Kenya Viewpoint

Trip Notes: fiscal slippage risks prove taxing

19 February 2024

GEM Economics
EEMEA | Kenya

Tatonga Rusike
Sub-Saharan Africa Economist
MLI (UK)
+44 20 7996 8446
tatonga.rusike@bofa.com

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

GEMs FI Strategy & Economics
BofAS

EEMEA FI Strategy & Economics
MLI (UK)

See Team Page for List of Analysts

Tax burden and weak KES weigh heavy on mood

We spent a day in Nairobi meeting with policymakers, advisers, and private sector experts. The mood was negative relative to the upbeat mood in Nigeria (see Nigeria Viewpoint: Trip notes: in search of hot money 13 February 2024). Higher public taxes and a weak shilling were some of the factors driving sentiment in our view. Coincidentally, our visit overlapped with the announcement of the government's Eurobond issuance and partial buyback, following the reopening of the market. A week later and Kenya sentiment has subsequently improved with a strengthening of the currency.

Default risk averted as Eurobond market reopens

The successful issuance and partial buyback are positive and help to refocus Kenya analysis on fundamentals rather than refinancing risks. International market access will likely help reduce the size of domestic borrowing. Domestic borrowing costs have been rising with the central bank increasing rates and a lack of international market access leading to increased domestic borrowing. The negative is that new Eurobond issuance is more expensive than all other past issuances. The default risk reduction underscores our long-held view that Kenya would not default (see Sub-Saharan Africa Viewpoint: Tough 2023 but brighter prospects in 2024 27 September 2023, and Kenya Viewpoint: Funding in the nick of time 18 May 2023.

Concerns about fiscal slippage

We remain concerned about the risks of fiscal slippage. Fiscal consolidation, based on tax revenue growth, may become increasingly challenging, due to public protests and judicial setbacks. In-year revenue collections are behind target. To keep to the fiscal targets aligned with the IMF program, Kenya's most likely option is spending cuts rather than even more tax revenue measures. Domestic debt service costs are high at about 4% of GDP. Now that external financing has been secured, we expect the focus to shift to reducing these costs by reducing the size of domestic borrowing.

Hawkish CBK could cut 100bp on KES stability

January headline CPI of 6.9% year on year is within the 5% inflation target with 2.5% deviation on either side, while the policy rate is 13%, following a 50bp increase in February 2024. We think the KES is likely to be stable post Eurobond financing and the central bank has room to ease the policy rate by up to 100bp over the next 12 months. A 6% real rate is too restrictive. Positive real rates do not need to exceed 5% – the neutral level. A lower policy rate could transmit to lower yields in government securities, given high domestic debt service costs.

Trip feedback: watching fiscal risks

More money, fewer problems

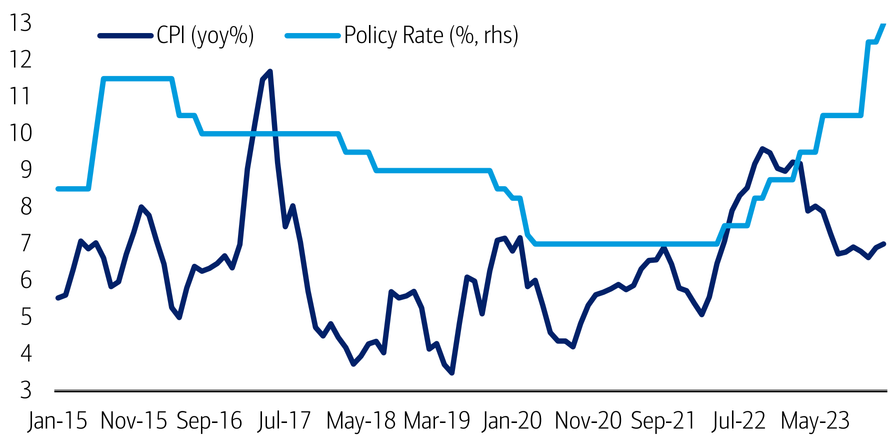
On 17 January, the IMF executive Board approved Kenya's sixth review of the extended fund facility (EFF), extended credit facility (ECF) and the first review under the Resilience and Sustainability Facility (RSF) and disbursed about $685 million. The IMF increased program financing compared to the $410 million disbursed in July 2023. In other words, the EFF/ECF program was extended by 10 months until April 2025, which comes with $540 million of new financing. An RSF arrangement was approved to run for 20 months concurrently with the EFF/ECF until April 2025. The upscaling of the EFF/ECF program + RSF provides at least $1 billion in new financing until April 2025. The next IMF review is likely in June, to be approved and disbursed before the close of the fiscal year.

In January, Kenya also received a loan of $210 million disbursed by the Trade and Development Bank. The World Bank is set to extend its loan financing to $1.25-1.5 billion under the development policy operation – the last disbursement of $1 billion was in June 2023. This time there are considerations to approve disbursements earlier in March and at the same time increase the support.

Negative ratings outlook likely to return to stable

All three rating agencies carry negative outlooks on Kenya. Its credit ratings stand at: Fitch B/negative, Moody's B3/negative, and S&P B/negative. Given the positive outcomes in both domestic and external funding, ratings outlooks are likely to return to stable. The funding squeeze has been dealt with in the near term, though structural issues remain around the twin deficits.

Exhibit 1: Inflation and Central Bank Rate (%)
Positive real rates have widened with hawkish hikes from CBK

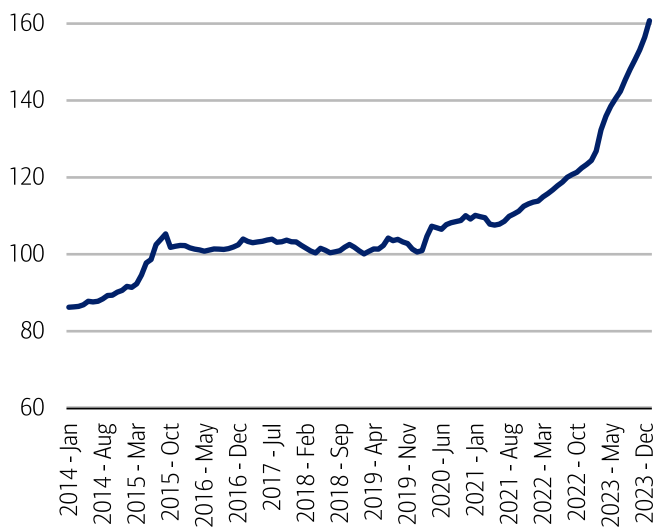


Source: Haver

BofA GLOBAL RESEARCH

Exhibit 2: USD-Kenyan Shilling Exchange rate History

Kenyan shilling has been weakening rapidly. Appreciation in the last week has been due to the re-opening up of the Eurobond market to Kenya

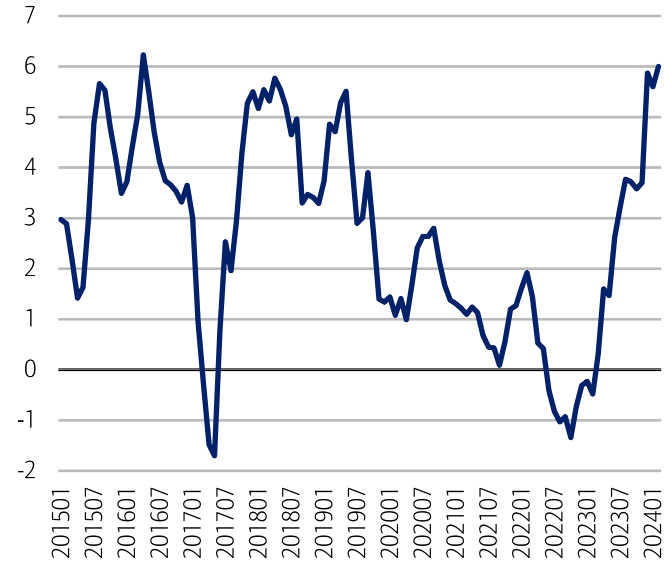


Source: Haver

BofA GLOBAL RESEARCH

Exhibit 3: Monetary Policy and Inflation Rate Differential

Positive real rates close to 6% reflect too restrictive monetary policy



Source: Haver, BofA Global Research

BofA GLOBAL RESEARCH

Hawkish CBK could cut 100bp on KES stability

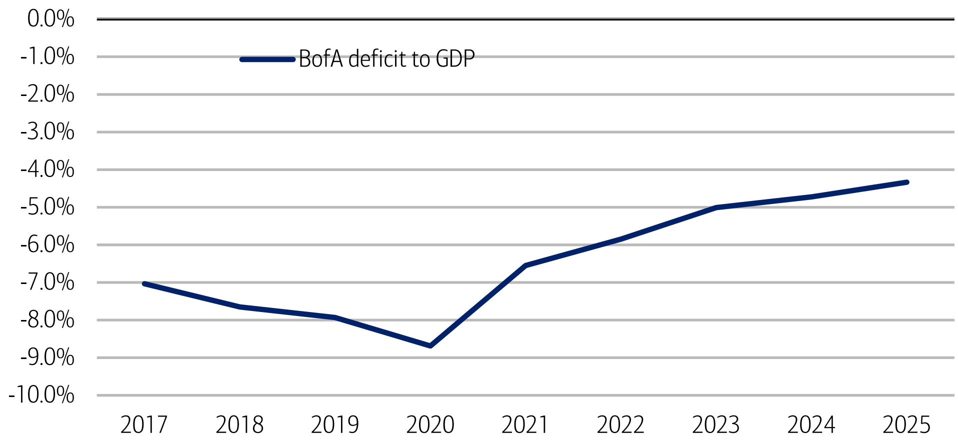
The latest January headline inflation reading printed 6.9% year on year, while the policy rate is 13%, following a 50bp increase in February 2024. The Central Bank of Kenya (CBK) targets inflation of 5%, with 2.5% deviation on either side. It could be argued that it is already within the range of 2.5%-7.5% and that monetary policy does not need to tighten further. However, we think monetary policy is too restrictive now and we expect moves towards cutting, with room for a cumulative 100bps over the next 12 months. The real interest rate is almost 6% (see Exhibit 3), which is too restrictive, as is anything above 5%, in our view.

We understand the CBK's concerns on recent shilling weakness and the likely pass-through to domestic inflation. Now that the external debt default risk question has been resolved with the partial buyback, the shilling is likely to be more stable at around KES150 per USD. Positive real rates do not need to exceed 5% (the neutral rate), in our view. If inflation stays within the target band, there is room for the CBK to ease the policy rate back to 12% over the remainder of the year. Substantial shilling weakness (see Exhibit 2) is likely done.

We think the appreciation over the past week is likely temporary rather than the new normal. Kenya still runs a current account deficit that is largely financed by debt. The debt inflow may provide opportunities for FX build-up on a cyclical basis rather than representing a structural improvement. Moderate depreciation of close to 10% is a likely baseline.

Kenya's credit channel already works with private sector credit growth aligned to nominal GDP growth. The next step would be to gradually reduce dollar holdings of commercial banks into the FX market. More shilling trades and fewer dollar holdings can improve monetary policy transmission. Non-residents are increasingly paying attention to Kenya's local market, which could structurally increase dollar inflows over time. That could help to lower domestic borrowing costs too.

Exhibit 4: Fiscal Deficit to GDP history and Forecast
Fiscal consolidation likely to slow over the medium



Source: Haver, BofA Global Research.

BofA GLOBAL RESEARCH

Risks of fiscal slippage

Fiscal slippage in the current fiscal year ending June and in the medium term is a significant risk in our view. Fiscal consolidation through more revenues would be challenging to say the least, underlined by public protests and wrangles over finance measures in the courts. The public outcry relates to higher and new taxes. Opposition leader, Raila Odinga, pushed for social protests to put pressure on the government to reverse tax increases. Measures implemented in the 23/24 budget, such as: 1) increasing the highest personal income tax rate to 35%; 2) raising VAT levied on petroleum products to 16%, from the current 8%; 3) a new digital tax on financial assets at 3%; and 4) increasing the excise duty rate on mobile money transfers to 15% from 12%. Various other taxes were also introduced including a 1.5% housing levy and a hospital insurance levy.

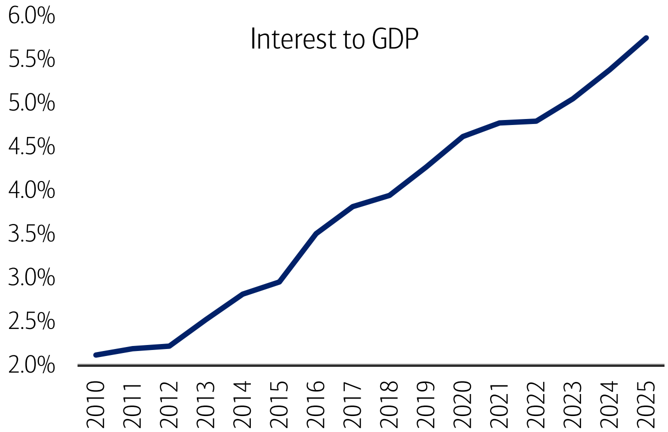
We have also seen court battles between the executive and judiciary – the new measures in the Finance bill were suspended until certain revisions were made, which resulted in its delayed implementation. More recently, it's the housing levy that is in dispute in the public courts. Judiciary decisions against the executive highlight the court's independence, which is an institutional strength. However, revenue collection would slow and result in missing targets. Kenya will need to moderate expenditure to stay on fiscal track.

In-year data shows half-year fiscal revenues are behind targets. Revenue has grown 14.5% year on year relative to the original target growth of over 25%. We assume conservative full-year growth of 15%. On the spending side, planned growth was over 20% while in-year spending is showing close to 10%, or at least KES300 billion slower than target. At this rate, we think the full-year deficit is likely to be around 5% (government: -4.9%) and achieve a primary balance – not too bad but not good enough for IMF targets of a surplus of 0.3% of GDP. Our deficit reduction path is much slower than the government's. We assume a likely deficit of -4.7% of GDP (government: -3.9%) in fiscal 2024/25, and -4.3% (-3.3%) in fiscal 2025. Nevertheless, it is still a welcome path, despite being weaker than the government's ambitious plan.

The supplementary budget is due to be presented in the coming weeks, where medium-term forecasts could be subject to revisions.

Exhibit 5: Debt service as ratio to GDP

Remains on a rising path, which is unsustainable over the medium term.

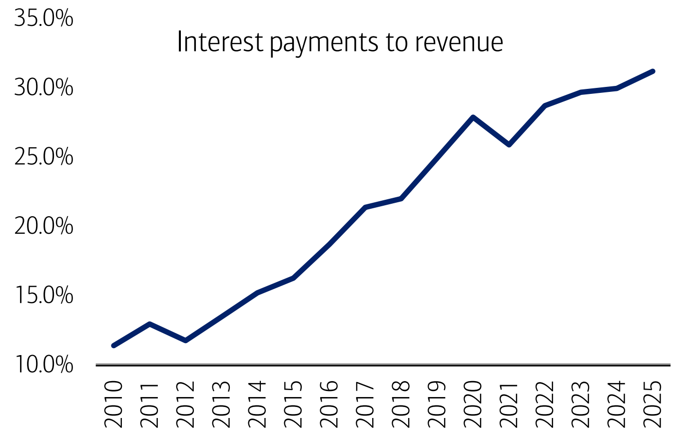


Source: Haver, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 6: Debt service to revenue ratio

Debt service costs are rising faster than revenue growth despite new tax measures.



Source: Haver, BofA Global Research

BofA GLOBAL RESEARCH

Debt service burden more domestic than external

The next big concern should be managing to moderate growth in domestic debt service. It is more expensive to borrow in the local market than abroad. We recognise that the latter is somewhat reduced by largely concessional financing from official lenders. However, Kenya's debt service burden relates more to domestic than external debt. Only 24% of debt service goes to external creditors, while 76% goes to domestic debt service. When expressed as a ratio of GDP, 1% is external debt service and 4% is domestic debt service. Overall, Kenya spends about 5% of GDP on interest costs. The debt stock mix between external and domestic is literally 50/50.

Domestic yields likely edged higher for two reasons: the rising central bank policy rate and increased borrowing by the government in the domestic market. The domestic yield curve is flattish, with front-end treasury bills as high as the belly and long-end securities. For instance, treasury bills yield around 18%, while the recent February 2024 7-year infrastructure bond has been issued at 18.6%. Nevertheless, funding conditions in the domestic market have improved with uptake of securities better than in the previous fiscal year. We are seeing more interest in infrastructure bonds (tax free) and short to medium tenors.

Domestic liquidity problems that characterised the fiscal year ending 30 June 2023 are now largely over. The government faced delays in salary payments in March 2023 and the undersubscription of domestic securities auctions, reflecting the domestic liquidity squeeze. The domestic financing target was met in June, just before the fiscal year-end, with a large oversubscription of the infrastructure bond. Expected external disbursements were slow, while the IMF approved its funding only in July, after the fiscal year had closed.

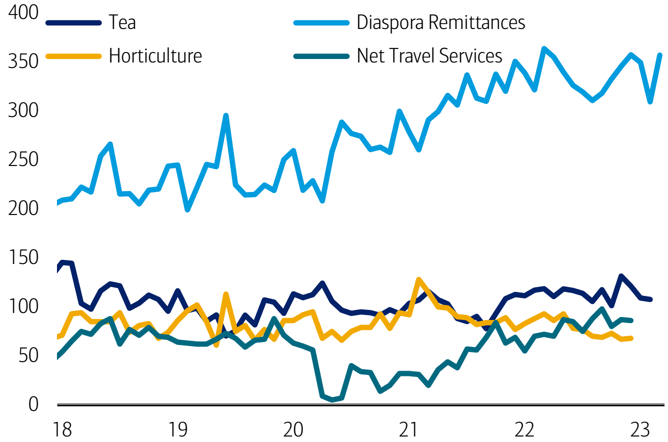
Still resilient economic growth

We expect GDP to continue to grow at 5% pa, similar to its historical average. Its post-pandemic recovery has been strong restoring growth close to 5%. That is 7.5% in 2021, and around 5% in 2022 and 2023. Much of the growth relies on services-driven activities: financial, telecommunications, retail, tourism and a regional hub for manufacturing. The agriculture sector's contribution to economic growth is small and sometimes negative due to weather-related shocks, such as frequent droughts. However, the contribution to employment is more than 50% of the total in Kenya.

Narrow economy + structural twin deficits

Kenya has a narrow economic base and structural twin deficits that rely more on debt financing and less on FDI. It has limited domestic goods production and relies on imports. Peers in Southern and West Africa are endowed with resources that allow them to run consistent trade surpluses. The services and agriculture sectors are key for economic growth and export receipts. The top-five USD earnings come from: diaspora remittances, Kenya airline receipts, tourism receipts, tea exports and horticulture. All current account receipts combined are not sufficient to cover current account payments, leading to moderately high current account deficits. Diaspora remittances are the single-largest source of current account receipts. Remittance growth is striking, and the tourism recovery has been strong. Tea and horticulture are performing broadly in line with historical levels. Services receipts have recovered robustly, primarily on the back of a revival in tourism.

Exhibit 7: Kenya's key goods and services exports (mn US$)
Diaspora remittances are single largest source of USD inflows



Source: Haver, BofA Global Research

BofA GLOBAL RESEARCH

Analyst Certification

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

Special Disclosures

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

Disclosures

Important Disclosures

FUNDAMENTAL EQUITY OPINION KEY: Opinions include a Volatility Risk Rating, an Investment Rating and an Income Rating. VOLATILITY RISK RATINGS, indicators of potential price fluctuation, are: A - Low, B - Medium and C - High. INVESTMENT RATINGS reflect the analyst's assessment of both a stock's absolute total return potential as well as its attractiveness for investment relative to other stocks within its Coverage Cluster (defined below). Our investment ratings are: 1 - Buy stocks are expected to have a total return of at least 10% and are the most attractive stocks in the coverage cluster; 2 - Neutral stocks are expected to remain flat or increase in value and are less attractive than Buy rated stocks and 3 - Underperform stocks are the least attractive stocks in a coverage cluster. An investment rating of 6 (No Rating) indicates that a stock is no longer trading on the basis of fundamentals. Analysts assign investment ratings considering, among other things, the 0-12 month total return expectation for a stock and the firm's guidelines for ratings dispersions (shown in the table below). The current price objective for a stock should be referenced to better understand the total return expectation at any given time. The price objective reflects the analyst's view of the potential price appreciation (depreciation).

Investment rating	Total return expectation (within 12-month period of date of initial rating)	Ratings dispersion guidelines for coverage cluster[R1]
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

[R1]Ratings dispersions may vary from time to time where BofA Global Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

INCOME RATINGS, indicators of potential cash dividends, are: 7 - same/higher (dividend considered to be secure), 8 - same/lower (dividend not considered to be secure) and 9 - pays no cash dividend. *Coverage Cluster* is comprised of stocks covered by a single analyst or two or more analysts sharing a common industry, sector, region or other classification(s). A stock's coverage cluster is included in the most recent BofA Global Research report referencing the stock.

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

From time to time research analysts conduct site visits of covered issuers. BofA Global Research policies prohibit research analysts from accepting payment or reimbursement for travel expenses from the issuer for such visits.
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.
Information relating to Affiliates of BofAS, MLPF&S and Distribution of Affiliate Research Reports:
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.
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; Merrill Lynch (Argentina): Merrill Lynch Argentina SA, regulated by Comisión Nacional 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.

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.

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

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

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

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

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

Research Analysts

EEMEA FI Strategy & Economics

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.