BofA SECURITIES

Emerging Insight

Central Asia in focus: a push for stability

17 March 2024

GEM Fixed Income Strategy & Economics
Global

Vladimir Osakovskiy >>
EM Sovereign FI/EQ strategist
Merrill Lynch (DIFC)
+971 4 425 8291
vladimir.osakovskiy@bofa.com

Mikhail Liluashvili
EEMEA Local Markets Strategist
MLI (UK)
+44 20 7996 1142
mikhail.liluashvili@bofa.com

David Hauner, CFA >>
Global EM FI/FX Strategist
MLI (UK)
david.hauner@bofa.com

Claudio Irigoyen
Global Economist
BofAS
claudio.irigoyen@bofa.com

See Team Page for List of Analysts

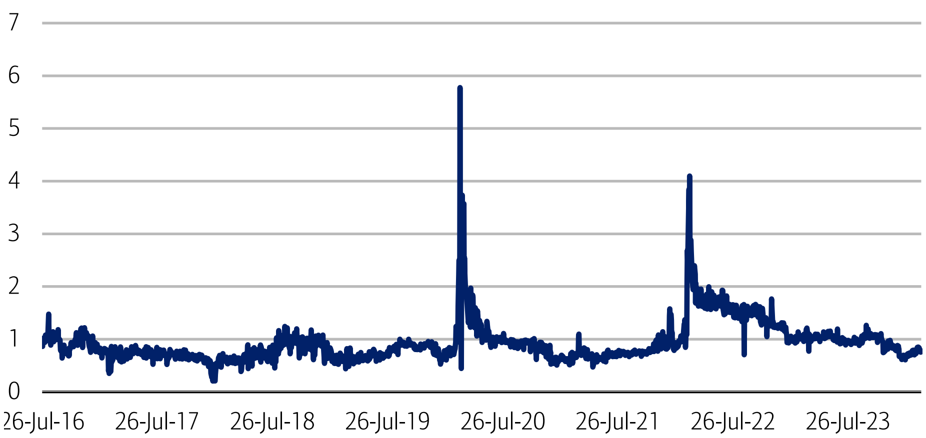
For a list of open trade recommendations and trade recommendations closed in the last 12 months, see Global Emerging Markets Weekly: Dropping the USD diet for real yields 15 March 2024

Key takeaways

- New growth targets imply KZT stability/appreciation long term. NBK to stay on hold until at least 3Q24 or clarity on fiscal
- UZS to stay on its 4-5% annual depreciation track. Slowing inflation creates incentives for continued policy approach
- We remain long UZS until early April; bullish bias for KZT due to high carry, but global is not supportive for the trade

By Vladimir Osakovskiy and Mikhail Liluashvili

Exhibit 1: KZT carry still looks attractive, but the broader USD is a big risk to the carry trade
The chart shows 1-month carry for 3m NDF against an equal basket of USD and EUR



Source: Bloomberg, BofA Global Research

BofA GLOBAL RESEARCH

Central Asia in Focus: a push for stability

In Kazakhstan, new growth targets create political incentives for the KZT to stay stable in nominal terms or appreciate. Monetary policy should remain tight, with the National Bank on hold until at least 3Q24 or until it has clarity on the fiscal policy path. KZT volatility should remain limited by Oil Fund/Pension Fund FX operations, which may also imply a cap on its appreciation. In Uzbekistan the authorities are set to stay on a controlled 4-5% annual depreciation path; we see risks to this as limited at this stage.

Growth targets suggest KZT should not weaken

We think that the recent growth targets set by Kazakhstan President Tokayev will have material implications for FX policy. Even if the government is able to stay on track with these new targets, the KZT should appreciate in nominal terms or at least remain stable at current levels by 2028. In particular, during the recent Cabinet reshuffle (see: Kazakhstan Watch 07 February 2024) the president tasked the government with ambitious new targets of 6-7% real GDP growth a year, as well as achieving a major milestone of US$450bn in nominal GDP by 2028.

Assuming that inflation stays close to the National Bank's target of 5% from 2025, even if the government manages to maintain real GDP growth at the minimally required 6% a year, the currency should at least stay stable in nominal terms throughout the targeted period (until 2028). Any material depreciation of the KZT in annual terms would directly push the government away from the nominal GDP target.

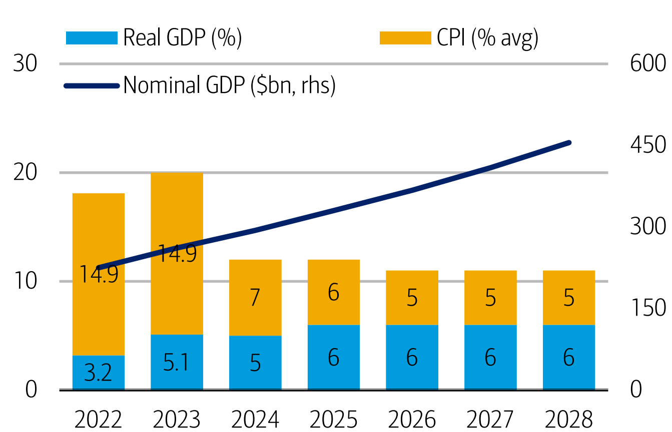
Tight policy, more active FX flows management

The National Bank will likely maintain its shift towards inflation-targeting and greater exchange rate flexibility. It was spared during the recent government reshuffle, as the president did not really criticize monetary policy. However, the new growth targets provide political incentives for a broadly stable currency. In the absence of major external shocks, we think such an approach suggests generally tight monetary policy, more active management of local FX flows (i.e., export revenue sales) as well as FX sales from the National Oil Fund (NOF).

KZT upside is also limited

We also think that with implicit incentive to avoid currency weakness, the Bank will be willing to control any appreciating pressures on the currency. Thus, we would not expect it to change its current "zero intervention" policy, but it may be more active in balancing FX sales from the NOF. The NBK has cut net FX sales from the NOF from $830m in January to $203m in February through an increase in planned FX purchases for the State Pension Fund (SPF). The Bank has also stated that it has explicitly decided to boost FX purchases for the SPF due to strong FX sales by the NOF, and will continue with such offsetting moves in future. We note that this has effectively stopped the strong KZT rally seen since late October, which could indicate an implicit tolerance level for KZT appreciation around current levels.

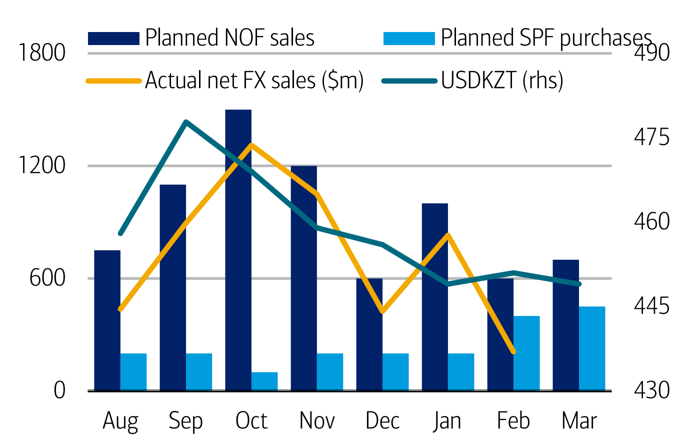
Exhibit 2: $450bn GDP target is attainable only with stable KZT
Any major KZT weakness will push the authorities away from the targets even if the real GDP target is met



Source: BofA Global Research estimates

BofA GLOBAL RESEARCH

Exhibit 3: Net FX sales rebalancing stopped the KZT rally in Feb
NBK has boosted SPF FX purchases, cut NOF FX sales citing "favorable market conditions"



Source: National Bank. Bloomberg

BofA GLOBAL RESEARCH

Still room for some rate cuts

Even though political priorities call for generally tight monetary policy, we think there is still room for 150-200bp in rate cuts this year. On the one hand, high real GDP targets suggest that monetary policy should not be overly restrictive. On the other hand, a remaining strong base effect from last year's CPI spikes strongly indicates that inflation should continue to slow, approaching 7% by year-end. This, we think, should allow the Bank to cut the policy rate by some 150-200bp, although only from 3Q24. In February it said there was limited room for further monetary easing during the next several policy meetings. Therefore, we think that renewed cuts will be feasible only when/if inflation starts to slow again, which we expect from July-August this year.

New fiscal easing – tighter policy, stronger KZT?

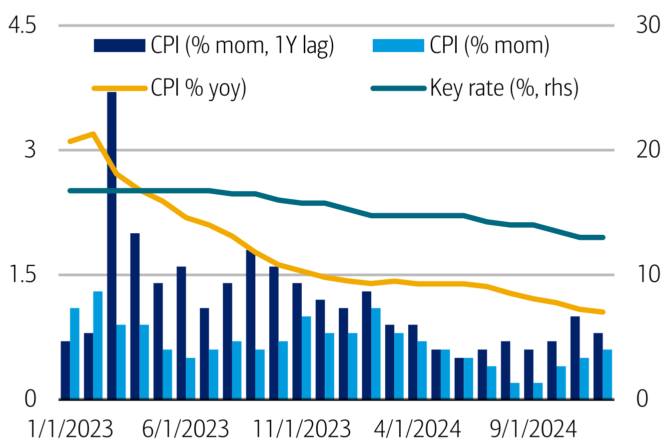
We emphasize (see: Focus on efficiency, no new money 07 February 2024) that 6-7% real GDP growth targets create material risks of further fiscal easing as the only realistic way of reaching them. This would likely be supportive for the KZT, at least near term. But such easing may also create new inflationary risks, especially given the economy is already running at close to potential growth, which the Bank sees at around 4% (see: CIS viewpoint 22 November 2023). It has explicitly mentioned the new government's potential growth-accelerating measures as the key source of uncertainty with respect to the inflation/policy outlook. At the same time, further fiscal easing could bring a new round of spending from the Oil Fund, providing direct support to the currency through market FX sales.

UZS: same risks and approaches

In Uzbekistan, the UZS will likely remain on its managed 4-5% annual devaluation path at least in the next several months. This 4-5% devaluation limit is consistent with the medium-term 5% inflation target, which the authorities aim to achieve within the next two to three years. Meanwhile, inflation slowed to 8.35% yoy in February, the lowest level in the country's recent economic history. This, we think, creates an incentive to keep the existing policy setup to maintain the disinflation trend. Moreover, with a further slowdown in inflation likely later in the year due to a material base effect, it's possible the Central Bank may cut its policy rate to 13% in 2H24.

Exhibit 4: Kazakhstan CPI slowdown would allow for 150-200bp in cuts in 2H24

Inflation to slow to 7% by the end of 2023 at least due to base effect

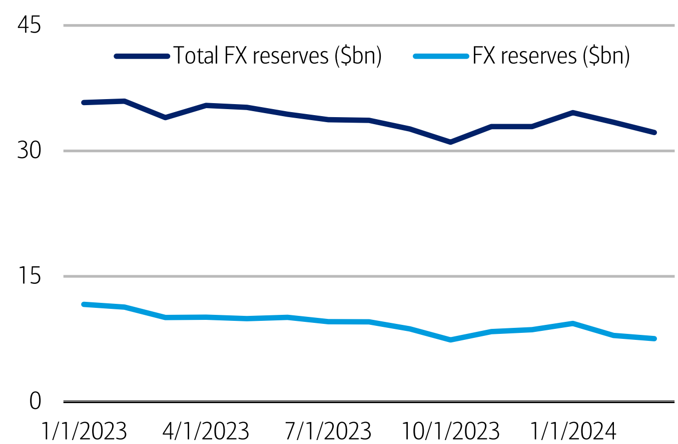


Source: Bloomberg, BofA Global Research estimates

BofA GLOBAL RESEARCH

Exhibit 5: Uzbekistan reserves drop so far is in line with normal volatility

Previous UZS moves were triggered by RUB, not reserves moves



Source: Central Bank of Uzbekistan

BofA GLOBAL RESEARCH

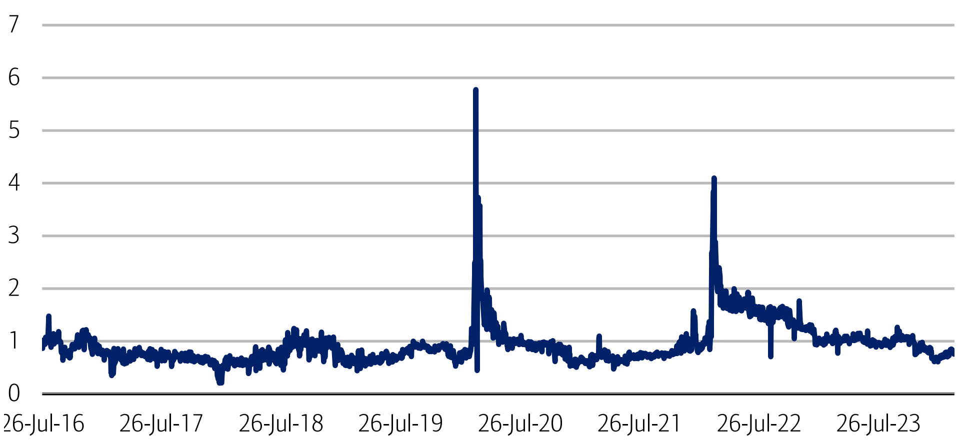
One-off devaluation risk is there, but still modest

We continue to see risk of occasional 5-10% one-off devaluations, similar to August 2023, and note a $2.37bn drop in the country's total FX reserves this year. However, such one-off FX moves are usually triggered by external shocks (namely sharp RUB moves), rather than fundamental changes/policy adjustment. Therefore, we think the risk of such a one-off adjustment is currently low. The decline in YTD reserves at this point is largely in line with monthly reserves volatility over the past few years and may be related to the volatility of bulky gold exports. In February, the decline partly reflected redemption of $500m in UZBEK'24 Eurobonds. Meanwhile, the country continues to receive substantial funding from international financial organizations, which may help to offset the decline in the near future. We also note a material valuation impact from some $24bn in Central Bank gold holdings, as a 6% move in gold prices in March could boost headline reserves by more than $1.2bn this month.

We remain long UZS and have a bullish bias for KZT

We remain long UZS through an NDF, which expires on 9 April. We think the UZS will be kept stable until early April. We sold the 3-month USDUZS NDF at 12,674 (spot reference: 12,374) on 5 January and the current USDUZS spot is 12.513. We also have a bullish bias for KZT as the carry for long KZT positions (as an equal basket against USD and EUR) still looks very attractive to us at around 0.8% per month. We are not long KZT now, given global uncertainty about the US monetary policy outlook. We also see the risks as skewed towards a stronger USD in the short term, which should be negative for the KZT carry trade.

Exhibit 6: KZT carry still looks attractive, but the broader USD is a big risk to the carry trade
The chart shows 1-month carry for 3m NDF against an equal basket of USD and EUR



Source: Bloomberg, BofA Global Research

BofA GLOBAL RESEARCH

News and Views

Brazil: Core Retail Sales increased 2.5% momsa in January

David Beker
+55 11 2188 4371

Natacha Perez
+55 11 2188 4127

January Core Retail Sales rose 2.5% momsa (from -1.4% momsa in December), well above market expectations of 0.2%. In monthly terms, five out of the eight groups posted positive prints. The main upward pressure came from apparel and footwear (8.5% momsa, vs -6.9%), followed by office supplies and computer (6.1% momsa, vs -13.0%). In yoy terms, sales were up 4.1% yoy (from 1.2% yoy), influenced by the declining Selic rate, as well as a strong labor market. Meanwhile, broad sales, which includes Building Materials, Vehicles and wholesale food items, were up 2.4% momsa (from -1.5% in September). In yoy terms, broad sales accelerated to 6.8% yoy (from 0.1% yoy).

To follow: We expect the sector to continue to post positives prints in 2024, as private consumption should accelerate this year.

Analyst Certification

We, Mikhail Liluashvili and Vladimir Osakovskiy, hereby certify that the views each of us has expressed in this research report accurately reflect each of our respective personal views about the subject securities and issuers. We also certify that no part of our respective compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

Special Disclosures

Some of the securities discussed herein should only be considered for inclusion in accounts qualified for high risk investment.

Disclosures

Important Disclosures

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 BofAS 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.
Individuals identified as economists do not function as research analysts under U.S. law and reports prepared by them are not research reports under applicable U.S. rules and regulations. Macroeconomic analysis is considered investment research for purposes of distribution in the U.K. under the rules of the Financial Conduct Authority.
Refer to BofA Global Research policies relating to conflicts of interest.
"BofA Securities" includes BofA Securities, Inc. ("BofAS") 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:

BofAS 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); BofASE (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 ("BofASE") 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), BofASE 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. BofASE's share capital can be found at www.bofaml.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 (HKSFC); 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 Canadian Investment Regulatory Organization; Merrill Lynch (Mexico): Merrill Lynch Mexico, SA de CV, Casa de Bolsa, regulated by the Comisión Nacional Bancaria y de Valores; BofAS 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; BofAS 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 BofASE (France), which is authorized by the ACPR and regulated by the ACPR and the AMF; has been considered and distributed in Japan by BofAS 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 HKSFC; is issued and distributed in Taiwan by Merrill Lynch (Taiwan); is issued and distributed in India by BofAS 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 BofASE (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.

Certain investment strategies and financial instruments discussed herein may only be appropriate for consideration in accounts qualified for high risk investment.

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:

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 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

Research Analysts

Global Economics

Claudio Irigoyen
Global Economist
BofAS
+1 646 855 1734
claudio.irigoyen@bofa.com

Antonio Gabriel
Global Economist
BofAS
antonio.gabriel@bofa.com

Global EM FI/FX Strategy

David Hauner, CFA >>
Global EM FI/FX Strategist
MLI (UK)
+44 20 7996 1241
david.hauner@bofa.com

Asia FI/FX Strategy & Economics

Helen Qiao
China & Asia Economist
Merrill Lynch (Hong Kong)
+852 3508 3961
helen.qiao@bofa.com

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

Jojo Gonzales ^^
Research Analyst
Philippine Equity Partners
jojo.gonzales@pep.com.ph

Abhay Gupta
Emerging Asia FI/FX Strategist
Merrill Lynch (Singapore)
abhay.gupta2@bofa.com

Pipat Luengnaruemitchai
Emerging Asia Economist
Kiatnakin Phatra Securities
pipat.luen@kkpfg.com

Miao Ouyang
China & Asia Economist
Merrill Lynch (Hong Kong)
miao.ouyang@bofa.com

Xiaoqing Pi
China Economist
Merrill Lynch (Hong Kong)
xiaoqing.pi@bofa.com

Benson Wu
China & Korea Economist
Merrill Lynch (Hong Kong)
benson.wu@bofa.com

Ting Him Ho, CFA
Asia Economist
Merrill Lynch (Hong Kong)
tinghim.ho@bofa.com

Janice Xue
Emerging Asia FI/FX Strategist
Merrill Lynch (Hong Kong)
janice.xue@bofa.com

Chun Him Cheung, CFA
Emerging Asia FI/FX Strategist
Merrill Lynch (Hong Kong)
chunhim.cheung@bofa.com

Kai Wei Ang
Asia & ASEAN Economist
Merrill Lynch (Singapore)
kaiwei.ang@bofa.com

Anna Zhou
China & Asia Economist
Merrill Lynch (Hong Kong)
anna.zhou@bofa.com

EEMEA Cross Asset Strategy, Econ

Mai Doan
CEE Economist
MLI (UK)
+44 20 7995 9597
mai.doan@bofa.com

Zumrut Imamoglu
Turkey & Israel Economist
MLI (UK)
zumrut.imamoglu@bofa.com

Vladimir Osakovskiy >>
EM Sovereign FI/EQ strategist
Merrill Lynch (DIFC)
vladimir.osakovskiy@bofa.com

Jean-Michel Saliba
MENA Economist/Strategist
MLI (UK)
jean-michel.saliba@bofa.com

Merveille Paja
EEMEA Sovereign FI Strategist
MLI (UK)
merveille.paja@bofa.com

Mikhail Liluashvili
EEMEA Local Markets Strategist
MLI (UK)
mikhail.liluashvili@bofa.com

Tatonga Rusike
Sub-Saharan Africa Economist
MLI (UK)
tatonga.rusike@bofa.com

LatAm FI/FX Strategy & Economics

David Beker >>
Bz Econ/FI & LatAm EQ Strategy
Merrill Lynch (Brazil)
+55 11 2188 4371
david.beker@bofa.com

Jane Brauer
Sovereign Debt FI Strategist
BofAS
+1 646 855 9388
jane.brauer@bofa.com

Carlos Capistran
Canada and Mexico Economist
BofAS
+1 646 743 2921
carlos.capistran@bofa.com

Ezequiel Aguirre
LatAm FI/FX Strategist
BofAS
ezequiel.aguirre2@bofa.com

Pedro Diaz
Caribbean Economist
BofAS
pdiaz2@bofa.com

Christian Gonzalez Rojas
LatAm Local Markets Strategist
BofAS
christian.gonzalezrojas@bofa.com

Lucas Martin, CFA
Sovereign Debt FI Strategist
BofAS
lucas.martin@bofa.com

Alexander Müller
Andean(ex-Ven) Carib Economist
BofAS
alexander.muller@bofa.com

Natacha Perez
Brazil Economist
Merrill Lynch (Brazil)
natacha.perez@bofa.com

Sebastian Rondeau
Southern Cone & Venz Economist
BofAS
sebastian.rondeau@bofa.com

BofA Securities participated in the preparation of this report, in part, based on information provided by Philippine Equity Partners, Inc. (Philippine Equity Partners). ^^Philippine Equity Partners employees are not registered/qualified as research analysts under FINRA rules.

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.

>> Employed by a non-US affiliate of BofAS and is not registered/qualified as a research analyst under the FINRA rules.

Refer to "Other Important Disclosures" for information on certain BofA Securities entities that take responsibility for the information herein in particular jurisdictions.