, vol ref 10.01%)
Short CHF/JPY via 3m 130/126 put spread	30/03/22	0.90% CHF (spot ref: 131.425)			30/06/22	Spot ref: 142.118
Buy 1y EUR/GBP vol swap	29-Jun-21	Net 0 premium at 6.212% vol (spot ref: 0.85995, atm vol ref : 5.915%)			29/06/22	EURGBP accrued 5.737% vol
Buy NOK/SEK	23/03/22	1.0743	1.13	1.0380	12/05/22	1.0380
Buy AUD/USD	29/04/22	0.7150	0.76	0.6950	10/05/22	0.6950

EM Alpha Trade Recommendations

David Hauner, CFA >>
MLI (UK)

Claudio Piron
Merrill Lynch (Singapore)

Exhibit 27: Open trades

EM Alpha Trade Recommendations

FX	Entry date	Entry level	Current level	Target	Stop	Notional	Rationale/ Time horizon	Risks
1yr USD/CNH vol swap at 6.175%	8/2/23	6.175	6.250	-	5.00	10	The rising use of CNY for cross-border trade settlement should help to cut FX risk for local corporates and reduce the inflation pass-through from imported goods.	Weaker USD environment is typically associated with lower FX volatility and a more favorable EM FX environment
Long KZT vs USD & EUR	8/2/2023	479	491.3	455	493.5	10	High carry + low global rates vol + tax period = long KZT. Official FX sales should also be supportive for the KZT.	High carry + low global rates vol + tax period = long KZT. Official FX sales should also be supportive for the KZT
Buy 6m 25-delta call option for USDTWD	8/1/2023	31.6	31.6	31.9	29.8	10	We like having a tail risk hedge to USDTWD, covering the period around Taiwan's Presidential election.	China announcing material fiscal stimulus
Short RONCZK	5/24/2023	4.77	4.87	4.53	4.92	10	RON is overvalued + current account in Romania is not improving (unlike the peers) => weaker RON; hawkish CNB => stronger CZK	The risk is crowded positioning in Czechia and delayed depreciation in Romania
Long EURPLN	5/17/2023	4.5	4.47	4.725	4.365	10	RSI+ positioning + potential pre-election cut support the trade	The risk is a better-than-expected backdrop for EEMEA FX
Buy USD/PEN	5/4/2023	3.72	3.69	3.8	3.68	10	We see an attractive risk-reward of fading the recent PEN rally. This is also consistent with risks flagged by our economics team that, the bar for elections might not be as high.	Hawkish BCRP surprise in guidance.
Buy 1y USDHKD 7.7670/7.8500 call spread	3/29/2023	Spot 7.8499	7.84	7.7670/7.8500	-	10	Forward points in HKD is very low given the outperformance of HK vs US rates following the increase in US banking sector risk	aggressive rally in US rates that significantly closes the HONIA-SOFR spread.
Long INRUSD	1/18/2023	81.65	82.73	80	83	10	We recommend adding long INR against USD on expectations of a catch-up move in INR vs the region on better risk sentiment	Risks to the trade come from further spike in the oil prices in the near term, and higher USD demand from importer

Source: BofA Global Research. Spot values as of Aug 31, 2023. Bid/offer spreads accounted for in initiation and dosing levels. Does not reflect tax withholdings or any investment advisory fees. Past performance is no guarantee of future results. A complete performance record is available on request. Inception date – July 4, 2016. Initiation and dosing prices are priced as of trade publication. For additional discussion of baseline views, valuation and risks to open trades, please see links to detailed reports.

BofA GLOBAL RESEARCH

Exhibit 28: Closed trades

EM Alpha Trade Recommendations

Trade description	Entry date	Entry Level	Target	Stop	Notional	Close date	Level closed
Short USDZAR through a call spread	8/9/2023	19.06 (for USDZAR)	-	-	10	23-Aug-23	0.57
Short EUR/HUF	8/4/2023	391.7	372.1	403.5	10	23-Jul-23	383.4
Sell CNH/CLP	6/15/2023	111.7	108	113.6	10	4-Aug-23	118
Short EURZAR	3/1/23	19.35	18.43	22	10	27-Jul-23	19.42
Buy a 3m digital call option on USDZAR	6/20/2023	23	17	18.7	10	5-Jul-23	35.5
Long USDILS	6/15/2023	3.58	108	113.6	10	5-Jul-23	3.73
Short USDZAR	3/23/2023	18.16	17	18.7	10	15-Jun-23	18.2
Sell MXN/CLP	5/22/23	44.85	42.00	47.00	10	15-Jun-23	46.37
Long USDPLN	3/8/2023	4.43	4.65	4.0	10	15-Jun-23	4.12
Sell USD/BRL	5/31/2023	5.08	4.85	5.2	10	13-Jun-23	4.85
Long KZT vs basket of USD and EUR via 3m NDF	5/25/2023	494.1	470	512	10	1-Jun-23	470
Sell EUR/BRL	23/Feb/23	5.43	5.20	5.80	10	18-May-23	5.34
Short PLN/HUF	4/25/2023	82	77.9	84.5	10	15-May-23	81.95
Pay PHP NDF Points	3/8/2023	12	25	5	10	9-May-23	16
Long EUR/CZK	27-May-22	24.7	25.9	22.5	10	4-May-23	23.5
Sell CNH/MXN	26-Oct-22	2.72	2.50	2.90	10	24-Apr-23	2.60
SELL USDZMW VIA 9M NDF	3/6/23	22.05	20	24	10	11-Apr-23	18.53
Sell ILSCZK	3/14/2023	6.12	5.6	6.5	10	11-Apr-23	5.9
Short PLN/HUF	3/17/2023	84	79.8	86.5	10	29-Mar-23	81.3
Long USD/IDR 12m NDF	11/18/2022	31.17	-	29.45	10	27-Mar-23	29.37
Short USDIDR	2/16/2023	15110	14700	15400	10	8-Mar-23	15400
short ILSZAR	2/2/2023	81.65	4.74	5.14	10	13-Feb-23	4.98
Long USDILS	19-Oct-22	3.54	3.72	3.2	10	13-Feb-23	3.542
Short CZK/HUF	1/18/2023	16.53	15.7	17.05	10	13-Feb-23	16.25
Long KZT vs an equal basket of USD and EUR (3m NDF)	1/16/2023	494.9	470.2	509.7	10	15-Feb-23	468
Short EURGEL (using 3m NDF)	20-Oct-22	2.714	2.94	2.53	10	1-Feb-23	2.53
Buy USDZAR	1/19/2023	17.23	17.86	16.85	10	1-Feb-23	14
Short INR vs long IDR	11/18/2022	191.9	183	188	10	18-Jan-23	184.7
Sell CAD/MXN 3m forward	29-Sep-22	15.1	14	15.5	10	18-Jan-22	14.68
Sell EUR/MXN 3m forward	29-Sep-22	20.06	19.00	21.00	10	18-Jan-22	19.72
Long USDZAR	15-Nov-22	17.3	18	16.9	10	1-Dec-22	17.6
Short EURKZT using 3m NDF	4-Oct-22	493	468.37	507.8	10	31-Oct-22	478
Short PLN/HUF	23-Sep-22	85.3	81	93	10	10-Nov-22	85
Long THB NEER	17-Jun-21	112.27	112.27	111	10	14-Oct-22	100.6
Long THB	19-Nov-21	32.60	30.0	34	10	14-Oct-22	38.08
Long 1x2 3M USD call, PHP put spread	16-Mar-22	52.975	53.5 / 54.75	-	10	14-Oct-22	53.48
Long USD/ZAR	13-Sep-22	17.35	18.2	16.8	10	26-Sep-22	18.00
Colombia: sell COP against basket of oil-currencies	22-Nov-21	100	104	97	10	2-Jun-22	102
Long USDILS	16-Aug-22	3.28	3.45	3.18	10	8-Sep-22	3.42
Long USDZAR	16-Aug-22	16.4	17.2	15.8	10	2-Sep-22	17.3
Long USD call, 6M CNH put spread	16-Mar-22	6.38	6.5/6.7	-	10	25-Aug-22	6.8168
Long KZT vs an equal basket of USD and EUR	2-Aug-22	504.1	479	519	10	19-Aug-22	494
Long ILS vs an equally weighted basket of USD and EUR	21-Jan-22	3.38	3.21	3.46	16.2	10-Aug-22	3.32
Long USD/ZAR	20-May-22	15.85	16.64	16.2	16.2	7-Jul-22	16.69
Sell USDZMW 6M NDF	12-Apr-22	18.25	16.8	-	10	7-Jul-22	16.80
Sell USD/PLN	2/3/2022	4.01	3.7	4.5	10	7-Jul-22	4.65
Short PLN/HUF	7-Jun-22	84.7	80.5	87.3	10	29-Jun-22	84.1
Long MYR/PHP	28-Apr-22	11.95	12.4	11.7	10	20-Jun-22	11.95
Colombia: sell COP against basket of oil-currencies	22-Nov-21	100	104	97	10	2-Jun-22	102
Long EUR/HUF	16-May-22	384.75	16.4	14	10	26-May-22	394
Buy CLP/COP	03-May-22	4.68	16.4	14	10	20-May-22	4.85
Sell USD/ZAR	10-May-22	16.1	15.3	16.4	10	19-May-22	15.83
Buy USD/ZAR	17-Jan-22	15.38	16.4	14	10	5-May-22	16.02

Note: Bid/offer spreads accounted for in entry and dosing levels. Does not reflect tax, withholdings or any investment advisory fees. Past performance is no guarantee of future results. A complete performance record is available on request. Inception date – July 4, 2016. For additional discussion on baseline views, valuation and risks to closed trades, please see links to the relevant reports. Trade recommendations are highlighted green when the closing value is greater than the entry value and red when the closing value is less than or equal to the entry value. **Source:** BofA Global Research

BofA GLOBAL RESEARCH

World At A Glance Projections

Exhibit 29: G10 FX Forecasts

Forecasts as of 31-Aug-2023

	Spot	Sep-23	YE 2023	Mar-24	Jun-24	Sep-24	YE 2024
G3							
EUR-USD	1.09	1.08	1.05	1.07	1.10	1.15	1.15
USD-JPY	146	147	150	146	142	138	135
EUR-JPY	159	159	158	156	156	159	155
Dollar Bloc							
USD-CAD	1.35	1.33	1.32	1.32	1.30	1.28	1.26
AUD-USD	0.65	0.63	0.64	0.66	0.68	0.71	0.71
NZD-USD	0.60	0.59	0.59	0.60	0.62	0.64	0.64
Europe							
EUR-GBP	0.86	0.85	0.85	0.85	0.85	0.85	0.85
GBP-USD	1.27	1.27	1.24	1.26	1.29	1.35	1.35
EUR-CHF	0.96	0.98	0.98	0.99	0.99	1.00	1.00
USD-CHF	0.88	0.91	0.93	0.93	0.90	0.87	0.87
EUR-SEK	11.84	12.00	11.70	11.40	11.20	11.00	10.70
USD-SEK	10.89	11.11	11.14	10.65	10.18	9.57	9.30
EUR-NOK	11.57	11.30	11.00	10.80	10.70	10.50	10.30
USD-NOK	10.64	10.46	10.48	10.09	9.73	9.13	8.96

Source: BofA Global Research, Bloomberg. Note: Forecasts as of 31-Aug-2023.

BofA GLOBAL RESEARCH

Exhibit 30: EM FX Forecasts

Forecasts as of 31-Aug-2023

	Spot	Sep-23	YE 2023	Mar-24	Jun-24	Sep-24	YE 2024
Latin America							
USD-BRL	4.88	4.90	4.90	4.95	5.00	5.05	5.10
USD-MXN	16.73	17.50	18.00	18.30	19.00	19.30	19.50
USD-CLP	851.92	870	870	873	875	878	880
USD-COP	4,091.73	4,200	4,350	4,400	4,450	4,500	4,550
USD-ARS	350.02	363	615	775	962	1,130	1,271
USD-PEN	3.69	3.75	3.78	3.80	3.82	3.84	3.86
Emerging Europe							
EUR-PLN	4.47	4.49	4.55	4.51	4.48	4.44	4.40
EUR-HUF	380.29	385	380	378	375	373	370
EUR-CZK	24.08	24.20	24.30	24.20	24.20	24.10	24.00
USD-RUB	-	73.00	75.00	76.00	77.00	78.00	80.00
USD-ZAR	18.76	19.00	18.00	17.60	17.50	17.00	17.50
USD-TRY	26.67	28.00	31.00	33.00	36.00	38.00	41.00
EUR-RON	4.94	4.95	5.03	5.05	5.08	5.10	5.13
USD-ILS	3.80	3.73	3.67	3.60	3.55	3.50	3.45
Asian Bloc							
USD-KRW	1,322.65	1,340	1,330	1,305	1,280	1,210	1,190
USD-TWD	31.86	31.90	31.70	31.50	31.20	30.30	30.10
USD-SGD	1.35	1.36	1.35	1.34	1.32	1.31	1.30
USD-THB	35.00	35.50	34.00	33.50	33.00	32.50	32.00
USD-HKD	7.84	7.83	7.83	7.83	7.80	7.80	7.78
USD-CNY	7.26	7.40	7.20	7.10	7.00	6.80	6.70
USD-IDR	15,230.00	15,100	14,900	14,800	14,700	14,600	14,500
USD-PHP	56.60	57.50	56.50	56.50	56.00	56.00	55.50
USD-MYR	4.64	4.70	4.66	4.62	4.58	4.56	4.54
USD-INR	82.79	83.00	82.00	81.00	80.50	80.00	80.00

Source: BofA Global Research, Bloomberg. Note: Forecasts as of 31-Aug-2023.

BofA GLOBAL RESEARCH

Options Risk Statement

Options and other related derivatives instruments are considered unsuitable for many investors. **Options strategy is by definition governed by a finite duration. The most severe risks associated with general options trading are total loss of capital invested and delivery/assignment risk, all which can occur in a short period.**

Analyst Certification

I, Adarsh Sinha, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

Disclosures

Important Disclosures

Due to the nature of the market for derivative securities, 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.

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.

Due to the nature of technical 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.

BofA Global Research personnel (including the analyst(s) responsible for this report) receive compensation based upon, among other factors, the overall profitability of Bank of America Corporation, including profits derived from investment banking. The analyst(s) responsible for this report may also receive compensation based upon, among other factors, the overall profitability of the Bank's sales and trading businesses relating to the class of securities or financial instruments for which such analyst is responsible.

BofA Securities fixed income analysts regularly interact with sales and trading desk personnel in connection with their research, including to ascertain pricing and liquidity in the fixed income markets.

Other Important Disclosures

Prices are indicative and for information purposes only. Except as otherwise stated in the report, for any recommendation in relation to an equity security, the price referenced is the publicly traded price of the security as of close of business on the day prior to the date of the report or, if the report is published during intraday trading, the price referenced is indicative of the traded price as of the date and time of the report and in relation to a debt security (including equity preferred and CDS), prices are indicative as of the date and time of the report and are from various sources including BofA Securities trading desks.

The date and time of completion of the production of any recommendation in this report shall be the date and time of dissemination of this report as recorded in the report timestamp.

This report may refer to fixed income securities or other financial instruments that may not be offered or sold in one or more states or jurisdictions, or to certain categories of investors, including retail investors. Readers of this report are advised that any discussion, recommendation or other mention of such instruments is not a solicitation or offer to transact in such instruments. Investors should contact their BofA Securities representative or Merrill Global Wealth Management financial advisor for information relating to such instruments.

Rule 144A securities may be offered or sold only to persons in the U.S. who are Qualified Institutional Buyers within the meaning of Rule 144A under the Securities Act of 1933, as amended. SECURITIES OR OTHER FINANCIAL INSTRUMENTS DISCUSSED HEREIN MAY BE RATED BELOW INVESTMENT GRADE AND SHOULD THEREFORE ONLY BE CONSIDERED FOR INCLUSION IN ACCOUNTS QUALIFIED FOR SPECULATIVE INVESTMENT.

Recipients who are not institutional investors or market professionals should seek the advice of their independent financial advisor before considering information in this report in connection with any investment decision, or for a necessary explanation of its contents.

The securities or other financial instruments discussed in this report may be traded over-the-counter. Retail sales and/or distribution of this report may be made only in states where these instruments are exempt from registration or have been qualified for sale.

Officers of BofA or one or more of its affiliates (other than research analysts) may have a financial interest in securities of the issuer(s) or in related investments.

This report, and the securities or other financial instruments discussed herein, may not be eligible for distribution or sale in all countries or to certain categories of investors, including retail investors.

Refer to [BofA Global Research policies relating to conflicts of interest](#).

"BofA Securities" includes BofA Securities, Inc. ("BofA") and its affiliates. Investors should contact their BofA Securities representative or Merrill Global Wealth Management financial advisor if they have questions concerning this report or concerning the appropriateness of any investment idea described herein for such investor. "BofA Securities" is a global brand for BofA Global Research.

Information relating to Non-US affiliates of BofA Securities and Distribution of Affiliate Research Reports:

BofA and/or Merrill Lynch, Pierce, Fenner & Smith Incorporated ("MLPF&S") may in the future distribute, information of the following non-US affiliates in the US (short name: legal name, regulator): Merrill Lynch (South Africa): Merrill Lynch South Africa (Pty) Ltd., regulated by The Financial Service Board; MLI (UK): Merrill Lynch International, regulated by the Financial Conduct Authority (FCA) and the Prudential Regulation Authority (PRA); BofA SE (France): BofA Securities Europe SA is authorized by the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and regulated by the ACPR and the Autorité des Marchés Financiers (AMF). BofA Securities Europe SA ("BofA SE") with registered address at 51, rue La Boétie, 75008 Paris is registered under no. 842 602 690 RCS Paris. In accordance with the provisions of French Code Monétaire et Financier (Monetary and Financial Code), BofA SE is an établissement de crédit et d'investissement (credit and investment institution) that is authorised and supervised by the European Central Bank and the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and regulated by the ACPR and the Autorité des Marchés Financiers. BofA SE's share capital can be found at www.bofam.com/BofASEdisclaimer; BofA Europe (Milan): Bank of America Europe Designated Activity Company, Milan Branch, regulated by the Bank of Italy, the European Central Bank (ECB) and the Central Bank of Ireland (CBI); BofA Europe (Frankfurt): Bank of America Europe Designated Activity Company, Frankfurt Branch regulated by BaFin, the ECB and the CBI; BofA Europe (Madrid): Bank of America Europe Designated Activity Company, Sucursal en España, regulated by the Bank of Spain, the ECB and the CBI; Merrill Lynch (Australia): Merrill Lynch Equities (Australia) Limited, regulated by the Australian Securities and Investments Commission; Merrill Lynch (Hong Kong): Merrill Lynch (Asia Pacific) Limited, regulated by the Hong Kong Securities and Futures Commission (HKSF); Merrill Lynch (Singapore): Merrill Lynch (Singapore) Pte Ltd, regulated by the Monetary Authority of Singapore (MAS); Merrill Lynch (Canada): Merrill Lynch Canada Inc, regulated by the Investment Industry Regulatory Organization of Canada; Merrill Lynch (Mexico): Merrill Lynch Mexico, SA de CV, Casa de Bolsa, regulated by the Comisión Nacional Bancaria y de Valores; Merrill Lynch (Argentina): Merrill Lynch Argentina SA, regulated by Comisión Nacional de Valores; BofA Japan: BofA Securities Japan Co., Ltd., regulated by the Financial Services Agency; Merrill Lynch (Seoul): Merrill Lynch International, LLC Seoul Branch, regulated by the Financial Supervisory Service; Merrill Lynch (Taiwan): Merrill Lynch Securities (Taiwan) Ltd., regulated by the Securities and Futures Bureau; BofA India: BofA Securities India Limited, regulated by the Securities and Exchange Board of India (SEBI); Merrill Lynch (Israel): Merrill Lynch Israel Limited, regulated by Israel Securities Authority; Merrill Lynch (DIFC): Merrill Lynch International (DIFC Branch), regulated by the Dubai Financial Services Authority (DFSA); Merrill Lynch (Brazil): Merrill Lynch S.A. Corretora de Títulos e Valores Mobiliários, regulated by Comissão de Valores Mobiliários; Merrill Lynch KSA Company: Merrill Lynch Kingdom of Saudi Arabia Company, regulated by the Capital Market Authority.

This information: has been approved for publication and is distributed in the United Kingdom (UK) to professional clients and eligible counterparties (as each is defined in the rules of the FCA and the PRA) by MLI (UK), which is authorized by the PRA and regulated by the FCA and the PRA - details about the extent of our regulation by the FCA and PRA are available from us on request; has been approved for publication and is distributed in the European Economic Area (EEA) by BofA SE (France), which is authorized by the ACPR and regulated by the ACPR and the AMF; has been considered and distributed in Japan by BofA Japan, a registered securities dealer under the Financial Instruments and Exchange Act in Japan, or its permitted affiliates; is issued and distributed in Hong Kong by Merrill Lynch (Hong Kong) which is regulated by HKSF; is issued and distributed in Taiwan by Merrill Lynch (Taiwan); is issued and distributed in India by BofA India; and is issued and distributed in Singapore to institutional investors and/or accredited investors (each as defined under the Financial Advisers Regulations) by Merrill Lynch (Singapore) (Company Registration No 198602883D). Merrill Lynch (Singapore) is regulated by MAS. Merrill Lynch Equities (Australia) Limited (ABN 65 006 276 795), AFS License 235132 (MLEA) distributes this information in Australia only to 'Wholesale' clients as defined by s.761G of the Corporations Act 2001. With the exception of Bank of America N.A., Australia Branch, neither MLEA nor any of its affiliates involved in preparing this information is an Authorised Deposit-Taking Institution under the Banking Act 1959 nor regulated by the Australian Prudential Regulation Authority. No approval is required for publication or distribution of this information in Brazil and its local distribution is by Merrill Lynch (Brazil) in accordance with applicable regulations. Merrill Lynch (DIFC) is authorized and regulated by the DFSA. Information prepared and issued by Merrill Lynch (DIFC) is done so in accordance with the requirements of the DFSA conduct of business rules. BofA Europe (Frankfurt) distributes this information in Germany and is regulated by BaFin, the ECB and the CBI. BofA Securities entities, including BofA Europe and BofA SE (France), may outsource/delegate the marketing and/or provision of certain research services or aspects of research services to other branches or members of the BofA Securities group. You may be contacted

by a different BofA Securities entity acting for and on behalf of your service provider where permitted by applicable law. This does not change your service provider. Please refer to the [Electronic Communications Disclaimers](#) for further information.

This information has been prepared and issued by BofAS and/or one or more of its non-US affiliates. The author(s) of this information may not be licensed to carry on regulated activities in your jurisdiction and, if not licensed, do not hold themselves out as being able to do so. BofAS and/or MLPF&S is the distributor of this information in the US and accepts full responsibility for information distributed to BofAS and/or MLPF&S clients in the US by its non-US affiliates. Any US person receiving this information and wishing to effect any transaction in any security discussed herein should do so through BofAS and/or MLPF&S and not such foreign affiliates. Hong Kong recipients of this information should contact Merrill Lynch (Asia Pacific) Limited in respect of any matters relating to dealing in securities or provision of specific advice on securities or any other matters arising from, or in connection with, this information. Singapore recipients of this information should contact Merrill Lynch (Singapore) Pte Ltd in respect of any matters arising from, or in connection with, this information. For clients that are not accredited investors, expert investors or institutional investors Merrill Lynch (Singapore) Pte Ltd accepts full responsibility for the contents of this information distributed to such clients in Singapore.

General Investment Related Disclosures:

Taiwan Readers: Neither the information nor any opinion expressed herein constitutes an offer or a solicitation of an offer to transact in any securities or other financial instrument. No part of this report may be used or reproduced or quoted in any manner whatsoever in Taiwan by the press or any other person without the express written consent of BofA Securities. This document provides general information only, and has been prepared for, and is intended for general distribution to, BofA Securities clients. Neither the information nor any opinion expressed constitutes an offer or an invitation to make an offer, to buy or sell any securities or other financial instrument or any derivative related to such securities or instruments (e.g., options, futures, warrants, and contracts for differences). This document is not intended to provide personal investment advice and it does not take into account the specific investment objectives, financial situation and the particular needs of, and is not directed to, any specific person(s). This document and its content do not constitute, and should not be considered to constitute, investment advice for purposes of ERISA, the US tax code, the Investment Advisers Act or otherwise. Investors should seek financial advice regarding the appropriateness of investing in financial instruments and implementing investment strategies discussed or recommended in this document and should understand that statements regarding future prospects may not be realized. Any decision to purchase or subscribe for securities in any offering must be based solely on existing public information on such security or the information in the prospectus or other offering document issued in connection with such offering, and not on this document.

Securities and other financial instruments referred to herein, or recommended, offered or sold by BofA Securities, are not insured by the Federal Deposit Insurance Corporation and are not deposits or other obligations of any insured depository institution (including, Bank of America, N.A.). Investments in general and, derivatives, in particular, involve numerous risks, including, among others, market risk, counterparty default risk and liquidity risk. No security, financial instrument or derivative is suitable for all investors. Digital assets are extremely speculative, volatile and are largely unregulated. In some cases, securities and other financial instruments may be difficult to value or sell and reliable information about the value or risks related to the security or financial instrument may be difficult to obtain. Investors should note that income from such securities and other financial instruments, if any, may fluctuate and that price or value of such securities and instruments may rise or fall and, in some cases, investors may lose their entire principal investment. Past performance is not necessarily a guide to future performance. Levels and basis for taxation may change.

Futures and options are not appropriate for all investors. Such financial instruments may expire worthless. Before investing in futures or options, clients must receive the appropriate risk disclosure documents. Investment strategies explained in this report may not be appropriate at all times. Costs of such strategies do not include commission or margin expenses.

BofA Securities is aware that the implementation of the ideas expressed in this report may depend upon an investor's ability to "short" securities or other financial instruments and that such action may be limited by regulations prohibiting or restricting "shortselling" in many jurisdictions. Investors are urged to seek advice regarding the applicability of such regulations prior to executing any short idea contained in this report.

This report may contain a trading idea or recommendation which highlights a specific identified near-term catalyst or event impacting a security, issuer, industry sector or the market generally that presents a transaction opportunity, but does not have any impact on the analyst's particular "Overweight" or "Underweight" rating (which is based on a three month trade horizon). Trading ideas and recommendations may differ directionally from the analyst's rating on a security or issuer because they reflect the impact of a near-term catalyst or event.

Foreign currency rates of exchange may adversely affect the value, price or income of any security or financial instrument mentioned in this report. Investors in such securities and instruments effectively assume currency risk.

BofAS or one of its affiliates is a regular issuer of traded financial instruments linked to securities that may have been recommended in this report. BofAS or one of its affiliates may, at any time, hold a trading position (long or short) in the securities and financial instruments discussed in this report.

BofA Securities, through business units other than BofA Global Research, may have issued and may in the future issue trading ideas or recommendations that are inconsistent with, and reach different conclusions from, the information presented herein. Such ideas or recommendations may reflect different time frames, assumptions, views and analytical methods of the persons who prepared them, and BofA Securities is under no obligation to ensure that such other trading ideas or recommendations are brought to the attention of any recipient of this information.

In the event that the recipient received this information pursuant to a contract between the recipient and BofAS for the provision of research services for a separate fee, and in connection therewith BofAS may be deemed to be acting as an investment adviser, such status relates, if at all, solely to the person with whom BofAS has contracted directly and does not extend beyond the delivery of this report (unless otherwise agreed specifically in writing by BofAS). If such recipient uses the services of BofAS in connection with the sale or purchase of a security referred to herein, BofAS may act as principal for its own account or as agent for another person. BofAS is and continues to act solely as a broker-dealer in connection with the execution of any transactions, including transactions in any securities referred to herein.

Copyright and General Information:

Copyright 2023 Bank of America Corporation. All rights reserved. iQDatabase® is a registered service mark of Bank of America Corporation. This information is prepared for the use of BofA Securities clients and may not be redistributed, retransmitted or disclosed, in whole or in part, or in any form or manner, without the express written consent of BofA Securities. BofA Global Research information is distributed simultaneously to internal and client websites and other portals by BofA Securities and is not publicly-available material. Any unauthorized use or disclosure is prohibited. Receipt and review of this information constitutes your agreement not to redistribute, retransmit, or disclose to others the contents, opinions, conclusion, or information contained herein (including any investment recommendations, estimates or price targets) without first obtaining express permission from an authorized officer of BofA Securities.

Materials prepared by BofA Global Research personnel are based on public information. Facts and views presented in this material have not been reviewed by, and may not reflect information known to, professionals in other business areas of BofA Securities, including investment banking personnel. BofA Securities has established information barriers between BofA Global Research and certain business groups. As a result, BofA Securities does not disclose certain client relationships with, or compensation received from, such issuers. To the extent this material discusses any legal proceeding or issues, it has not been prepared as nor is it intended to express any legal conclusion, opinion or advice. Investors should consult their own legal advisers as to issues of law relating to the subject matter of this material. BofA Global Research personnel's knowledge of legal proceedings in which any BofA Securities entity and/or its directors, officers and employees may be plaintiffs, defendants, co-defendants or co-plaintiffs with or involving issuers mentioned in this material is based on public information. Facts and views presented in this material that relate to any such proceedings have not been reviewed by, discussed with, and may not reflect information known to, professionals in other business areas of BofA Securities in connection with the legal proceedings or matters relevant to such proceedings.

This information has been prepared independently of any issuer of securities mentioned herein and not in connection with any proposed offering of securities or as agent of any issuer of any securities. None of BofAS or any of its affiliates or their research analysts has any authority whatsoever to make any representation or warranty on behalf of the issuer(s). BofA Global Research policy prohibits research personnel from disclosing a recommendation, investment rating, or investment thesis for review by an issuer prior to the publication of a research report containing such rating, recommendation or investment thesis.

Any information relating to the tax status of financial instruments discussed herein is not intended to provide tax advice or to be used by anyone to provide tax advice. Investors are urged to seek tax advice based on their particular circumstances from an independent tax professional.

The information herein (other than disclosure information relating to BofA Securities and its affiliates) was obtained from various sources and we do not guarantee its accuracy. This information may contain links to third-party websites. BofA Securities is not responsible for the content of any third-party website or any linked content contained in a third-party website. Content contained on such third-party websites is not part of this information and is not incorporated by reference. The inclusion of a link does not imply any endorsement by or any affiliation with BofA Securities. Access to any third-party website is at your own risk, and you should always review the terms and privacy policies at third-party websites before submitting any personal information to them. BofA Securities is not responsible for such terms and privacy policies and expressly disclaims any liability for them.

All opinions, projections and estimates constitute the judgment of the author as of the date of publication and are subject to change without notice. Prices also are subject to change without notice. BofA Securities is under no obligation to update this information and BofA Securities ability to publish information on the subject issuer(s) in the future is subject to applicable quiet periods. You should therefore assume that BofA Securities will not update any fact, circumstance or opinion contained herein.

Certain outstanding reports or investment opinions relating to securities, financial instruments and/or issuers may no longer be current. Always refer to the most recent research report relating

to an issuer prior to making an investment decision.

In some cases, an issuer may be classified as Restricted or may be Under Review or Extended Review. In each case, investors should consider any investment opinion relating to such issuer (or its security and/or financial instruments) to be suspended or withdrawn and should not rely on the analyses and investment opinion(s) pertaining to such issuer (or its securities and/or financial instruments) nor should the analyses or opinion(s) be considered a solicitation of any kind. Sales persons and financial advisors affiliated with BofAS or any of its affiliates may not solicit purchases of securities or financial instruments that are Restricted or Under Review and may only solicit securities under Extended Review in accordance with firm policies.

Neither BofA Securities nor any officer or employee of BofA Securities accepts any liability whatsoever for any direct, indirect or consequential damages or losses arising from any use of this information.

Research Analysts

Europe

Athanasios Vamvakidis

FX Strategist
MLI (UK)
+44 020 7995 0279
athanasios.vamvakidis@bofa.com

Kamal Sharma

FX Strategist
MLI (UK)
+44 20 7996 4855
ksharma32@bofa.com

Michalis Rousakis

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

US

John Shin

FX Strategist
BoFAS
+1 646 855 9342
joong.s.shin@bofa.com

Paul Ciana, CMT

Technical Strategist
BoFAS
+1 646 855 6007
paul.ciana@bofa.com

Vadim Iaralov

FX Strategist
BoFAS
+1 646 855 8732
vadim.iaralov@bofa.com

Howard Du, CFA

G10 FX Strategist
BoFAS
+1 646 855 6586
yuhao.du@bofa.com

Pac Rim

Adarsh Sinha

FX Strategist
Merrill Lynch (Hong Kong)
+852 3508 7155
adarsh.sinha@bofa.com

Shusuke Yamada, CFA

FX/Rates Strategist
BoFAS Japan
+81 3 6225 8515
shusuke.yamada@bofa.com

Global Emerging Markets

Claudio Piron

Emerging Asia FI/FX Strategist
Merrill Lynch (Singapore)
+65 6678 0401
claudio.piron@bofa.com

Trading ideas and investment strategies discussed herein may give rise to significant risk and are not suitable for all investors. Investors should have experience in relevant markets and the financial resources to absorb any losses arising from applying these ideas or strategies.