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Fixed Income Note

February 2023

"Has the CBK changed tact?"

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Table of Contents

Executive Summary

- Our February 2023 fixed income report is titled **"Has the CBK changed tact"** in reference to the Central Bank of Kenya's (CBK) both re-opening **FXD1/2017/10** and issuing new **FXD1/2023/10** with a KES.50Bn funding target.
- We see a high likelihood of an undersubscription with interested investors expected to bid aggressively due to rising interest rates, inflationary pressure and knowledge of the fiscal budget financing challenges.
- Liquidity is likely to be concentrated on **FXD1/2017/10** whose short remaining tenure of 4.5 years is more attractive to investors given the current rising interest rate environment which dissuades investors from locking up their capital over an extended period.
- Our weighted average bid predictions are as follows:

  FXD1/2017/10: 13.84 - 13.94
  FXD1/2023/10: 14.04 - 14.14

- The report 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.
- Our report concludes with our inflation expectations as well as analysis of the Monetary Policy Committee (MPC) decision in its 30th January 2023 meeting.

CBK seeks to raise KES.50Bn in February 2023

- The Central Bank of Kenya (CBK) invites bids to raise KES.50Bn through a re-opened (**FXD1/2017/10**) and new bond issue **FXD1/2023/10** (Table.1).
- We notice a slight change on borrowing strategy with CBK issuing a relatively short debt security with a medium term bond.
- We see this as strategic to appeal to investors who have shied away from investing in longer dated debt securities at a time interest rates are on the rise.
- There is a high likelihood of an undersubscription with interested investors expected to bid aggressively due to rising interest rates, inflationary pressure and knowledge of the fiscal budget financing challenges.

Table.1: Primary Bond issues' summary

Issue Number	FXD1/2017/10	FXD1/2023/10
Total Amount Offered	KES.50Bn	
Tenor	4.5 Years	10 Years
Coupon Rate (%)	12.966	Market Determined
Price Quote	Discounted/Premium/Par	
Period of Sale	**17/01/2023 to 07/02/2023**	
Auction Date	08/02/2023	
Value Date	13/02/2023	
Yield Curve (%) (Weighted average tenor - 31st Jan 2023)	**13.5286**	**13.7789**

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 31st January 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	FXD1/2017/10	FXD1/2023/10
Weighted Average bid predictions (%)	13.84 - 13.94	14.04 - 14.14

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 as of 31st January 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 Years (Days)	Implied Yield to maturity (%)	Yield Curve at time of issue
FXD1/2017/10	31st July 2017	12.9660	19th July 2027	4.5 (1,630)	13.4419	12.9660
FXD1/2018/15	28th May 2018	12.6500	9th May 2033	10.3 (3,751)	13.8015	13.0244

Source: Central Bank of Kenya

- Recent historical auctions of 10-year debt issues illustrate low subscription with investors discouraged from investing in longer-dated debt issues due to higher duration risk (Table.4).
- We see banks on an asset-liability matching strategy as the biggest buyers of these debt issues with most institutional buyers keen to avoid mark-to-market losses if they are bought and held for trading or for sale in the current interest rate environment.
- Most investors prefer to invest in shorter dated bonds and T-Bills with subscription on the 91-day T-Bill only falling below 100% once in the past few weeks and averaging 348.6% in January 2023.
- We expect this to be the trend going forward.

Table.4: Historical primary market auction performance

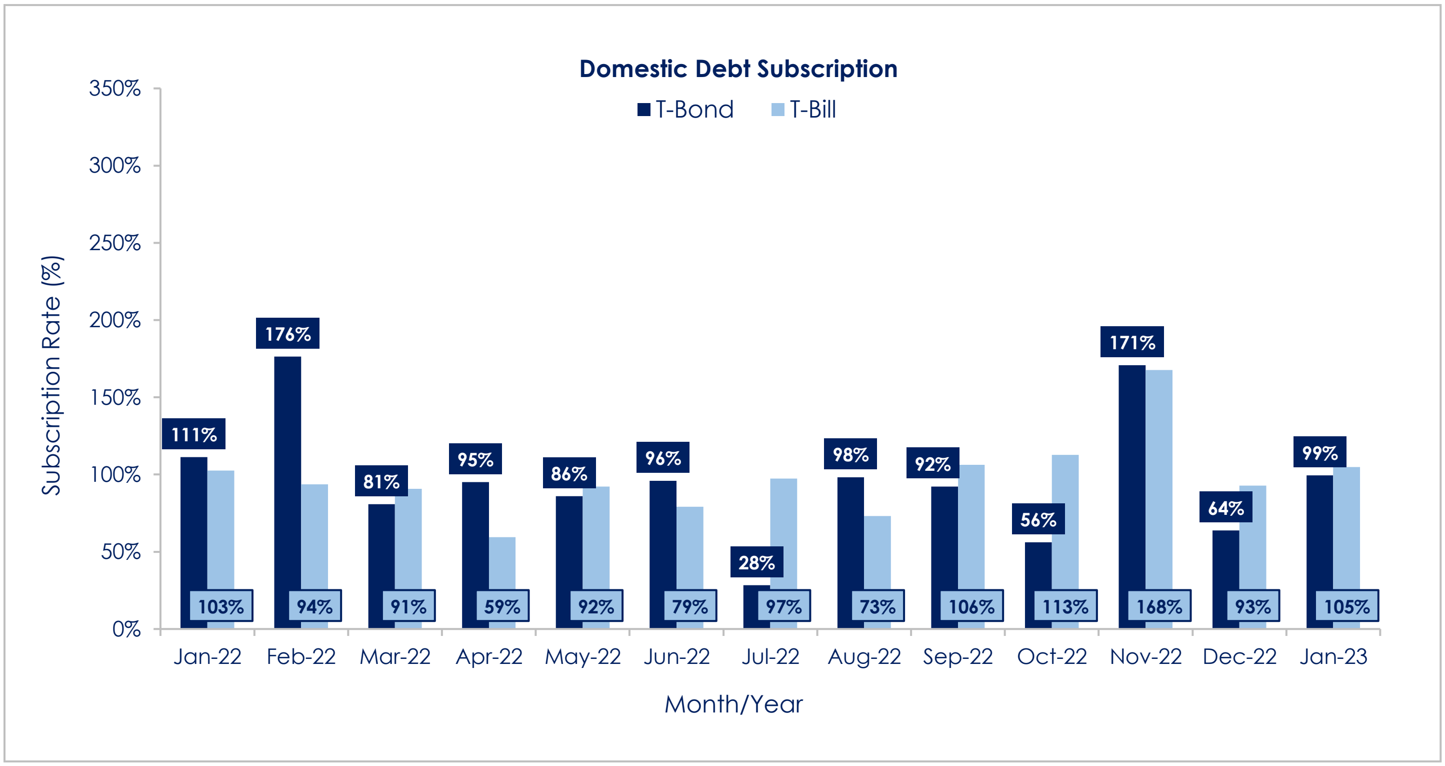
Issue	Issue Date	Offered (KES.Bn)	Bids Received (KES.Bn)	Amount Accepted (KES.Bn)	Performance Rate (%)	Coupon Rate (%)	Implied Yield (%)
10-Year							
FXD1/2018/10	27th Aug 2018	40	29.8	19.4	74.6	12.686	13.5783
FXD2/2018/10	17th Dec 2018	40	28.8	26.2	72.0	12.502	13.6189
FXD1/2019/10	25th Feb 2019	50	36.3	32.8	72.6	12.438	13.6421
FXD2/2019/10	15th Apr 2019	50	70.9	51.3	141.8	12.300	13.6575
FXD3/2019/10	19th Aug 2019	50	52.8	45.0	105.6	11.517	13.6943
FXD4/2019/10	25th Nov 2019	50	38.4	28.4	76.8	12.280	13.7093
FXD1/2022/10	16th May 2022	60	43.2	31.7	72.0	13.490	13.7200

Source: Central Bank of Kenya

Demand for domestic debt issues ticks up in January 2023

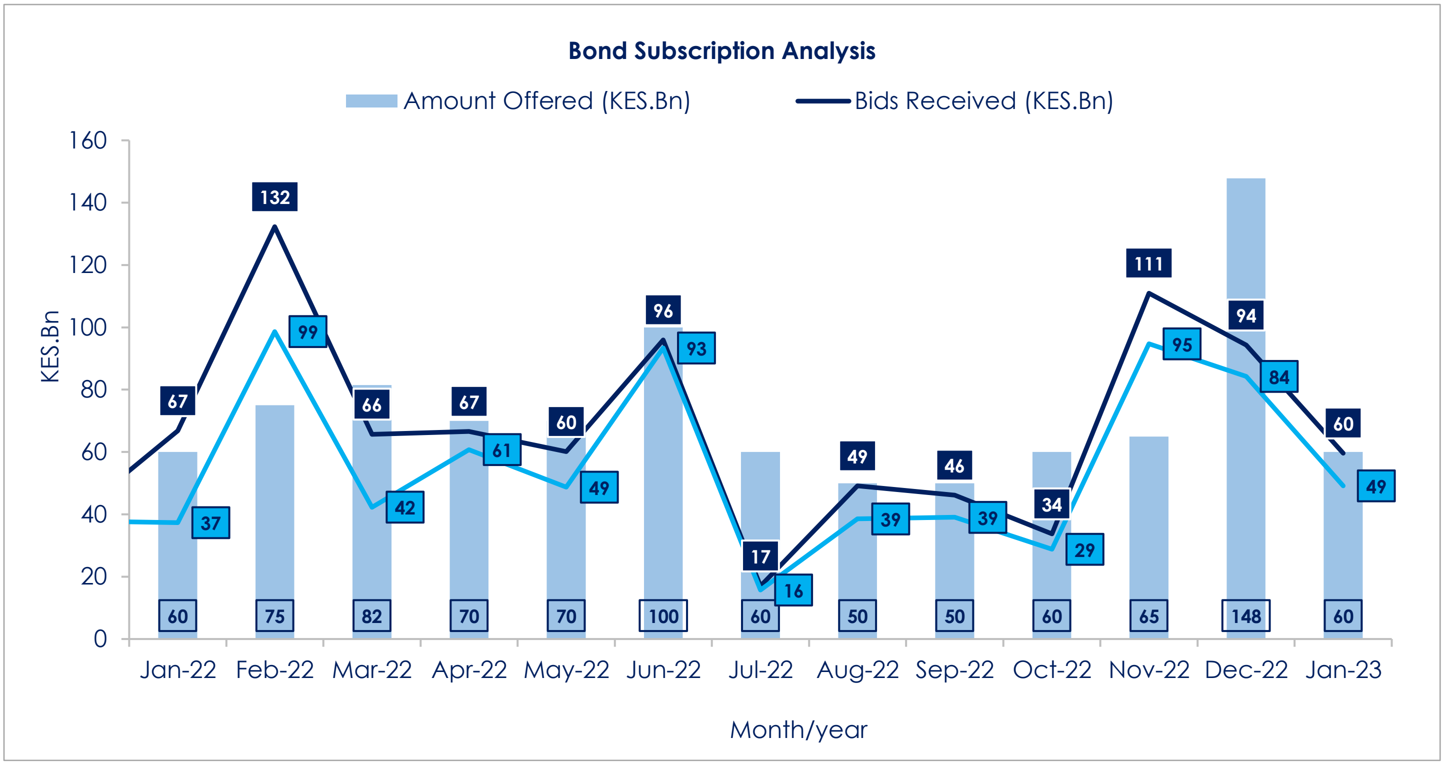
- T-Bond subscription increased in January 2023 with KES.59.7Bn bids received against KES.60Bn offered equivalent to a 99.4% subscription rate.
- This was higher than the 63.8% recorded in December (Figure.1).
- T-bills subscriptions also recorded an increase, coming in at 104.8% with KES.125.8Bn bids received against KES.120Bn offered which is higher than the 92.8% recorded in December 2022 (Figure.1).
- The 91, 182 and 364-Day T-Bills recorded a 348.6%, 74.7% and 37.4% subscription rate in January compared to 395.7%, 40.1% and 24.3% respectively in December 2022.
- The increase in T-bond subscription was due to the relatively short tenor of the **FXD1/2020/5** whose 2.4-year tenor elicited strong demand.
- With regard to T-Bills, investors have increasingly allocated their capital to the 91-day T-Bill in recent months to avoid locking up their funds in longer dated paper due to the rising interest rate environment.
- We expect investor capital to be centered on the 91-day paper for the rest of Q1 2023 as investors hedge against the aforementioned duration risk.

Figure.1: T-Bill & Bond subscriptions up in January 2023



Source: Central Bank of Kenya

Figure.2: Bond subscriptions in January 2023

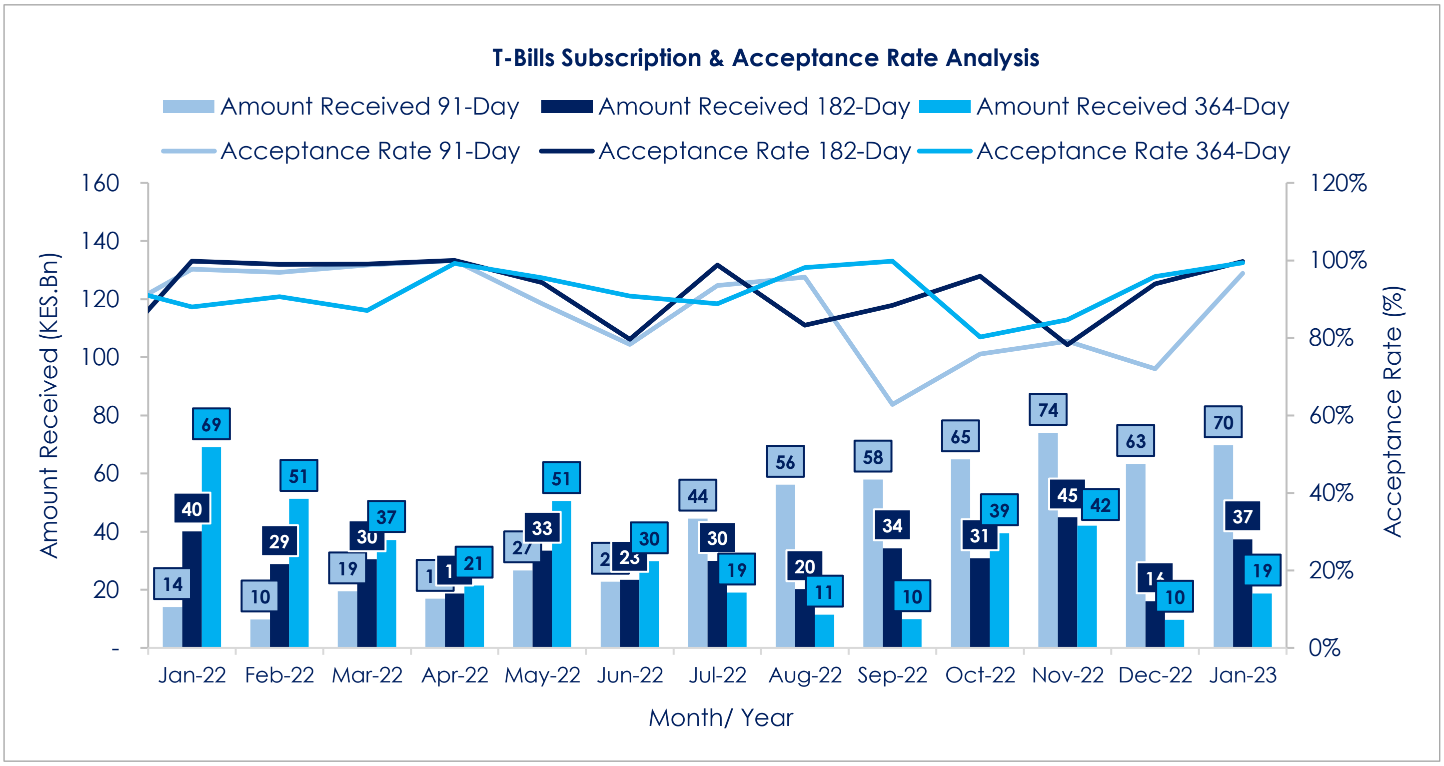


Source: Central Bank of Kenya

CBK's acceptance rate increases even further in January 2023

- CBK's acceptance rate for the 91, 182-Day and 364-Day T-Bills stood at 96.7%, 99.7% and 99.4% in January 2023 compared to 72%, 93.9% and 99.4% in December 2022. (Figure.3).
- The relatively higher acceptance rate for the longer tenor T-Bills (182 and 364-Day), is consistent with the CBK's strategy to lengthen the average term to maturity of public debt.

Figure.3: High 91, 182 and 364-Day T-Bill acceptance rates in January 2023

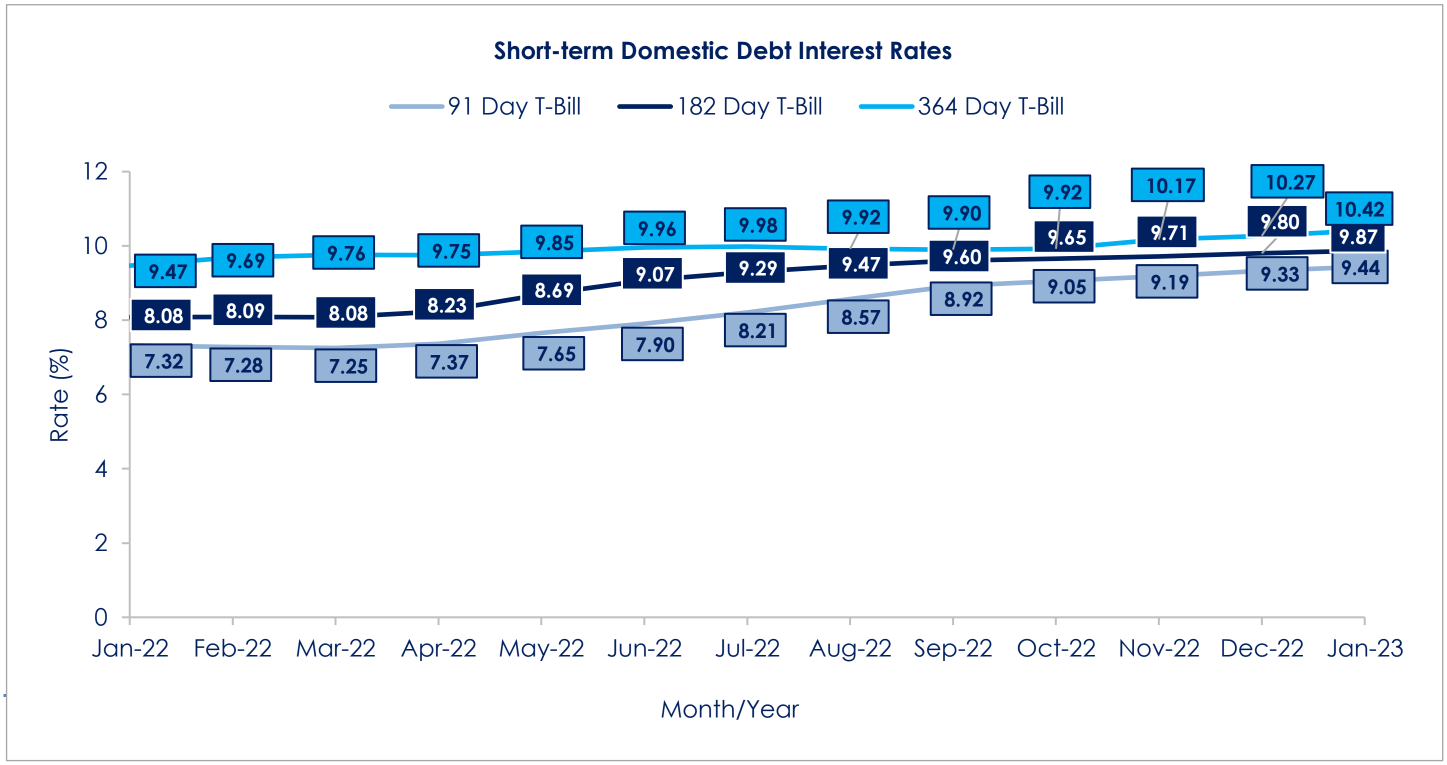


Source: Central Bank of Kenya

T-bill rates continue upward trajectory in January 2023

- Average 91, 182 and 364-Day T-Bill rates rose to 9.4%, 9.9% and 10.4% respectively in January 2023 compared to 9.3%, 9.8% and 10.3% in December 2022 (Figure.4)
- This is attributable to upward revisions of the CBR, high inflation and increased fiscal deficit financing.
- Investors are aware of the challenges faced by Government in financing the budget and therefore will demand a premium for capital invested in debt securities.

Figure.4: T-Bill rates continue upward trajectory in January 2023

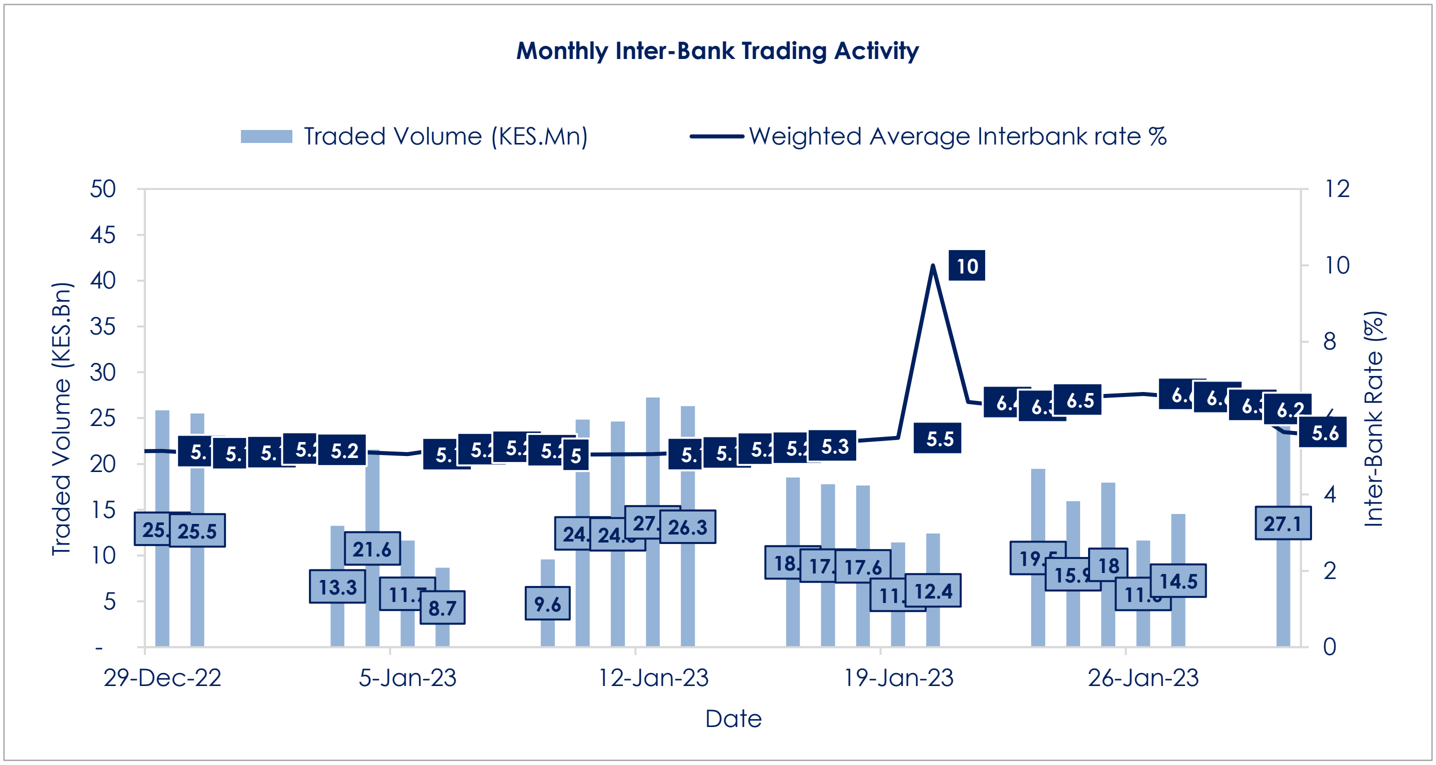


Source: Central Bank of Kenya

Average inter-bank rates tick up while trading volumes decline in January 2023

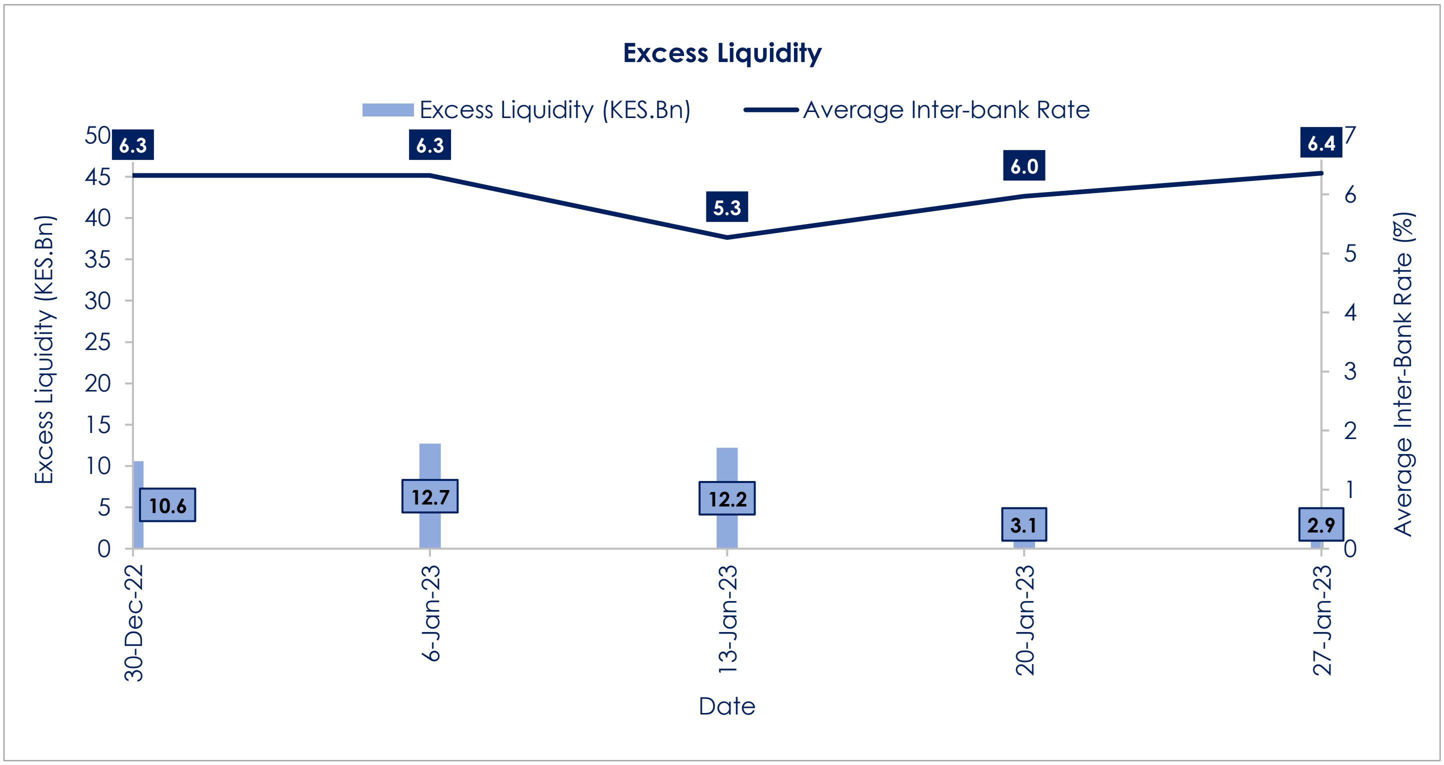
- Average inter-bank rates increased while trading volumes decreased in January 2023.
- The average inter-bank rate increased from 5.4% in December to 6% in January pointing to an ever-illiquid inter-bank market.
- Trading volumes declined coming in at KES.352.1Bn in January 2023 from KES.428.8Bn in December 2022 (Figure.5).
- Contrary to our previous expectations, market liquidity has tightened significantly, a trend we expect to persist given current market dynamics.
- Over the same period, excess reserves (the additional liquidity above the minimum 4.25% Cash Reserve Ratio (CRR)) declined 56.7% from KES.71.4Bn in December 2022 to KES.30.9Bn in January 2023 (Figure.6).
- We revise our earlier forecast upwards and expect the tightened liquidity environment to average 5% - 6% in February.

Figure.5: Average inter-bank lending rates to range between 5% and 6% in February 2023



Source: Central Bank of Kenya

Figure.6: Excess commercial bank reserves decline in January 2023

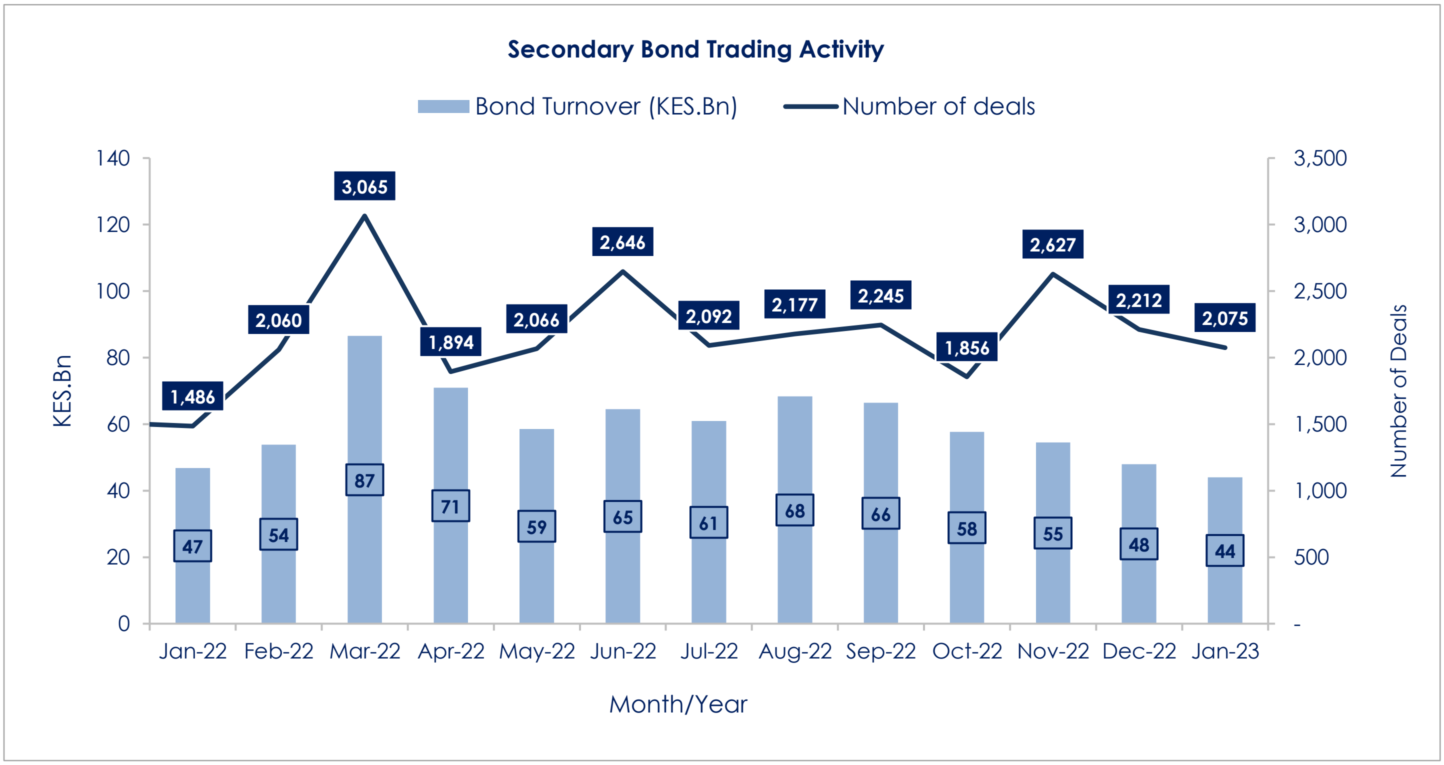


Source: Central Bank of Kenya

Secondary market trading down 8.3% in January 2023

- Secondary bond market trading declined 8.3% to KES.44Bn in January 2023 from KES.48Bn in December while the number of deals declined 6.2% to 2,075 from 2,212 (Figure 7).
- This has increasingly become the trend given the increase in capital allocation to the 91-Day T-bill.
- We do not expect the two bonds on issue; **FXD1/2017/10** and **FXD1/2023/10** to see an increase in trading given their long tenors and the relatively tight market liquidity.
- We expect trading to be relatively muted on a year-over-year (YoY) basis until the issuance of a very short-dated paper or an IFB.

Figure.7: Secondary trading activity remains subdued in January 2023

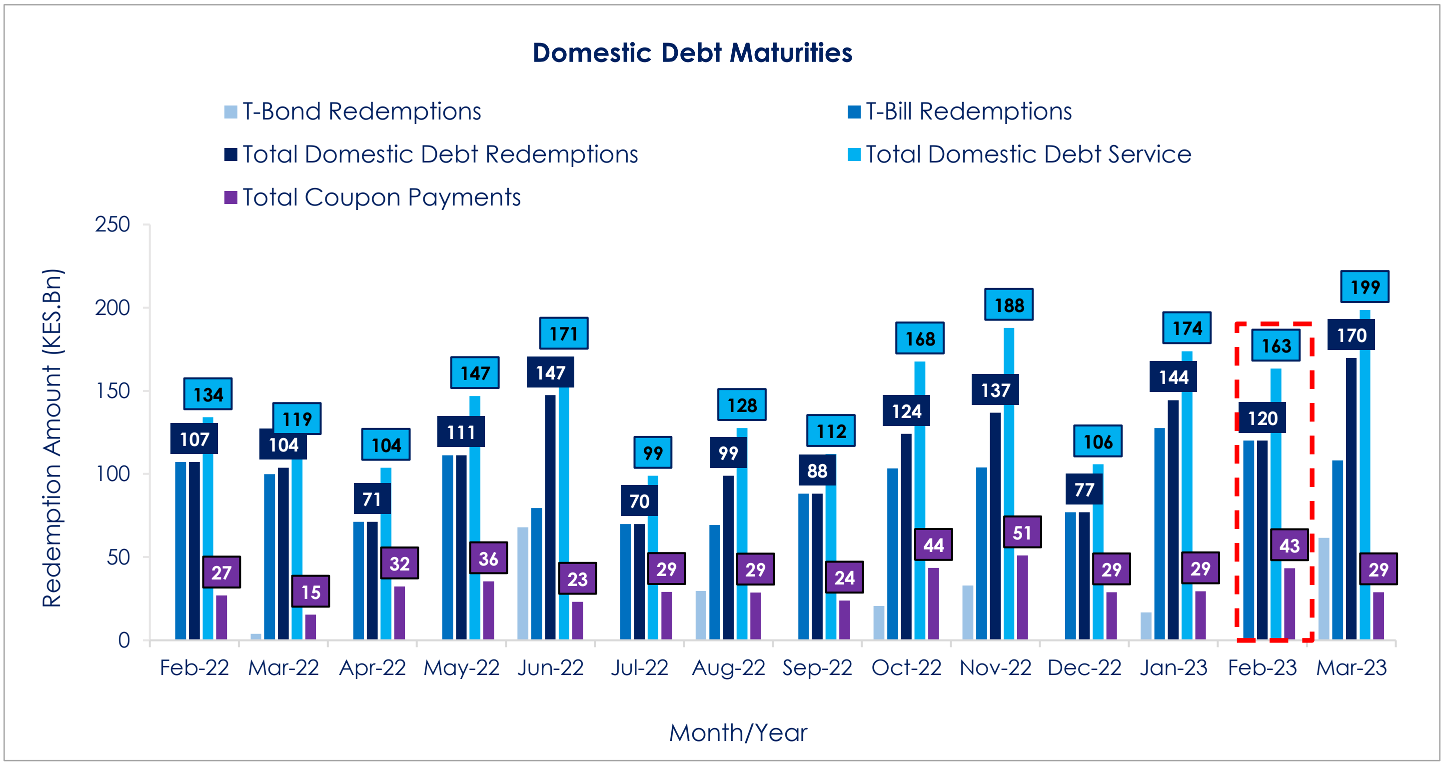


Source: Central Bank of Kenya

Domestic debt service in February 2023 at KES.163Bn

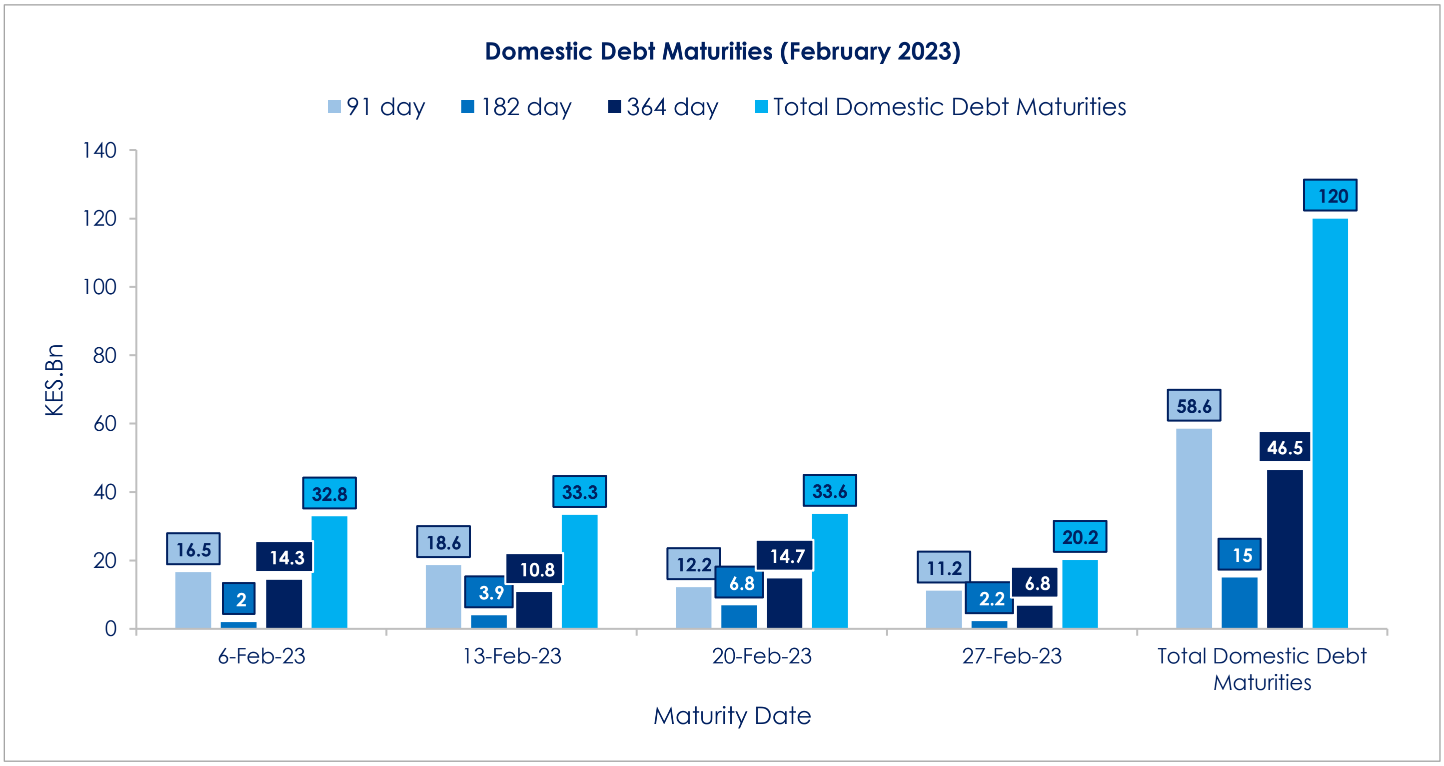
- Total domestic debt service for February 2023 is KES.163.4Bn 6% lower than January 2023 (KES.173.9Bn) (Figure.8).
- This comprises of KES.120Bn in T-Bill redemptions and KES.43.4Bn in coupon payments.
- Redemptions for the 91, 182 and 364-day T-Bills amount to KES.58.6Bn, KES.15Bn and KES.46.5Bn respectively with the third week of the month having the highest redemptions at KES.33.6Bn (Figure.9).

Figure.8 February debt service at KES.163Bn



Source: Central Bank of Kenya

Figure.9: Weekly debt maturities February 2023

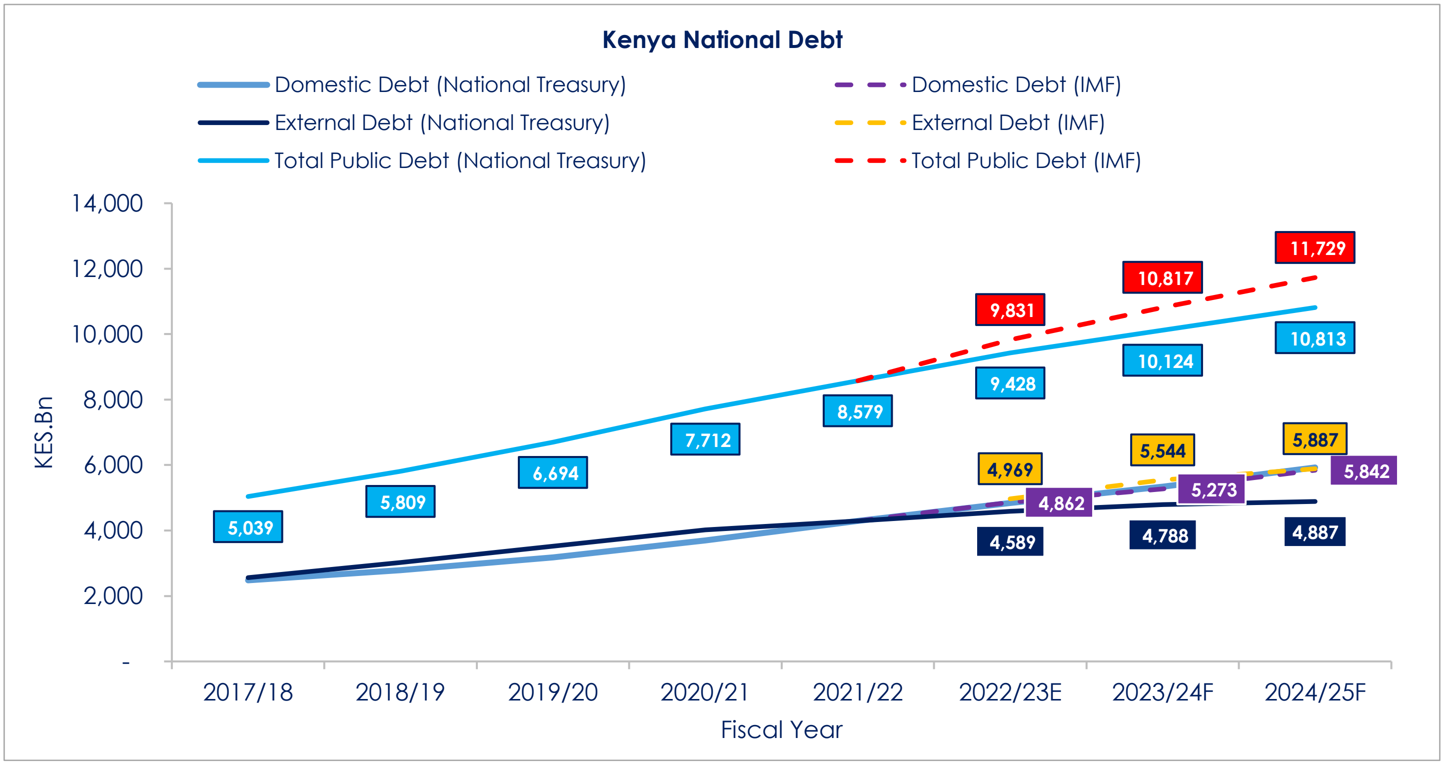


Source: Central Bank of Kenya

Kenya total public debt stock estimated at +KES.9Tn in 2022/23

- The most recently available public debt data (30th November 2022) shows Kenya's total public debt stock at KES.8.9Tn with a domestic vs external debt proportion of 49.8% to 50.2%.
- This is a slight contrast with the end of the 2021/22 fiscal year (30th June where the domestic and external debt was evenly split with the total at KES.8.6Tn.
- We see glaring differences in projected public debt estimates (Figure.10)
- Looking forward, the National Treasury in its Draft 2023 Budget Policy Statement (2023 BPS) forecasts total public debt at KES.9.4Tn in 2022/23 and KES.10.1Tn in 2023/24.
- This falls short of the International Monetary Fund's (IMF) forecasts in its December 2022 country report of KES.9.8Tn and KES.10.8Tn in 2022/23 and 2023/24 respectively.
- We look at the National Treasury's tax revenue forecasts as optimistic on account of relatively subdued economic activity coming from a pandemic and inflationary environment.
- In addition, the expected refinancing of the US$.2Bn (KES.250Bn) Eurobond (XS1028952403) that matures in June 2024 will have a significant impact on the country's total public debt.
- Also evident from the BPS 2023 is what appears to be a significant underestimation of external debt in 2022/23 and 2023/24 at 47.3% and 45.2% respectively while the IMF forecasts 51.3% and 50.2% in for the same years respectively.

Figure.10 January debt service at KES.182Bn



Source: National Treasury & International Monetary Fund (IMF)

National Treasury receipts remains below linear run rate target

- Government receipts for the 2022/23 remain below our linear target run rate as at the end of the first half of the fiscal year (Table.5 and Figure.11).
- Of particular concern is domestic borrowing at KES.254Bn or 24.4% of the total target of KES.1.04Tn.
- We attribute this shortfall to undersubscription in bond primary bond auctions with low interest in medium and long-term bonds in an environment of rising interest rates.
- This partially explains why the CBK is re-opening a 10-year bond with 4.5 years to maturity (**FXD1/2017/10**) and a new 10-year (**FXD1/2023/10**) debt issue.

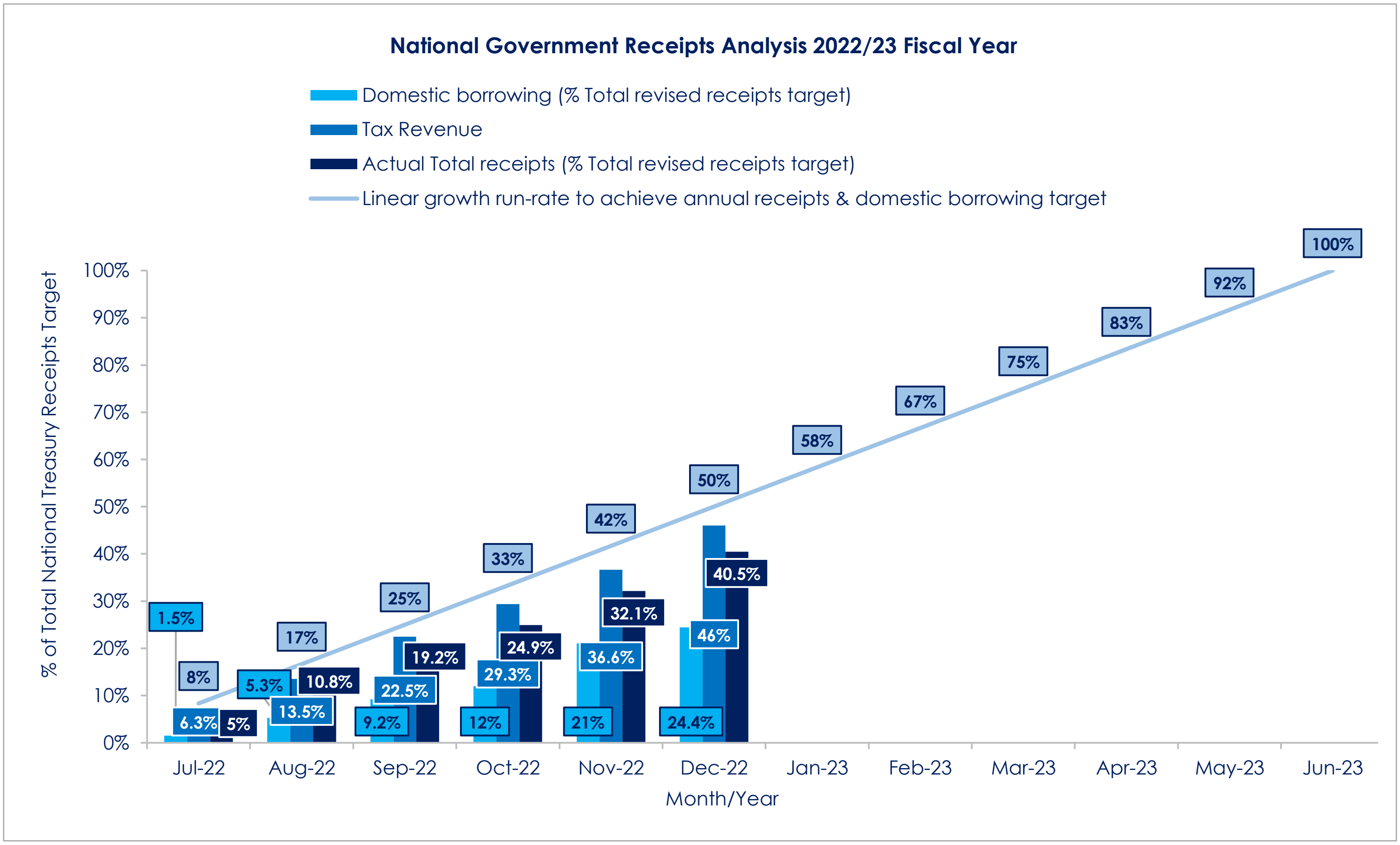
Table.5: Total Government receipts underperforming after H1 2022/23

Receipts	Original Estimates 2022/21 (KES.Mn)	Original Estimates 2022/23 (KES.Mn)	Variation 2022/23 vs 2021/22	Actual Receipts (KES.Mn) 30th December 2022	Proportion of Total Receipts 30th December 2022
Opening Balance (1st July)	21.3			616.5	
Tax Revenue	**1,784.4**	**2,071.9**	**16.1%**	**952.6**	**46%**
Non-Tax Income	67.1	69.7	3.9%	34.6	49.6%
Domestic Borrowing*	**1,022**	**1,040.5**	**1.8%**	**254**	**24.4%**
External Loans & Grants	421.2	349.3	-17.1%	177.9	50.9%
Other Domestic Financing	40.1	13.2	-67.1%	15.3	115.9%
Total Revenue	**3,334.8**	**3,544.6**	**6.3%**	**1,139.0**	**40.5%**
Linear Run Rate target (6 months of fiscal year 2022/23)					**50%**

* Note 1: Domestic Borrowing of KES. 1,040.5Bn = Net Domestic borrowing KES.579.1Bn & Internal Debt Redemptions (Roll-overs) KES.461.4

Source: The Kenya Gazette Vol. CXXV - No.7 13th January 2023

Figure.11: Domestic borrowing underperforming as at H1 2023

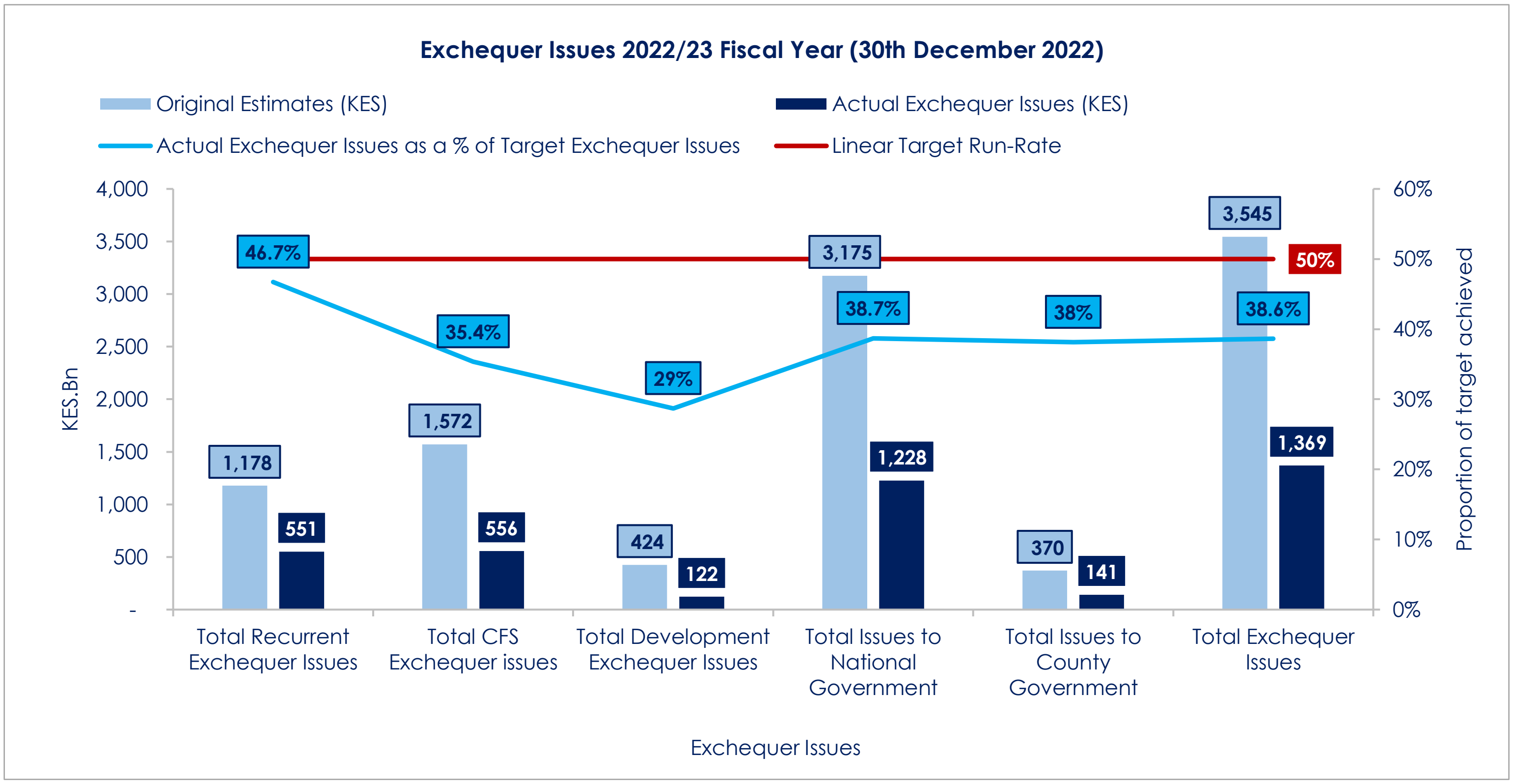


Source: The Kenya Gazette Vol. CXXV - No.7 13th January 2023

Government expenditure below our 2022/23 fiscal year linear run-rate

- After half the current fiscal year (2022/23) we observe that the Government remains below the 50% linear target run rate (Figure.12).

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

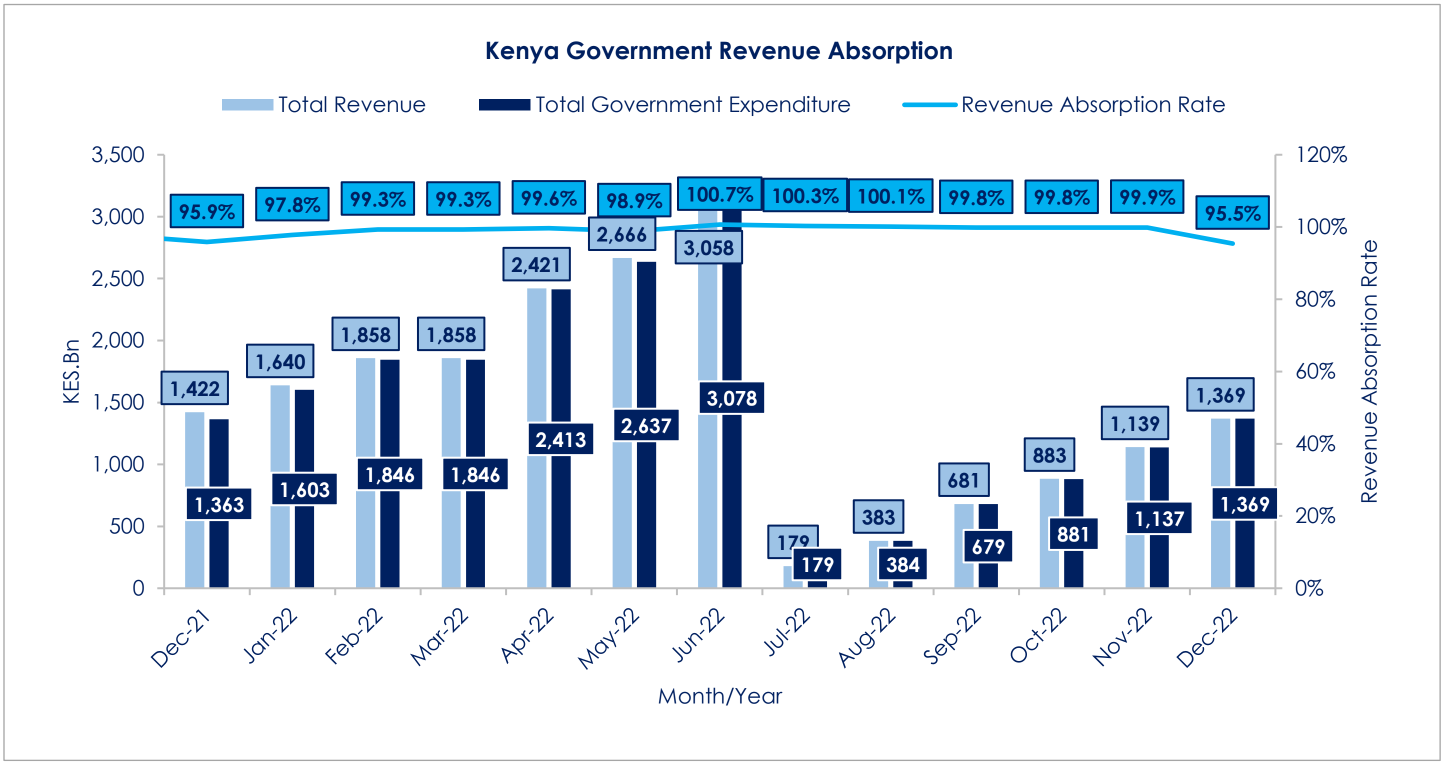


Source: The Kenya Gazette Vol. CXXV - No.7 13th January 2023

Government Revenue Absorption declines in December 2022

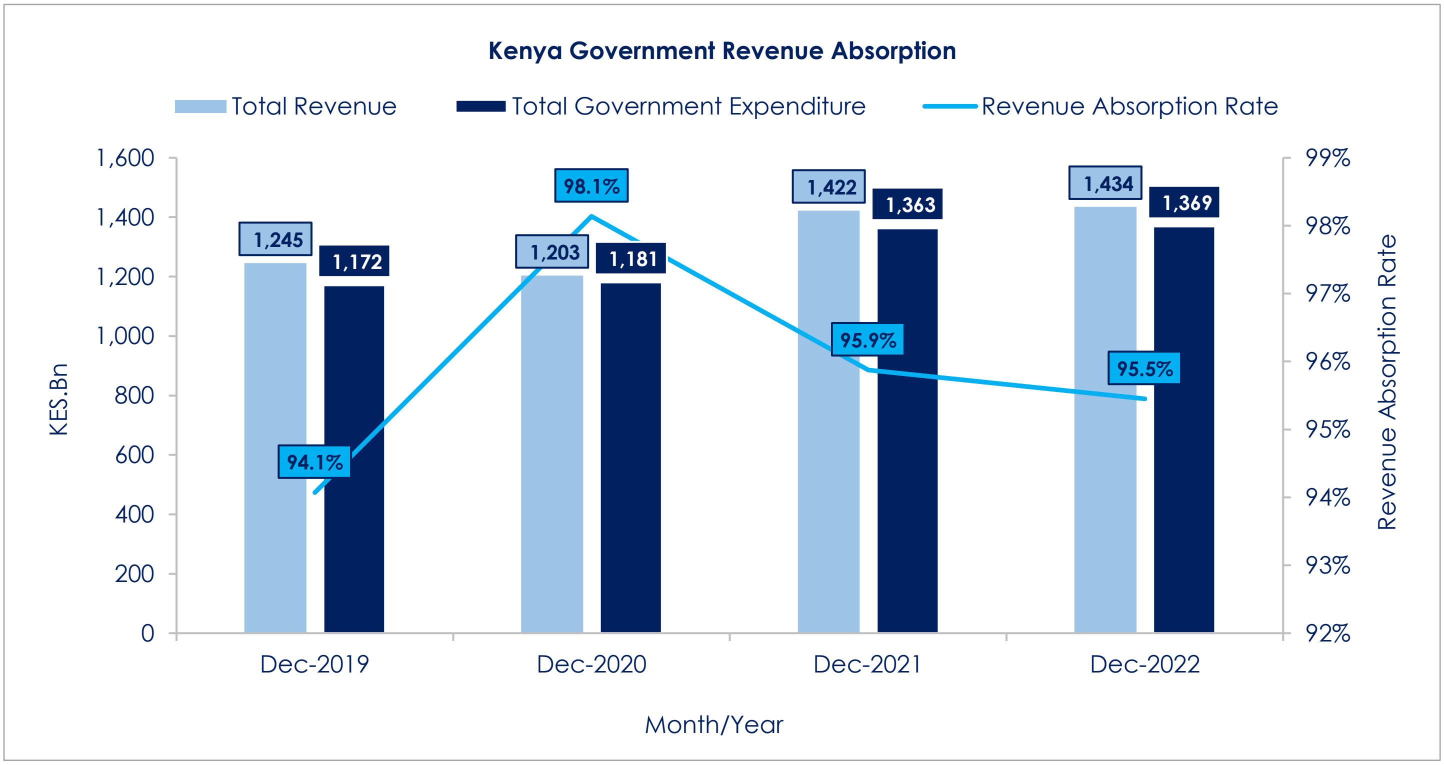
- Government Revenue Absorption Rate (RAR) which is the proportion of Government receipts used to finance expenditure declined to 95.5% in December 2022 from 99.9% in November 2022 (Figure.13).
- This appears to be a pattern in the last month of the first half of the fiscal year with the same month reporting a RAA of 95.9% in 2021.
- With regards to a year on year comparison, we observe a modest increase in both Government revenues (0.9%) and expenditure (0.4%) in 2022 compared to 2021 (Figure.14).
- This growth rate is significantly lower than the 18.2% and 15.5% in revenue and expenditure recorded in 2021 compared to 2022 taking note the adverse impact of the Covid-19 pandemic in 2020.
- The trend in 2022 points at efforts by the Government to grow its revenues particularly through tax collections while managing its expenditure.

Figure.13: Government revenue utilization declines to 96%



Source: The Kenya Gazette Vol. CXXV - No.7 13th January 2023

Figure.14: Revenue absorption lower in December 2022

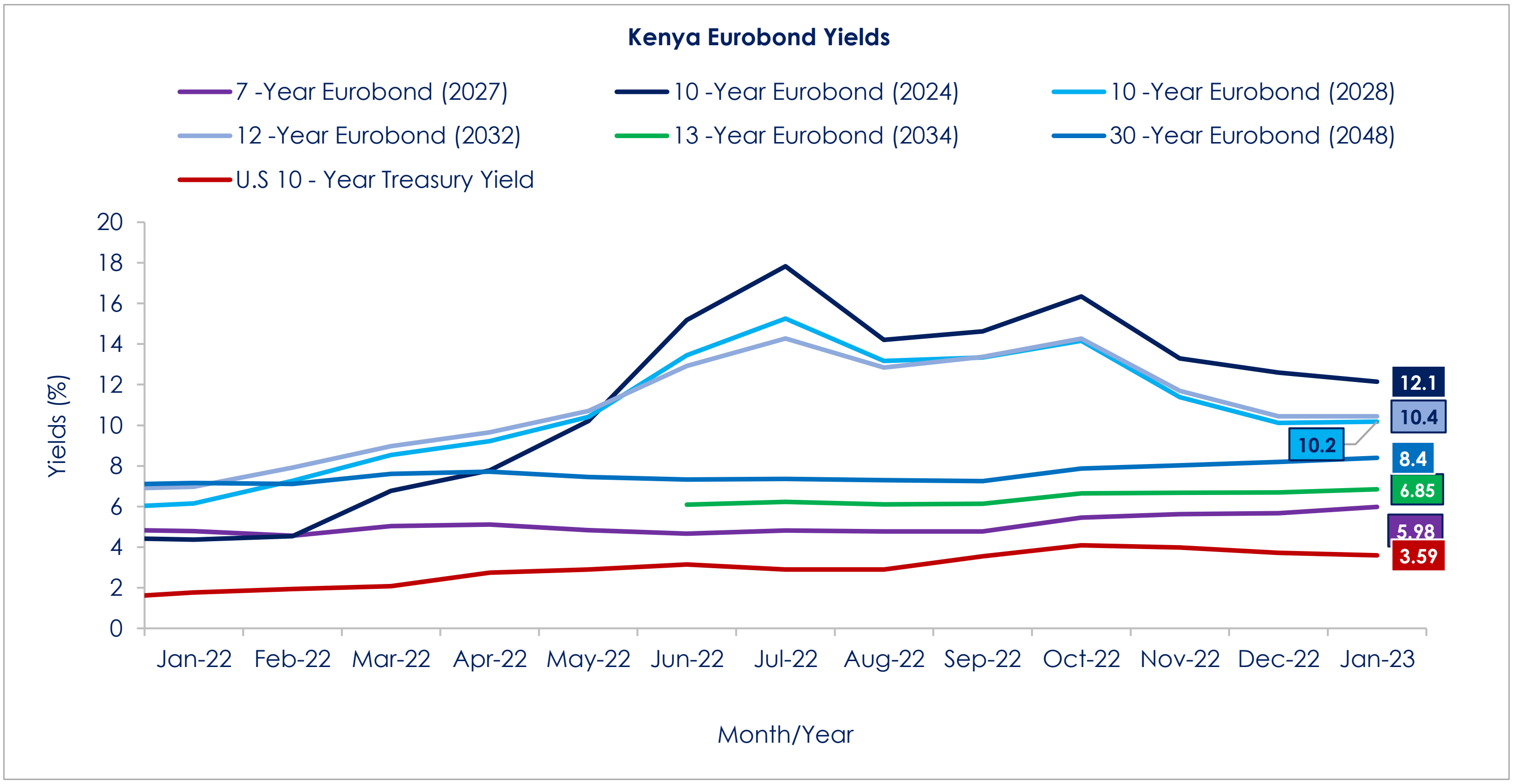


Source: The Kenya Gazette Vol. CXXV - No.7 13th January 2023

Kenya Eurobond yields trend lower in January 2023

- Kenya Eurobond yields declined 11bps on average in January 2023 compared to December 2022 on expectations that United States interest rates were reaching their peak and would begin to fall (Figure.15).
- Likewise, the average U.S 10-year treasury rate declined 13bps over the same period following economic data signals that inflation had peaked and was on a decline.
- It also increased investor uncertainty over initial expectations that the Federal Reserve would increase the Fed rate by 25 - 50 basis points in their next meeting on 31st January and 1st February 2023.
- Kenya's sovereign risk rating remains fairly stable in spite of a recent downgrade by Fitch.
- On 14th December 2022, Fitch downgraded Kenya's Foreign currency issuer Default rating (IDR) to B from B+ with a stable outlook.
- S&P in August 2022 affirmed the country's B/B long- and short-term foreign and local currency sovereign credit ratings with a stable outlook.
- We maintain the view that the 10-year US$.2Bn Eurobond maturing in June 2024 (**ISIN - XS1028952403)** presents an attractive investment opportunity even with the lower current yields, its short term to maturity and expected U.S$ appreciation.

Figure.15: Kenya Eurobond yields decline in December but are expected to remain elevated



Source: Central Bank of Kenya

Yield curve continues to shift upwards

- A comparison of average yields on the NSE on 31st May 2018 (close to issuance of **FXD1/2018/15** - benchmark for **FXD1/2023/10** currently in issue), 31st July 2017 (**FXD1/2017/10** issue date) and a year ago (31st January 2022) shows an increase in yields across the curve. (Table.6 and Figure.16).
- The upward shift in the yield curve over the last one year is a direct result of the following:

  1) Upward adjustments of the CBR, with three revisions between May 2022 and November 2022 - 175bps to 8.75%.

  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.

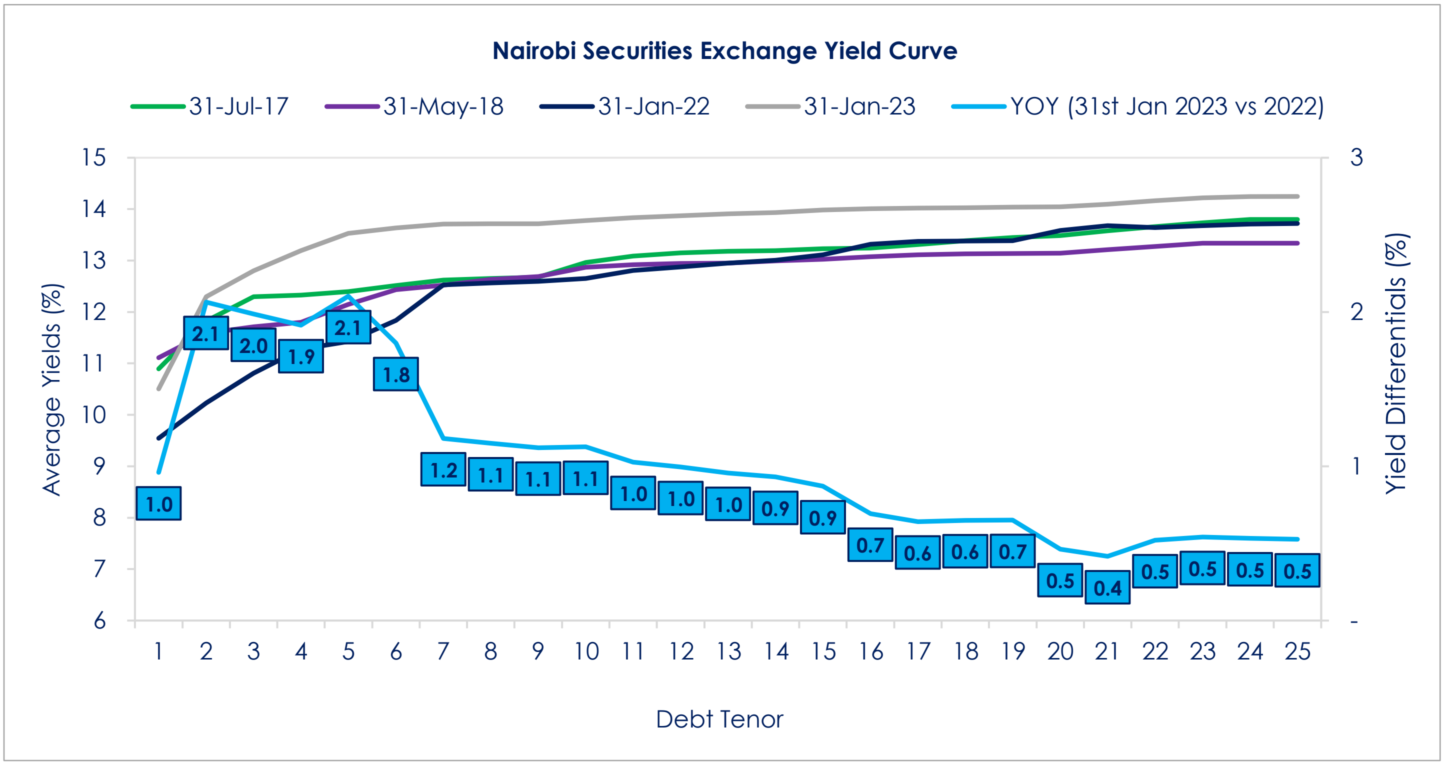
  4) Rising inflation with investors bidding higher to maintain positive real return on capital invested.

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

Tenor	Yields (31st May 2018)	Yields (31st July 2017)	Yields (31st Jan 2022)	Yields (31st Jan 2023)	∆ 31st Jan 2023 vs May 2018 (Bps)	∆ 31st Jan 2023 vs July 2017 (Bps)	YoY ∆ 31st Jan 2023 vs 2022 (Bps)	Sterling Capital Yield Curve (Feb 2023)
1	11.1110	10.8940	9.5440	10.5040	↓ 60.70	↓ 39.00	↑ 96.00	10.50
2	11.5910	11.8225	10.2343	12.2989	↑ 70.79	↑ 47.64	↑ 206.46	12.50
5	12.1500	12.3938	11.4261	13.5286	↑ 137.86	↑ 113.48	↑ 210.25	13.50
10	12.8667	12.9660	12.6533	13.7789	↑ 91.22	↑ 81.29	↑ 112.56	13.95
15	13.0244	13.2285	13.1124	13.9826	↑ 95.82	↑ 75.41	↑ 87.02	14.05
20	13.1438	13.4873	13.5847	14.0473	↑ 90.35	↑ 56.00	↑ 46.26	14.15

Source: Nairobi Securities Exchange

Figure.16: Higher year on year differentials across short-term and medium-term tenors



Source: Nairobi Securities Exchange

Trading ideas - Invest in IFBs and Kenya Eurobonds

- Recently issued IFBs offer immense value with the newly issued "switch bond" **IFB1/2022/6** particularly attractive because of its comparatively short tenor.
- Investors with a high-risk tolerance should consider buying the US.$ denominated Kenya Eurobonds to take advantage of current attractive yields with an option of holding till maturity or disposing when trading opportunities arise (Table.7).

Table.7: Trading ideas - Consider Kenya Eurobonds

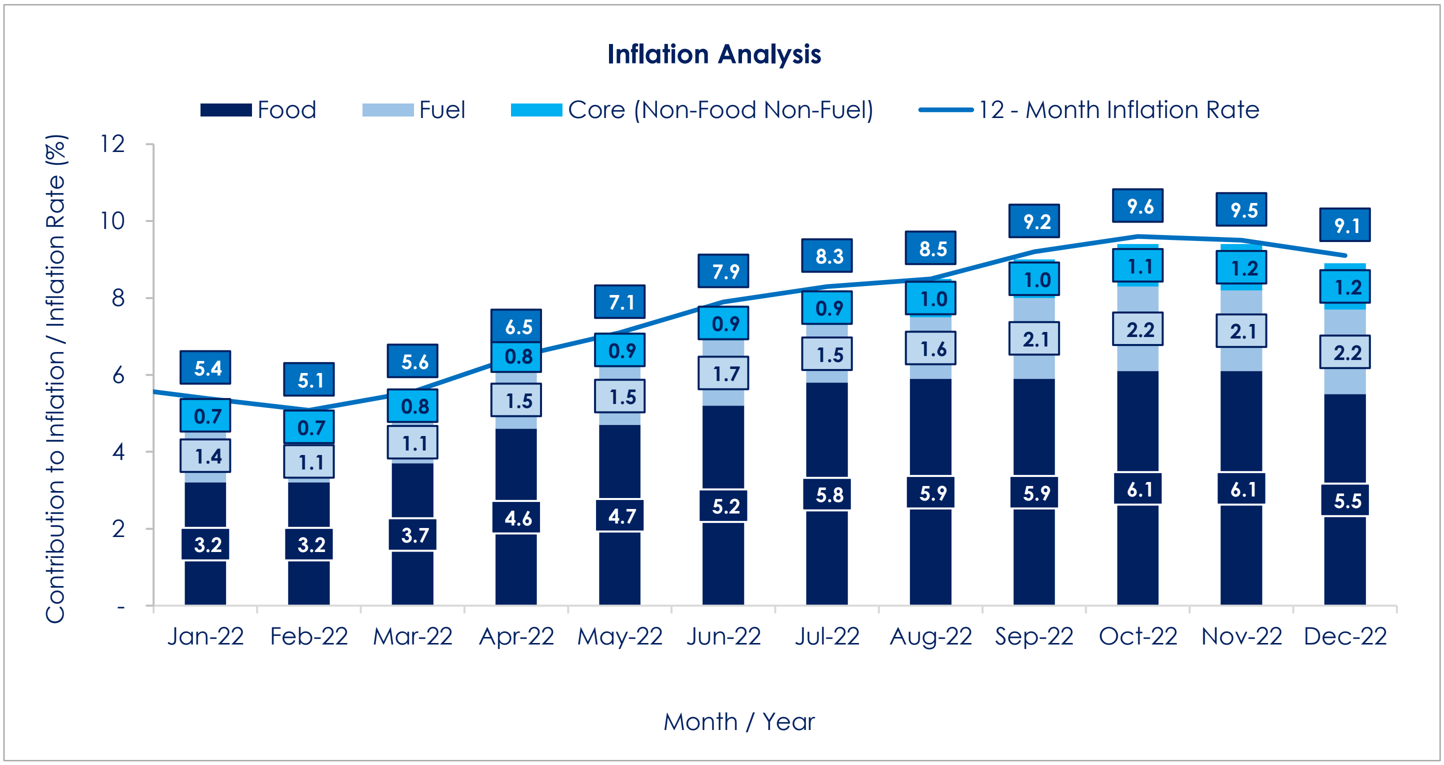
ISIN Code	Issue date	Tenor (Years)	Outstanding amount (US.$ Bn)	Coupon	Yield to maturity (26th January 2023)	Maturity
XS102895240	Jun-14	10	2	6.875%	10.402	Jun-24
XS184343584	May-19	7	0.9	7%	9.766	May-27
XS178171054	Feb-18	10	1	7.25%	9.726	Feb-28

Source: Bloomberg

Inflation eases for the third month in a row

- Inflation continued to ease in January 2023 compared to December (9.1%) and November (9.5%) 2022 (Figure.17).
- The inflation print came in within our estimated range of 8.5% - 9%.
- The decline was primarily driven by a decline in the prices of mangoes, Irish potatoes and cowpeas which dropped by 4.7%, 3.8% and 3.6% respectively.
- The full report can be found here.
- Our February inflation forecast is 8.5% - 9% on account of declining global fuel prices whose impact should soon be felt in Kenya, coupled with a decline in transport costs given the end of the festive season.

Figure.17: February 2023 inflation forecast 8.5% - 9%



Source: Kenya National Bureau of Statistics

MPC retained the CBR at 8.75% in January meeting

- The Monetary Policy Committee (MPC) met on 30th January 2023 retaining the CBR at 8.75% contrary to our prediction of a 25 - 50 basis point (Bps) hike.
- Our projection was informed by;

  1) December inflation - though decreasing, still exceeds its upper band medium term range of 7.5%.

  2) The continued depreciation of the Kenya Shilling (KES).

- Inflationary pressure driven by supply side (cost-push) pressure on price inelastic goods such as fuel and cooking oil and not consumer spending meaning that raising the CBR will have minimal impact.

- The following were MPC's key discussion points:

1) Expectations of a decline in overall inflation in the near term with the Government allowing duty-free imports of key food items particularly maize, rice and sugar.

2) Improved global economic outlook with easing inflation pressures in major economies particularly in the US as well as China's lifting of COVID-19 restrictions.

3) Kenya's economy to be resilient in 2023 supported by strong performance in the service sector and expected recovery in the agriculture sector, however global uncertainties exist.

4) Goods exports remained strong at 10.9% driven by receipts from tea and manufactured goods which increased by 16.1% and 22.1% respectively.

   Oil imports grew by 60.3% on account of the elevated international prices which moderated in the fourth quarter of 2022.

   Receipts from services exports rebounded significantly reflecting sustained improvement in international travel and transport.

   Remittances totalled US$.4,028Mn in 2022, 8.3% higher than 2021.

5) CBK foreign exchange reserves (US.$7,005Mn - 3.92 months of import cover) as at 26th January 2023, providing adequate cover against any short-term shocks in the foreign exchange market.

6) Banking sector maintains strong liquidity and capital adequacy ratios.

   Gross Non-Performing loans (NPLs) ratio stood at 13.3% in December 2022 compared to 13.8% in October with improved asset quality in trade, tourism, restaurant and hotels, transport and communication and manufacturing sectors.

   Asset base increased 10% from KES.6Tn at end of 2022 to KES.6.6Tn supported by banks reviewing their business models leveraging on technology and innovation, enhanced capital and liquidity buffers and a continued focus on customer-centricity.

7) Private sector credit increased to 12.5% in 2022 compared to 8.6% in 2021 with strong growth in manufacturing (13.8%), transport and communication (23.5%) trade (11.4%), business services (13.7%) and consumer durables (12.9%).

8) Implementation of the FY2022/23 Government Budget, particularly the strong tax revenue collection reflects enhanced tax administration efforts and increased economic activity.

   The proposed FY2022/23 Supplementary Budget and rationalization of expenditure which is expected to support the envisaged fiscal consolidation in the medium term, were also noted.

- We see a moderate to high possibility of the CBR rate remaining unchanged in Q1 2023 with revisions thereafter depending on inflation and rate of KES depreciation.

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