Thursday, 06 July 2023

Analysts:
Renaldo D'Souza
Renaldo.DSouza@sterlingib.com

Davis Gathinji
Davis.Gathinji@sterlingib.com

Isabel Chakairu
Isabel.Chakairu@sterlingib.com

Email: research@sterlingib.com

Bond Dealing: +254 (20) 2213914/0723 153 219

Email: invest@sterlingib.com
Office Address: Delta Corner Annex, 5th Floor, Ring Road Westlands.

Website www.sterlingib.com

Bloomberg Code: SCLK <GO>

Fixed Income Note

July 2023

"Funding the KES.718Bn deficit"

Table of Contents

Executive Summary

- Our July 2023 fixed income report is titled "Funding the KES.718Bn deficit" in reference to the Central Bank of Kenya (CBK) re-opening **FXD1/2016/10** and issuing a new debt issue **FXD1/2023/5** with a KES.40Bn funding target.
- This is the first issuance of the 2023/24 fiscal year where the Government is looking to finance a KES.718Bn budget deficit.
- Our weighted average bid prediction is as follows:

  FXD1/2016/10: 15.70 - 15.99
  FXD1/2023/5: 15.99 - 16.20

- This report also covers primary auction outcomes, secondary market trading trends, short-term domestic debt interest rates and market liquidity.
- Domestic maturities have a huge impact on CBK's borrowing strategy and this debt service is analyzed in the report.
- Also covered in the report is the country's current fiscal position including Government revenue, expenditure and fiscal deficit as well as its borrowing needs.
- We also include an analysis of the yield curve over selected periods showing trends in yields of different tenors.
- The report concludes with our inflation expectations as well as our view of the outcome of the most recent Monetary Policy Committee's (MPC) meeting on 26th June 2023.

CBK seeks to raise KES.40Bn in July 2023 through two domestic debt issues

- The Central Bank of Kenya (CBK) invites bids to raise KES.40Bn through two bonds **FXD1/2016/10** (re-opened) and a new bond issue **FXD1/2023/5** (Table.1).
- This strategy of re-opening bonds with short tenors to maturity and new short dated tenured bonds is deliberate considering low demand for medium and long-term bonds in the current environment of rising interest rates.

Table.1: Primary Bond issues' summary

Issue Number	**FXD1/2016/10**	**FXD1/2023/5**
Total Amount Offered	KES.40Bn	
Tenor	3.2 Years	5 Years
Coupon Rate (%)	15.039%	Market Determined
Price Quote	Discounted/Premium/Par	
Period of Sale	**28/06/2023 to 11/07/2023**	
Auction Date	12/07/2023	
Value Date	17/07/2023	
Yield Curve (%) (Weighted average tenor - 30th June 2023)	**14.2494**	**14.3588**

Source: Central Bank of Kenya & Sterling Capital Research

Our market weighted average bid predictions

- We used implied yields of securities of similar tenors on the Nairobi Securities Exchange (NSE) as of 30th June 2023 as well as discussions with fixed income traders (Table.2) to determine our Market-weighted average bid predictions.

Table.2: Auction bid predictions

Rate	**FXD1/2016/10**	**FXD1/2023/5**
Weighted Average bid predictions (%)	15.70 - 15.99	15.99 - 16.20

Source: Sterling Capital Research

Our predicted rates are guided by historical debt issues

- We used implied yields of bonds of similar tenors to maturity on the NSE on 30th June 2023 as a guide for possible investor auction bid levels (Table.3).

Table.3: Benchmark issues to guide investor bids

Treasury Bond	**Issue Date**	**Coupon Rate (%)**	**Maturity Date**	**Term to Maturity (Days)**	**Implied Yield to maturity (%)**	**Yield Curve at time of issue**
FXD1/2016/10	29th Aug 2016	15.039	17th Aug 2026	1,144	14.2494	14.6002
FXD1/2018/10	27th Aug 2018	12.686	14th Aug 2028	1,872	14.3831	12.6860

Source: Nairobi Securities Exchange

- We expect investors to bid aggressively guided by the most recent IFB issue as well as expectations of higher interest rates following the recent CBR revision and expected deficit financing challenges.
- There is a likelihood of a full subscription considering the relatively low funding target amount.

Table.4: Historical primary market auction performance

Issue	Issue Date	Offered (KES.Bn)	Bids Received (KES.Bn)	Amount Accepted (KES.Bn)	Performance Rate (%)	Coupon Rate (%)	Implied Yield (%)
10-Year							
FXD2/2018/10	17th Dec 2018	40	28.8	26.2	72.0	12.502	14.4313
FXD1/2018/10	27th Aug 2018	40	29.8	19.4	74.6	12.686	14.3831
FXD1/2019/10	25th Feb 2019	50	36.3	32.8	72.6	12.438	14.4587
FXD2/2019/10	15th April 2019	50	70.9	51.3	141.8	12.300	14.4768
FXD3/2019/10	19th Aug 2019	50	52.8	45.0	105.6	11.517	14.5198
FXD4/2019/10	25th Nov 2019	50	38.4	28.4	76.8	12.280	14.5500
FXD1/2022/10	16th May 2022	60	43.2	31.7	72.0	13.490	14.6500
FXD1/2023/10	13th Feb 2023	50	11.5	9.3	23.0	14.151	14.7351
5-Year							
FXD1/2019/5	25th Feb 2019	50	41.9	20.6	83.9	11.304	11.7388
FXD2/2019/5	13th May 2019	50	49.3	39.2	98.6	10.872	12.0285
FXD3/2019/5	16th Dec 2019	25	28.5	18.7	113.9	11.492	13.1033
FXD1/2020/5	11th May 2020	50	34.5	20.8	69.1	11.667	13.6336
FXD1/2021/5	15th Nov 2021	50	66.6	53.7	133.2	11.277	14.2571
3-Year							
FXD1/2022/3	11th April 2022	40	34	33.1	85.1	11.766	13.5600
FXD1/2023/3	15th May 2023	20	20.7	20.3	103.7	14.228	14.2388

Source: Central Bank of Kenya

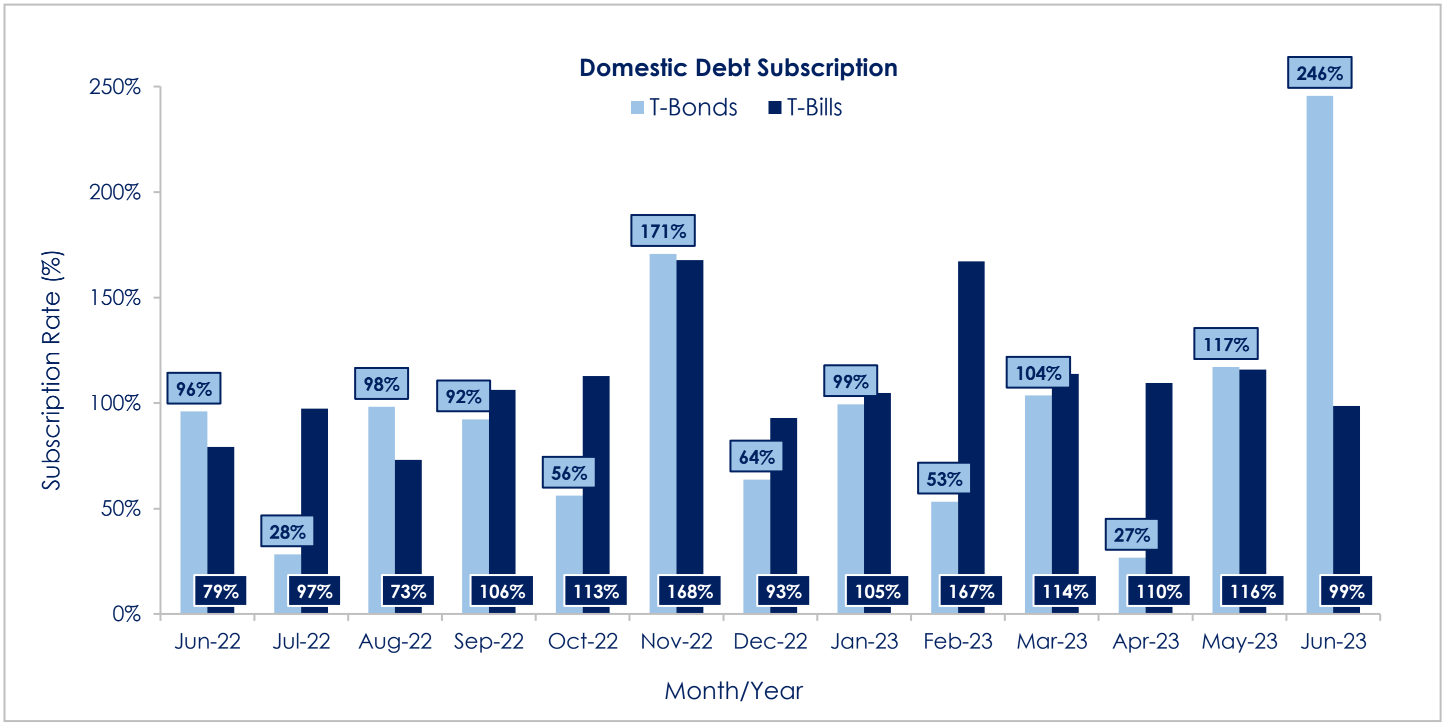
IFB credited with the spike in bond demand in June 2023

- T-Bill and T-Bond subscriptions declined and rose in June 2023 respectively with this attributed to the issuance of an infrastructure bond **IFB1/2023/7.**
- T-Bill subscriptions declined to 98.6% from 115.8% a month earlier with KES.94.6Bn worth of bids received against KES.96Bn offered. This was the first undersubscription since December 2022 (Figure.1).
- This was indicative of the decline from KES.139Bn received against KES.120Bn offered in May 2023.
- The 91, 182 and 364-Day had subscription rates of 491.8%, 17.7% and 22.1% compared to 499.9%, 46.6% and 31.4% respectively in May.
- High subscription for the 91-Day T-Bill remains with investors looking to counter risks in a rising interest rate environment.
- T-Bond demand rose to 246% from 117.1% in May with KES.220.5Bn received in bids against the KES.60Bn offered (Figure.1 & 2).
- Both the amount and the subscription rate are the highest ever recorded on a Government domestic bond issuance.
- The high interest in the bond was driven largely by investor awareness of the Government's "desperation" to bridge its domestic funding deficit ahead of

the closure of the 2022/23 fiscal year.

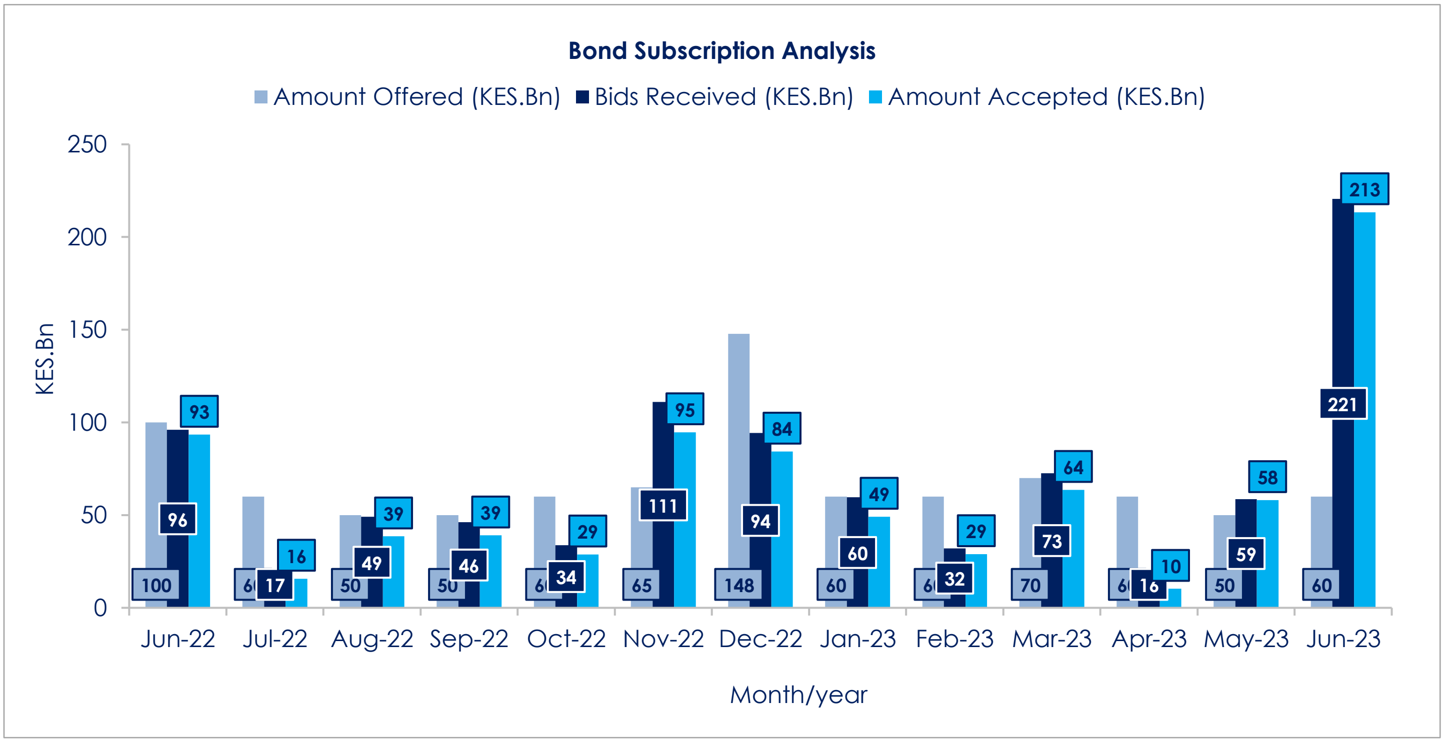
- This also prompted investors to test the resolve of the CBK by bidding aggressively.

Figure.1: T-Bond subscription in June 2023 highest in recorded history



Source: Central Bank of Kenya

Figure.2: T-Bond acceptance in June 2023 highest in recorded history

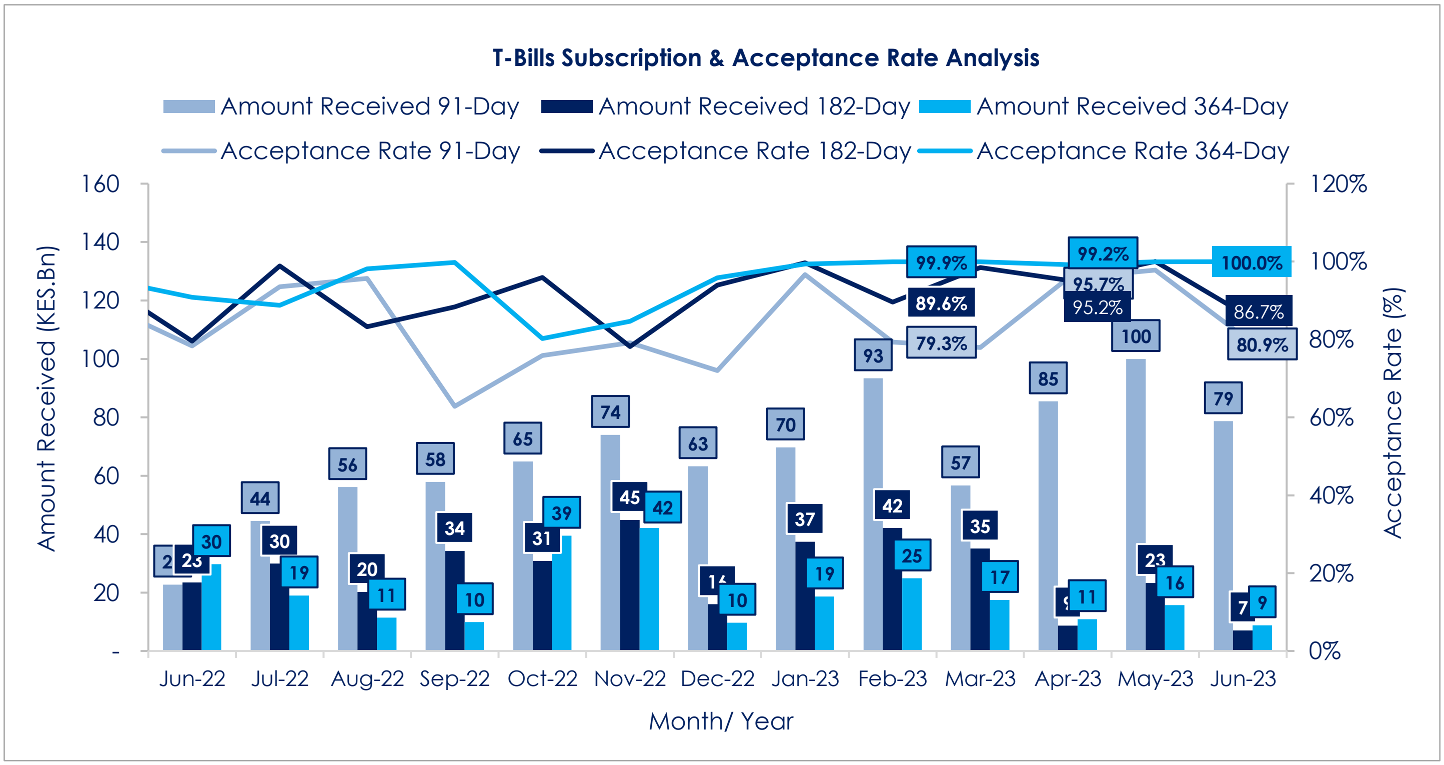


Source: Central Bank of Kenya

CBK's T-Bill acceptance rate declines in June 2023 due to massive T-Bond demand

- There was a decline in the CBK's acceptance rate for T-Bills in June (83.1%) compared to May (98.4%).
- Acceptance rates for the 91-Day, 182-Day and 364-Day T-Bills stood at 80.9%, 86.7% and 100% in June 2023 compared to 97.8%, 100% and 99.9% in May 2023 (Figure.3).
- As per our expectations in our May Fixed Income report, both T-Bill subscription and acceptance rates declined in June as investors shifted their focus to **IFB1/2023/7.**
- The National treasury continues to be faced with the challenge of managing the cost of deficit financing at a favourable cost while increasing the Average Term to maturity of public debt.
- While the Treasury has raised the Average Term to maturity on T-Bonds from 6.3 years in June 2019 to 9.1 years in June 2022, continued interest in short tenor papers has reduced the average term to 8.7 months in June 2023.
- Also of worthy note is that **IFB1/2023/7** drained significant swaths of liquidity from the market which points to lower demand for both T-Bonds and T-Bills going forward.

Figure.3: T-Bill acceptance rates decline in June 2023 due to high T-Bond subscription

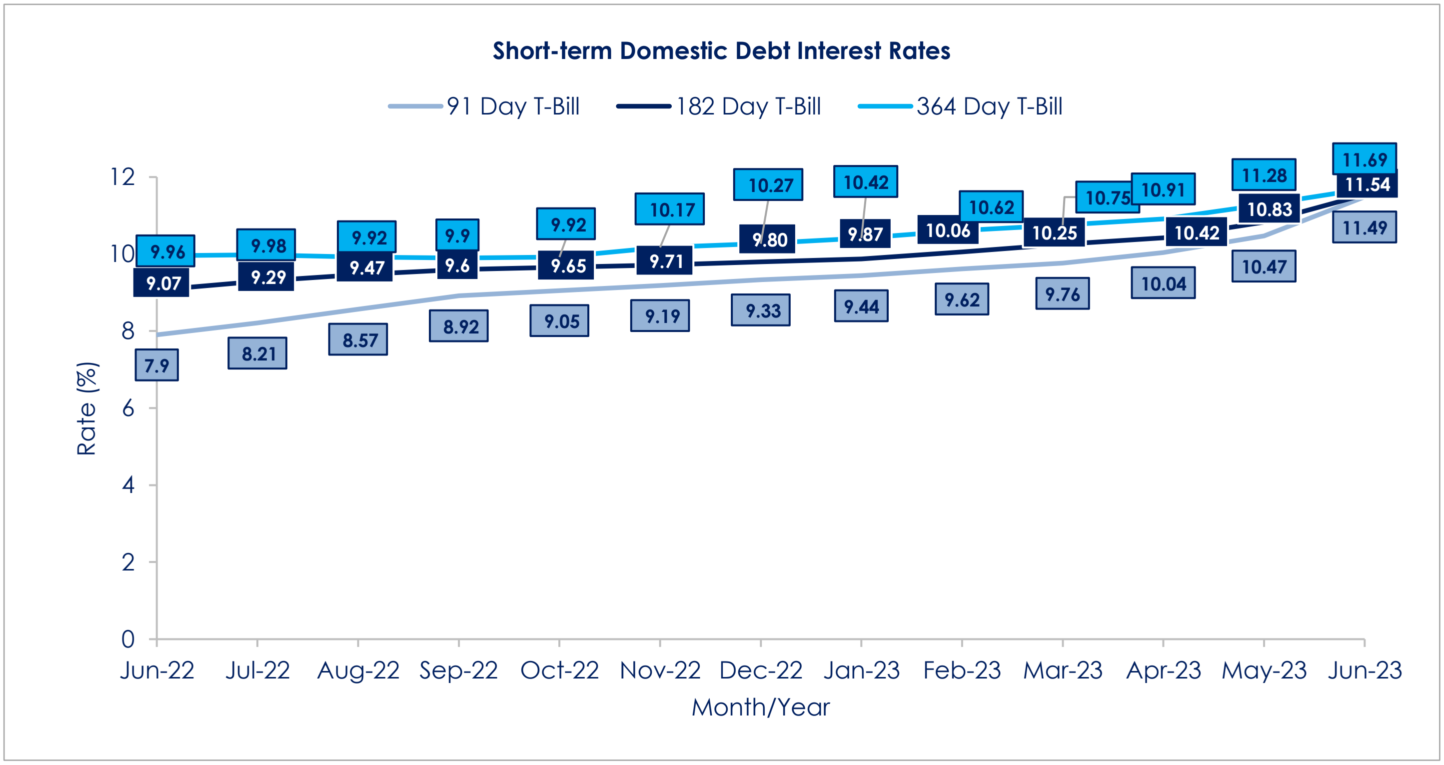


Source: Central Bank of Kenya

T-Bill rates edge closer to 12% in June 2023

- Average T-Bill rates continued on an upward trajectory in June 2023 with the 364 Day T-Bill rate edging nearer to 12% (Figure.4).
- The 91, 182 and 364-day average rates increased to 11.5%, 11.5% and 11.7% from 10%, 10.4% and 10.9% in May 2023 respectively.
- Over the past month alone, average 91, 182 and 364-Day T-Bill rates have increased 101, 72 and 41 bps respectively showing the impact of CBR revisions, investor expectations, high inflation and increased fiscal deficit financing.
- The Monetary Policy Committee's decision to raise the CBR from 9.5% to 10.5% will work to drive T-Bill rates further upward as investors accommodate this rate hike in future auction bids.
- The implementation of risk-based credit pricing by banks will also in our opinion exert further pressure on domestic debt rates as banks lend to the private sector as an alternative to investing in Government debt.

Figure.4: T-Bill rates continue trending upwards in June 2023



Source: Central Bank of Kenya

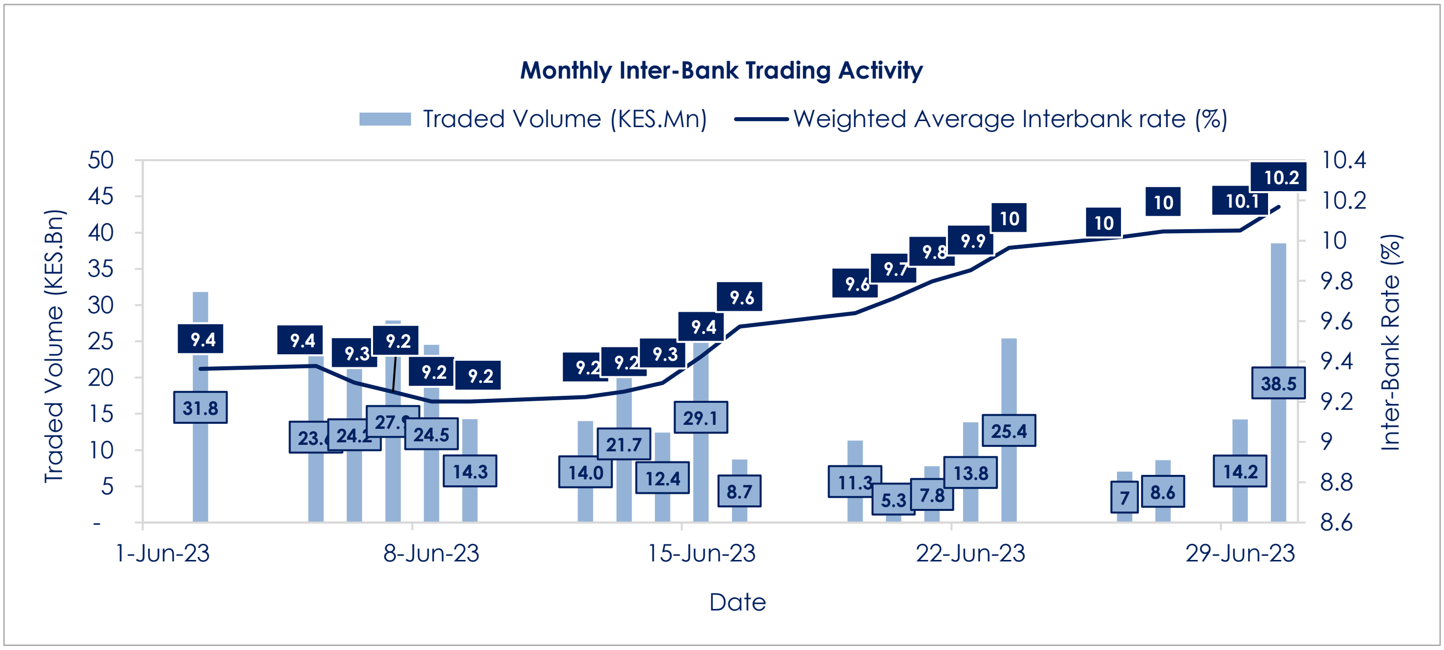
Average inter-bank rates rise in June 2023

- Average inter-bank rate rose to 9.6% in June 2023 from 9.4% in May reflective of the general rise in interest rates (Figure.5).
- Trading volumes over the same period declined 23.2% to KES.364.1Bn from KES.474.4Bn.
- Over the same period, excess reserves (the additional liquidity above the minimum 4.25% Cash Reserve Ratio (CRR)) increased 95.3% from KES.125.7Bn

in May 2023 to KES.245.5Bn in June 2023 (Figure.6).

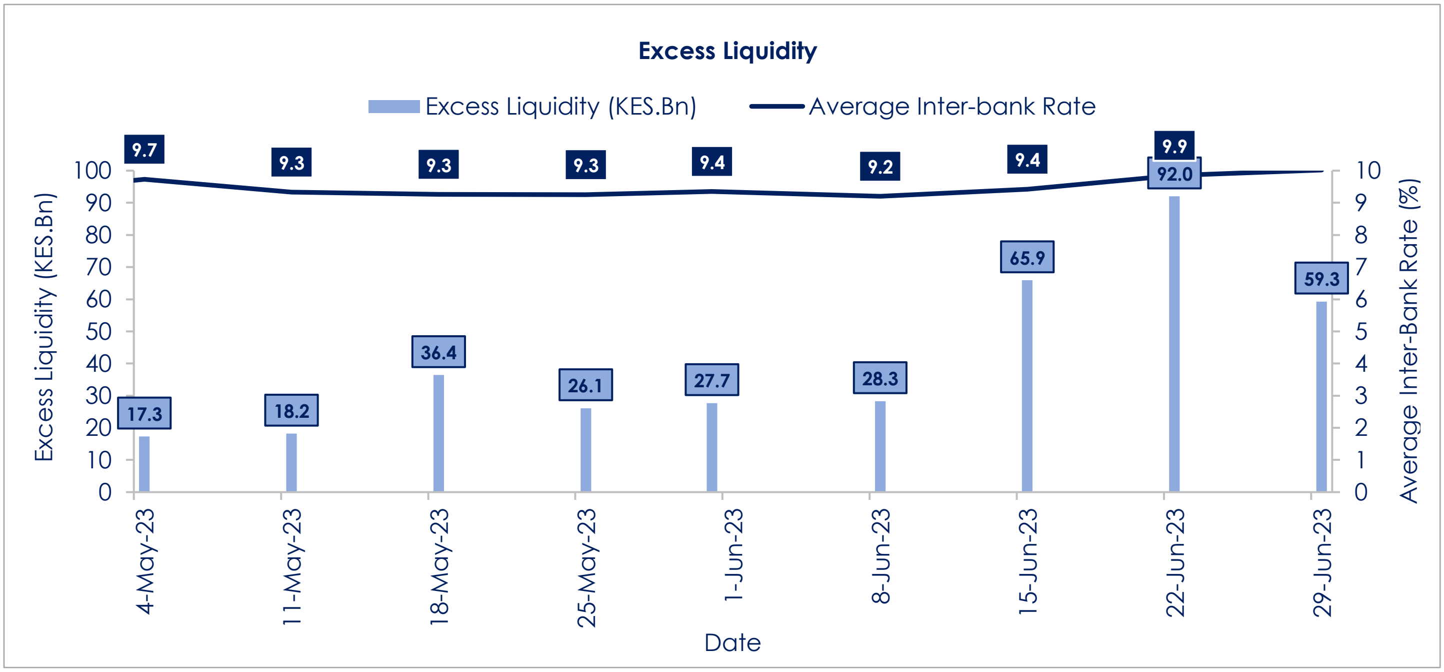
- The increase is reflective of the CBK's open market operations primarily consisting of reverse repos which injected KES.300Bn into the banking system in June alone.
- Given the level of liquidity channeled to the Government via the recent IFB auction, we expect liquidity to remain tight, above 10%, in July.

Figure.5: Uptick in average inter-bank lending rates in June 2023 due to tight market liquidity



Source: Central Bank of Kenya

Figure.6: Excess commercial bank reserves increase in June 2023

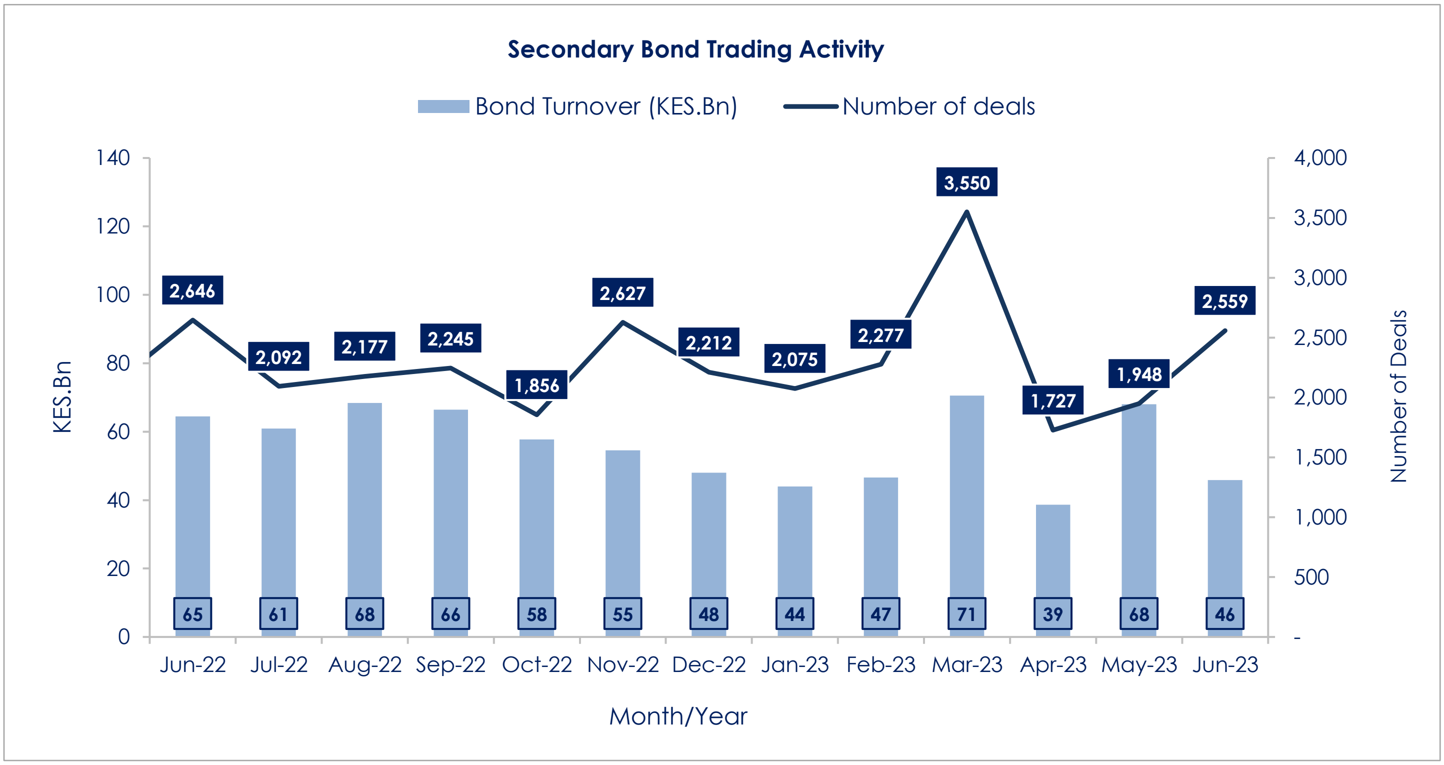


Source: Central Bank of Kenya

Secondary bond market turnover down 32.6% in June 2023

- Secondary bond market trading declined 32.6% to KES.45.8Bn from KES.68Bn in June 2023 while the number of deals increased 31.4% to 2,559 from 1,948 (Figure. 7).
- This can be explained by institutional investors holding **IFB1/2023/7** whereas the higher number of deals shows high retail investor demand.
- It is also worth noting that **IFB1/2023/7** begun trading on the 20th of June meaning that the bond only traded for nine days in June.
- With all these factors in mind, we expect higher turnover and number of trades for the bond in July.

Figure.7: Secondary trading activity increased in May 2023

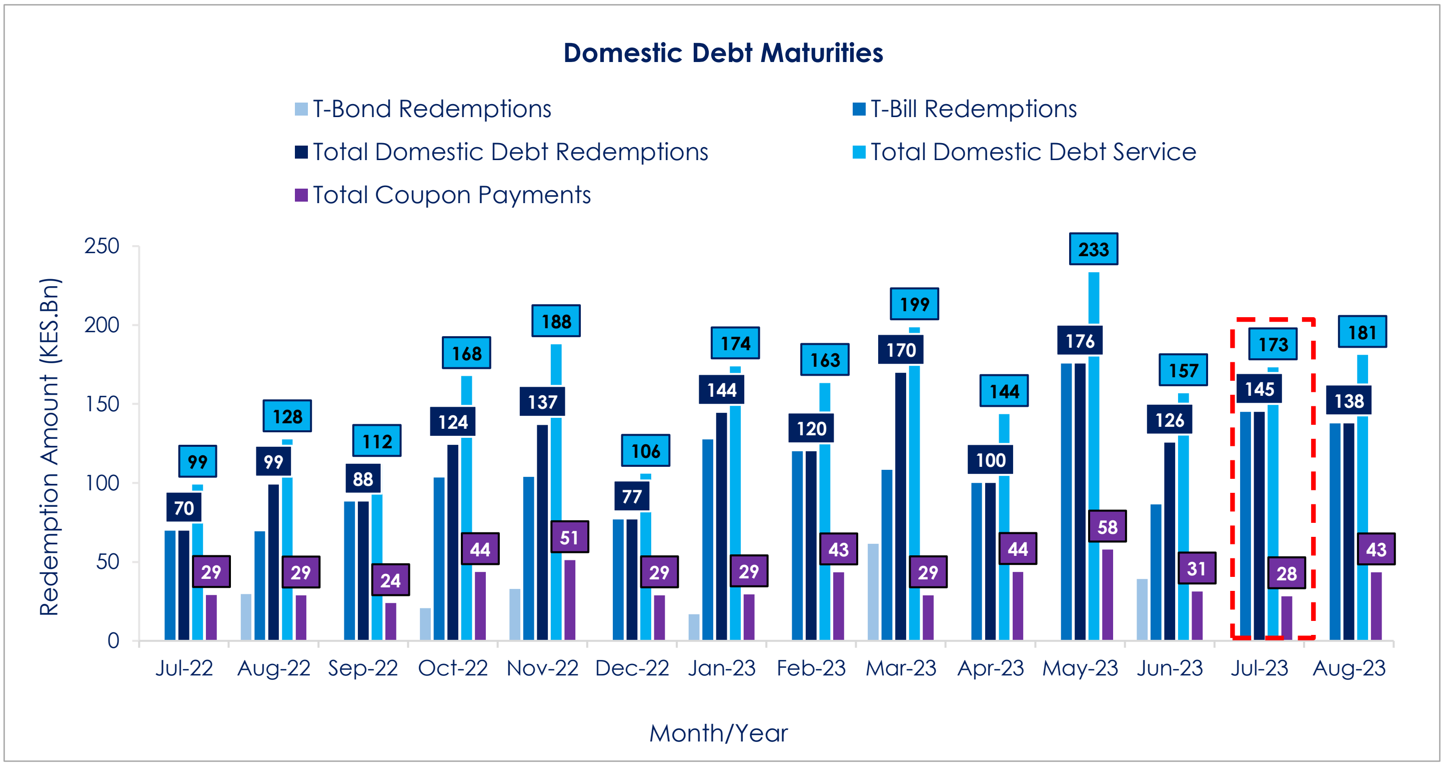


Source: Central Bank of Kenya

Domestic debt service in July 2023 at KES.173.3Bn

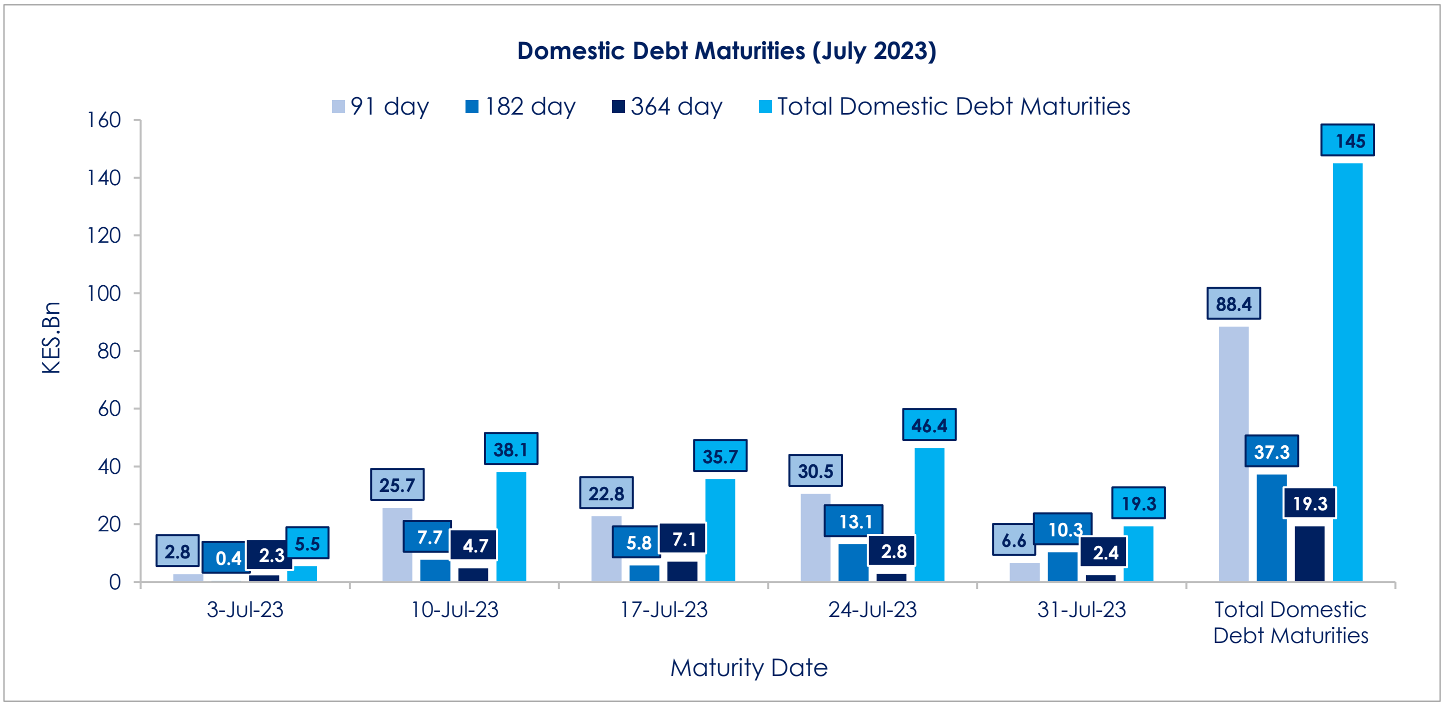
- Total domestic debt service will increase 10.5% in July 2023 to KES.173.3Bn from KES.156.9Bn in June 2023. (Figure.8).
- This comprises of KES.145Bn in T-Bill redemptions and KES.28.3Bn in coupon payments.
- There will be no T-Bond redemptions during the month.
- Redemptions for the 91, 182 and 364-day T-Bills amount to KES.88.4Bn, KES.37.3Bn and KES.19.3Bn respectively with the fourth week of the month having the highest redemptions at KES.46.4Bn (Figure.9).

Figure.8: Slight increase in debt service driven by higher T-Bill Redemptions in July 2023



Source: Central Bank of Kenya

Figure.9: Fourth week of July 2023 with highest T-Bill redemption at KES.46.4Bn

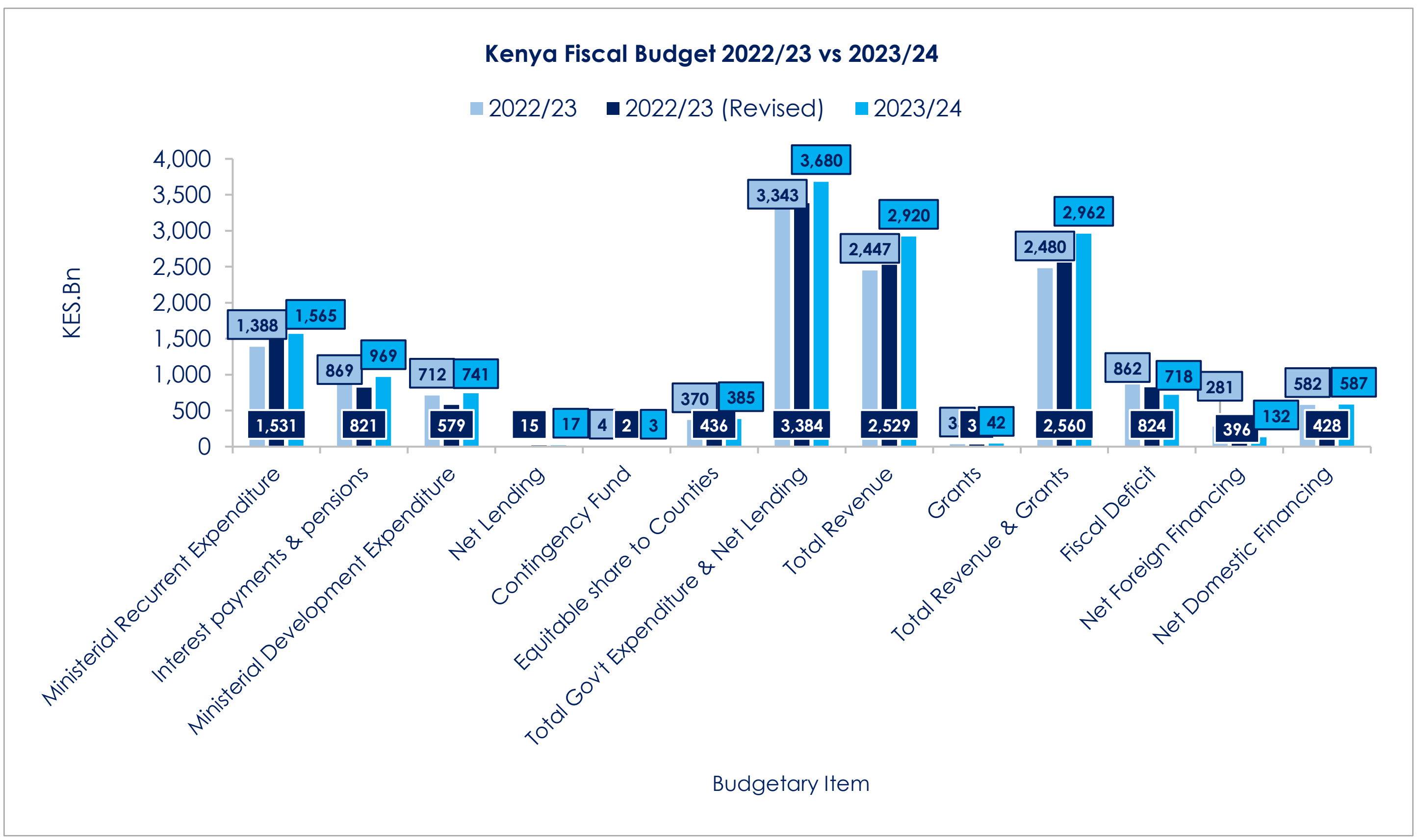


Source: Central Bank of Kenya

National Treasury unveils ambitious 2023/24 budget

- The National Treasury released its 2023/24 fiscal budget in June 2023 outlining an ambitious revenue generation and conservative expenditure estimates (Figure.10).
- Most notable is the total revenue and grants estimate of KES.2.96Tn which is 15.7% higher than the 2022/23 supplementary budget.
- The Government aims to achieve this huge target primarily through increased tax collection which will rely heavily on higher taxes, improved compliance and widening of the tax bracket.
- Economic activity in our opinion has declined and this means achieving this target is unlikely.
- The increase in Government expenditure is modest at 10.1% to KES.3.68Tn but considering the shortfalls in tax collection we expect to see a higher budget deficit than the KES.718Bn.
- We also observe a shift in the deficit financing strategy with domestic financing higher at KES.586.5Bn than foreign financing at KES.131.5Bn.
- We noticed a significant increase in external borrowing towards the end of the 2022/23 fiscal year and a reduction in domestic financing following a decline in demand for domestic debt amid rising interest rates.

Figure.10: 2023/24 fiscal budget ambitious amid subdued economic activity



Source: National Treasury & International Monetary Fund (IMF)

National Treasury increasingly likely to miss revised 2022/23 revenue targets

- With one month left to the end of the 2022/23 fiscal year, the National Treasury remained behind its revenue target having raised KES.2.6Tn equivalent to 72.1% of its KES.3.6Tn revised target (Table.5).
- Latest data available shows net domestic borrowing at KES.464.7Bn or 52.4% of the KES.886.5Bn target.
- Note that this does not take into account the huge domestic borrowing of KES.213.4Bn from the issuance of **IFB1/2023/7** in June that will to a large extent take domestic borrowing closer to the fiscal year target.
- In previous reports we showed our concern over tax revenues that have remained sluggish due to the underperformance of the economy and it is increasingly likely that the Government will miss its tax revenue target of KES.2.1Tn with KES.1.74 collected at the end of May 2023.
- The shortfall in revenues will be filled largely by external borrowing with the data National Treasury data at the end of June 2023 likely to show a spike in borrowing particularly from Multilateral lenders IMF, World Bank and AFDB.

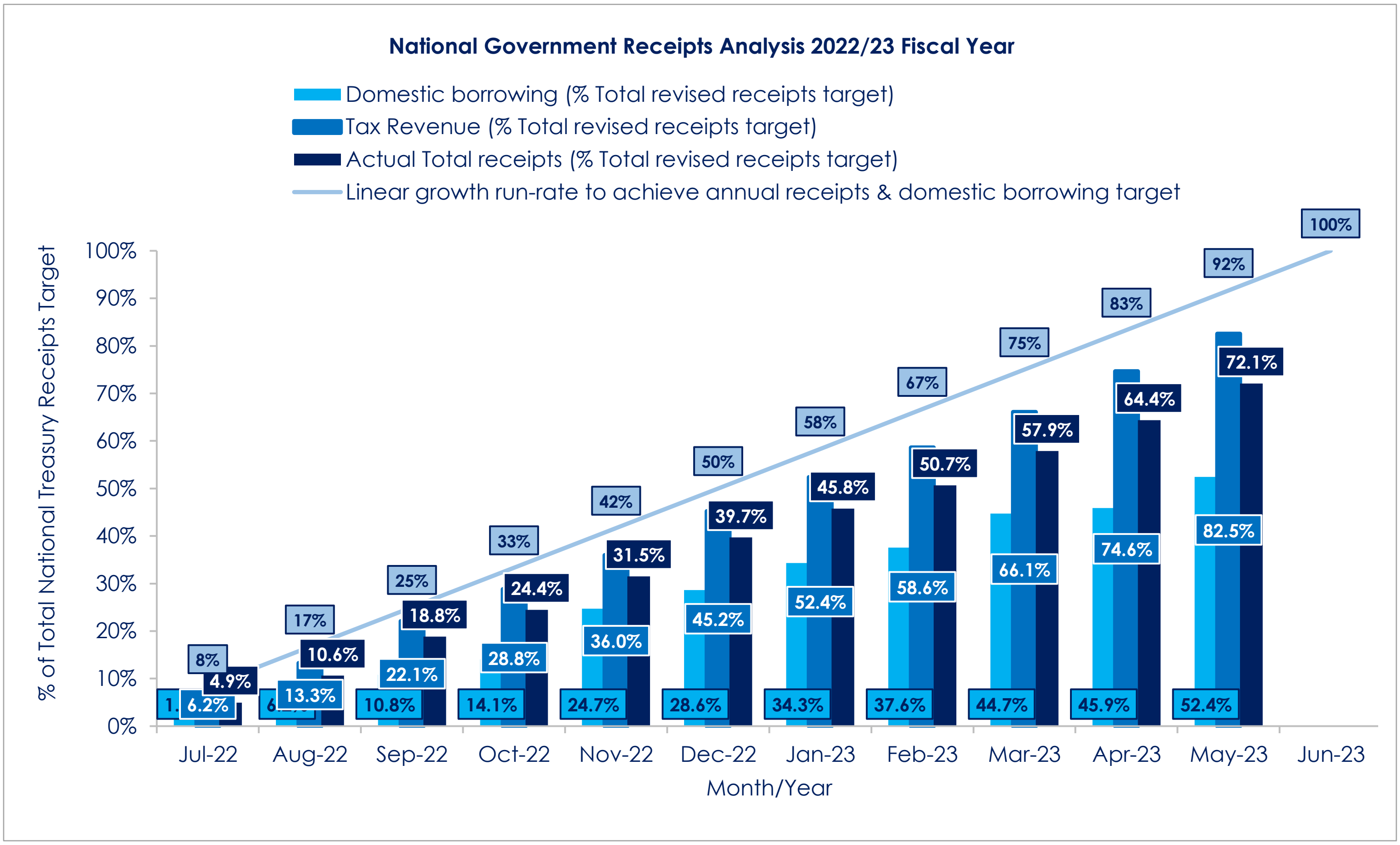
Table.5: All Government receipts below target with one month of the 2022/23 fiscal year left

Receipts	Original Estimates 2022/23 (KES.Mn)	Original Estimates 2022/23 (KES.Mn)	Variation Original vs Revised 2022/23 Estimates	Actual Receipts (KES.Mn) 31st May 2023	Proportion of Total Receipts 31st May 2023
Opening Balance (1st July)				616.5	
Tax Revenue	**2,071.9**	**2,108.3**	**1.8%**	**1,740.4**	**82.5%**
Non-Tax Income	69.7	83.7	20.1%	71.1	84.9%
Domestic Borrowing*	**1,040.5**	**886.5**	**-14.8%**	**464.7**	**52.4%**
External Loans & Grants	349.3	520.6	49%	311.8	59.9%
Other Domestic Financing	13.2	13.2	0	15.5	117.4%
Total Revenue	**3,544.6**	**3,612.3**	**1.9%**	**2,603.5**	**72.1%**
Linear Run Rate target (11 months of fiscal year 2022/23)					**91.7%**

* Note 1: Domestic Borrowing of KES.886.5Bn = Net Domestic borrowing KES.425.1Bn & Internal Debt Redemptions (Roll-overs) KES.461.4

Source: The Kenya Gazette Vol. CXXV - No.137 16th June 2023

Figure.11: Actual receipts remain well below our linear target run-rate

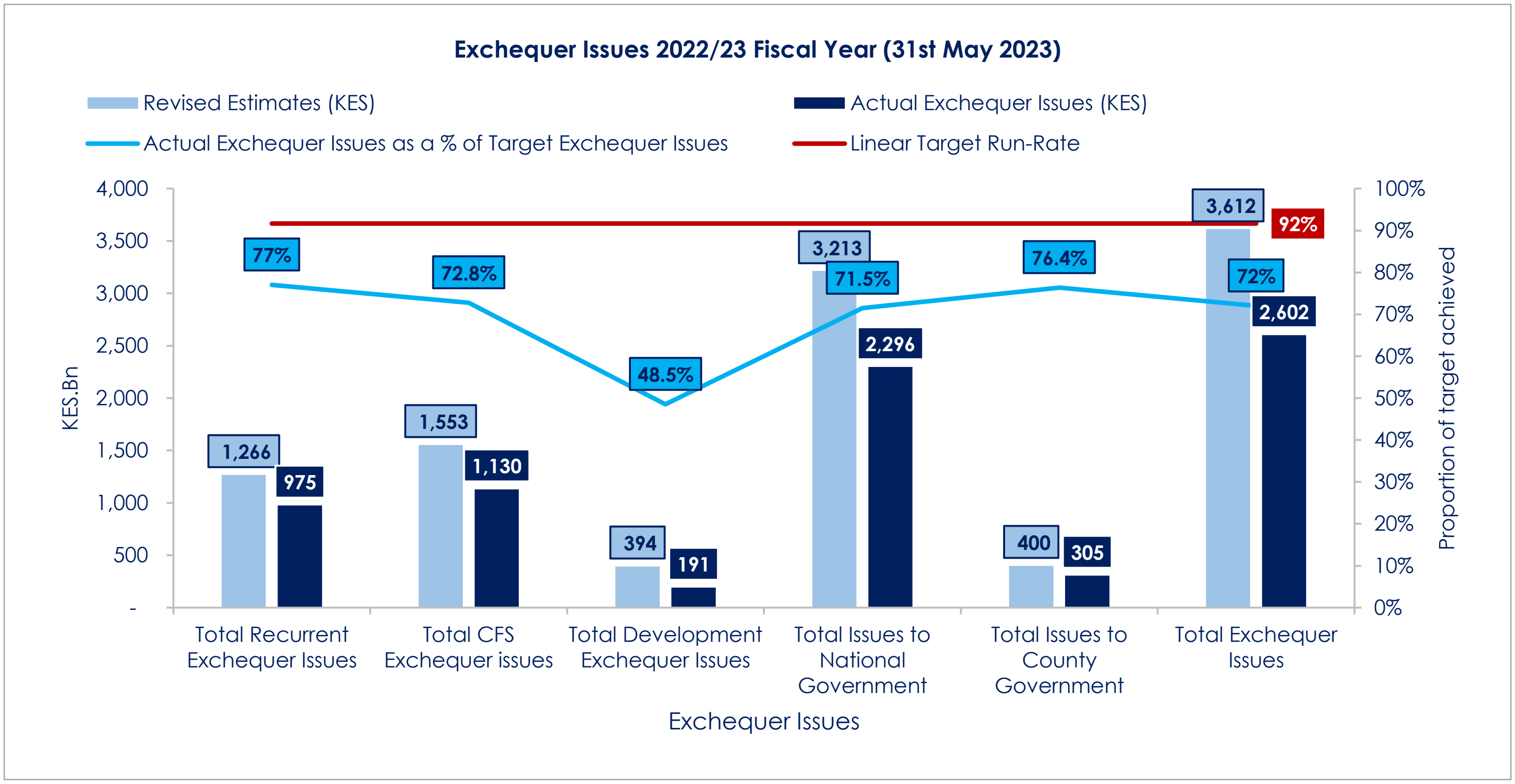


Source: The Kenya Gazette Vol. CXXV - No.137 16th June 2023

Exchequer issues remain below our 92% target run rate

- All National Treasury issues remain below our 92% linear target run rate after eleven months of the 2022/23 fiscal year (Figure.12).
- This can be attributed to shortfalls in tax revenue collection with KES.1.7Tn collected against a target of KES.2.1Tn.
- We note a significant 18.3% month on month increase in Consolidated Fund Service (CFS) exchequer issues and issues to the county Governments (10.7%).
- As has been the case for most of the year, the Government has cut down on development expenditure which despite increasing 7.1% month on month to KES.191.1Bn remains well below 48.5% of the revised target of KES.393.8Bn.

Figure.12: Recurrent expenditure at 47% of total budget in H1 2022/23

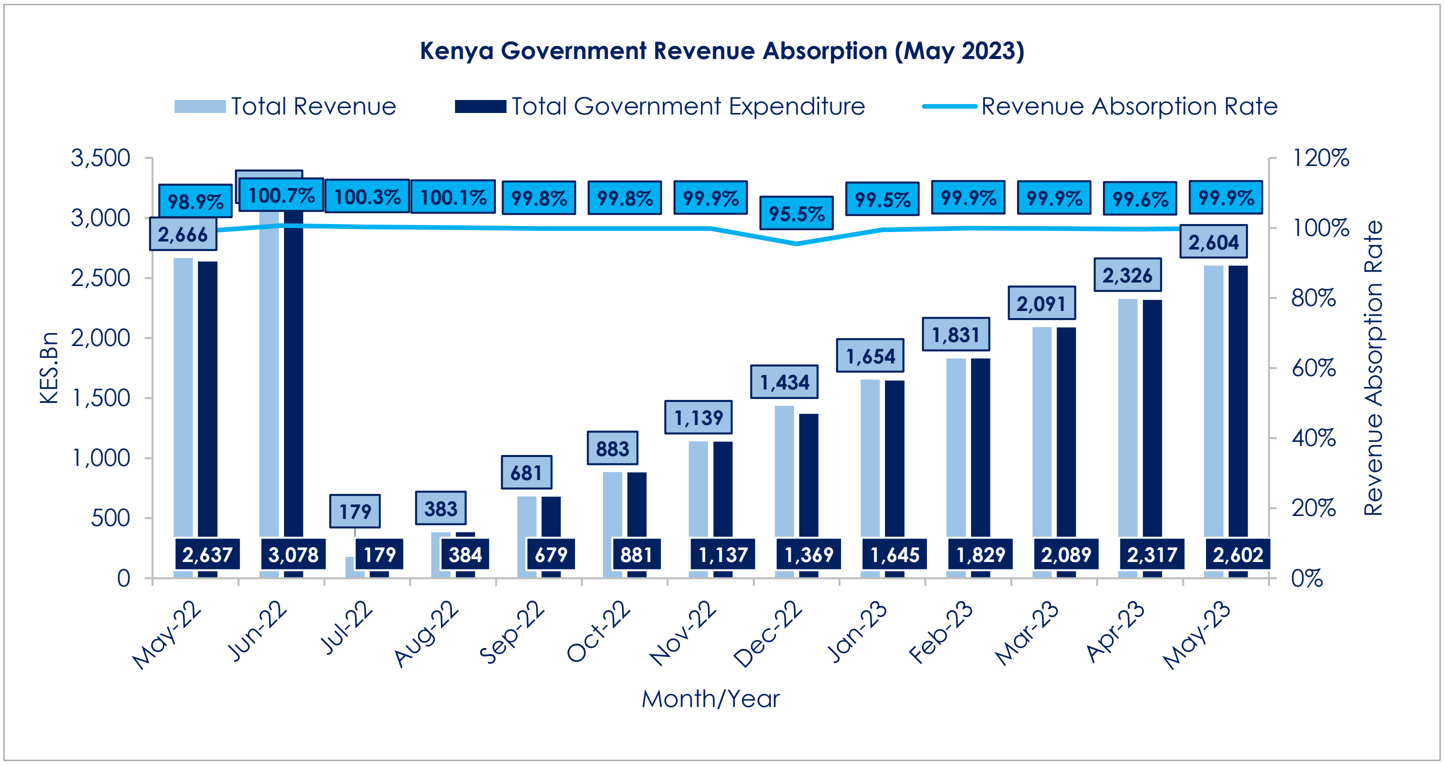


Source: The Kenya Gazette Vol. CXXV - No.137 16th June 2023

Near full Government Revenue Absorption

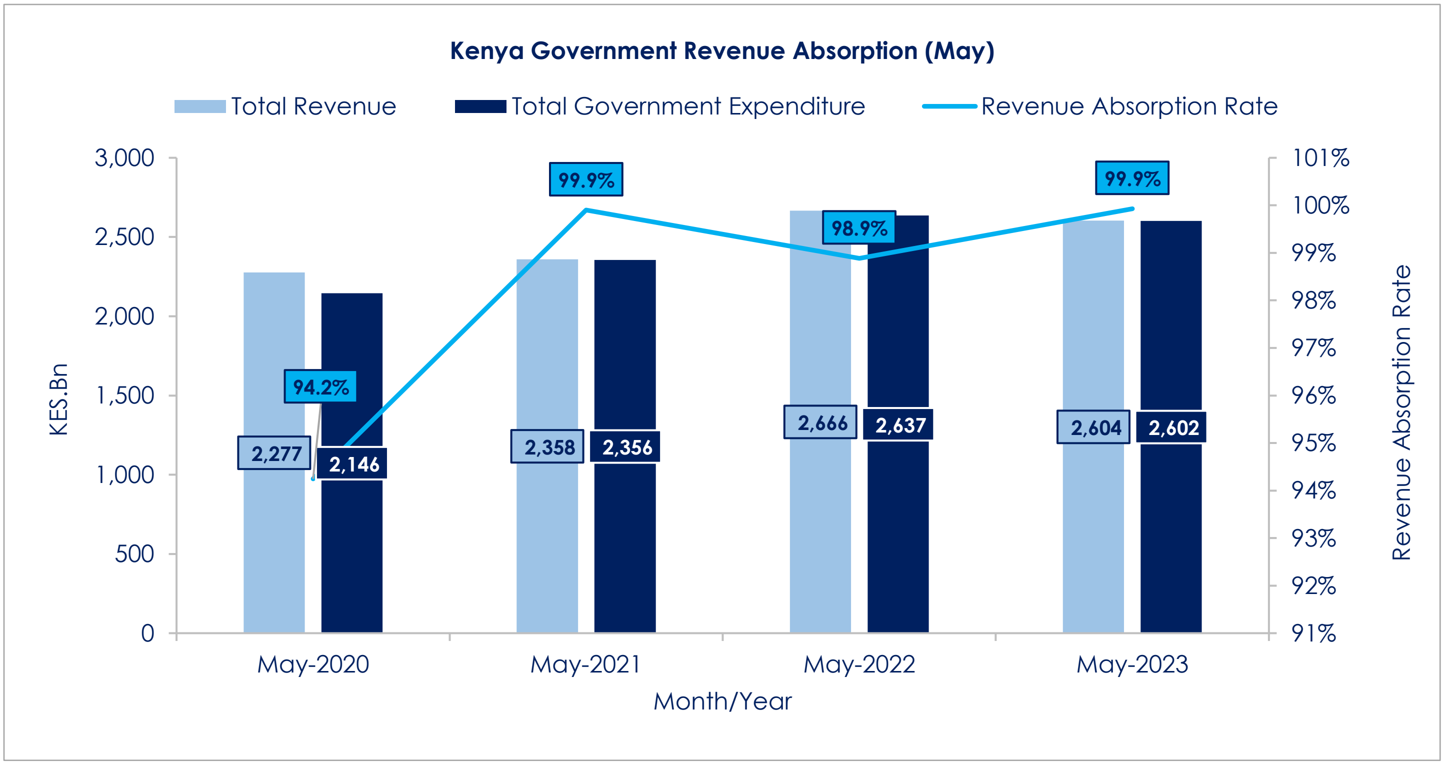
- The Government Revenue Absorption Rate (RAR) which is the proportion of Government receipts used to finance its expenditure rose to 99.9% or near full subscription in May 2023 (Figure.13).
- The reason for this is almost the entire Government revenue is allocated to its expenditure a scenario best explained by shortfalls in revenue collection.
- Further analysis shows a 2.4% and 1.3% decline in year on year Government revenue and expenditure (Figure.14).
- This points to a real possibility of Government revenues falling short not only of the 2022/23 target but also that of 2021/22.

Figure.13: Government's revenue utilization has remained high throughout the year due to revenue shortfalls



Source: The Kenya Gazette Vol. CXXV - No.137 16th June 2023

Figure.14: Revenue absorption highest in May 2023

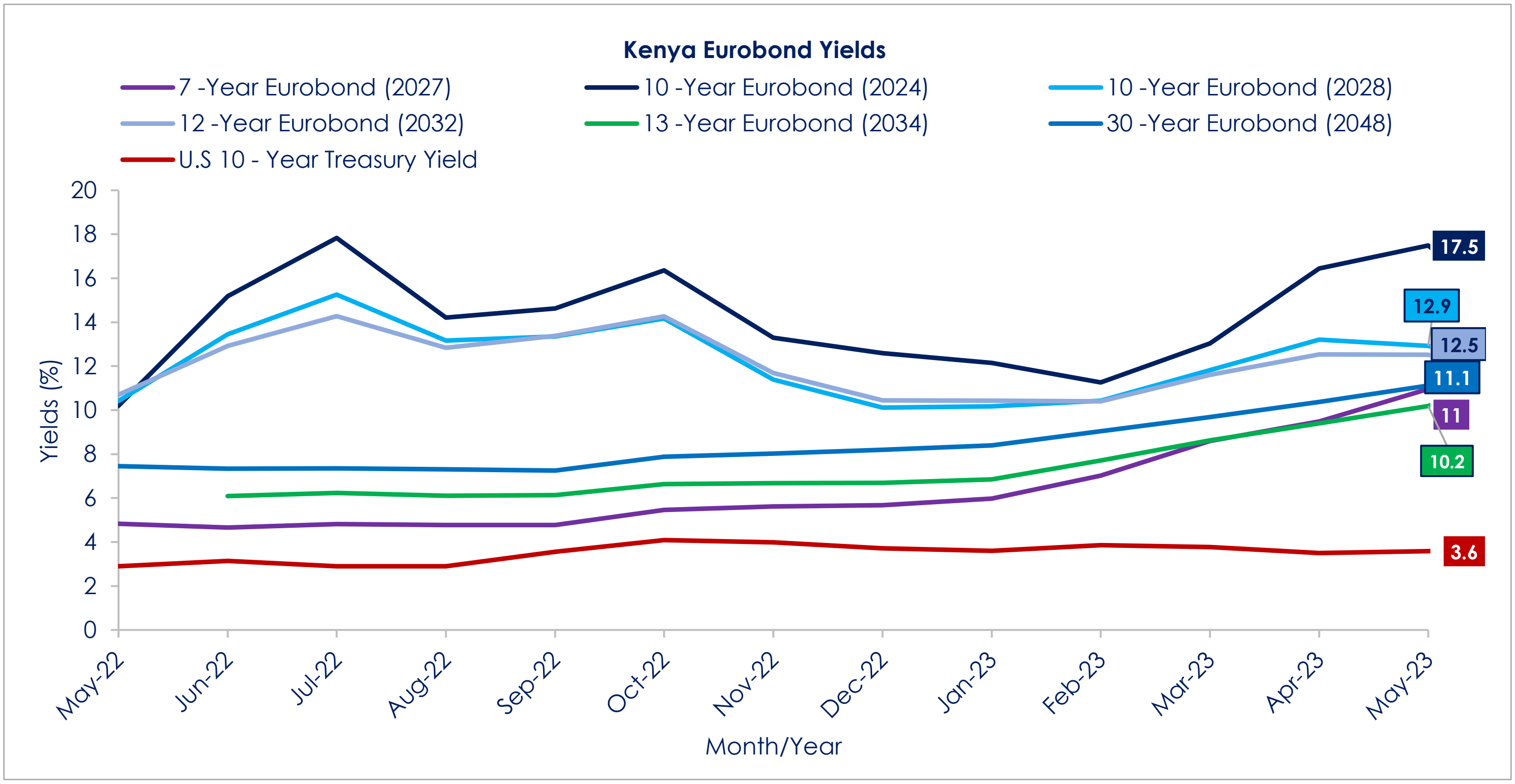


Source: The Kenya Gazette Vol. CXXV - No.137 16th June 2023

Kenya Eurobond yields decline in June 2023 following IMF reassurance

- The average yield on Kenya Eurobonds declined 180 bps in June compared to the previous month with the yields on 10-Year (2024) and 7-Year (2027) declining 382 and 246 bps respectively (Figure.15).
- The yields on 10 -Year Eurobond (2024) **XS1028952403** rose to as high as 20.9% on 2nd May due to perceived credit risks and declined as low as 12.3% on 20th June as fiscal risks subsided on IMF reassurances.
- During the same period, the US 10-year treasury yield rose 27 bps following a 25 bps Fed rate hike in May from 5% to 5.25%.
- The rate hike like others before was aimed at countering inflation. Two more rate hikes are expected by the end of 2023.
- We expect yields on the Kenya Eurobonds to remain volatile in upcoming months as they react to Fed rate actions as well as the country's fiscal position.
- This volatility is likely to present investors with attractive investment opportunities especially on **XS1028952403** maturing in June 2024.

Figure.15: Kenya Eurobond yields decline in June 2023



Source: Central Bank of Kenya

Yield curve continues to shift upwards

- A comparison of average debt security NSE yields as at 30th June 2023 against those as at 31st August 2016 (Close to issuance of **FXD1/2016/10** on 29th August 2016; before the capping of interest rates in September 2016) and one year ago, shows a general increase across the curve. (Table.6 and Figure.16).
- The upward shift in the yield curve is a result of the following:

1) Upward adjustments of the CBR, with five revisions between May 2022 and June 2023 - 350Bps to 10.5%.

2) Increased budgetary financing pressure resulting from revenue shortfalls with the CBK borrowing aggressively in the domestic debt market.

3) CBK has accommodated more aggressive investor bids to encourage subscription following a decline in investor demand for short-term debt instruments.

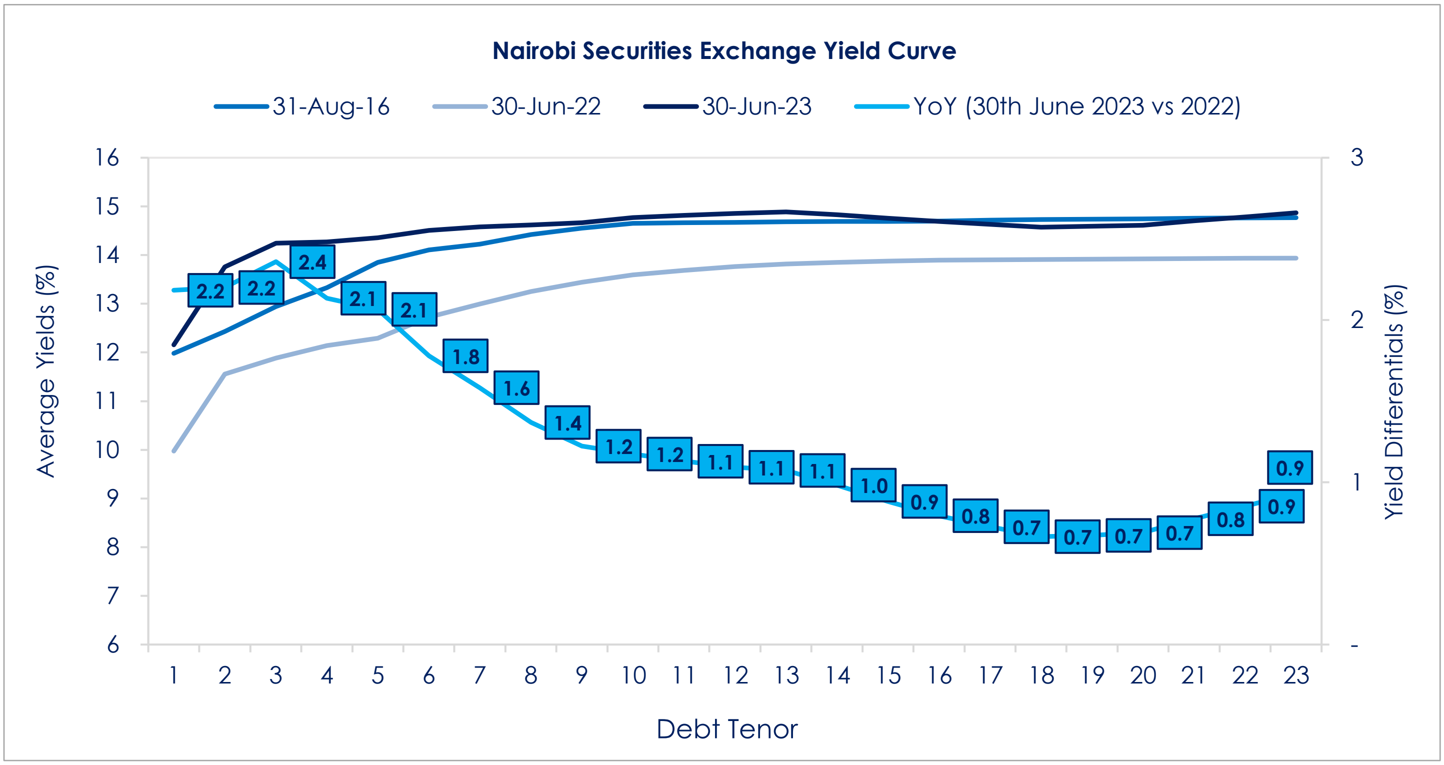
4) High inflation with investors bidding higher to maintain positive real return on capital invested.

Table.6: Yield curve has significantly shifted upward across all tenors

Tenor	Yields (31st Aug 2016)	Yields (30th June 2022)	Yields (30th June 2023)	∆ (30th June 2023 vs 31st Aug 2016) Bps	YoY ∆ (30th June 2023 vs 2022) Bps
1	11.9820	9.9740	12.1570	↑ 17.5	↑ 218.3
2	12.4277	11.5572	13.7576	↑ 133	↑ 220
5	13.8500	12.2933	14.3588	↑ 50.9	↑ 206.6
10	14.6500	13.5941	14.7681	↑ 11.8	↑ 117.4
15	14.6918	13.8762	14.7582	↑ 6.6	↑ 88.2
20	14.7461	13.9231	14.6129	↓ 13.3	↑ 69

Source: Nairobi Securities Exchange & Sterling Capital Research

Figure.16: Higher year on year differentials across all tenors



Source: Nairobi Securities Exchange

Trading ideas - Invest in Kenya Eurobonds

- Investors with a high-risk tolerance should consider buying Kenya Eurobonds and in particular, **XS1028952403** maturing in June 2024 to take advantage of high yields with an option of holding till maturity or disposing in the event short term trading opportunities arise (Table.7).
- **XS1028952403** had a yield of 12.62% as at 29th June 2023 with twelve months to maturity reducing the risk associated with longer dated bonds.
- The bond has seen a steep decline in yields in recent weeks from yields as high as 20.3% on the 24th of April 2023 as reassurance from the IMF and increased effort to refinance the bond calmed investors.

Table.7: Trading ideas - Consider Kenya Eurobonds

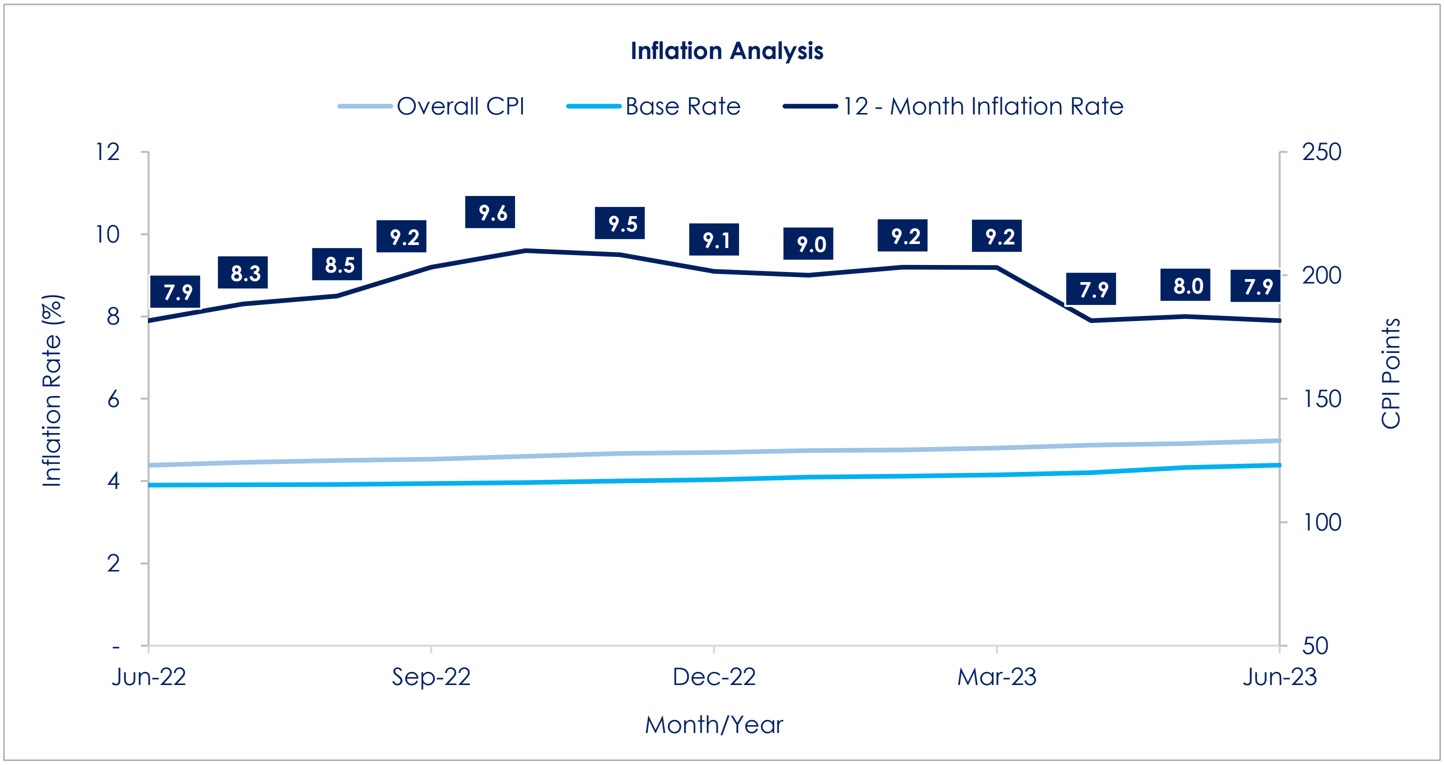
ISIN Code	Issue date	Tenor (Years)	Maturity	Outstanding amount (US.$ Bn)	Coupon	Yield to maturity (29th June 2023)
XS1028952403	Jun -14	10	Jun-24	2	6.875%	12.62%
XS1843435840	May -19	7	May-27	0.9	7%	11.41%
XS1781710543	Feb -18	10	Feb-28	1	7.25%	11.07%

Source: Bloomberg & CBK

June 2023 Inflation declined slightly month on month to 7.9%

- June 2023 inflation declined slightly to 7.9% from 8% in May on account of lower prices of Liquefied Petroleum Gas (LPG), diesel and petrol by 1.8%, 0.7% and 0.4% respectively (Figure.17).
- Notable declines in food prices were observed during the period.
- The inflation rate was in line with our forecasted range of 7.6% - 8.1% for the month.
- Overall, there was marginal 1.3% month on month change in food and non-alcoholic beverages whose contribution to inflation is highest at 32.9%.
- Notably, year on year inflation flat at 7.9% in both June 2022 and 2023 despite an increase in prices of commodities under food and non-alcoholic beverages (10.3%), housing, water, electricity, gas and other fuels (9.4%) and transport (9.4%).
- Pending implementation of the Finance Bill 2023, we expect the long rains and upward revision of the CBR to 10.5% from 9.5% to continue moderating inflationary pressure with our July 2023 forecast at 7.6% - 8.1%.
- We are however, cautious of the expected impact of higher taxes as proposed in the 2023 Finance Bill which are likely to act as a counterbalance to a reduction in inflation as producers push on higher costs to consumers.
- While global fuel prices have declined, we do not expect this to translate to lower pump prices locally further due to currency depreciation and the increase of Value added Tax from 8% to 16%.

Figure.17: July 2023 inflation forecast at 7.6% - 8.1%



Source: Kenya National Bureau of Statistics

MPC revises CBR to 10.5% during June meeting

- The Monetary Policy Committee (MPC) revised the CBR upwards by 100bps to 10.5% on 26th June 2023 which surprised investors as it was just a month after its last meeting on 29th May 2023.
- Notable during the meeting was the increase in Non-Performing Loans (NPLs) to 14.9% in May 2023 from 14.6% in April.
- Other points of discussion included global economic developments, current account position, private sector credit and foreign exchange reserves.
- It will be interesting to see the next move of the MPC in July with the implementation of the Finance Bill 2023 expected to have a significant impact on inflation.
- We find it prudent to desist from giving a view on any CBR revisions at this point as the full implementation of the Finance Bill which will have a material impact on inflation is subject to legal proceedings.

Disclosures

Ownership and material conflicts of interest:
The authors or a member of their household, of this report do not hold a financial interest in the securities of this company. The authors or a member of their household, of this report do not know of the existence of any conflicts of interest that might bias the content or publication of this report.

Position as an officer or director: The authors or a member of their household, do not serve as an officer, director or advisory board member of the subject company.

Research analyst certification:
The research analyst(s) primarily responsible for the preparation and content of all or any identified portion of this research report hereby certifies that all of the views expressed herein accurately reflect their personal views. Each research analyst(s) also certify that no part of their compensation was, is, or will be, directly or indirectly, related to the view(s) expressed by that research analyst in this research report.

Additional Disclosures:
This research report is for distribution only under such circumstances as may be permitted by applicable law. This research report has no regard to the specific investment objectives, financial situation or particular needs of any specific recipient, even if sent only to a single recipient. This research report is not guaranteed to be a complete statement or summary of any securities, markets, reports or developments referred to in this research report. Neither SCL nor any of its directors, officers, employees or agents shall have any liability, however arising, for any error, inaccuracy or incompleteness of fact or opinion in this research report or lack of care in this research reports preparation or publication, or any losses or damages which may arise from the use of this research report.

Disclaimer:
This research report was prepared under the supervision of the Research Department of Sterling Capital Limited (SCL), a company authorized to engage in securities activities in Kenya, and with partnerships in Uganda, Rwanda, Zimbabwe, and Tanzania. Data used in this report was gathered from reliable sources, but the analyst(s) and the publishers of this report do not hold themselves responsible for the accuracy or completeness of data used. The report provides the opinions, analyses and conclusions of the Research division only and is provided without any warranties of any kind.

This report does not constitute an offer, or the solicitation of an offer, for the sale or purchase of any security. The reader should independently evaluate the investment risks and is solely responsible for their investment decisions. Whilst every care has been taken in preparing this report, no representation, warranty or undertaking (express or implied) is given and no responsibility or liability is accepted by SCL or any employee of SCL as to the accuracy, timeliness, completeness merchantability or fitness for any particular purpose of any such recommendation or information contained and opinions expressed herein. SCL do not accept any liability for any direct or remote loss or damage arising out of the use of all or any part of the information contained in this report.

This report is published for information purposes only and is not an offer to solicit, buy or sell any security of any kind. This report does not provide customized investment advice. It has been prepared without regard to the individual financial circumstances and risk and return objectives of individuals who receive it. The appropriateness of a particular investment will depend on an investor's individual circumstances, risk tolerance and return objectives. The investments securities referred to in this document may not be suitable for all or certain categories of investors. The Research Division and SCL have implemented Chinese walls procedures to prevent any conflict of interest. Other additional information may be available at SCL.

Further disclosure regarding SCL policy on potential conflicts of interest in the context of investment research and SCL policy on disclosure and conflicts in general are available on request. The opinions presented in this note may be changed without prior notice or cannot be depended upon if used in the place of the investor's independent judgment. The historical performance of a security is not representative of the security's future returns. Investment in securities can be highly risky as security prices may go down in value as well as up and you may not get back the full amount invested. Where an investment is denominated in a currency other than the local currency of the recipient of the research report, changes in the exchange rates may adversely affect the value, price or income of that investment. In case of illiquid investments for which there is no organized market it may be difficult for investors to exit investment positions or to obtain reliable information about its value or the extent of the risk to which it is exposed. The information contained in this report is confidential and is solely for use to those persons to whom it is addressed and may not be reproduced, further distributed to any other person or published, in whole or in part, for any purpose.