

# Sub-Saharan Africa Viewpoint

## Tough 2023 but brighter prospects in 2024

### Higher global rates keep SSA out of Eurobond market

In SSA, external funding remains a challenge with international markets still inaccessible. No sub-Saharan African country has been able to access the Eurobond market since April 2022, except for Gabon with a guarantee from an investment-grade issuer. Global central banks are still raising interest rates and projections reflect a higher-for-longer scenario, which would likely keep single-B yields above 10% and market access challenging in 2024. However, individual countries with good reform stories could have opportunities in 2H24. We turn our attention to these idiosyncratic stories.

### Oil prices to benefit Angola via surpluses in 2024...

Higher oil prices benefit Angola and Nigeria. Angola had a difficult 1H23 with oil prices dipping into the \$70s while production declined on maintenance-related concerns. That switches Angola into a small fiscal deficit while the current account remains in surplus. The pain of lower oil prices has led to weaker GDP growth, substantial kwanza depreciation, and rising inflation. However, we believe oil production has stopped declining, which, combined with oil prices rising to an average \$90 in 2024E, suggests upside to the growth outlook and a return to twin surpluses.

### ...and Nigeria with potential rating upgrade

Transition and reform are ongoing in Nigeria without substantial dollar inflows to improve FX liquidity. We expect the CBN to hike by a cumulative 150bp by year-end. Foreign portfolio inflows are unlikely to come back before 2H24, or at least until there are positive real rates in the local market and more exchange rate stability. We see the naira remaining weak, at 800 per USD by year-end, only appreciating in 2024. A potential increase in oil production represents the most likely positive catalyst and structural change in Nigeria. If that materialises, a rating upgrade to B in 2H24E is likely. Oil revenues should rise on higher oil prices and production, and the removal of subsidies. Efforts to increase non-oil revenues should help to return to the 3% fiscal deficit limit.

### Kenya: no default but concerns about fiscal adjustment

We maintain our no default call in June 2024 as the \$2 billion Eurobond matures. However, we are concerned about near-term fiscal slippage risks. To keep to the fiscal targets aligned with the IMF program, Kenya's most likely option is spending cuts, rather than additional tax revenue measures, even though expenditure is set to rise by over 1% of GDP, to Kes3.9 trillion. The political capital for higher taxes is probably exhausted considering the legal issues with the Finance Act and opposition-led protests about the rising cost of living.

27 September 2023

GEM Economics  
EEMEA | South Africa

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

**EEMEA FI Strategy & Economics**  
MLI (UK)

**GEMs FI Strategy & Economics**  
BoFAS

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

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

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

**Refer to important disclosures on page 15 to 17.**

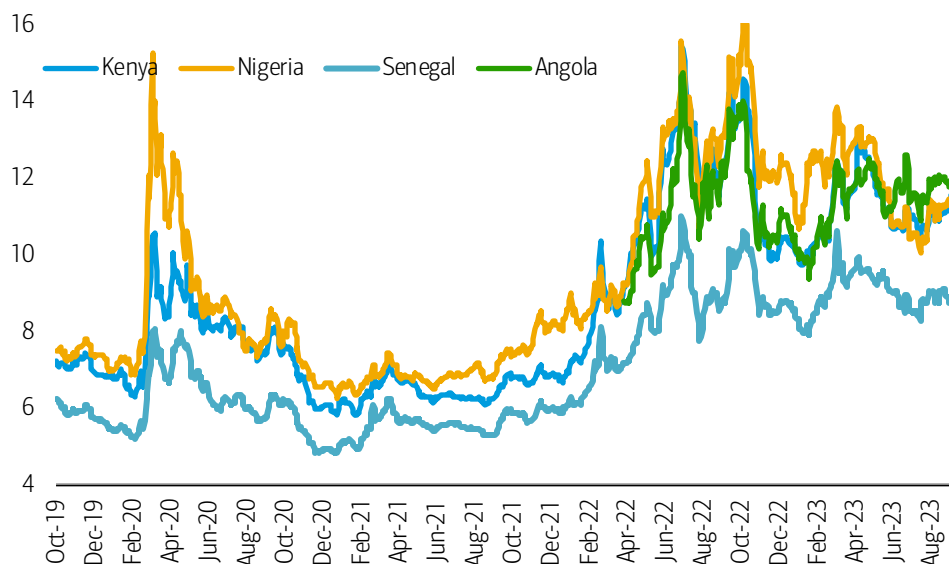
12605766

Timestamp: 26 September 2023 09:21PM EDT

# Markets remain inaccessible while interest rates are still rising

## Exhibit 1: Historical Eurobond yields in selected SSA countries (%)

10-year bond yields have moderated from March 2020 and summer 2022 highs, but remain above 2021 levels



Source: Bloomberg

BofA GLOBAL RESEARCH

## A cutting cycle could open up markets in 2H24

The markets remain inaccessible to SSA while global central banks are still raising interest rates. Our US economics team sees the Fed implementing a first cut in June 2024, with cumulative cuts of 75bp to year-end. We think that a cutting cycle could start to open up the international market for sub-Saharan African issuers in 2H24. The opportunities are likely to be aligned with individual reform stories. 10-year bond yields are now at better levels than last summer with yields below 10% supporting potential issuance. Senegal appears to have the lowest yields among peers and the opportunity to issue, likely post February 2024 elections.

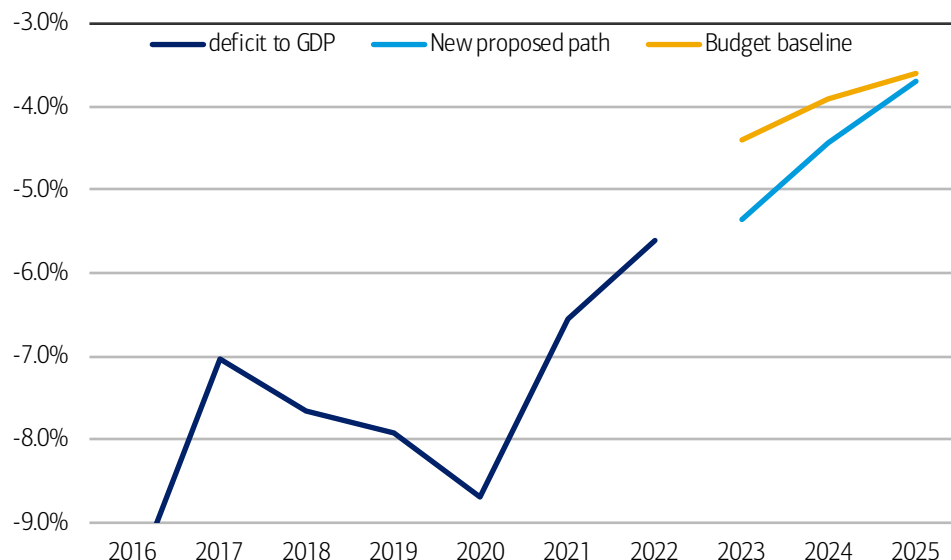
## Debt negotiations drag on into 2024

Progress in debt talks has been slow in both Zambia and Ghana with not much happening post the IMF spring meetings. Zambia is a step ahead of Ghana having agreed an in-principle deal with official creditors on 22 June. However, adding the details to the memorandum of understanding has taken more time than anticipated. Comparability of treatment with private creditors under a common framework and factoring in a potential upgrade to Zambia's debt-carrying capacity to medium from low, are some of the details being finalised. Debt talks with private creditors are likely to continue into 2024.

## Kenya: needs to stay on track with fiscal adjustment, financing, and FX reserves adequacy

### Exhibit 2: Headline fiscal deficit path baseline vs proposed path

IMF will be comfortable with keeping the budget baseline as planned. The supplementary budget should move away from the proposed path back to baseline



Source: Haver, BofA Global Research

BofA GLOBAL RESEARCH

## Fiscal correction required to keep the IMF on side

In the 2022/23 fiscal year Kenya achieved a deficit of -5.6%. In 2023/24, the bar is higher with a target of -4.4%. We see near-term pressures that could slow the pace of consolidation. National Treasury figures suggest revenue collection in the first two months of the fiscal year is below targets. The plan is to increase tax revenues by over 20% from 2022/23 levels largely helped by the implementation of new tax measures. However, any new taxes or increases in rates face pushback based on legal and social risks. We think that adjustments on the expenditure side would be the most realistic way to cut and stay below original fiscal targets, but expenditure, particularly recurrent, is set to grow by over 20%, which we see as a hurdle to reaching the fiscal consolidation objective.

## Some easing in domestic political and legal pressures

### Protests and High Court temporary suspension of Finance Act reflects tensions

In July 2023, the opposition led three-day demonstrations against the higher cost of living/higher taxes. The High Court also suspended the implementation of the 2023 Finance Act on 30 June. The bone of contention was largely the tax increases in the new act. For instance, measures proposed in the 2023/24 budget, such as: 1) PAYE: increasing the highest personal income tax rate to 35%; 2) VAT: increasing the rate levied on petroleum products to 16% from 8%; 3) the CRYPTO tax: a new digital tax on financial assets such as crypto at 3%; and 4) the mobile money tax: increasing the excise duty rate on mobile money transfers to 15% from 12%. Overall, revenues raised by the new measures are expected to add at least 1% to GDP. The suspension was lifted, and the Finance Act has since been implemented without amendments. However, the delay will impact the pace of collections and likely the deficit.

In August, Kenya temporarily reinstated fuel subsidies, by keeping prices at the pump unchanged for August-September. Oil importers were compensated from the petroleum development fund, which had built up some savings. The authorities quickly reiterated that the freeze was temporary and not a policy reversal. Prices have since been revised upwards in September.

## **New draft fiscal plan not in line with IMF targets**

On 15 September, Kenya's National Treasury published a draft 2023 Budget Review and Outlook paper with negative revisions to fiscal targets. Overall, the headline fiscal deficit target is set to weaken to -5.4% of GDP from -4.4% of GDP, which could jeopardise IMF targets. However, the draft publication is for consultation and yet to be approved by parliament. A supplementary budget is expected to be presented by end of October/early November. The IMF 5<sup>th</sup> review was passed on the premise of reaching the -4.4% of GDP deficit and primary surplus of 0.7%. A primary deficit would not be consistent with IMF targets. Therefore, the Treasury could revise targets to culminate in a primary surplus and a deficit likely below 5% of GDP. The risk of protests could limit the likelihood of new tax measures such as raising tax rates. Rather, a focus on enhancing tax administration and compliance is likely. More feasibly, the Treasury is likely to cut spending items to reach overall targets.

## **Expenditure cuts can restore fiscal credibility**

The Minister of Finance has announced that expenditure is set to rise to Kes3.9 trillion from a previously planned Kes3.7 trillion in June. Compared with close to Kes3.2 trillion achieved in 2022/23, this shows substantial fiscal expansion – over a 20% nominal increase while nominal GDP growth and inflation growth are both closer to 10%.

The in-year additional fiscal spending is largely attributed to incurring expenditure overruns from the 2022/23 fiscal year: Kes77.5 billion carried over from 2022/23 into 2023/24 and about a Kes120 billion increase in external interest payments due to a weaker currency. Overall, additional spending amounts to over 1% of GDP above the original budget baseline. Fiscal financing pressures are likely to remain elevated, similar to the last fiscal year. With a deficit close to Kes900 billion, financing is likely to be split roughly equally between domestic and external sources at Kes415.3 billion and Kes448.7 billion. Net external fiscal financing (excluding amortisation) amounts to close to \$3 billion.

## **External financing uncertainties remain**

Besides predictable financing from official lenders (the IMF+ World Bank), other external financing sources are still being sought and are not yet firmly agreed or concluded. Most recently, the government appointed bankers to help it explore options to refinance the \$2 billion Eurobond due in 2024. It is less likely that the Eurobond market would have opened up to frontier countries by then. So, Kenya needs an alternative plan to refinance. Recent government announcements suggested shelving buy-back plans. President Ruto had committed to a potential buy-back of up to \$1 billion by the end of December 2022. So, syndication loans become a likely near-term option to boost financing and FX reserves.

The central bank also suggested paying off from FX reserves. As of today, FX reserves are weak, around \$7 billion, equivalent to 3.8 months of import cover. Unless there is a substantial build-up in FX reserves, paying the Eurobond in June 2024 from this source could breach IMF program reserve targets. The IMF expects FX reserves to be around \$7.3 billion at end-2023, \$8.5 billion by end-2024 and \$9.7 billion by end-2025.

Kenya runs structural current account deficits while FDI inflows are low. This results in over-reliance on debt financing to cover the funding gap. FX reserves can only be built up with external borrowing. IMF and World Bank funds only flow later in Nov 2023, May 2024 before the end of June 2024. In the meantime, Kenya needs to demonstrate access to external financing beyond official lenders that could prop up FX reserves and be resolute in sticking to its fiscal targets – primary surplus target of 0.7% of GDP and headline deficit of -4.4% of GDP.

We estimate that the Kenyan government will need to borrow a gross amount close to \$6 billion in 2024 while net borrowings will be around \$3 billion. The IMF and World Bank can provide up to \$2.3 billion, leaving other sources to make up the balance.

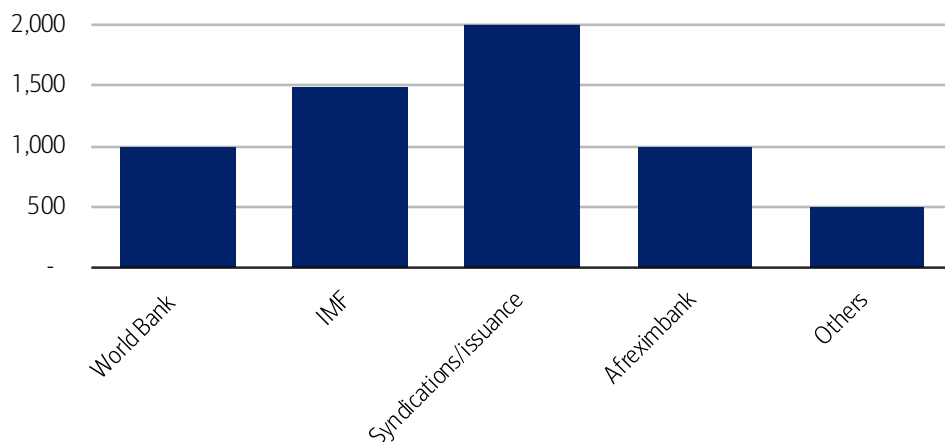
Afreximbank could disburse up to \$1 billion from the \$3 billion medium-term funding for the country, including the private sector.

### IMF could provide more funding if Kenya keeps to targets

If Kenya stays on course with all targets, there is room for more funding from the IMF, subject to Board approval. Currently Kenya's limit is up to 600% of the quota and it has used up to 510%. The remaining 90% (\$650 million) could be applied for and considered by the Board for the next review due in November/December. In 2024, the IMF could provide up to \$1.5 billion while the World Bank provides a \$1 billion development policy operation funding.

#### Exhibit 3: 2024 External funding sources (USD millions)

IMF could increase from baseline while syndication loans could offset market issuance if conditions are not yet conducive



Source: BofA Global Research

BofA GLOBAL RESEARCH

#### Exhibit 4: Kenya Macroeconomic forecasts

Growth outlook remains one of the highest among peers

Kenya	2022	2023e	2024F
Real GDP (%yoy)	4.8	4.8	5
CPI (%yoy, avg)	7.7	8	7.1
Policy Rate (eop)	8.8	10.5	9
Fiscal Bal (%GDP)	-5.5	-5.1	-4.5
Nominal exchange rate (vs USD, eop)	123.4	150	160
CurAct Bal (%GDP)	-4.5	-4.7	-5

Source: Haver, BofA Global Research

BofA GLOBAL RESEARCH

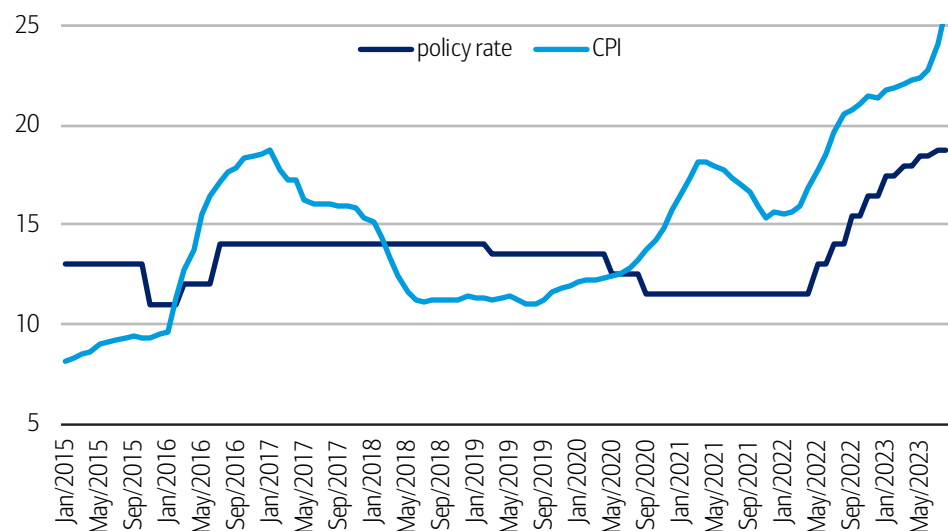
## Nigeria: pain of reforms without dollar inflows

The new government is still talking about reforms. It removed the fuel subsidy and devalued the naira. Without substantial dollar inflows coming into the country yet, domestic fuel prices and overall inflation have escalated. Neither portfolio inflows from non-residents, foreign direct investment or government external borrowings have been able to increase dollar inflows since the liberalisation of the currency and removal of the fuel subsidy.

Portfolio investors are still sceptical about returning to the local markets. The central bank is going through leadership changes, which could be positive for a return to some form of orthodox monetary policy. Real rates are likely to remain negative in 2023 as there is still scepticism about the size of interest rate hikes to fight inflation.

**Exhibit 5: Inflation and monetary policy rates**

Inflation surged recently to almost 26% in August, while interest rate hiking has been more muted



Source: Haver

BofA GLOBAL RESEARCH

**The CBN to hike by a cumulative 150bp to year end 2023E**

The new government has promised to get rid of unorthodox central bank policies, such as monetising fiscal deficits and lending to government beyond what is provided for in the law. A new central bank governor, Yemi Cardoso, has been appointed along with a new team of deputy governors. They are likely to hike by more than their predecessors did in July (25bp); that is 100bp in September/October and 50bp in November. Hiking aggressively is politically sensitive, however, and addressing the structural issues in the FX market would be preferable, in our view.

Currency devaluation has brought about higher inflation, which we estimate could peak at close to 30% in the next two months, before moderating. The official market rate appears to be stabilising around the 750-800 level. However, the parallel market is diverging towards NGN1,000 per USD. The divergence reflects the lack of inflows in the formal market, particularly CBN dollar supply, and demand for dollars rising in the parallel market. There are still FX backlogs to be cleared – the Finance Ministry estimates about \$6.8 billion in outstanding FX forwards to be paid. If cleared, this could ease some of the dollar demand pressures. Fundamentally, the naira is undervalued but distortions are likely to persist to year-end in line with limited FX inflows. Accordingly, we see the naira remaining weak for the rest of the year, with potential gains in 2024 on structural improvements and increased dollar inflows.

**Exhibit 6: USD-NGN forecasts**

Naira floated in June 2023

	Q3 23	Q4 23	Q1 24	Q2 24	Q3 24
USD-NGN	800	800	750	750	700

Source: BofA Global Research

BofA GLOBAL RESEARCH

The removal of the fuel subsidy, which cost about 2% of GDP in 2022 and about 1% in 1H23, will improve fiscal revenues. Fiscal weakness is likely to have bottomed in 2022 and should improve over the medium term. The removal of the fuel subsidy and likely increase in oil production should boost fiscal revenues. The next step should be spelling out in the 2024 budget the measures to increase non-oil revenues and reach the 3% deficit target from next year.

## The quest for dollars continues

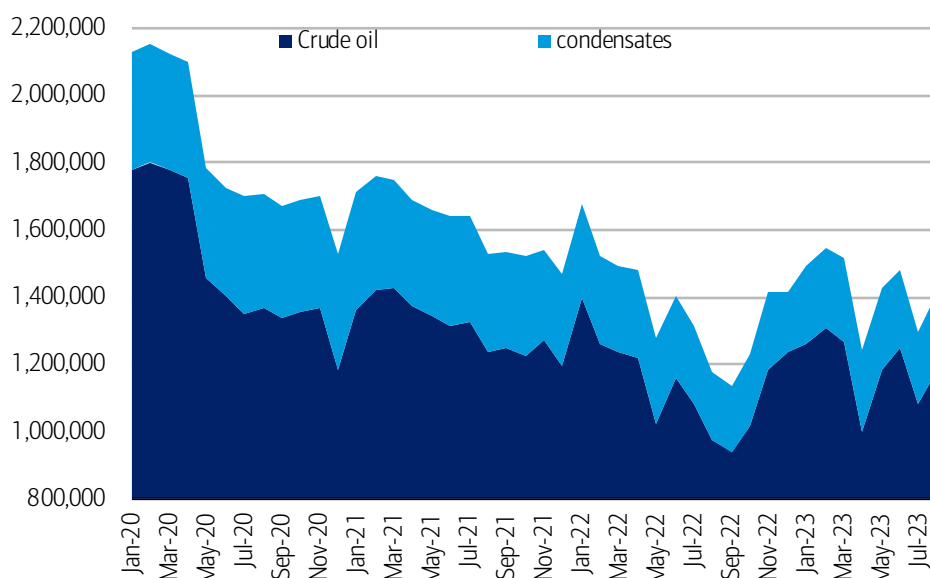
Nigeria is still in need of dollars to unlock the illiquidity in the FX market. The Nigerian National Petroleum Company is stepping into the quest for dollar inflows, seeking up to \$3 billion in external credit lines: mainly \$1 billion from Afreximbank and another \$2 billion from syndication loans. The DMO, the traditional financier, is considering multilateral loans in the near term.

## Inward-looking solution – increasing oil production

We believe higher oil production is likely to be a near-term catalyst for increased dollar inflows. The NNPC is presenting bullish scenarios on the outlook for oil production, largely on improving security in pipelines reducing oil theft. The NNPC estimates oil production (including condensates) could reach 2 million bpd early 2024, from around 1.5m bpd. The near-term target is 1.7 million bpd for crude by the end of October. The production number by 31 October is likely to be used as the new base for Nigeria's OPEC limit for 2024 guidance. Earlier in June, Nigeria's OPEC quota was lowered to 1.38m bpd from 1.742m bpd due to continued production underperformance. The next OPEC meeting, scheduled for 26 November, could decide the next level. We consider an increase in crude oil production from 1.3m bpd to 1.5m bpd feasible, but not to the NNPC's near term target of 1.7mbpd.

### Exhibit 7: Nigeria Oil production (barrels per day)

Oil production bottomed in September 2022 and has picked up modestly with dips associated with one off factors



Source: Nigeria Upstream Petroleum Regulatory Commission

BofA GLOBAL RESEARCH

## B credit rating in 2H24 likely on higher oil production

Higher oil production could be reflected in a structural improvement in Nigeria's outlook-increased dollar exports, tax revenues and higher economic activity. Fiscal risks have eased on the removal of the fuel subsidy, resulting in higher oil revenues. S&P revised the outlook back to stable from negative post the subsidy removal and currency float. Past fiscal deficits of 5-6% of GDP are no longer likely in the medium term. A 2024 Budget that restores the deficit limit to 3% would be credit positive. Structural positives relate to low external leverage and financing requirements, including a manageable external debt-servicing burden.

When moving to Caa1 in January 2023, Moody's was concerned about the continued deterioration of the fiscal and debt position. Rising debt-servicing costs take up a large portion of fiscal revenues, making the situation unsustainable. The basis for the decision was that reform prospects were limited due to vested interests and that the fuel subsidy

would be removed more gradually. Moody's perceived that it would take some time for a degree of fiscal adjustment to take place. It argued that Nigeria's Caa1 rating does not mean it is at imminent risk of default. Rather, it reflects very weak macro fundamentals. We think Moody's could reverse course and upgrade Nigeria's outlook/rating in 2024.

Fitch remained constructive with B-/stable in 2023. We think Fitch is likely to be the first mover on the upside, followed by the other rating agencies over the course of 2024. Fitch has indicated that initial reform steps are positive for the credit outlook. The concern lies in execution and the need for a better plan to increase non-oil fiscal revenues. The rating constraints of security challenges, low non-oil revenues and weakness in the exchange rate framework are likely to be addressed in coming months.

#### Exhibit 8: Major Macro forecasts

Moderate growth outlook.

<b>Nigeria</b>	<b>2022</b>	<b>2023e</b>	<b>2024F</b>
Real GDP (%yoy)	3.3	2.5	3.0
CPI (%yoy, avg)	19.0	25	15.0
Policy Rate (eop)	16.50	20.25	16.00
Fiscal Bal (%/GDP)	-5.5	-4.0	-3.5
CurAct Bal (%/GDP)	0.2	-0.1	0.5

Source: BofA Global Research

BofA GLOBAL RESEARCH

## Angola: twin surpluses likely to return in 2024

1H23 was weak for Angola – oil prices fell to close to \$70 per barrel, while oil output declined, which together led to a GDP contraction and lower tax revenue collections. Meanwhile, 60%-kwanza depreciation led to higher inflation. We revise down our 2023 macro estimates- and now see weaker real GDP growth (1.2% vs 3% previously), a fiscal deficit, and modest current account surplus (1.7% of GDP vs 5.4%). We expect higher oil prices, less of a drag from oil production, and continued reforms; removal of the fuel subsidy is likely a key fiscal priority. We believe oil production has stopped declining, and slightly higher oil production should provide some upside to our GDP growth outlook. We expect oil production of around 1.2m bpd and oil prices averaging \$90 per barrel, which could support a higher pace of economic performance in 2024E at about 3%. The IMF's concluding statement post its review acknowledges the successful reforms in 2021 and 2022 helped by higher oil prices. Low oil production is a challenge, but this is largely due to the maintenance of oilfields rather than a structural decline in output.

### Angola: 2023E growth outlook halved: 1.2% from 3%

Lower oil production is hurting near-term economic performance – unsurprising, as the oil and gas sector contributes about 40% of GDP. Angola's economy declined about -1.1% qoq and 0.3% yoy in 1Q23, compared with 2.6% yoy in 4Q22. This was the largest slowdown since 2Q21, due mainly to lower oil output and softer international prices. The oil sector contracted by 15% qoq and 8% yoy in the first quarter.

Total, one of the largest international oil companies, closed block 17 for maintenance for over a month between February and March 2023. It usually produces an average of 120,000 bpd. Prior to that, oil production had stabilised at a higher level, having risen moderately from an average of 1.12m bpd in 2021 to 1.14m bpd in 2022. In 2023 so far, it barely reached 1.1m bpd, after only 1.06m bpd in February and less than 1m bpd in March.

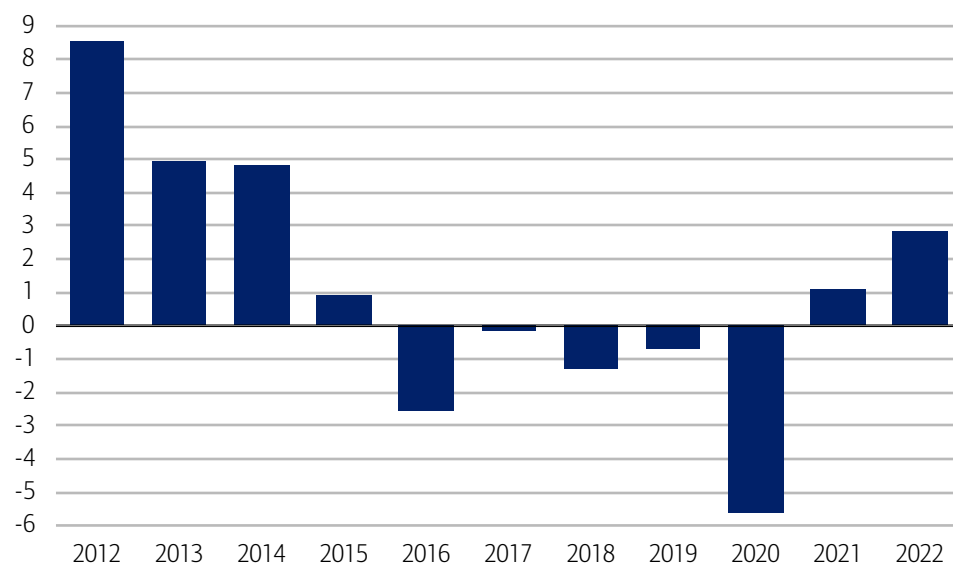
The government has been targeting average oil production of 1.18m bpd, which is well below the OPEC quota of 1.45m bpd. There are still concerns on the outlook for 2Q growth as international oil prices have continued to moderate, while output remains constrained. In Q2, the kwanza weakened by more than 50%.



For 2024, though, we are more constructive based on potential upside to the oil sector, which could lift growth to 3.1%. We forecast oil prices averaging \$90/bbl in 2024 compared with \$80 in 2023. Production could increase rather than continue to decline.

#### Exhibit 9: Angola real GDP growth trends (%)

Oil sector contraction hurts GDP growth due to a large share of oil in total GDP, about 40%

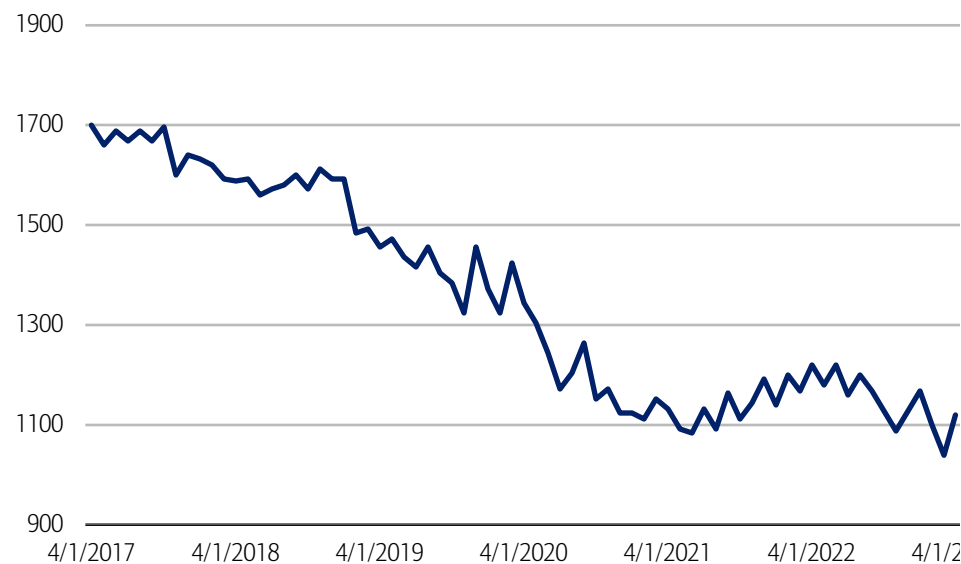


Source: Haver

BofA GLOBAL RESEARCH

#### Exhibit 10: Angola oil production profile

Oil production reached new lows in 1Q 23, resulting in overall economic contraction



Source: Bloomberg

BofA GLOBAL RESEARCH

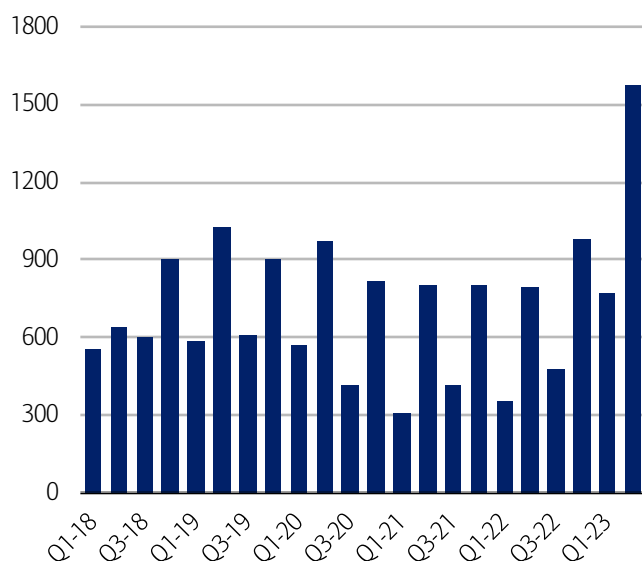
### Current account surplus likely holding up, circa 2% of GDP

In 2Q23, Angola posted the smallest quarterly current account surplus of about \$100 million since 2020. This follows a weak surplus in 1Q23 as well (\$338 million). The weak 1H23 performance is directly related to lower oil prices and production relative to the same period in 2022. Exports are substantially lower, by 40% year-on-year, due to prices being down by 30%, while production has also fallen. Oil production has averaged below 1.2 million bpd. Other than oil and gas, diamond export revenues also declined on lower international prices and the scaling back of production. On the imports side, lower oil

prices help to reduce the import bill for fuel while both services and income deficits have narrowed in 1H 2023.

#### Exhibit 11: Current account: external interest payments (USD '000)

2Q23 increase reflects resumption of interest payments to some Chinese lenders who had granted a moratorium under DSSI in 2020

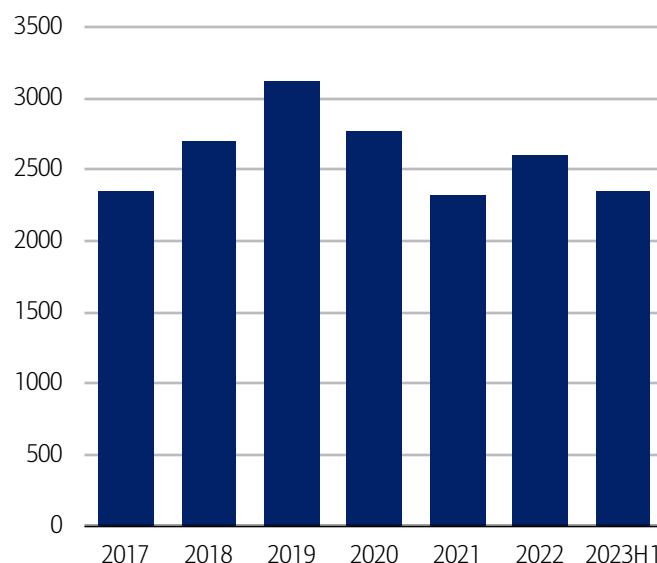


Source: Haver

BofA GLOBAL RESEARCH

#### Exhibit 12: Current account: external interest payments (USD '000)

1H 23 external interest payments have reached \$2.3 billion compared to a full year of \$2.6 billion in 2022.



Source: Haver

BofA GLOBAL RESEARCH

### CA surplus despite a rise in external debt-service payments to China

Interest payments rose substantially in 2Q, largely due to government debt-service payments to China. Chinese lenders CDB and ICBC granted a debt service moratorium in 2020 for three years. The moratorium was part of the international community's efforts to ease payments for low-income countries under the debt service suspension initiative. The resumption of debt service payments has resulted in quarterly payments rising to close to \$1.6 billion from below \$1 billion per quarter. The 2Q23 spike is not a one-off but likely the new normal due to the resumption of Chinese-related debt servicing. We estimate full year external interest payments could reach \$4 billion by year end.

Nevertheless, we estimate that 2H23 is likely have better export revenues with higher oil prices and stabilising production. The higher dollar revenues should outweigh the higher debt service burden and still leave the current account in surplus. Overall, we estimate a current account surplus of close to 2% of GDP in 2023. The medium-term outlook is better – with oil prices rising to \$90 per barrel in 2024E, which supports an increasing current account surplus of over 6% of GDP in 2024E.

The weak macro in 1H 23 has been reflected in a substantially depreciating kwanza per USD. The currency has depreciated by over 60% year to date. We think that appreciation is more likely in 2024 than this year and forecast 850 per USD to end-2023. However, we see a higher current account surplus in 2024 supporting modest FX reserves build-up and some kwanza appreciation to 800 by end-2024. When the government is able to access external borrowing, particularly large lump sums through USD-denominated issuance, it usually helps to build up FX reserves and strengthen the currency.

**Exhibit 13: Angola Macroeconomic Forecasts**

Economic growth halved, while fiscal temporarily switches into a deficit

<b>Angola</b>	<b>2022</b>	<b>2023e</b>	<b>2024F</b>
Real GDP (%yoy)	2.8	1.2	3.1
CPI (%yoy, avg)	21.4	12.5	10
Policy Rate (eop)	19.5	17	15
Fiscal Bal (%/GDP)	2.7	-1.9	1.2
Nominal exchange rate (vs USD, eop)	503.7	850	800
CurAct Bal (%/GDP)	11	1.7	6.6

Source: Haver, BofA Global Research

BofA GLOBAL RESEARCH

**Near-term temporary fiscal weakening in 2023**

At the beginning of the year, the Angolan government assumed a fiscal surplus of 0.9% of GDP using an oil price of \$75 bpd and oil production of 1.18m bpd. Oil production has barely reached 1.1m bpd resulting in weaker fiscal revenues. We estimate that temporary fiscal weakening will lead to a deficit of -1.9% of GDP in 2023 but this could improve to a surplus of 1.2% in 2024. Angola needs to press ahead with full fuel subsidy reform. The IMF is recommending non-oil tax measures to keep fiscal in check. Currency depreciation reverses most of the de-leveraging since 2020. We expect debt to GDP to be around 80% over the medium term.

**Zambia: unlocking copper volumes and closing debt talks**

Zambia's 2023 copper production is at its weakest levels, likely losing \$2 billion in exports. We estimate production at around 700,000 metric tonnes compared with 900,000 in 2022. However, the dispute resolution of KCM (return of KCM to Vedanta) is likely to boost production of under-utilised mines in 2024. We are bullish on copper prices – average \$9,750 in 2024E, largely linked to China – while a dip in the economic outlook has been offset by demand for copper in green energy. Progress in debt talks depends more on cooperation from creditors than on the Zambian government. A memorandum of understanding with official creditors could be signed in the coming weeks. An in-principle deal was agreed in May 2023, but ironing out the details has taken more time than anticipated. Comparability of treatment with private creditors under a common framework and factoring in a potential upgrade to Zambia's debt-carrying capacity to medium from low, are some of the details being finalised. Debt talks are likely to continue into 2024 with private creditors.

**Zambia: GDP growth slowing to 3% in 2023E**

The economy grew 2.3% yoy in 1Q23 from 4.4% in 4Q22. Agriculture and mining contracted, as did wholesale and retail trade. Manufacturing and various service sectors posted positive prints. Lower electricity supply resulted in power cuts in the first two months of the year. Electricity is largely hydro and thermal powered. Low water levels at Kariba plus planned maintenance reduced the amount of electricity supplied.

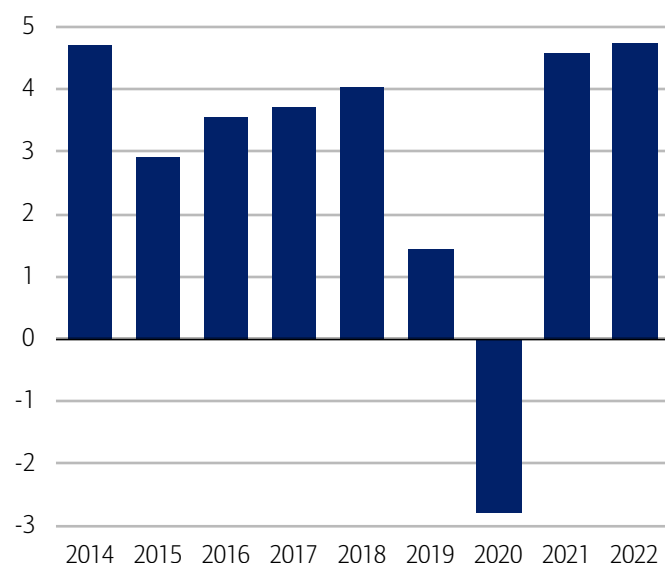
Copper production is currently below full capacity levels. Issues with Konkola Copper Mines (KCM) and Mopani are a huge setback. KCM was put into liquidation in 2019. Finding a solution between the government and Vedanta, owner of KCM, has taken time. The Mopani mine, formerly owned by Glencore, represents another setback to copper production. Glencore sold the mine to the government in 2021. Both mines are operating at less than half capacity. High frequency indicators such as PMIs show economic activity picking up in 2Q but slowing in 3Q – still volatile.

Overall, we estimate economic growth at 3% in 2023 (from 4%), reaching 4% in 2024. Medium-term prospects are brighter if mining issues can be resolved and copper production increases substantially. Local reports suggest Vedanta is close to obtaining

KCM, while a new investor in Mopani is still being sought. Mopani is currently owned by a government entity through ZCCM-IH, which obtained 90% of shares from Glencore.

#### Exhibit 14: Zambia annual real GDP growth trends

Weak growth in 2019 driven by macro fiscal strains leading to sovereign default in 2020. Contraction in 2020 was due to Covid-related lockdowns

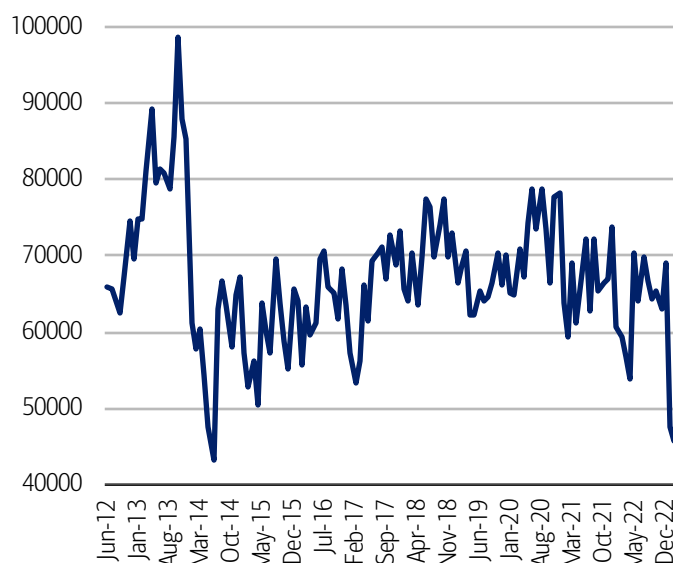


Source: Haver

BofA GLOBAL RESEARCH

#### Exhibit 15: Monthly copper production

January-May 23 production data at historical lows averaging 52,000 metric tons per month



Source: Haver

BofA GLOBAL RESEARCH

The government recently agreed with Vedanta to return KCM to Vedanta. The next steps will be work on revitalising the mines. We think it will take at least three months to resolve issues with workers and creditors, and get the mines back to full capacity. We expect copper output to improve in 2024 but not by end-2023.

### Low copper production reduces dollar exports

Zambia's copper exports usually contribute 70-75% to total exports. So any changes in volumes and prices matter. In 2022, the overall current account surplus fell to 3.6% of GDP from more than 10% in 2021 while average copper prices declined modestly to \$8,800/tonne from \$9,300/tonne. The 2023 ytd data is showing substantially lower copper production despite average prices being similar to 2022. Monthly production has averaged just over 50,000 metric tonnes per month but at least 70,000 metric tonnes is required to reach 900,000 metric tonnes achieved in 2021 and 2022. We estimate that full year production is likely to undershoot 700,000 metric tonnes. The lower production reduces copper exports to under \$6 billion from at least \$8 billion in each of the past two years. Moderation in imports with lower fuel prices helps to keep the trade balance in a small surplus while we estimate the current account is likely to switch into a small deficit of around -0.8% of GDP.

### Bullish on copper prices medium term

Over the medium term, we are bullish on copper prices, which we expect to average \$9,750 in 2024. Our house view is largely linked to China prospects. A dip in the economic outlook has been offset by demand for copper in green energy. So, copper prices have remained resilient on green investment and production issues. Green demand in China, ie, investment in renewables and electric vehicle production, has been remarkably strong, while grid spending has completely offset weakness from the housing market. Copper prices could rally if the Chinese government pushes through more stimulus measures. We expect the current account surplus to increase close to 5% of GDP in 2024.

## Debt restructuring progress likely next catalyst for kwacha

The Zambian kwacha strengthened in April 2023 on the back of expected news of progress on government negotiations with external creditors. However, a weaker macro and lower dollar receipts put pressure on the currency, and it has depreciated by 15% year-to-date. Near-term macro signals are still pointing towards further depreciation. However, there could be a temporary pull back if there is progress in the debt talks. In the past the currency strengthened to 17 per USD after official creditors verbally agreed to debt relief in line with IMF debt sustainability targets. Over the last month, Zambian kwacha is strengthening on potential near-term news – a successful China trip by President Hichilema and likely official creditors meeting in September that could result in the signing of a memorandum of agreement. Near-term macro is still weak; low copper production means less dollar inflows to year end. We expect the kwacha to oscillate around the 20 level for the rest of the year.

## Debt-carrying capacity upgrade on the horizon

On 22 June, Zambia reached a debt-restructuring agreement with official creditors. The terms and MoU are still to be ironed out but long maturities and grace periods in the near term are expected. The agreement with official creditors allowed the IMF to disburse the outstanding \$189 million, completing the first review. The IMF DSA guidance is up to a 49% reduction in NPV terms. Any numbers from official creditors will shape discussions with bondholders.

The agreement with official creditors incorporates for an upgrade of Zambia's debt-carrying capacity to medium if economic performance and policy-making improve enough. A medium debt-carrying capacity would allow Zambia to pay more principal and interest payments than currently permitted with the low debt-carrying capacity. A step-up in coupon payments could help resolve the debt sustainability issues and lead to higher repayments to creditors.

In the near term, we will be looking out for the World Bank Annual Country Policy and Institutional Assessment (CPIA) publication. In this regard, the composite indicator (CI) score is an important metric; it is calculated using data from IMF World Economic Outlook published each year in April and October and the latest available CPIA. The last published CI score is 2.59, which falls under low debt-carrying capacity. The threshold for medium debt-carrying capacity is 2.69 so it's close.

The World Bank 2022 CPIA is likely to be published by the end of September, ahead of the IMF review due in October. Both could provide important updates. Zambia's fiscal policy management is improving and is likely to be upgraded to the economic management category [by the WB. Two consecutive readings are required to be upgraded, so we should have full materialisation results in 2024. It has been factored into the debt discussion with official creditors that by 2025 Zambia will have medium debt-carrying capacity if all goes well.

In our view, progress with private creditors can only come post all agreements with official creditors. We therefore see debt talks as likely to drag on into next year. Navigating debt talks will need contingent instruments that lead to higher debt repayments if Zambia is upgraded to medium debt-carrying capacity.

## Special Disclosures

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

BofA Securities is currently acting as financial advisor to Bunge Ltd in connection with its proposed merger with Viterro Ltd, together with certain affiliates of Glencore PLC, Canada Pension Plan Investment Board, and British Columbia Investment Management Corp, which was announced on June 13, 2023. The proposed transaction is subject to approval by shareholders of Bunge Ltd. This research report is not intended to provide voting advice, serve as an endorsement of the proposed transaction, or result in the procurement, withholding or revocation of a proxy.

# 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 <sup>R1</sup>
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

<sup>R1</sup> 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.bofam.com/BofASEdisclaimer](http://www.bofam.com/BofASEdisclaimer); BofA Europe (Milan): Bank of America Europe Designated Activity Company, Milan Branch, regulated by the Bank of Italy, the European Central Bank (ECB) and the Central Bank of Ireland (CBI); BofA Europe (Frankfurt): Bank of America Europe Designated Activity Company, Frankfurt Branch regulated by BaFin, the ECB and the CBI; BofA Europe (Madrid): Bank of America Europe Designated Activity Company, Sucursal en España, regulated by the Bank of Spain, the ECB and the CBI; Merrill Lynch (Australia): Merrill Lynch Equities (Australia) Limited, regulated by the Australian Securities and Investments Commission; Merrill Lynch (Hong Kong): Merrill Lynch (Asia Pacific) Limited, regulated by the Hong Kong Securities and Futures Commission (HKSF); Merrill Lynch (Singapore): Merrill Lynch (Singapore) Pte Ltd, regulated by the Monetary Authority of Singapore (MAS); Merrill Lynch (Canada): Merrill Lynch Canada Inc, regulated by the Investment Industry Regulatory Organization of Canada; Merrill Lynch (Mexico): Merrill Lynch Mexico, SA de

CV, Casa de Bolsa, regulated by the Comisión Nacional Bancaria y de Valores; Merrill Lynch (Argentina): Merrill Lynch Argentina SA, regulated by Comisión Nacional de Valores; BofA Japan: BofA Securities Japan Co., Ltd., regulated by the Financial Services Agency; Merrill Lynch (Seoul): Merrill Lynch International, LLC Seoul Branch, regulated by the Financial Supervisory Service; Merrill Lynch (Taiwan): Merrill Lynch Securities (Taiwan) Ltd., regulated by the Securities and Futures Bureau; BofA India: BofA Securities India Limited, regulated by the Securities and Exchange Board of India (SEBI); Merrill Lynch (Israel): Merrill Lynch Israel Limited, regulated by Israel Securities Authority; Merrill Lynch (DIFC): Merrill Lynch International (DIFC Branch), regulated by the Dubai Financial Services Authority (DFSA); Merrill Lynch (Brazil): Merrill Lynch S.A. Corretora de Títulos e Valores Mobiliários, regulated by Comissão de Valores Mobiliários; Merrill Lynch KSA Company: Merrill Lynch Kingdom of Saudi Arabia Company, regulated by the Capital Market Authority.

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

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

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





employees may be plaintiffs, defendants, co-defendants or co-plaintiffs with or involving issuers mentioned in this material is based on public information. Facts and views presented in this material that relate to any such proceedings have not been reviewed by, discussed with, and may not reflect information known to, professionals in other business areas of BofA Securities in connection with the legal proceedings or matters relevant to such proceedings.

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

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.

