Global FX weekly

When carry rules

The View

Carry dynamics are driving USDJPY and USDCNH to fresh highs despite policymakers leaning against the move this week. Intervention is a risk but conditions are very different from 2022. We expect further gains for both currency pairs. We discuss EM FX performance so far this year and explore lessons learned.

USD and technological progress

Our longer-term USD-negative view consistent with soft US productivity growth since early 70s. Markets hoping for recent technological progress to result in higher productivity. Late 1990s only episode of elevated productivity and USD soared for years.

Do rates still matter for FX?

FX struggling to disentangle short-term risk of higher terminal rates vs. medium term recession risk. Muted FX response to recent hawkish surprises and decoupling from rates vol. Still, G10 FX largely consistent with historical betas to front end rate differentials.

Phase 3 of JPY's structural decline in 2024?

No Fed cuts 2024 may lead to 3rd phase JPY sell-off. 1st = policy divergence (2022); 2nd = yen carry trade (2023); 3rd = households' rebalancing (2024). If households lose faith in JPY, offshore investment can accelerate, challenging policymakers.

PHP

Confidence driven by PHP stability despite stronger USD. Moderate PHP weakness tolerable to ease financial conditions.

MYR

MYR's weakness on correlation to CNY is justified by economic linkages; having almost fully unwound the re-opening optimism.

LatAm

We find MXN is almost 20% overvalued relative to global factors and that most of this overvaluation is explained by carry.

Vol Insights

6m AUDUSD implied vol back to levels last seen in 2021. FX vol PCA heatmap shows value at current level with 6m AUD vol below fair value.

Technicals

We expect a USD bounce back rally in July, a move lower in yields and eventual breakdown in oil. We discuss 13 pressure points to know in Q3.

30 June 2023

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Timestamp: 30 June 2023 12:00AM EDT

Our medium-term views

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Exhibit 1: Our medium-term views
G10 and EM FX medium-term views

G10	We now look for broader USD upside in the near term, extending our EURUSD 1.05 mid-year forecast to the rest of the year, as we still have to see a landing of the US economy that will bring inflation to a sustained path towards the target. But we keep our longer-term end-2024 forecast at 1.15, as we also see the USD overvalued vs. equilibrium estimates. We now look for even more and more prolonged JPY weakness this year on FX carry and as Japan's basic balance of payments becomes more balanced. We revised our EURGBP profile lower, now finding risks more balanced in the coming months. We continue to favor AUD, CAD 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 also like long THB against USD or CNY. In EEMEA we like long EUR/PLN as we position for a pre-election rate cut. In LatAm we stay neutral BRL and we close our long MXN/CNH position. 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

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Our key forecasts

Exhibit 2: Key BofA G10 and EM FX forecasts
Forecasts as of 29-June-2023

(EOP)	YE 2021	YE 2022	1Q23	3Q23	YE 2023	YE 2024
EUR/USD	1.14	1.07	1.08	1.05	1.05	1.15
USD/JPY	115.08	131.12	132.86	147.00	145.00	125.00
GBP/USD	1.35	1.21	1.23	1.24	1.24	1.35
AUD/USD	0.73	0.68	0.67	0.67	0.69	0.75
USD/CNY	6.36	6.90	6.87	7.40	7.20	6.70
USD/BRL	5.58	5.29	5.06	4.95	5.00	5.10
USD/INR	74.34	82.74	82.18	83.00	82.00	80.00
USD/ZAR	15.94	17.04	17.80	19.00	18.00	17.50

Source: BofA Global Research. Forecasts as of 29-June-2023.

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What we particularly like right now

Exhibit 3: Our latest G10 and EM FX trade recommendations
What we particularly like right now

G10	
Sell 2m 0.89 USD/CHF put	Our relative monetary policy outlook suggests USDCHF spot is overly stretched.
Sell 2m 25-delta EUR/GBP put	Tail risks of UK harder landing have increased, and we now see risks to GBP as more balanced than before.
Buy 1y 25-delta AUD/USD risk reversal	AUD stands to benefit from broad-based USD sell-off and China reopening in 2023.
EM	
Sell CNH/CLP	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.
Short USD/IDR	We enter long IDR on improving fundamentals, improving balance of payments and FX regulatory measures to support IDR. Key risk to trade is higher US inflation and Fed hawkishness.
Sell MXN/CLP	We like to sell MXN/CLP to express a bearish MXN view while limiting the carry cost.

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

Calls at a glance

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Thematic calls

- **Near-term USD upside:** No US landing means we now look for broader USD upside near term. We extend our 1.05 EURUSD mid-year forecast to the year-end.
- **Mid-year G10 FX Quant and Vol update:** Our quant models point to medium-term USD & CHF weakness. Our Vol analysis supports short OTM USD calls and long OTM AUDJPY puts in baseline, and long USDCHF forwards as hedges.
- **Rates & FX:** We show that G10 FX moves have been largely consistent with historical betas to front end rate differentials.
- **JPY – no news is bad news:** No rate cut by Fed (sticky inflation) + no rate hike by patient BoJ until mid-24 = USD/JPY carry = ca. 6% for another year.
- **Housing risks:** Highest for Antipodeans, Canada, and Scandies. Housing risks' divergence supports AUDNZD and NOKSEK; BoC pause alleviates risks for CAD.
- **Flows & positioning:** Real Money has been selling USD in June vs. EUR, JPY and AUD. Hedge Funds turned against GBP and EM FX the week ending June 23.

Central Bank calls

Exhibit 4: G10 Central Bank calls
RBA is meeting next week

Country	Next Meeting	BofA	Consensus	Prior	Narrative
US	26-Jul	5.25%	5.25%	5.00%	We now expect two more 25bp rate hikes in July and September, with risks for November, and do not look for a first cut and an end to QT until May 2024, versus March 2024 in our previous forecast.
Eurozone	27-Jul	3.75%	-	3.50%	We expect the depo rate to peak at 3.75% (25bp in June and in July), with risks for more hikes. We do not expect rate cuts until June-24.
Japan	28-Jul	-0.10%	-0.10%	-0.10%	Our base case remains that the BoJ will slide the duration of the YCC long-rate target to 5 years, from 10 currently (while keeping intact the ceiling on the trading band at 50bp) at its next meeting on July 28th. We also think that the political calendar adds to the case for a July move at the margin. We expect bigger changes to the policy framework, incl. the removal of NIRP and YCC, to be delayed until 2024, with mid-2024 our base case.
UK	3-Aug	5.25%	-	5.00%	We maintain our call for two more 25bp rate hikes and raise terminal as a result to 5.5% from 5.25%. We remove the rate cut we previously expected in 2024. So, we see Bank Rate at 5.5% at end-2024. We see risks skewed to higher terminal and more cuts and cannot rule out that the BoE may pause hikes later this year only to hike further in the new year as inflation proves more stubborn than they expect.
Canada	12-Jul	4.75%	-	4.75%	We expect the BoC to remain on hold for the rest of the year as the economy and inflation decelerate. May's labor report is supportive of our view. Risks remain to the upside though and another hike in July cannot be discarded.
Australia	4-Jul	4.10%	4.35%	4.10%	We now expect a pause, based on dovish tone of Jun RBA minutes & softer-than-expected May CPI. However we still expect one more 25bp hike In August.
New Zealand	12-Jul	5.50%	-	5.50%	We see rates on hold at 5.50% for a year before the RBNZ commences cuts in July 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	17-Aug	4.00%	-	3.75%	We look for two more 25bp hikes, in August and September, to 4.25% terminal. We see risks skewed up.
Sweden	21-Sep	4.00%	-	3.75%	We now expect 25bp in September and a 4% terminal. We continue expecting 3 rate cuts in 2024.

Source: BofA Global Research, Bloomberg consensus forecasts as of 29-June-2023.

The view

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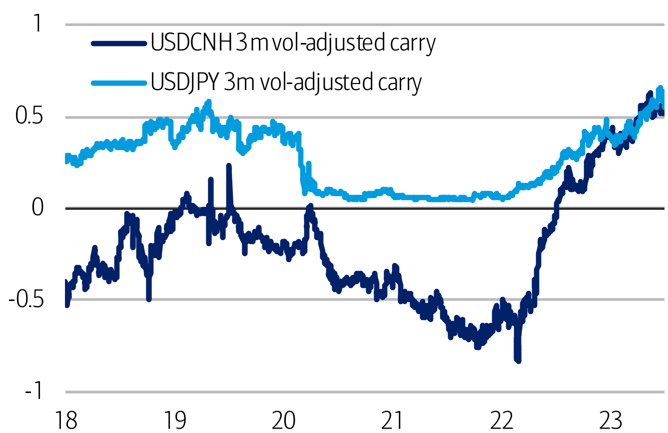
The yen-yuan of carry trades

As we enter summer, the persistence of low volatility and large rate differentials mean that FX carry trades remain the flavor of the season. USDJPY and USDCNH, while technically not the "best" carry trades, represent important microcosms: the volatility-adjusted carry for both is at multi-year highs (Exhibit 5), central banks are cutting/not hiking policy rates, and policymakers have recently leaned against currency depreciation. We are bullish both pairs for 3Q 23, forecasting USDJPY at 147 and USDCNH at 7.40 but we consider some of the risks below.

Too soon for policy rate convergence

Policy divergence is most evident for Japan and China – while virtually all central banks have been tightening in response to higher inflation, Japan has lagged with YCC adjustment but no policy rate hike, while China's low growth & inflation backdrop has led to rate cuts. Policy convergence seems a low risk for these carry trades currently. Our economists expect the Fed to hike twice, while the PBoC will likely cut further. The Bank of Japan carries more uncertainty – we expect further flexibilization of Yield Curve Control possibly as soon as the July policy meeting. But with negative interest rate policy likely to be maintained until 2024, the impact on carry-relevant front end rates should be limited.

Exhibit 5: 3-month carry-to-implied volatility – USDCNH & USDJPY
Vol-adjusted carry at the highs



Source: Bloomberg

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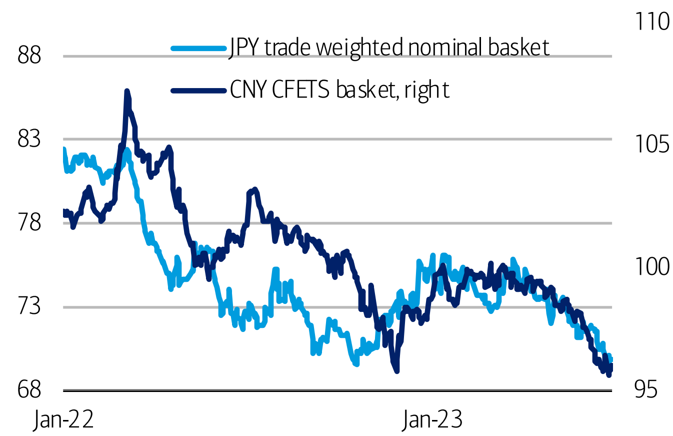
Exhibit 6: JPY and CNY trade weighted exchange rates
JPY and CNY not yet at 2022 lows vs. USD but already there in trade weighted terms



Source: Bloomberg

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Intervention risk – similarities and differences vs. 2022

It is notable that policymakers in Japan and China are simultaneously leaning against currency depreciation, albeit in very different ways. While neither currency is at the 2022 lows vs. USD, their respective trade weighted exchange rates are (Exhibit 6) perhaps driving some of the concern.

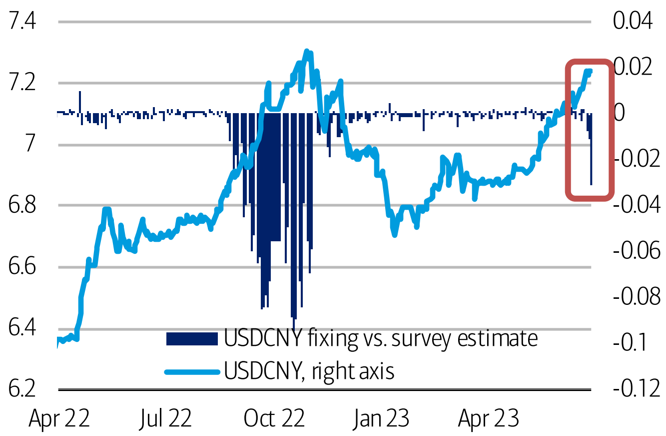
- Japan government officials have escalated their verbal rhetoric against yen depreciation over the past week. FX intervention may be on the cards if USD/JPY exceeds 145 and heads toward 150 with rising volatility. But the weak yen's cost-benefit balance has improved vs. 2022 due to lower oil prices and reopening of inbound tourism, which may also soften the political costs of a weak currency.

Unless the move is drastic, we think the government will refrain from FX intervention with USD/JPY below 150 (Japan Viewpoint 07 June 2023).

- The PBoC has begun delivering daily USDCNY fixes that are materially below market/model estimates. While the deviations are not yet as large as observed in 2022 (Exhibit 7), it represents the first meaningful resistance to CNY depreciation this year. More steps may follow but the fact that realized currency volatility has been much lower compared to 2022 suggests less urgency for now. We continue to expect a move to 7.40 to be accommodated by policymakers, especially if the USD broadly strengthens as we expect (Asia FX Monthly – A Mid-Year Reality Check 21 June 2023).

Ultimately both countries seem to be taking a calibrated approach to managing currency depreciation – there will likely be levels in both spot and volatility when more aggressive measures are considered, but we are not there yet in our view.

Exhibit 7: USDCNY fixing vs. Bloomberg survey estimate
Recent fixings have been below market estimates



Source: Bloomberg

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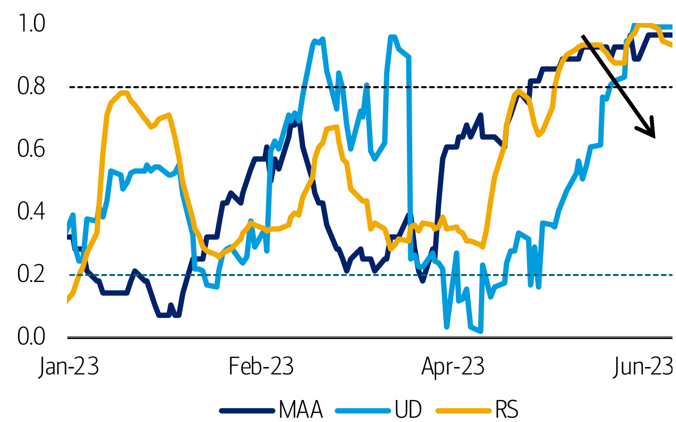
Exhibit 8: USD/CNH uptrend has become stretched
USD/CNH moving average aggregate (MAA), up/down vol (UD), and residual skew (RS)



Source: Bloomberg

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Positioning bigger risk for short CNH than short JPY

While long USDJPY and USDCNH "feel" like popular carry trades, the hard data is less conclusive. Both JPY and CNH rank mid-table in our flow based positioning scorecards (Liquid Cross Border Flows 26 June 2023). Japan household participation in the yen carry trade seems limited for now (Liquid Insight 28 June 2023). In contrast, our quant indicators (up/down vol and residual skew) suggest that long USD/CNH positioning may be extreme (Exhibit 8, FX Quant Insight 26 June 2023).

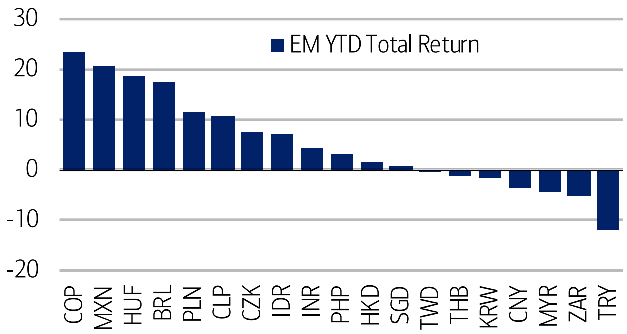
Mid-year EM FX Review – Latam and Asia divergence

As H1 ends, its worthwhile examining the EM FX performance so far this year and exploring the lessons learned. Exhibit 9 shows the year-to-date carry-adjusted (total return) for emerging market currencies. The top five performers are dominated by Latam and EMEA, namely: COP, MXN, HUF, BRL and PLN. Clearly, attractive carry and a credible monetary policy cycle are benefiting these currencies and rewarding their central banks' credibility.

Asia's "high yielders" IDR, INR and PHP managed to deliver the highest total returns among Asian currencies and are in eighth, ninth and tenth place among top performing mainstream EM currencies. This underwhelming performance among Asian currencies is explained by the shallower monetary policy tightening cycle relative to the Fed and the greater reliance on fiscal subsidies and administered prices to control inflation. This is resulting in lower carry and implied interest rates, as well as limited improvement in fiscal positions post COVID.

What is more remarkable still is how EM FX total return performance maps into risk-adjusted Sharpe Ratio performance, as shown in Exhibit 10. On this risk-adjusted basis, MYR, CNY and HKD underperformed TRY and ZAR, highlighting how their lower volatility and negative yield differential to the US dollar is driving their underperformance and increasing the relative attractiveness of CNY and CNH as a funding currency.

Exhibit 9: H1 EM FX performance led by COP, MXN and HUF
Beyond TRY and ZAR weakness, MYR and CNY weakness is notable



Source: BofA Global Research, Bloomberg

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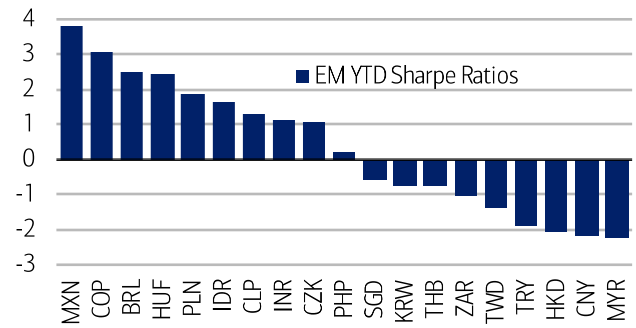
Exhibit 10: Sharpe risk-adjusted returns, Latam dominates top 3
Short CNY or CNH is attractive as a funding currency for EM trades



Source: BofA Global Research, Bloomberg

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The pronounced and protracted weakness of MYR has not gone unnoticed by its central bank that issued a public statement, warning that it reserved the right to intervene if it viewed the weakness as unwarranted by fundamentals. There are some signs that NDF FX implied yields are rising above domestic interest rates, indicative of speculation and a divergence from covered interest rate parity.

Similarly in China, we have seen the People's Bank of China step in to fix USD/CNY at a stronger than expected CNY level at the daily reference fixing to stabilize depreciation momentum. This comes as the 24-currency CFETS basket approaches key support levels of 96 (the November low of last year). Nonetheless, we continue to expect the gravity of yield differentials to drive a weaker CNY to 7.40 against the USD by the end of this quarter.

USD and technological progress

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Link to the full report: FX Viewpoint: USD and technological progress 28 June 2023

USD in an era of exceptional technological progress

Markets have been looking to understand the impact of rapid technological progress on the outlook. The pace of such overwhelming technological change has appeared to have accelerated as of late. Indeed, the speed of such change is reminiscent of the mid 1990s, which started a decade of strong productivity growth and years of exceptional USD strength.

The Dream of the '90s is alive in chatbots

Despite technological progress, developed economies have been mired in a productivity slump since the early 1970s, with the exception of that Tech Boom that extended from the mid 1990s to the early 2000s. Such slow productivity growth happened over the past generation even as technological process feels like it is accelerating. The recent eruption of AI applications, especially chatbots that can engage in disquietingly sophisticated conversations, is only the most recent example.

Productivity growth would be a USD upside factor

A longer-term rise in productivity growth would potentially be a much larger USD positive, both theoretically, and also reflective of what markets experienced during that one episode of a sustained productivity boom from the late 90s to early 2000s. Stronger productivity growth in that tech boom helped to draw in foreign capital, and distinguished the US as the premiere place to invest. Higher productivity growth could also imply higher future incomes, rationalizing higher spending and stronger growth. There were many factors and crises moving the dollar during that period as well, but strong productivity growth was still consistently a USD-positive factor.

Our base case for FX is ultimately less techno-optimistic

With our base case of moderate USD softness through the end of next year, we do not incorporate strong productivity growth in the USD outlook. Despite hopes that technology progress will result in higher productivity, the US is likely to stay in a softer growth mode for the medium term, implying a EUR-USD that is around the 1.15 level by the end of next year, and ultimately moving towards fair value in the 1.20's.

Do rates still matter for FX?

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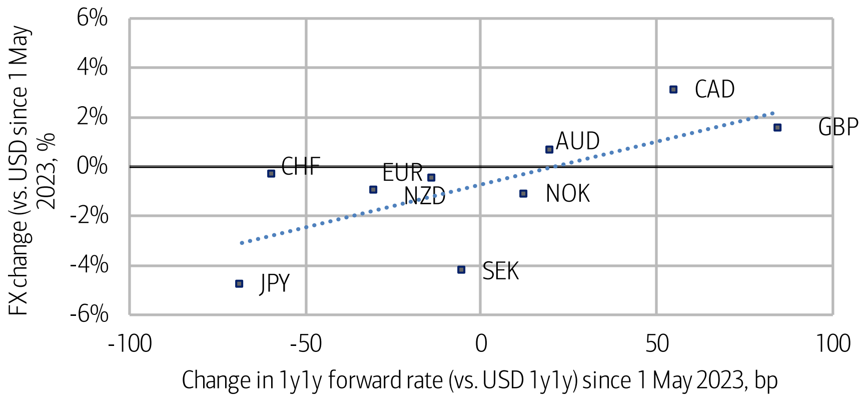
Link to the full report: Liquid Insight: Do rates still matter for FX? 26 June 2023

- FX markets are struggling to disentangle the short-term risk of higher terminal rates vs. medium term recession risk...
- ... evident in muted FX responses to recent hawkish surprises, as well as the decoupling of FX vs. rates volatility.
- Despite this, we show that G10 FX moves have been largely consistent with historical betas to front end rate differentials.

Exhibit 11: G10 FX vs. 1y1y changes (relative to USD) since 1 May 203
G10 FX changes largely consistent with shifts in front end rate differentials



Source: Bloomberg

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Do rates still matter for FX?

Rates and FX markets are grappling with the short-term risk of higher terminal rates vs. medium term recession risk (and potential rate cuts further out). While this clearly translates to deeper curve inversion in rates, the implications for FX can be harder to disentangle. This was evident in last week's muted FX response to hawkish central bank surprises, as well as the decoupling of FX vs. rates volatility. That said, the Chart of the Day shows relative FX performance has been largely consistent with shifts in front end rate differentials and we show these are commensurate to what historical betas would imply, with the exception of SEK weakness. While JPY also screens as weak relative to rate differentials, the divergence is not yet sufficient to imply it is not "reflecting fundamentals" – a likely precondition for any FX intervention.

JPY: Phase 3 of JPY's sell-off in 2024?

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Link to the full report: Liquid Insight: Phase 3 of JPY's structural decline in 2024? 28 June 2023

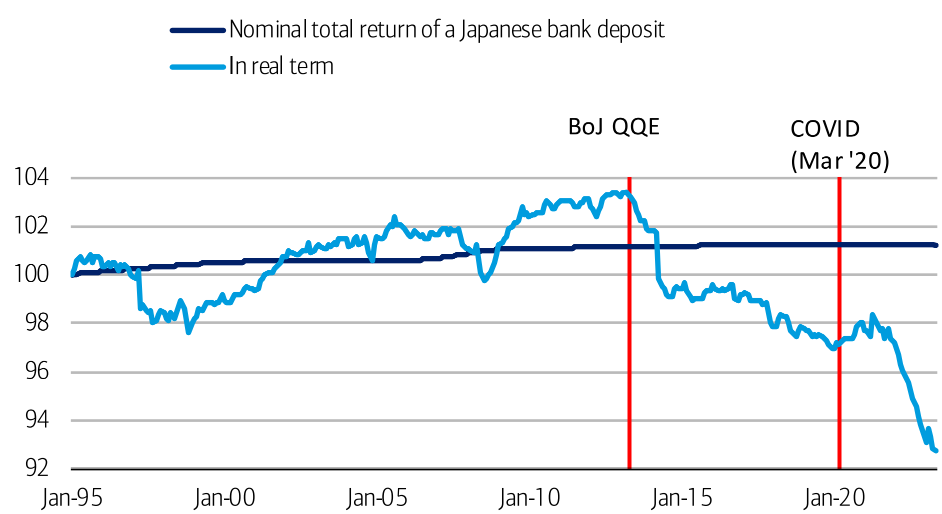
Risk of JPY's 3rd phase of weakening in 2024

We have been bearish on the yen and expect USD/JPY to stay high for long on carry-trade (147 by Sep vs 134 consensus; see report: JPY: no news is bad news 22 June 2023). That said, we agree with consensus on USD/JPY's correction in 2024 on policy convergence as our economists expect the Fed to start cutting rates in May 2024 and the BoJ to remove NIRP in mid-2024.

However, we think the yen's downside risk in 2024 cannot be ignored The market prices in around 170bp rate cut from the peak Fed policy rate in the fall 2023 to end-2024. At 3.7%, the Dec '24 OIS forward (1m) is notably lower than the Fed's dot (4.6%) and BofA's forecast (4.1%). Uncertainty remains high as to whether US inflation will slow sufficiently over the medium term, allowing the Fed to start cutting rates.

In particular, in a risk scenario where the Fed does not cut rates in 2024, (1) how would Japanese retail investors react? and (2) how would the BoJ's policy normalization proceed? We address these two questions in the recent note (see: Liquid Insight: Phase 3 of JPY's structural decline in 2024? 28 June 2023). Our conclusion is that the yen weakness can enter the third phase if the Fed does not cut rates in 2024: 1st phase = policy divergence (2022); 2nd phase = carry trade (2023); 3rd phase = households' rebalancing to offshore assets to protect purchasing power (2024).

Exhibit 12: Total return of Japan's ordinary bank deposit in nominal and real terms
Yen deposit has loosing purchasing power since BoJ's QQE and after COVID



Source: BofA Global Research, Haver,
Total return in real term is adjusted after CPI

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Philippines – Lowering defenses on PHP

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Full Report: Asia FI & FX Strategy Watch: Philippines – Lowering defenses on PHP 23 June 2023

BSP guidance - PHP out of the equation

Over the last one year, BSP has come a long way from delivering a surprise 75bps rate hike in July'22 to defend against PHP weakness to now guiding the market towards rate-cut in 1Q24. In the recent comments, BSP continues to test the waters with increasingly dovish bias, indicating little concerns on FX weakness derailing the disinflation process.

While Fed hiking cycle is still ongoing, BSP has decoupled itself from earlier guidance towards maintaining an interest-rate spread over US rates. Recent comments from BSP governor merely mentioned keeping an eye on other central banks actions rather than following them. Rate cuts guidance has become more concrete with mention of Jan-Feb window on expectations of inflation falling back to target in 4Q. There is some uncertainty on the Governor's term extension, but it is hard to discount the guidance as government representative on MPB has given similar guidance.

Thus, it appears that BSP may not mind moderate FX weakness to ease financial conditions. PHP remains near the top of the historical range in real terms which is not conducive to achieve the adjustment on external accounts. Weaker FX thus becomes more tolerable to support growth prospects and reduce the drag from imports.

Tilting risks towards depreciation

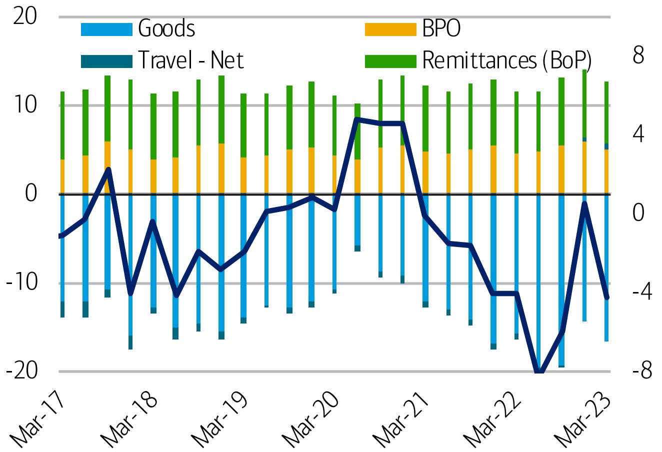
We believe this reflects BSP's increasing comfort on PHP stability this year. Then the key question is whether this dovish bias is backed by fundamental improvement or the recent PHP price action. We believe that this comfort may not last long as it is driven by the latter while fundamentals remain weak for PHP. As BSP's reserves buffer remain relatively low, risk of sharper depreciation would increase if BSP maintains a dovish bias.

BofA economist expects current account gap to narrow from 4.8% of GDP in 2022, but still wide at 3.4% despite the correction in commodity prices and recovering tourism (See Emerging Insight: Philippines – Can the BSP maintain its long pause? 20 June 2023). BoP deficit narrowed YTD to around USD 0.5Bn but that mainly supported by government debt funding flows (See **Exhibit 14**8).

On the portfolio investments, excluding net government debt flows of USD 1Bn, private sector flows turn to small negative YTD. Usually government debt funding's impact on FX should be limited if it flows directly to BSP reserves but it may have been partly converted through the market. Banks' flows of USD 4.3 Bn in 1Q were also driven by government loan funding of USD 2.2 Bn and other short term bank deposit flows of USD 1.4 Bn. Overall private sector flows remain insufficient to fund the current account deficit which would keep the currency under pressure.

Exhibit 13: CA deficit likely to widen to 3.4% in 2023 on BofAe

Philippines goods, BPO (business process outsourcing), travel exports and Remittances (% GDP, lhs) and CA (% Gdp, rhs)



Source: BofA Global Research, Bloomberg

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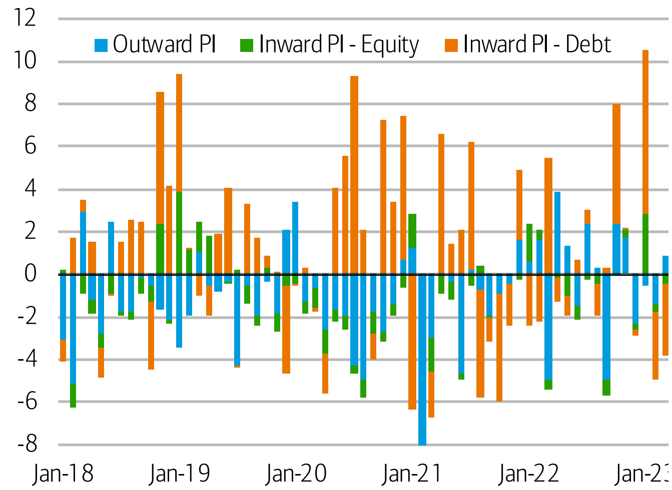
Exhibit 14: Inflows mostly from debt for government funding

Portfolio investments (PI) broken into equity and debt (% of GDP)



Source: BofA Global Research, Bloomberg

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Malaysia – Assessing FX reserves buffer

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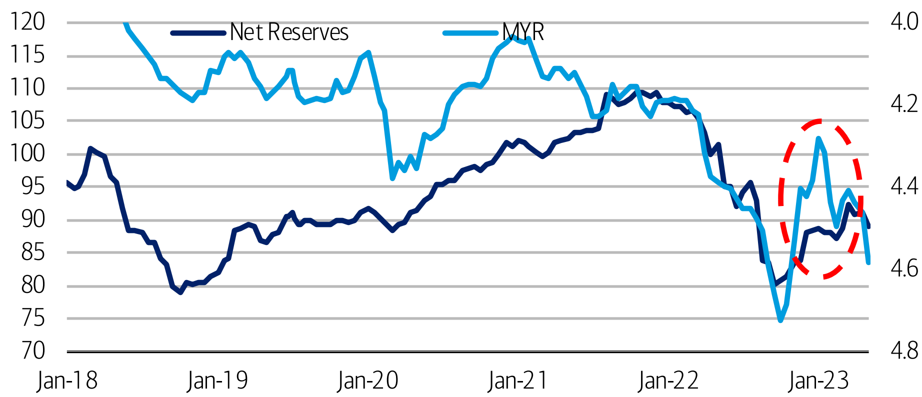
Full Report: Asia FI & FX Strategy Watch: Malaysia – Assessing FX reserves buffer 21 June 2023

MYR continues to exhibit strong correlation to CNY weakness recently, which is justified by its economic linkages to China growth and investment cycle. Recent weakness has almost fully unwound the earlier appreciation since Oct'22 that on China re-opening optimism. However, other factors including negative carry could still weigh on MYR while BNM reserves buffer to contain risk of sharper depreciation appears low.

BNM's headline spot reserves have recovered from a low of USD 104.5 Bn in Oct'22 to USD 112.7 Bn as of end-May. After adjusting for estimated valuation changes (around USD 4Bn on our estimate) and government debt payment of USD 3 Bn in Mar'23, the overall increase appears to be similar in magnitude as the nominal difference. However, the short forward liabilities accumulated last year to mitigate the MYR's weakness have not been unwound yet. Even as MYR appreciated sharply heading into and post the general election results, BNM's forward positions surprisingly increased further and have begun to decline only recently.

Exhibit 15: Lower net reserves buffer this time to mitigate MYR weakness
BNM's net reserves (adjusted for forward book) (USD Bn, lhs) and MYR level (rhs)



Source: BofA Global Research, Bloomberg

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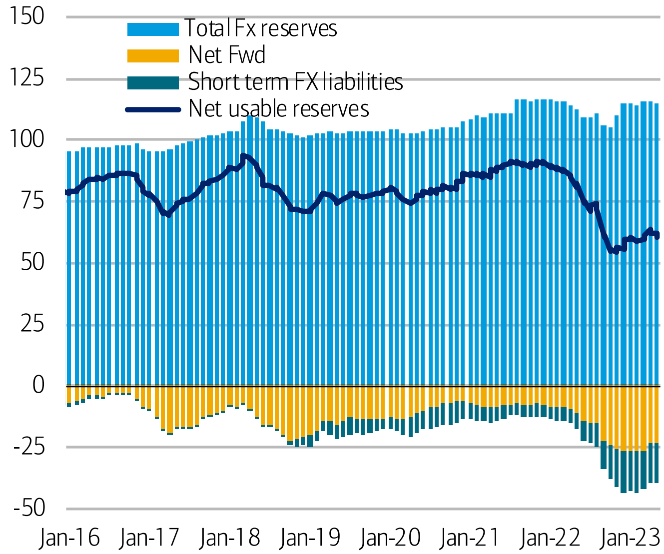
IMF's reserves adequacy metrics assess the reserves to be adequate and show no concerns on sustainability of external debt. Reserve coverage is still assessed at 110% of recommended levels, as of end-2022, albeit lower vs 121% at end-2021. However, net reserves, after adding forward positions, have remained well-below the levels seen over the last 5 years. Further adjusting for other short-term drains on BNM's reserves and other components of reserves besides FX spot, BNM's readily usable reserves have fallen to lowest levels seen in over a decade.

Exhibit 16: BNM net usable reserves near decade low
FX reserves, net forward positions (fwd), FX liabilities and estimated net usable reserves (USD Bn)



Source: BofA Global Research, Bloomberg

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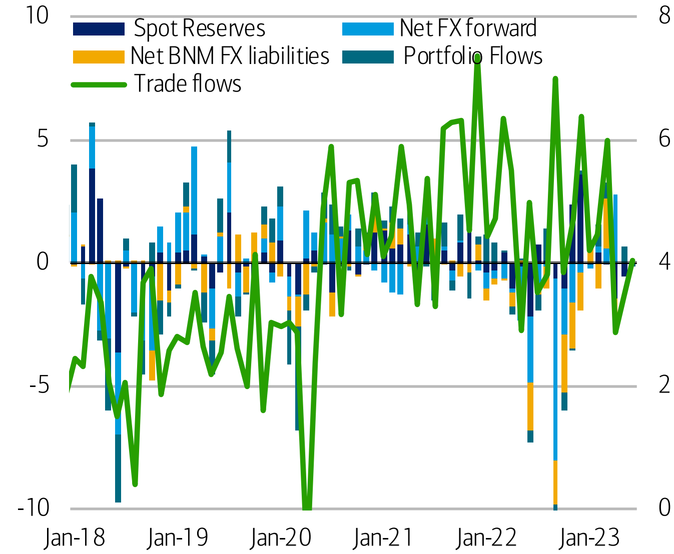
Exhibit 17: Persistent draw on reserves in 2022 despite high trade flows
Monthly changes in spot reserves, FX forward, portfolio flows (USD Bn, lhs) and trade flows (USD Bn, rhs)



Source: BofA Global Research, Bloomberg

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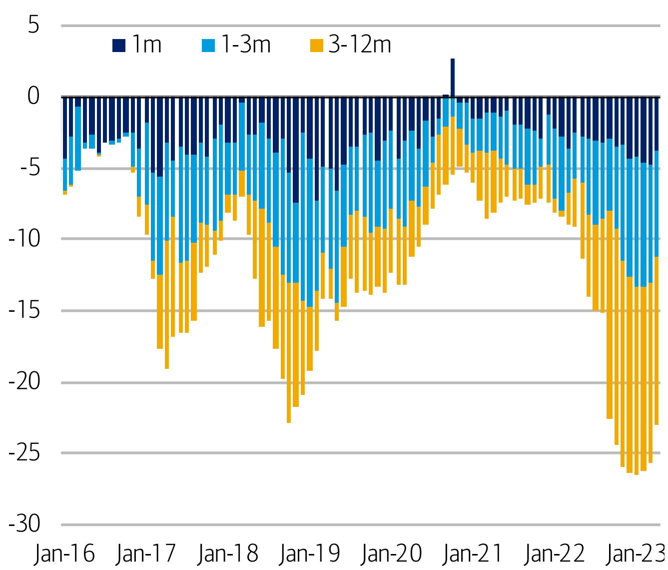
FX liabilities – beginning to unwind

In all previous episodes of FX weakness during 2016 and 2018, BNM also built-up short FX forward positions (See **Exhibit 18**12). It is often preferred over drawing down spot reserves to avoid market concerns on reserve adequacy and keeping domestic liquidity from tightening further. Over 2022, the increase in short FX forward positions was seen to levels exceeding 2018.

Exhibit 18: BNM short forward positions beginning to unwind
BNM's net forward book by tenors (USD Bn)



Source: BofA Global Research, Bloomberg

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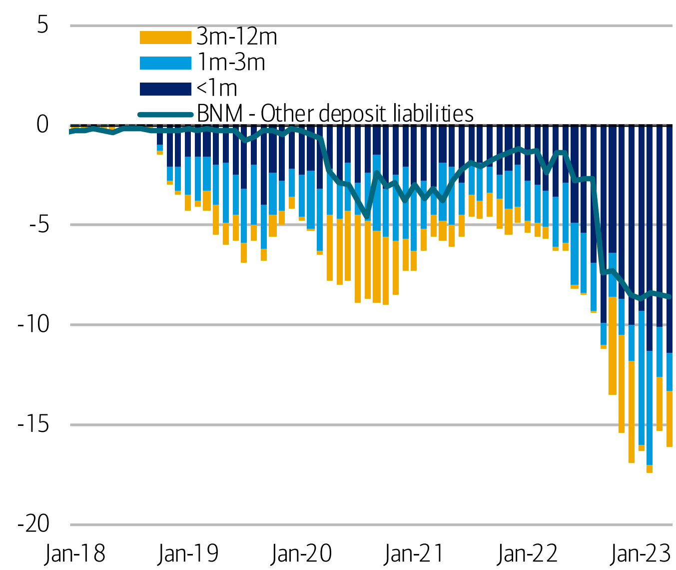
Exhibit 19: Large short-term drains on FX reserves
BNM's short-term FX liabilities by tenors (USD bn)



Source: BofA Global Research, Bloomberg

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However, the other short-term drains on FX reserves have gone up more sharply this time around, almost doubling from the previous level, with a total increase of around USD 11 Bn over 2022 (See Exhibit 13). Usually these also include the government debt payments but we believe that most of these liabilities are due to FX deposits placed by banks with BNM. These deposits primarily appear to be concentrated in 1-month tenor, which increases the need to rollover risk.

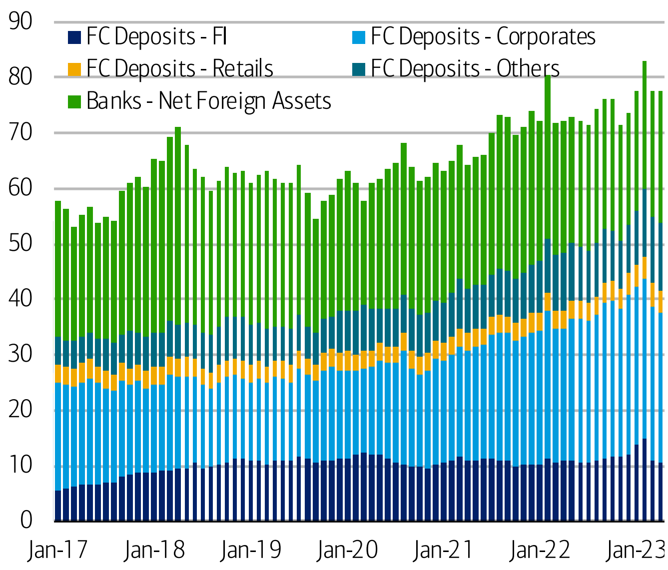
Since 2018, BNM began issuing FX bills due to banks' demand for short-term high-quality assets and shifted forward liabilities from FX forwards to bills. However, last year, both bills and FX forwards have been simultaneously increasing, leading to accumulation of large short-term drains on FX reserves.

Banks foreign assets – augmenting official reserves

BNM has often dismissed any market concerns about reserve adequacy by citing that Malaysia's banking system's foreign assets add to the country's pool, on top of the central banks' assets. Malaysian banks also have presence in offshore financial centers which increases their access and ability to raise USD funding during times of stress, thus reducing the need for the sovereign to maintain a higher level of reserves. A large part of Malaysia short-term external debt is also explained by interbank borrowings which don't pose a large risk of rollover as such. While we broadly agree with this argument, concerns on the liquidity of banks' FX assets could still arise as these may not be as readily available as BNM's own reserves.

Secondly, banking system has net foreign assets at USD 23 Bn pointing towards dependance of other sources of funding, apart from the USD 54 Bn foreign currency deposit base. Net foreign assets position has remained broadly stable over the last 2 years even as deposits increased sharply. This trend reversed over the last 2 months as corporates drew their USD deposits (See Exhibit 21 15) which adds to some risk of asset-liability mismatch if assets are tied-up in illiquid corporate loans.

Exhibit 20: Banks net foreign assets stable while deposits increased
Stock of foreign currency (FC) deposits by holder and banks' net foreign assets (USD Bn)



Source: BofA Global Research, Bloomberg

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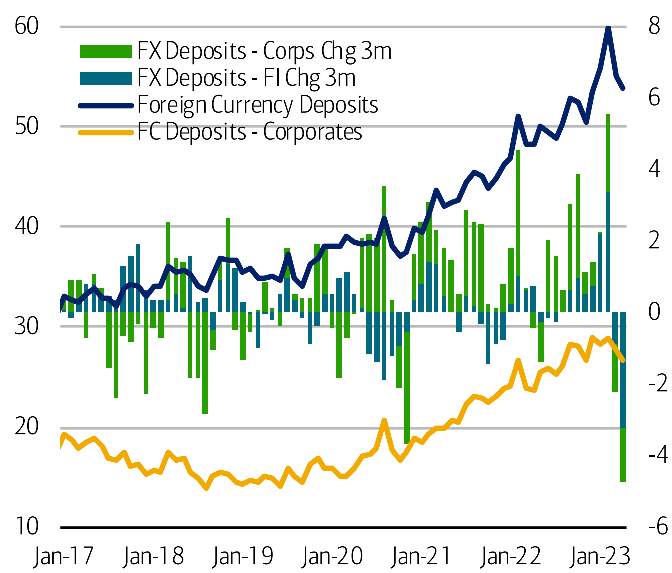
Exhibit 21: Corporates have begun to drawdown USD deposits
Foreign currency deposits (USD Bn, lhs) and 3-month rolling change for corporates and financial institutions (FI) (USD Bn, rhs)



Source: BofA Global Research, Bloomberg

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LatAm – Don't carry on with MXN

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Full Report: LatAm FI & FX Strategy Viewpoint: Keep calm, but don't carry on with MXN 20 June 2023

The Super Peso remains undefeated

The resilience of the Mexican peso (MXN) over the past year has been remarkable. Despite both global and domestic shocks, MXN has managed to outperform all other major currencies. The rally has been so persistent that it has puzzled several market participants, who keep wondering what the main driving forces of MXN strength are, and whether these forces will continue to support MXN further into stronger territory.

Can global factors explain the Super Peso's resilience?

We leverage our previous work on global factors to understand whether MXN dynamics are consistent with the evolution of global growth, global financial conditions, commodity supply, credit premium and EM growth. We find that MXN is *overvalued* by almost 20% relative to what our global factors would dictate. In other words, the level of USD/MXN that would be consistent with global factors is close to 20.5.

MXN is mostly about carry

By construction, our global factors framework does not consider domestic factors that could be an important driver of exchange rates. We note an important correlation between Mexico's policy rate and the dynamics of MXN overvaluation relative to global factors. To take this into account, we expand our analysis to include the impact of the interest rate differential between Mexico and the US. We find that carry has been a major driver of MXN resilience. Our analysis suggests that the level of USD/MXN consistent with the dynamics of global factors and Mexico's interest rate differential is close to 17.5. This yields an MXN *overvaluation* of only about 1.5% relative to what global factors and the interest rate differential would dictate.

Should investors keep calm and *carry* on?

Our analysis suggests MXN could remain resilient if Mexico keeps a wide interest rate differential relative to the US. However, carry trades yield positive returns to compensate for exposure to crash risk. Therefore, at current levels, we believe investors should be cautious in weighing the tradeoff between earning carry and potential downside in spot returns.

We remain neutral MXN while the bears hibernate

In our view, risk-reward of long MXN positions is not attractive. We see limited upside from carry, given that we are confident Banxico has reached peak hawkishness versus the Fed. Moreover, with a real exchange rate that is the strongest since 2008, we believe there is limited upside and potentially a significant downside in spot returns, particularly in the event of a US recession that can simultaneously hit carry, remittances and induce flight to quality. While nearshoring should be supportive in the long term, we believe it is highly unlikely that it has significant real short-term impact other than providing a positive narrative. Long positioning, while not extreme as early in the year, also increases unwind risk. As a result, we prefer to remain neutral to MXN exposure.

Vol Insights

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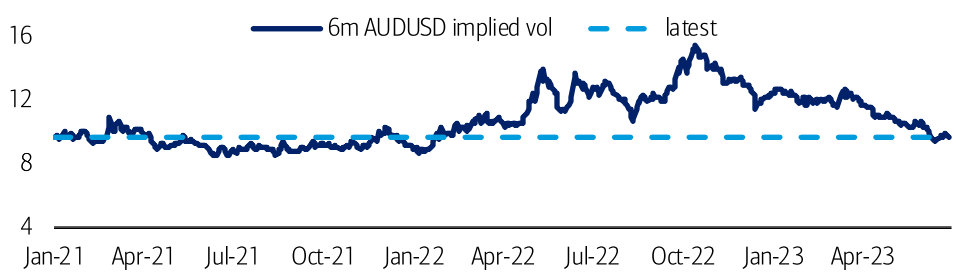
- 6m AUDUSD implied vol is now at 2021 range, too low vs current macro backdrop.
- PCA heatmap from FX Vol Dashboard confirms 6m AUDUSD vol cheapness.

Medium-term AUDUSD vol is cheap to own

While we expect the low vol regime to persist in the next few weeks (FX Watch: 13 June 2023), investors with a more medium-to-long term horizon may consider owning some long-dated FX vols at current level. For example, 6m AUDUSD implied has fallen to the pre-Ukraine war shock range, which does not reflect sufficient risk premium given this pair is exposed to macro uncertainty coming from both China and the US, in our view.

The PCA heatmap table in our FX Vol Dashboard confirms AUDUSD vol's cheapness, showing current level is more than 1 vol below the PCA fair value (Exhibit 23). Current implied vs fair values spread sits at -2.7 z-scores using a 5y lookback window. The sharp decline in AUDUSD vol this year is partly due to falling equity vol, in our view. Our equity derivatives strategists see more upside for VIX from here, which should support higher AUDUSD vol (Global Equity Volatility Insights: 27 June 2023). The risk would be a persistent lack of realized vol for rest of the year.

Exhibit 22: Current level of 6m AUDUSD implied vol has fallen to pre-Ukraine war shock level
6m AUDUSD implied vol



Source: BofA Global Research, Bloomberg

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Exhibit 23: 6m AUDUSD implied vol is below PCA fair value by -1.07 vols
6m G10 FX implied volatility heatmap

6M PCA Implied Vol vs Fair Value

Vols	EUR	GBP	AUD	NZD	USD	CAD	CHF	NOK	SEK
GBP	0.12								
AUD	-0.73	-0.09							
NZD	-0.66	0.07	0.04						
USD	-0.94	0.11	-1.07	-1.13					
CAD	-0.95	-0.01	-0.57	-0.53	-1.00				
CHF	-0.86	-0.23	-0.93	-1.07	-0.57	-0.96			
NOK	1.02	1.32	0.48	0.29	0.28	0.45	0.92		
SEK	0.80	0.35	-0.14	-0.04	-0.29	0.17	1.14	1.12	
JPY	0.23	1.07	-0.13	-0.30	0.86	0.11	0.78	0.15	0.11

Tenor: 1M, 3M, 6M, 1Y

Implied – PCA Fair Value: Cheap -2.00 … 2.00 Rich

Source: BofA Securities, BofA Global Research

Source: BofA Global Research, Bloomberg. Cells with cheap implied vol vs PCA fair value are colored in teal and cells with rich implied vol vs PCA fair value are colored in orange.

BofA GLOBAL RESEARCH

Tehcnicals

13 pressure points in Q3 to know

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Link to the full report: [Technical Advantage: 13 pressure points in Q3 to know 25 June 2023]

View: Bullish USD, bearish yields and probably oil in Q3

Heading into 3Q23 we look for the BBDXY to bounce back in July, the 10Y UST yield to correct lower from the top of its downward sloping channel and a break lower in oil prices. Seasonal patterns are supportive of our technical setups. For example, July seasonals show the USD tends to bounce back from a June dip, 10Y US yield tends to decline and oil prices peak around the July 4th US holiday and are biased lower in the 2H. Its two against one and while BBDXY is above +/- 1220 (YTD low is 1210) and 10y yield is below the 3.90% channel line then commodity and oil prices are at risk.

13 pressure points to know heading into Q3

1. US 10Y yield remains in a downward sloping channel. The top of the channel is at 3.90% and starts July at 3.86%, which is the June yield highs.

2. US 10Y Real Yield chart is similar to 10Y UST. It is testing its trend line at 1.55% which so far has been faded. (The pre bank crisis March peak is 1.67%.)

3. US 2s10s made the lowest weekly close this cycle. Its deepest inversion level this year rounds to -111bps right before the regional banks began failing.

4. Bund 10Y yield is starting to break below trend line support. Another decline below 2.34% and/or 2.25% increases conviction in Q3 yield downtrend.

5. Italy 10Y yield is (modestly) breaking down in favor of a triangle top. If below the March yield low of 3.92% then conviction in a top increases.

6. Japan 30Y yield is forming the right shoulder of a head and shoulders top. Below 1.19% would be a 3m new low and below 1.10% confirms a top.

7. BBDXY is forming a triangle pattern this year. Trend line support is at 1220 and resistance is about 1245. We look for upside in July.

8. Euro, like the USD indices is rangebound, however we look for short term downside in early Q3 to raise conviction in rest of year downside possibilities.

9. USDCHF: Barring a crisis, weekly closes tend to hold at/above the .8700s. If a crisis in hand, then look out below.

10. USDMXN monthly RSI is the most oversold ever, with spot near secular trend line support at 16.90. Prudent to hedge shorts or speculate on a Q3 pop higher.

11. Oil: The battle to hold the 200wk SMA on WTI in the $67s and on Brent in the $71s continues, however big tops and bearish continuation patterns remain.

12. EMBI Global Spread: Credit rally approaching resistance line at 365 to start Q3.

13. US Unemployment rate: A Q3 NFP release with an unemployment rate above 3.7% will look like a double bottom and then higher from there.

Trade Recommendations G10

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Exhibit 24: G10 Central Bank calls
RBA is meeting next week

Country	Next Meeting	BofA	Consensus	Prior	Narrative
US	26-Jul	5.25%	5.25%	5.00%	We now expect two more 25bp rate hikes in July and September, with risks for November, and do not look for a first cut and an end to QT until May 2024, versus March 2024 in our previous forecast.
Eurozone	27-Jul	3.75%	-	3.50%	We expect the depo rate to peak at 3.75% (25bp in June and in July), with risks for more hikes. We do not expect rate cuts until June-24.
Japan	28-Jul	-0.10%	-0.10%	-0.10%	Our base case remains that the BoJ will slide the duration of the YCC long-rate target to 5 years, from 10 currently (while keeping intact the ceiling on the trading band at 50bp) at its next meeting on July 28th. We also think that the political calendar adds to the case for a July move at the margin. We expect bigger changes to the policy framework, incl. the removal of NIRP and YCC, to be delayed until 2024, with mid-2024 our base case.
UK	3-Aug	5.25%	-	5.00%	We maintain our call for two more 25bp rate hikes and raise terminal as a result to 5.5% from 5.25%. We remove the rate cut we previously expected in 2024. So, we see Bank Rate at 5.5% at end-2024. We see risks skewed to higher terminal and more cuts and cannot rule out that the BoE may pause hikes later this year only to hike further in the new year as inflation proves more stubborn than they expect.
Canada	12-Jul	4.75%	-	4.75%	We expect the BoC to remain on hold for the rest of the year as the economy and inflation decelerate. May's labor report is supportive of our view. Risks remain to the upside though and another hike in July cannot be discarded.
Australia	4-Jul	4.10%	4.35%	4.10%	We now expect a pause, based on dovish tone of Jun RBA minutes & softer-than-expected May CPI. However we still expect one more 25bp hike In August.
New Zealand	12-Jul	5.50%	-	5.50%	We see rates on hold at 5.50% for a year before the RBNZ commences cuts in July 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	17-Aug	4.00%	-	3.75%	We look for two more 25bp hikes, in August and September, to 4.25% terminal. We see risks skewed up.
Sweden	21-Sep	4.00%	-	3.75%	We now expect 25bp in September and a 4% terminal. We continue expecting 3 rate cuts in 2024.

Source: BofA Global Research, Bloomberg consensus forecasts as of 29-June-2023.

Exhibit 25: 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 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 USDJPY 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 and13.307)			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 USDJPY put, long 6m USDJPY 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
Buy 1m 1.102 EUR/USD call funded by 1.0820/1.0400 put spread	06/04/22	Zero premium (spot ref: 1.0894)			05/05/22	Spot ref:1.06
Buy GBP/USD	04/04/22	1.3111	1.3400	1.2995	25/04/22	1.2995
Buy 6m AUD/NZD 1.0753/1.0944 ATMF call spread	27/01/22	0.7764% AUD (spot ref: 1.069)			22/04/22	1.2168% AUD (spot ref 1.0954)
Short GBP/SEK via 3m 12.3488 put	04/02/22	1.7442% GBP (spot ref: 12.3734, vol ref: 8.819%)			16/03/22	1.8116% GBP (spot ref: 12.3913, vol: 12.694%)
Sell EUR/JPY	24/02/22	128.50	120	133.20	07/03/22	127

EM Alpha Trade Recommendations

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Claudio Irigoyen
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Exhibit 26: Open trades
EM Alpha Trade Recommendations

FX	Entry date	Entry level	Current level	Target	Stop	Notional	Rationale/ Time horizon	Risks
Buy a 3m digital call option on USDZAR	6/20/2023	18.15	18.70	19.25	-	10	Loadshedding to worsen from here. Baseline and downside scenario show USDZAR above 19.5 in September.	The risks is a weaker dollar
Sell CNH/CLP	6/15/2023	111.7	110.42	108	113.6	10	CLP has been supported both by declining policy risks and hawkish BCCh guidance	Dovish turn from BCCh
Lond USDILS	6/15/2023	3.58	3.67	3.74	3.47	10	Hawkish Fed + rising political uncertainty in Israel + lower sensitivity of ILS to US equities + positive carry	Potential BoI interventions
Short RONCZK	5/24/2023	4.77	4.78	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
Sell MXN/CLP	5/22/2023	44.85	46.91	42.00	47.00	10	A stretched valuation, crowded positioning, potentially shrinking carry, and US recession risks pose key risks to MXN.	Dovish BCCh or hawkish Banxico surprises, a sharp selloff in copper prices, lower risks of a recession in the US.
Long EURPLN	5/17/2023	4.5	4.48	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	3.63	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	7.83	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.
Short EURZAR	3/1/2023	19.35	20.37	18.43	20.75	10	Valuations and positioning are supportive from the trade; strong China's PMI is a trigger for a stronger rand	The risk is a strong labour market and/or higher-than-expected inflation in the US driving EM FX weaker against the USD and EUR
Long INRUSD	1/18/2023	81.65	82.06	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 June 29 2023. Bid/offer spreads accounted for in initiation and closing 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 closing 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 27: Closed trades

EM Alpha Trade Recommendations

Trade description	Entry date	Entry Level	Target	Stop	Notional	Close date	Level closed
Short USDZAR	3/23/2023	18.16	17	18.7	10	15-Jun-23	18.2
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 PLNHUF	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 PLNHUF	3/17/2023	84	79.8	86.5	10	29-Mar-23	81.3
Long USDTWD 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 CZKHUF	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-Jull-22	16.80
Sell USD/PLN	2/3/2022	4.01	3.7	4.5	10	7-Jull-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 closing 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

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World At A Glance Projections

Exhibit 28: G10 FX Forecasts
Forecasts as of 29-June-2023

	Spot	Sep-23	YE 2023	Mar-24	Jun-24	Sep-24	YE 2024
G3							
EUR-USD	1.09	1.05	1.05	1.07	1.10	1.15	1.15
USD-JPY	144.64	147.00	145.00	140.00	135.00	130.00	125.00
EUR-JPY	157.51	154.00	152.00	150.00	149.00	150.00	144.00
Dollar Bloc							
USD-CAD	1.33	1.32	1.30	1.30	1.29	1.28	1.26
AUD-USD	0.66	0.67	0.69	0.72	0.73	0.74	0.75
NZD-USD	0.61	0.61	0.62	0.64	0.65	0.66	0.67
Europe							
EUR-GBP	0.86	0.85	0.85	0.85	0.85	0.85	0.85
GBP-USD	1.26	1.24	1.24	1.26	1.29	1.35	1.35
EUR-CHF	0.98	0.98	0.98	0.99	0.99	1.00	1.00
USD-CHF	0.90	0.93	0.93	0.93	0.90	0.87	0.87
EUR-SEK	11.82	11.50	11.00	10.70	10.60	10.50	10.30
USD-SEK	10.86	10.95	10.48	10.00	9.64	9.13	8.96
EUR-NOK	11.73	10.90	10.60	10.40	10.40	10.20	10.00
USD-NOK	10.78	10.38	10.10	9.72	9.45	8.87	8.70

Source: BofA Global Research, Bloomberg. Note: Forecasts as of 29-June-2023.

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Exhibit 29: EM FX Forecasts
Forecasts as of 29-June-2023

	Spot	Sep-23	YE 2023	Mar-24	Jun-24	Sep-24	YE 2024
Latin America							
USD-BRL	4.87	4.95	5.00	5.03	5.05	5.08	5.10
USD-MXN	17.14	18.50	19.00	19.50	19.80	20.20	20.50
USD-CLP	801.95	807.00	810.00	815.00	820.00	825.00	830.00
USD-COP	4,191.10	4,350.00	4,500.00	4,600.00	4,650.00	4,700.00	4,750.00
USD-ARS	256.31	321.00	519.00	636.00	779.00	940.00	1,136.00
USD-PEN	3.63	3.72	3.76	3.78	3.80	3.82	3.84
Emerging Europe							
EUR-PLN	4.44	4.65	4.55	4.51	4.48	4.44	4.40
EUR-HUF	371.63	375.00	370.00	368.00	365.00	363.00	360.00
EUR-CZK	23.71	23.80	23.50	23.40	23.30	23.20	23.00
USD-RUB	-	73.00	75.00	76.00	77.00	78.00	80.00
USD-ZAR	18.80	19.00	18.00	17.60	17.50	17.00	17.50
USD-TRY	26.06	25.00	26.00	27.00	28.50	29.50	30.50
EUR-RON	4.96	5.05	5.09	5.13	5.17	5.21	5.25
USD-ILS	3.69	3.60	3.55	3.50	3.45	3.40	3.30
Asian Bloc							
USD-KRW	1,317.50	1,340.00	1,330.00	1,305.00	1,280.00	1,210.00	1,190.00
USD-TWD	31.07	31.40	31.20	31.00	30.70	29.80	29.60
USD-SGD	1.36	1.36	1.35	1.34	1.32	1.31	1.30
USD-THB	35.62	35.50	34.00	33.50	33.00	32.50	32.00
USD-HKD	7.84	7.85	7.85	7.83	7.83	7.83	7.83
USD-CNY	7.25	7.40	7.20	7.10	7.00	6.80	6.70
USD-IDR	14,993.00	15,100.00	14,900.00	14,800.00	14,700.00	14,600.00	14,500.00
USD-PHP	55.33	57.50	56.50	56.50	56.00	56.00	55.50
USD-MYR	4.67	4.70	4.66	4.62	4.58	4.56	4.54
USD-INR	82.06	83.00	82.00	81.00	80.50	80.00	80.00

Source: BofA Global Research, Bloomberg. Note: Forecasts as of 29-June-2023.

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