South Africa Watch

Spending grip + SARB profits transfer champion short-term boost for Budget

26 February 2024

GEM Economics
EEMEA | South Africa

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

EEMEA FI Strategy & Economics
MLI (UK)

GEMs FI Strategy & Economics
BofAS

See Team Page for List of Analysts

Fiscal framework unchanged – a short-term positive

With no real new tax measures, the National Treasury largely maintained its call for a grip on spending. It cited nominal reductions in non-interest spending, no new allocations to state-owned enterprises and slower growth in debt service costs, helping to keep fiscal forecasts more constructive than our base case. Non-interest spending is set to grow 4-5% per year, while interest spending should increase by less than 10%.

Risks to spending could influence fiscal outcomes

There are risks to spending assumptions that could impact fiscal outcomes. Historical wage agreements have resulted in settlements above the Treasury's baseline. Interest spending has grown by 15% over the past three fiscal years. Assuming an increase of less than 10% could be a risk, even if helped by reducing borrowings through central bank profits drawdowns. New spending transfers to Transnet may be delayed rather than denied, as Transnet is too big to fail.

We turn more positive once Eskom support is phased out

The government expects a main budget deficit of -4.7% of GDP in 2023/24 (BofA -4.8%) and -4.3% for the 2024 budget (BofA -4.5%). Our all-in deficit including Eskom support is above the line at -5.8% in 2023/24E and -5.4% in 2024/25E and -5.6% in 2025/26E. Our forecasts underscore our overall dim view of public finances. To be constructive on the fiscal, we wait for 2026 when Eskom support is phased out, likely resulting in a stronger primary surplus.

Central bank profits drawdown reduces borrowing

Immediate access to central bank profits (unrealised revaluation gains from central bank FX reserves in the Gold & Foreign Exchange Contingency Reserve Account (GFECRA)) reduces near-term borrowing requirements. The government is set to tap into R150 billion (about 2% of GDP) of GFECRA funds over the next three years. Net borrowings, excluding redemptions, in 2024/25 will likely decline to R385 billion, from R407 billion in 2023/24. However, due to lower GFECRA drawdowns, net borrowings could increase to R418 billion in 2025. As Eskom support is phased out, net borrowings should decline more significantly in 2026 to below R300 billion.

Leadership continuity at Treasury key post elections

As South Africa heads to elections on May 29, opinion polls suggest governing ANC could fail to win an outright majority and it may need to form a coalition to remain in government. The outcome could be uncertain and noisy. However, the budget presentation looked beyond elections and refuted suggestions of populist spending before voting: no new spending ahead of the election and no tax increases, with the aim to stabilise debt. We hope that, for continuity, the Finance Minister can stay beyond 2024 to continue implementing his fiscal framework. Leadership changes could be a further setback to structurally weak public finances.

Post-budget fiscal views

Short-term boost

The budget provided a short-term boost to the fiscal outlook – the drawdown from central bank profits cut near-term borrowing by R100 billion. However, it will be challenging to reduce fiscal deficits significantly over the next two years. Fiscal consolidation will likely rely on containing expenditure due to few tax options – VAT and PAYE are already at high rates. CIT (corporate income tax) was supposed to trend downwards but will likely stay at the current level as the government can't afford to lose more tax revenues.

New bailout packages for state-owned enterprises were temporarily contained but not eliminated. Transnet is still covered by the R47 billion guarantee and may require future transfers to support its turnaround plans. Like Eskom, Transnet is too big to fail.

Spending increases by R250 billion over the medium term are largely due to budgeting for higher wages and social protection. Budgeting for wages becomes more realistic with average growth of 4.5% compared to close to 2% in the previous framework. Social protection increases suggest the social relief of distress grant could become permanent through increases in overall social protection allocation. For the first time, there is no additional allocations for debt service over the medium term.

Primary surpluses to anchor fiscal outlook

The National Treasury is targeting consistent primary surpluses over the medium term to anchor fiscal consolidation and debt stabilisation by 2025/26 – an elusive dream over the past 10 years. We think the fiscal outlook is more positive from 2026, when Eskom financing is completed and deficits below 4% of GDP should truly support strong primary surpluses. When we include Eskom allocations in spending, primary balance remains negative until at least 2026.

Increasing tax revenues are likely to rely on higher GDP growth. We see new tax policy measures as limited – there were no increases in the major taxes in the 2024 budget, in line with our expectations. The R15 billion baseline of new tax measures is largely covered by bracket creep – not by adjusting tax brackets for inflation which provides a higher revenue base. The Treasury largely maintained its call for a grip on spending with no new allocations to state-owned enterprises and slower growth in debt service costs helped by tapping into GEFECRA. Additional spending of R58 billion should cover shortfalls in wage bill budgeting.

Fiscal revenues likely to hold up

Changes to economic growth forecasts to 0.6% in 2023 and 1.3% in 2024 are largely in line with our expectations. Tax revenues are directly affected by changes in nominal GDP growth. Headline revenue projections remain largely unchanged compared to three months ago. While revenue buoyancy in 2024 appears higher than usual (1.33 in 2024/25 vs 0.6% in 2023/24), it reflects the pick-up in economic growth that will be transmitted to revenues. We think revenue targets should be broadly achievable. Tax revenue gains over the medium largely emanate from bracket creep resulting in overall gains of R18.2 billion in 2024/25, R19.3 billion in 2025/26 and R28.2 billion in 2026/27.

Nominal spending reductions set tone for containment

Expenditure growth is assumed to increase below inflation – in nominal terms, 4% in 2024 and 5% thereafter. The 2023 fiscal year shows control over non-interest spending – down R6 billion from the original 2023 budget guidance. Over the medium term, non-interest expenditure cuts amount to R80.6 billion due to a reduction in the baseline from the February 2023 budget. Nevertheless, some expenditure increases contained in the fiscal framework relate to provisioning for wage increases, social grants inflation related adjustments, , among others. For instance, the Treasury has now factored in additional allocations for social protection until 2027– amounts similar to those for the social relief of distress grant, implying this funding may become permanent.

Higher wage increases remain a risk to fiscal outlook

The overall wage bill increase has risen to 4.5% compared to around 2% in the previous framework. Should wage negotiations result in higher increments, the government intends to offset increases within existing budget lines and, if necessary, reduce headcount. Negotiations between the PSA and the public service unions are to begin in the next fiscal year. Higher wage increases present downside risks to the fiscal framework.

Debt service costs have been among the fastest-growing spending items, rising by 15% on average in the last three fiscal years. The pace of growth is assumed to slow to less than 10% pa due to lower borrowing than suggested by headline deficits. This is largely due to drawdowns of central bank profits by the government.

Deficit and financing

Exhibit 1: Financing Outlook table for 2024

GFECRA drawdowns of R100 billion reduces borrowings more substantially.

Financing outlook	Revised 23/24	Budget 2024	BofA 2024 baseline
Main budget balance	-331.38	-321	-341
Redemptions	-145.76	-172.6	-172.6
Eskom debt relief	-78	-64.15	-64.15
GFECRA settlement		100	100
Total financing required	**-555.1**	**-457.7**	**-477.8**
Financing items			
Domestic long term	327.9	328.1	328.1
Domestic short term	88	33	53.1
External borrowing	45.16	36.7	36.7
Use of cash	92.07	59.9	59.9
Total financing	**553.13**	**457.7**	**477.8**

Source: National Treasury, BofA Global Research

BofA GLOBAL RESEARCH

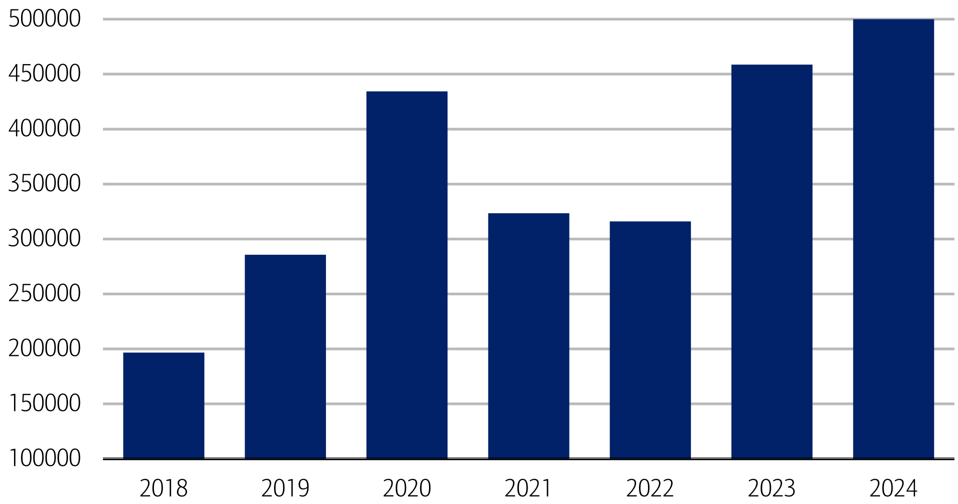
Domestic borrowing auctions largely unchanged

Domestic long-term borrowings were largely left unchanged. Treasury bills were utilised to cover short term funding gaps. Domestic auction changes were made to long term issuances, albeit mildly. The fixed rate bond amounts were reduced marginally to R3.75 billion per week from R3.9 billion, inflation linkers remained unchanged at R1 billion.

No Eurobond market access near term

Near-term external borrowing remains relatively low. The government expects to borrow $2 billion in 2024/25 fiscal year largely from concessional sources. There is no baseline for market issuance. External borrowing is likely to be scaled up in 2025 to about $9.5 billion, with Eurobond market access likely that year.

Exhibit 2: SARB Gold and FX Contingency Reserve account (Rmil)
Balance due to SA government have been rising over the years.



Source: National Treasury

BofA GLOBAL RESEARCH

Lower financing as government taps into GFECRA

The tailwind for the government is drawing down on the Gold & Foreign Exchange Contingency Reserve Account (GEFECRA). The GEFECRA account has about R500 billion in balances from unrealised gains in the holdings of gold and foreign exchange reserves. GFECRA is a government account held at the central bank. It records the gains and losses made from FX reserves transactions. As the account is recorded in ZAR while FX reserves are largely in USD, profits tend to show when the ZAR depreciates. R150 billion is to be disbursed as follows: R100 billion in 2024/25 and R25 billion in each of the two subsequent fiscal years.

Distributing mechanisms of GEFECRA

The SARB and Treasury have decided not to sell the FX reserves (underlying asset) to finance transfers to the latter. Instead, they will create bank reserves as local currency liabilities on the SARB balance sheet. Government assets, such as deposits on the central bank balance sheet, are a liability for the latter. Other central bank liabilities include excess reserves of banks, which are deposited at SARB and paid interest at the monetary policy rate.

Sterilisation costs are estimated at R8 billion in 2024, R10 billion in 2025 and R12 billion in 2026. Costs are met by the Treasury. Distribution of GFECRA balances to the National Treasury are not expected to cause inflationary pressures due to the use of liquidity management tools to prevent excess liquidity.

GFECRA reform creates three pools

GFECRA balances will now be settled instead of remaining unrealised gains. The framework creates three pools: a buffer set at R250 billion; a contingency reserve of R100 billion; and funds for distribution to the National Treasury. The buffer pool is meant to absorb any losses from currency appreciation without resulting in negative balances in the account. The contingency reserve is an additional pool to act as an equity buffer for the SARB, maintained to absorb losses including sterilisation costs when payments are made to the National Treasury. Any remaining funds are then distributed to the National Treasury each year – that is, any amounts above R350 billion.

Mechanisms to protect SARB include: no settlement of GFECRA balances if it undermines the solvency of the central bank; and no sales of FX reserves to realise GFECRA gains if FX reserves are below estimated adequacy levels. Any settlements on GFECRA shall be used to reduce government borrowing and transfers shall be governed by an agreement and schedule. The transfers are supposed to reduce service costs by R30.2 billion over the medium.

Medium-term fiscal strategy

- Achieve fiscal sustainability by achieving primary surpluses plus debt stabilisation. The debt-stabilising primary surplus is likely to be around 1% of GDP.

- Support economic growth: energy supply and logistics failures addressed through acceleration of private investment; Eskom's debt-relief arrangement is set to end in 2025/26; and R100 billion of investment in new private energy generation projects. Solar panels are now generating 52000MW of electricity for households and businesses. Transnet received a R47 billion guarantee in 2023/24, conditional on implementation of its comprehensive turnaround plan.

- Reduce fiscal and economic risks by reducing fiscal deficits.

Exhibit 3: Key Macroeconomic forecasts

Revised economic growth projection downwards to 1.3% from 1.5%.

	2019	2020	2021	2022	2023e	2024f	2025f
Real GDP growth (%yoy)	0.3	-6.0	4.7	1.9	0.5	1.3	1.5
CPI average (%yoy)	4.1	3.3	4.6	6.9	5.9	4.9	4.5
Policy rate (%, end of period)	6.5	3.5	3.8	7.0	8.3	7.5	7.0
Fiscal Bal (% of GDP)	-6.1	-9.8	-5.1	-4.6	-5.8	-5.4	-5.6
Primary Bal (% of GDP)	-2.5	-5.7	-0.9	0.0	-0.8	-0.3	-0.3
Debt (% of GDP)	57.2	70.2	68.0	70.9	73.9	76.1	78.1
Current Account Deficit % of GDP	-2.6	1.9	3.7	-0.5	-1.5	-2.5	-2.5
Exchange rate (USD/ZAR end period)	14.0	14.7	15.9	17.0	19.0	17.8	18.4
Exchange rate (USD/ZAR avg)	14.5	16.5	15.0	16.5	18.6	18.2	18.1

Source: Haver, BofA Global Research

BofA GLOBAL RESEARCH

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.