



Thursday, 30 December 2021

**Analysts:**

**Renaldo D'Souza**

+254 (20) 2222651

[Renaldo.DSouza@sterlingib.com](mailto:Renaldo.DSouza@sterlingib.com)

**Elizabeth Njenga, CFA**

+254 (20) 2222651

[Elizabeth.Njenga@sterlingib.com](mailto:Elizabeth.Njenga@sterlingib.com)

**Davis Gathinji**

+254 (20) 2222651

[Davis.Gathinji@sterlingib.com](mailto:Davis.Gathinji@sterlingib.com)



# Fixed Income Note

## January 2022

“On to H2 of the 2022/23 fiscal year”

**Email:** [research@sterlingib.com](mailto:research@sterlingib.com)

**Bond Dealing:** +254 (20) 2213914, 3315414; 2244077  
+254 723153219, +254 734219146

**Email:** [invest@sterlingib.com](mailto:invest@sterlingib.com)

Office Address: Delta Corner Annex, 5<sup>th</sup> Floor, Ring Road Westlands.

**Website** [www.sterlingib.com](http://www.sterlingib.com)

**Bloomberg Code:** SCLK <GO>

## Table of Contents

Executive Summary .....	3
CBK's January debt issues target KES.60Bn .....	4
Weighted and accepted bids average estimates .....	4
Historical debt issues provide guidance .....	5
5-Year debt issue to receive the bulk of demand .....	5
Lower domestic debt subscription recorded in December 2021 .....	6
T-Bill acceptance rates drop in December 2021 .....	8
T-Bill rates continue heading North with the 364 Day at +9% .....	9
Average inter-bank rates remain flat in December 2021 .....	10
Secondary market bond turnover to pick up in January 2022 .....	11
Trading ideas - Investors buy IFB's and high yielding FXD .....	12
Total domestic debt service set to rise in January 2022.....	13
Domestic borrowing remains above 2021/22 fiscal year target .....	14
Government expenditure remains below 2021/22 fiscal year expenditure run-rate targets.....	16
Government Revenue Absorption inches towards full utilization .....	17
Kenya Eurobond yields rise in December 2021 .....	18
Kenya sovereign bond index returns positive in December 2021 .....	18
NSE yield curve has shifted upwards over the last one year .....	19
December 2021 inflation to rise on higher transport and food prices .....	21
Monetary Policy Committee to meet at the end of January 2022 .....	22
Disclosures .....	23

## Executive Summary

- Our fixed income report for the month of January 2022 is titled “**On to H2 of the 2022/23 fiscal year**” in reference to the issuance of the first Treasury Bond issues of the second half of the 2022/23 fiscal year.
- These are also the first debt issues in the 2022 calendar year where the Central Bank of Kenya (CBK) intends to raise KES.60Bn through three re-opened bonds; **FXD1/2020/5 (3.4 years), FXD2/2018/10 (7 years) and FXD1/2021/20 (19.7 years)**.
- Our weighted average bid predictions are as follows:

### **Weighted Average Rate (WAR) of investor bids**

FXD1/2020/5: 10.90% - 11.10%

FXD2/2018/10: \*

FXD1/2021/20: \*

### **WAR of accepted bids**

FXD1/2020/05: 10.85% - 10.95%

FXD2/2018/10: \*

FXD1/2021/20: \*

\*We will send our estimates for **FXD2/2018** and **FXD1/2021/20** closer to toward the end of their periods of sale.

- The report summarizes the details of the bonds issued, examines historic primary auction results and gives our subscription level and weighted average predictions.
- Also analyzed in the report is T-Bill and T-Bond subscription patterns, T-Bill and inter-bank rates and secondary bond trading activity.
- Investment recommendations are highlighted in the trading ideas section based on the current and expected yield curve movements.
- Under national accounts we analyze the latest Government revenue and expenditure data.
- Under the yield curve section we analyze trends in domestic debt interest rates of different tenors in the period under focus.
- The report concludes with an analysis of both inflation and the outcome of the Monetary Policy Committee (MPC) meeting at the end of January 2022.

## CBK's January debt issues target KES.60Bn

- The Central Bank of Kenya (CBK) invites bids for three re-opened treasury bonds; **FXD1/2020/5**, **FXD2/2018/10** and **FXD1/2021/20** in a bid to raise KES.60Bn for budgetary support (Table.1).
- The three bonds have remaining terms to maturity of 3.4, 7 and 19.7 years respectively.
- FXD1/2020/5, FXD2/2018/10 and FXD1/2021/20 have coupon rates of 11.667%, 12.502% and 13.444% respectively.
- We see an increasing likelihood of FXD1/2020/5 being oversubscribed on account of its short tenure particularly due to the expectation that interest rates will continue rising come 2022.
- We are not convinced that the other bonds will be fully subscribed considering that there is an oversupply of bonds of similar tenors trading on the Nairobi Securities Exchange (NSE).

**Table.1: Primary Bond issue summary**

Issue Number	FXD1/2020/05	FXD2/2018/10	FXD1/2018/20
Total Amount Offered	KES.60Bn		
Tenor	5 Years	10 Years	20 Years
Term to Maturity	3.4 Years	7 Years	19.7 Years
Coupon Rate (%)	11.667	12.502	13.444
Price Quote	Discounted/Premium/Par		
Period of Sale	20 <sup>th</sup> Dec 2021 – 4 <sup>th</sup> Jan	20 <sup>th</sup> Dec 2021 – 18 <sup>th</sup> Jan 2022	
Auction Date	5 <sup>th</sup> January 2022	19 <sup>th</sup> January 2022	
Value Date	10 <sup>th</sup> January 2022	24 <sup>th</sup> January 2022	
Yield Curve (%) (Weighted average tenor - 24 <sup>th</sup> December)	<b>10.7939</b>	<b>12.1993</b>	<b>13.1800</b>

Source: Central Bank of Kenya

## Weighted and accepted bids average estimates

- Our analysis of yields of bonds of similar tenors on the Nairobi Securities Exchange (NSE) as at 24<sup>th</sup> December as well as discussions with fixed income traders resulted in the following bid predictions for the treasury bonds (Table.2).
- **Note that we will disclose our auction bid predictions closer to the auction date for FXD2/2018/10 and FXD1/2018/20.**

**Table.2: Auction bid predictions**

Rate	FXD1/2020/5	FXD2/2018/10*	FXD1/2018/20*
Market Weighted Average Rate (%)	10.90 - 11.10		
Weighted Average Rate of Accepted Bids	10.85 - 10.95		

\*Action bid predictions to be disclosed closer to end of period of sale

Source: Sterling Capital Research

### Historical debt issues provide guidance

- We used implied yields of bonds of similar tenors to maturity on the Nairobi Securities Exchange (NSE) as at 24<sup>th</sup> December 2021 to estimate possible investor bids (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
<b>5-Year</b>						
FXD1/2020/5	11 <sup>th</sup> May 2020	11.67	5 <sup>th</sup> May 2025	3.4 (1,235)	10.7939	11.6670
<b>10-Year</b>						
FXD2/2018/10	17 <sup>th</sup> Dec 2018	12.50	1 <sup>st</sup> Mar 2038	16.4 (5,939)	12.1993	12.5000
<b>20-Year</b>						
FXD1/2021/20	16 <sup>th</sup> Aug 2021	13.44	22 <sup>nd</sup> July 2041	19.7 (7,157)	13.1800	13.3688

Source: Central Bank of Kenya

### 5-Year debt issue to receive the bulk of demand

- A historical comparison of primary auction results for 5, 10 and 20 year debt issues shows investors' preference for bonds with shorter tenors (Table.4).
- This trend coupled with rising interest rates leads us to believe that **FXD1/2020/5** will have the highest demand among all the three issues.

**Table.4: Historical primary market auction performance**

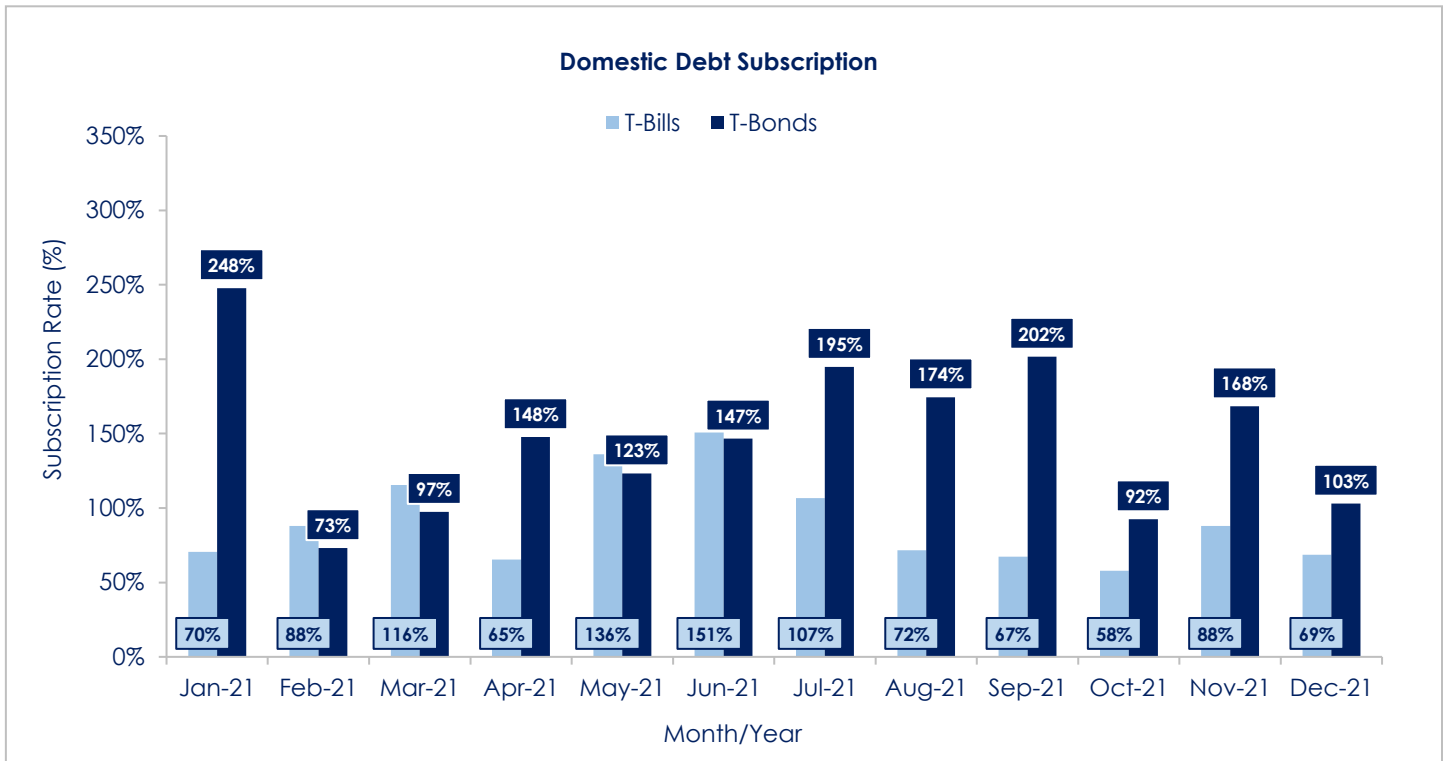
Issue	Offered (KES.Bn)	Bids Received (KES.Bn)	Amount Accepted (KES.Bn)	Performance Rate (%)	Coupon Rate (%)	Implied Yields (%)
<b>5-Year</b>						
FXD1/2019/5	50	41.9	20.6	83.9	11.304	10.5500
FXD2/2019/5	50	49.3	39.2	98.6	10.872	10.6334
FXD1/2020/5	50	34.5	20.8	69.1	11.667	10.7939
FXD1/2021/5	50	66.6	53.7	133.2	11.280	11.2770
<b>10-Year</b>						
FXD1/2019/10	50	36.3	32.8	72.7	12.444	12.2486
FXD2/2019/10	50	70.9	51.3	141.9	12.300	12.2837
FXD3/2019/10	50	52.8	45.0	105.5	11.517	12.3683
FXD4/2019/10	50	38.4	28.4	76.8	12.280	12.4290
<b>20-Year</b>						
FXD2/2018/20	40	13.9	10.5	34.7	13.200	13.2665
FXD1/2019/20	50	14.7	9.0	29.4	12.873	13.2754
FXD1/2021/20	60	43.5	39.5	72.5	13.444	13.3035

Source: Central Bank of Kenya

#### Lower domestic debt subscription recorded in December 2021

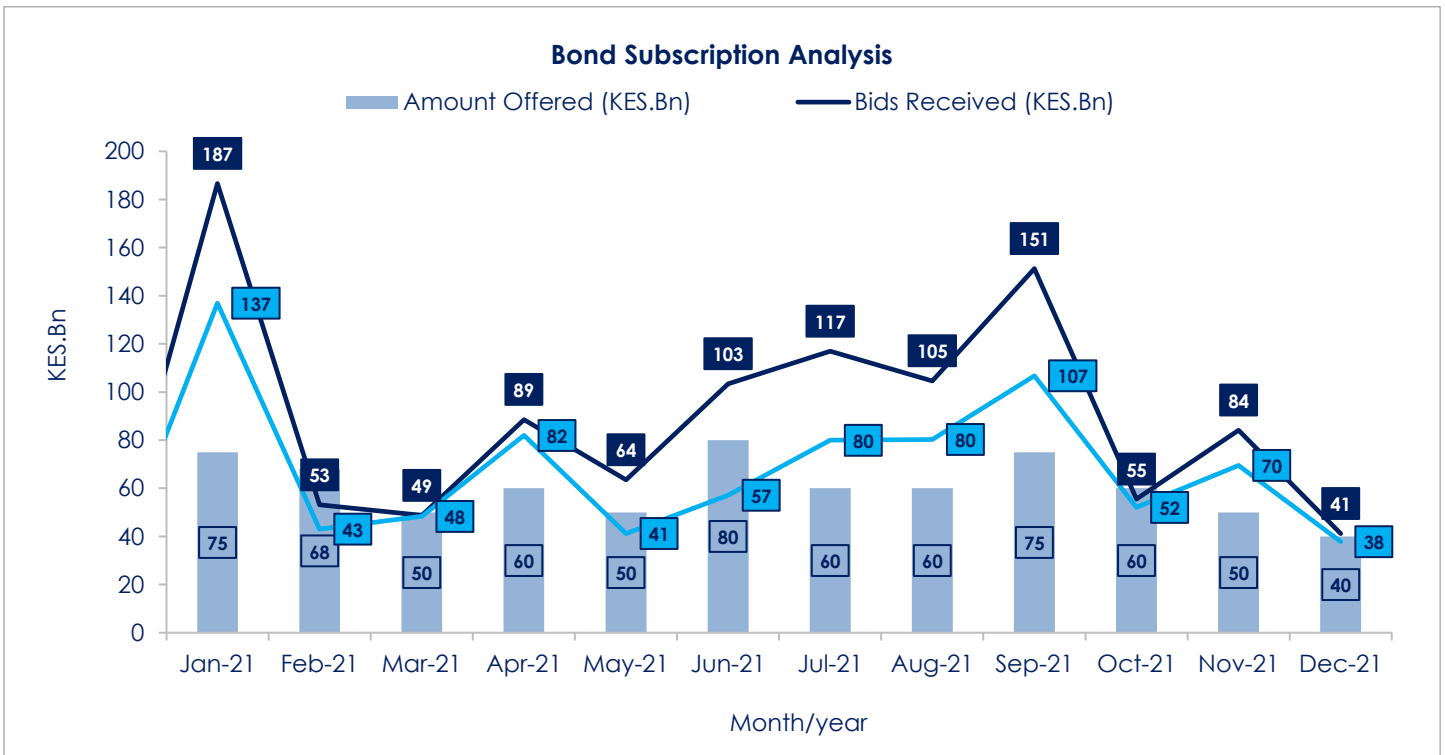
- Treasury Bill (T-Bill) demand dropped in December with the CBK receiving bids worth KES.66Bn against an offer amount of KES.96Bn, equivalent to a 68.7% subscription rate which is lower than the 87.9% in November 2021. (Figure.1).
- Subscription rates for the 91, 182 and 364 day T-Bills stood at 124.3%, 57% and 58.2% respectively.
- The two re-opened Bonds, FXD4/2019/10 and new issue FXD1/2018/20 received aggregate bids worth KES.41.2Bn against KES.40Bn offered, equivalent to a 102.9% subscription rate (Figure.2).
- The high subscription was largely attributable to the comparatively low target amount with recent debt issues looking to raise KES.50 - 60Bn.

**Figure.1: Both T-Bill and T-bond subscriptions decrease in December 2021**



Source: Central Bank of Kenya

**Figure.2: Bond subscriptions above expectation in December 2021**

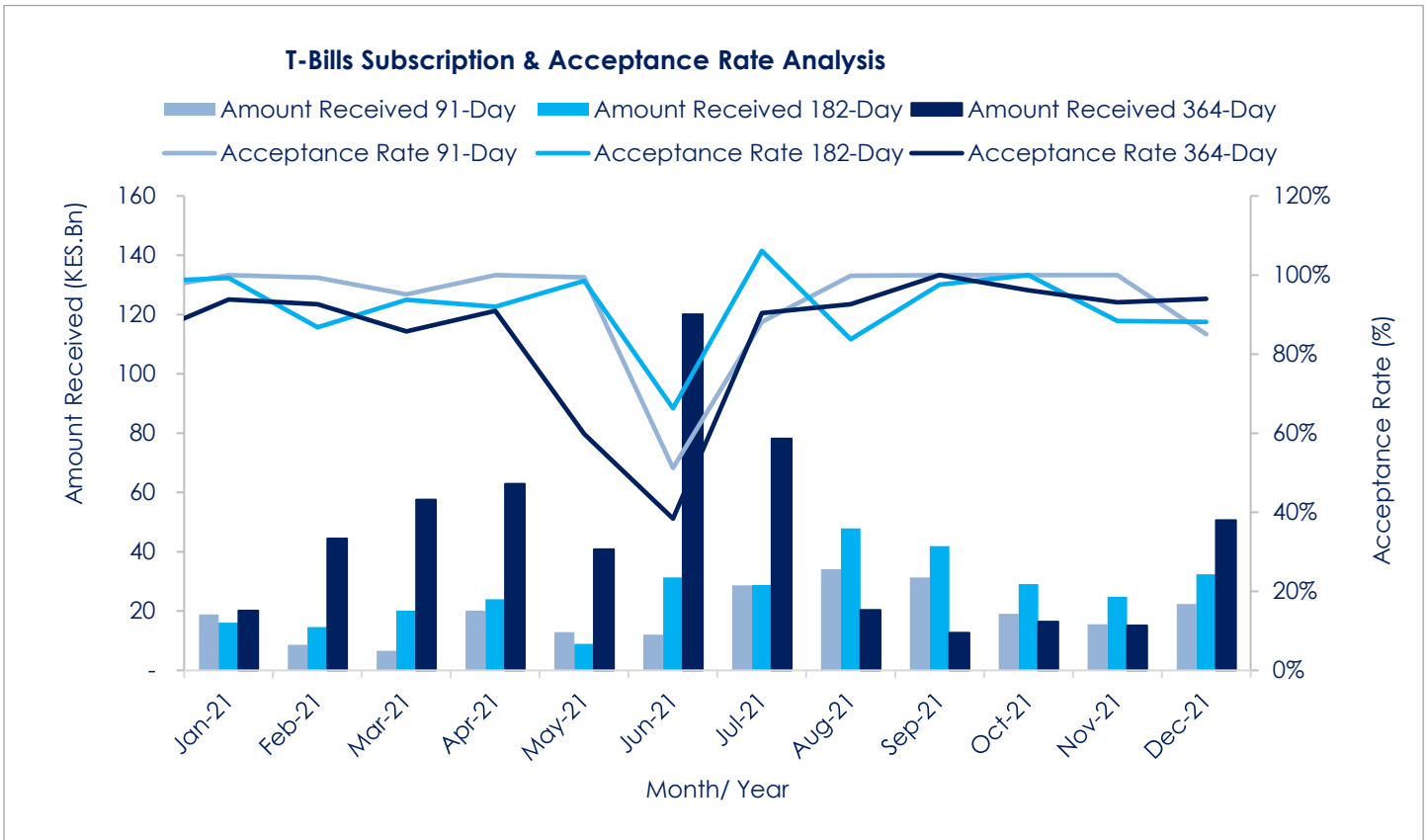


Source: Central Bank of Kenya

### T-Bill acceptance rates drop in December 2021

- CBK's acceptance rates for 91, 182 and 364-Day T-bills were 85%, 74.5% and 94% respectively which were relatively lower compared than November's 100%, 88.1% and 93.1% save for the 364-Day issue (Figure.3).
- Acceptance rates still remain relatively high due to the high deficit financing pressure faced by the National Treasury.

**Figure.3: T-Bill acceptance rates remain relatively high in December**



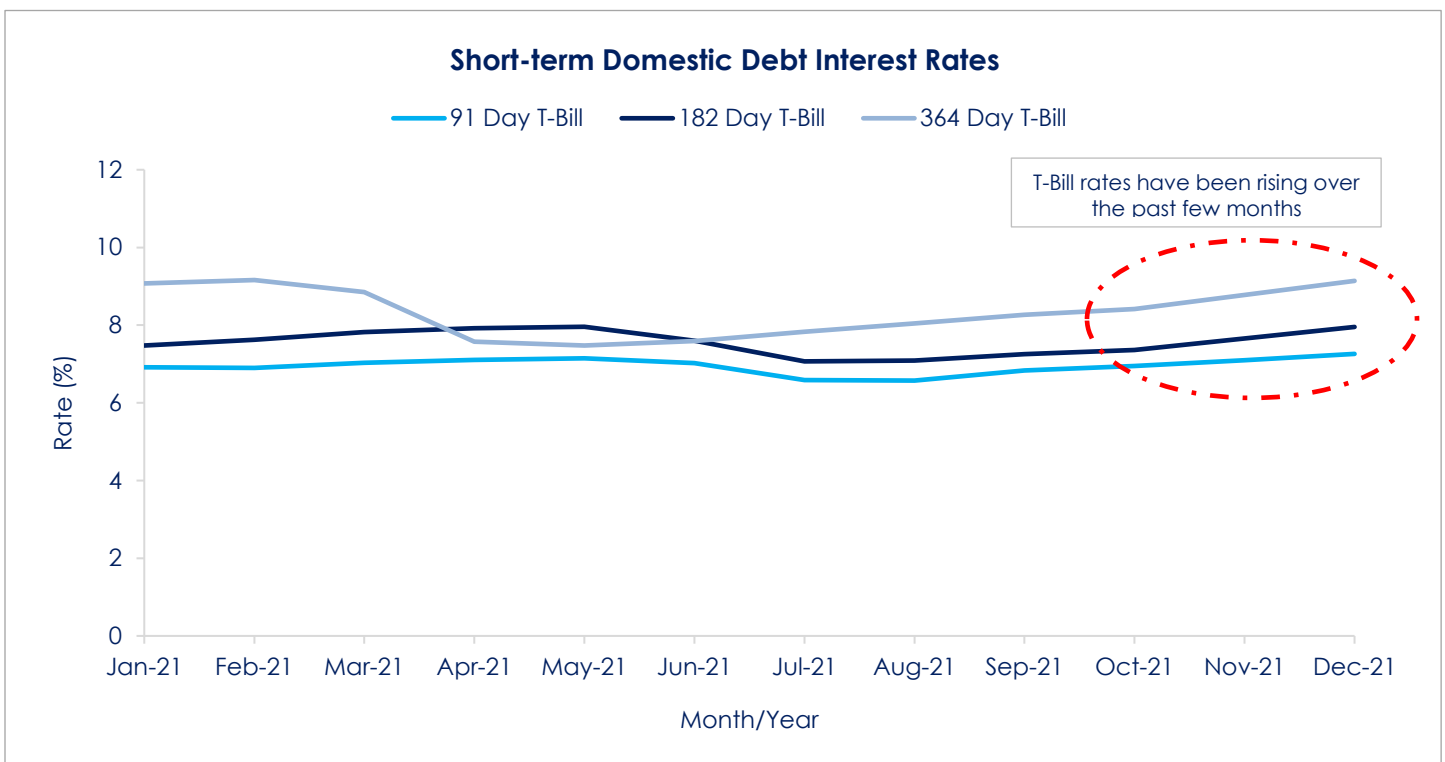
Source: Central Bank of Kenya



## T-Bill rates continue heading North with the 364 Day at +9%

- T-Bill rates continue on an upward trajectory with average rates for the 91, 182 and 364-day debt issues at 7.3%, 8% and 9.1% in December 2021 from 7.1%, 7.7% and 8.7% in November 2021 respectively (Figure.4).
- The biggest rise was 40 bps reported on the 364 day T-Bill a trend which is attributable to the CBK being more accommodative of higher investor bids to encourage subscription and reduce the refinancing risk.
- A sustained increase in T-Bill rates is expected in the near term as deficit financing pressure persists.

**Figure.4: Sustained rise in short-term debt securities interest rates**

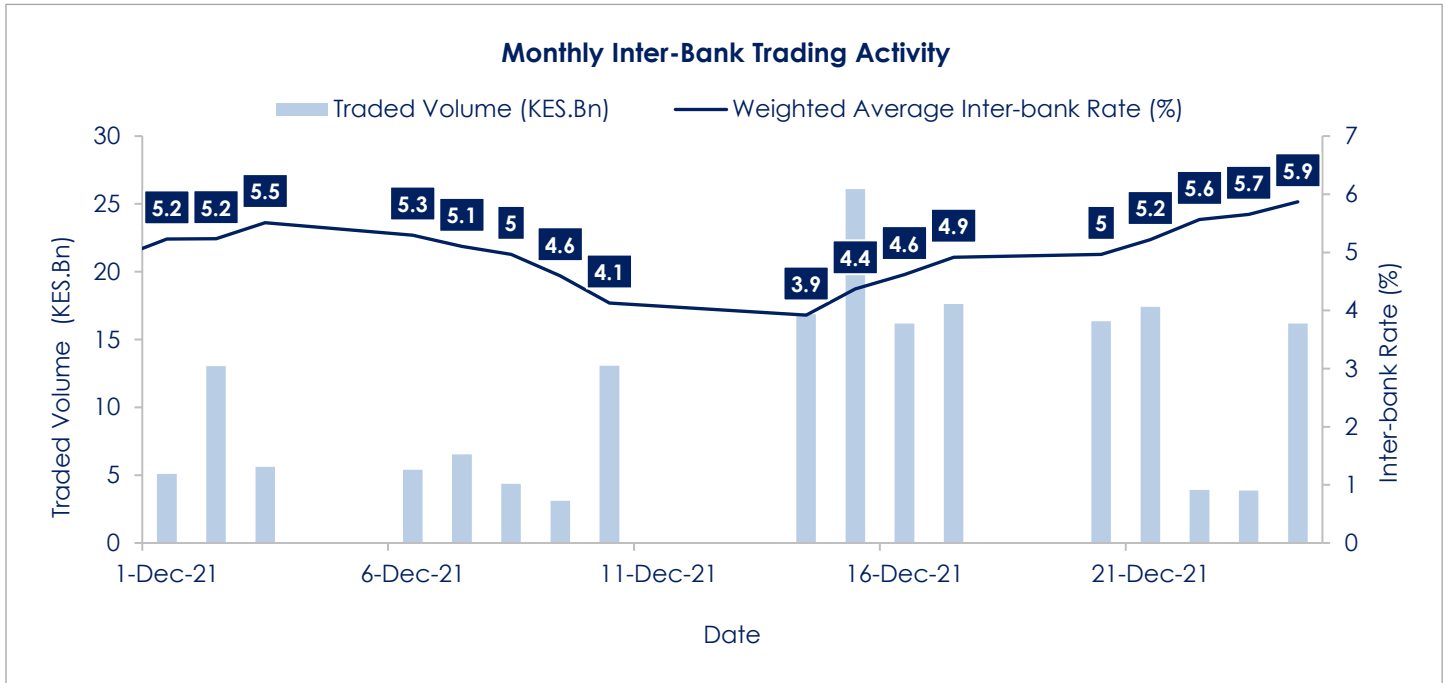


Source: Central Bank of Kenya

### Average inter-bank rates remain flat in December 2021

- Average inter-bank rate for December 2021 remained flat at 5% similar to November while total inter-bank trading volumes over the same period increased negligibly by 1.3% to KES.190.7Bn. (Figure.5).
- Our forecasted average inter-bank rate range for January 2021 is 4.5% - 5.5%.

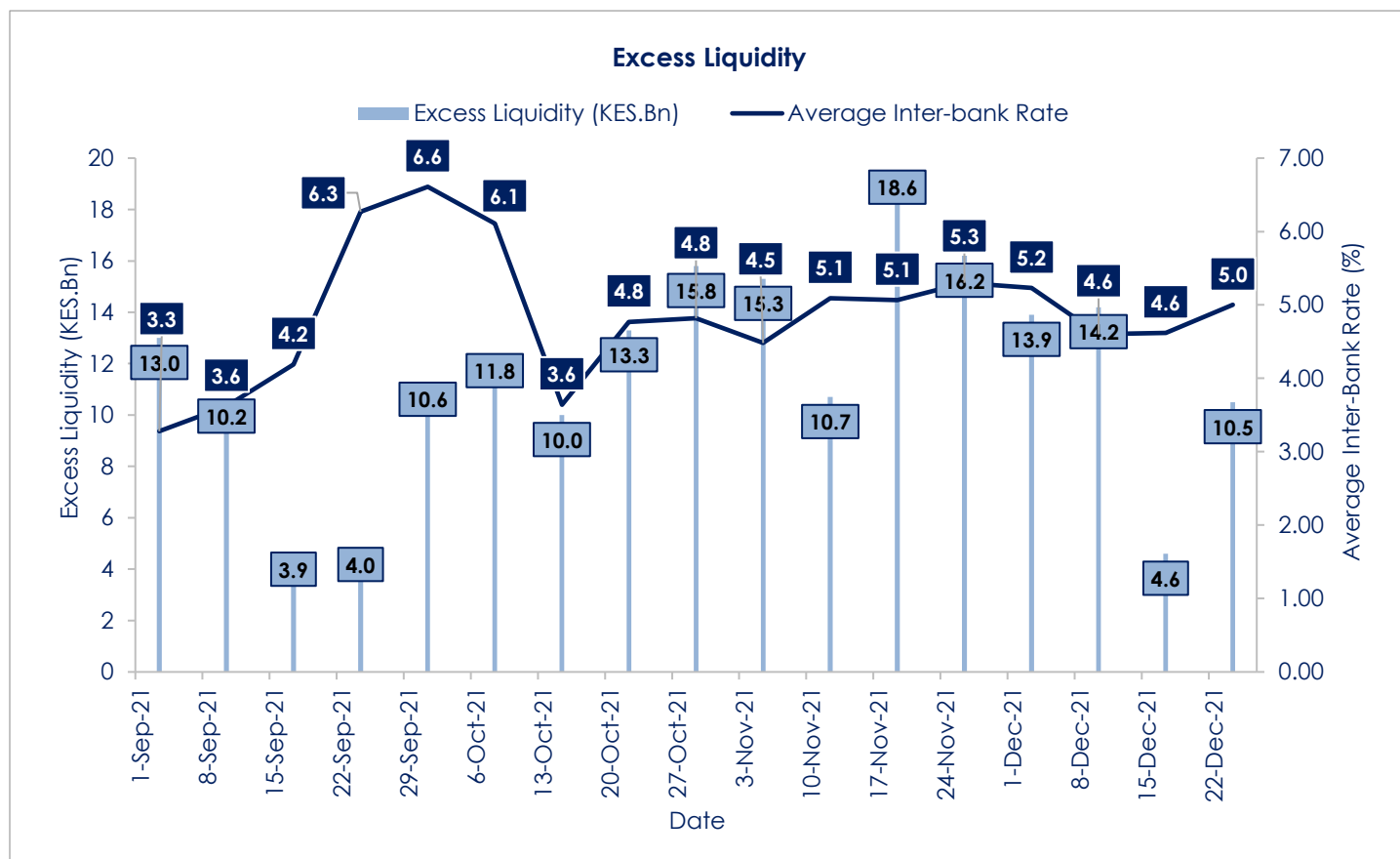
**Figure.5: Inter-bank lending rates to hover around 5% in January 2022**



Source: Central Bank of Kenya

- Excess reserves (additional liquidity above the minimum 4.25% Cash Reserve Ratio (CRR)) over the same period continued its month-on-month declined to KES.43.2Bn, compared to KES.60.8Bn in November and KES.61.5Bn in October (Figure.6).

**Figure.6: Excess commercial bank reserves decrease further in December 2021**

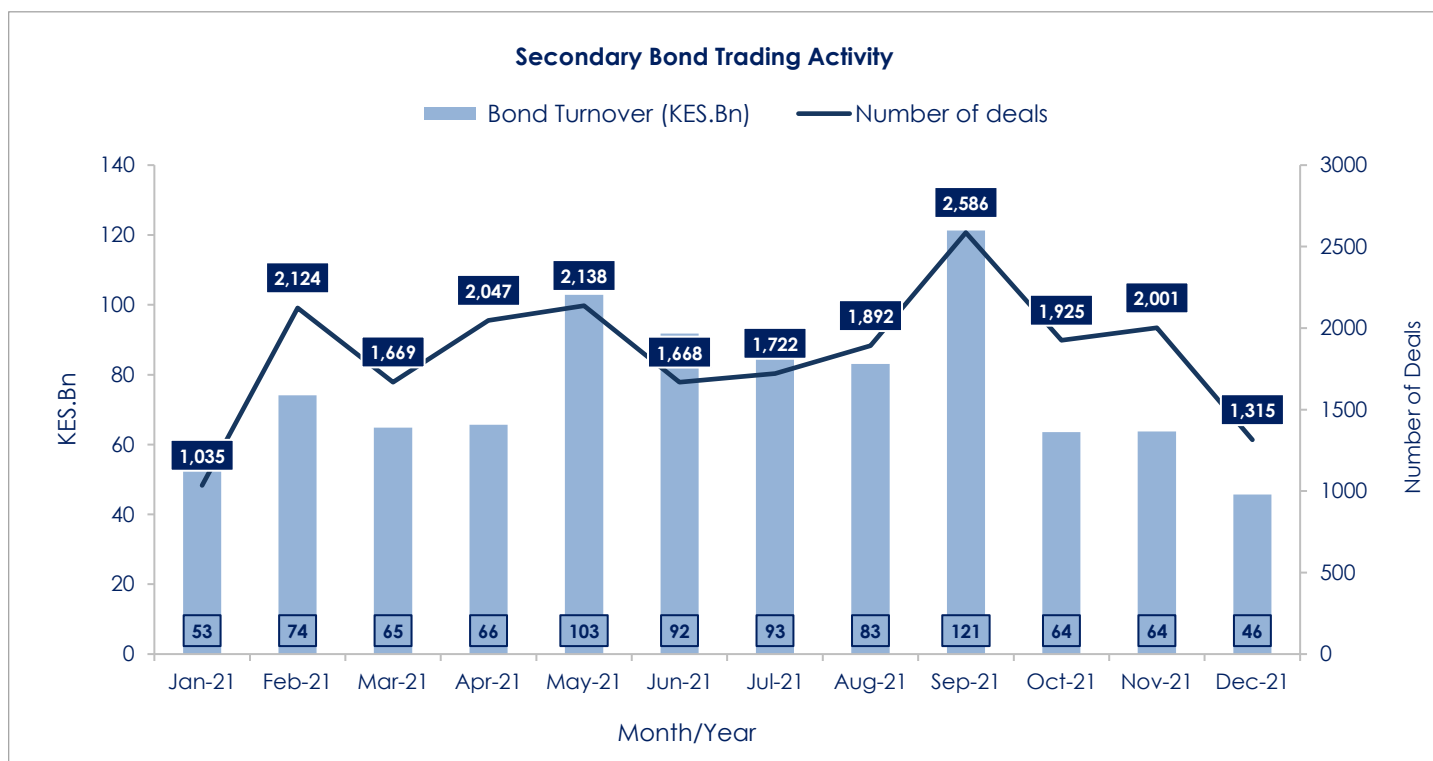


Source: Central Bank of Kenya

### **Secondary market bond turnover to pick up in January 2022**

- Secondary market trading activity stood at KES.45.7Bn as at 24<sup>th</sup> December 2021, down from KES.63.8Bn in November with the number of deals over the same period decreasing 34.3% to 1,315 (Figure.7).
- As per our expectations, trading turnover declined due to the onset of the festive season which has reduced trading days. Further, tightening liquidity in the market has also contributed to lower turnover.
- We expect trading turnover to pick up in January 2022 following the end of the festive season, liquidity increases as the CBK initiates further reverse repos.
- We also expect increased trading activity on the FXD1/2020/5 due to high investor demand.

**Figure.7: Secondary trading activity decreases in December 2021**



Source: Central Bank of Kenya

### Trading ideas - Investors buy IFB's and high yielding FXD

- We identify Infrastructure Bonds **IFB1/2021/21** as **FXD1/2021/5** a short-tenor T-Bond as suitable investment options for fixed income investors (Table.5).
- IFBs have attractive yields (due to tax exemption), favorable capital appreciation and are highly liquid.
- The 5 year issue is attractive largely because of its relatively short tenor and has been trading heavily since its issuance in October 2021.

**Table.5: Trading ideas**

Bond	Tenor (Years)	Coupon (%)	Modified Duration* (%)	Sterling Capital Yield to Maturity (%)	Current Yield** (%)
FXD1/2021/5	4.9	11.28	3.61	11.40	11.13
IFB1/2021/21	20.7	12.74	7.01	12.50	12.10

\*Modified duration - Expresses the measurable change in the value of a security in response to a change in interest rates (for every 1% movement in interest rates, the bond would inversely move in price by the modified duration)

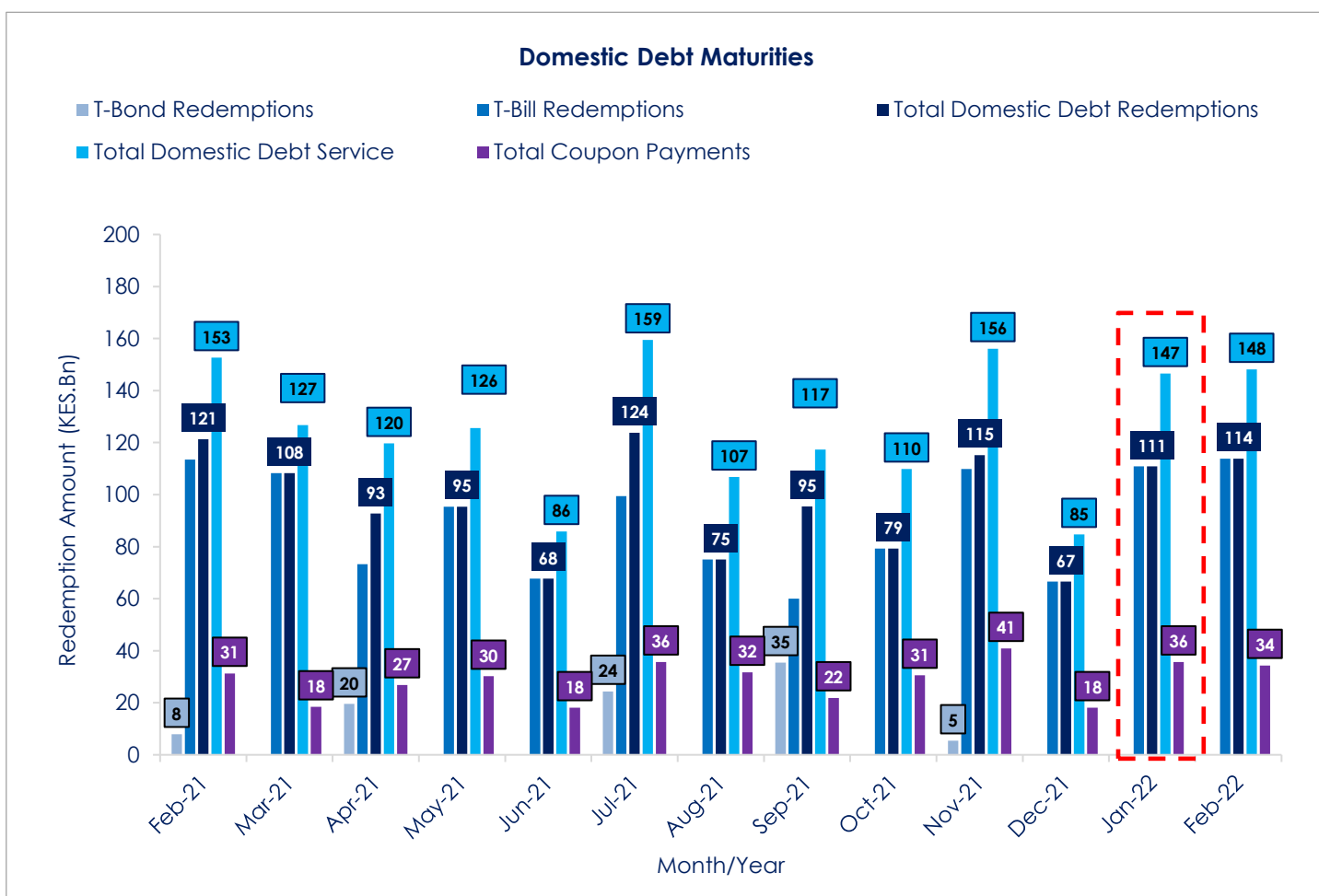
\*\* Current Yield - Return on investment, for an investor holding a specific bond for 1 year

Source: Central Bank of Kenya

## Total domestic debt service set to rise in January 2022

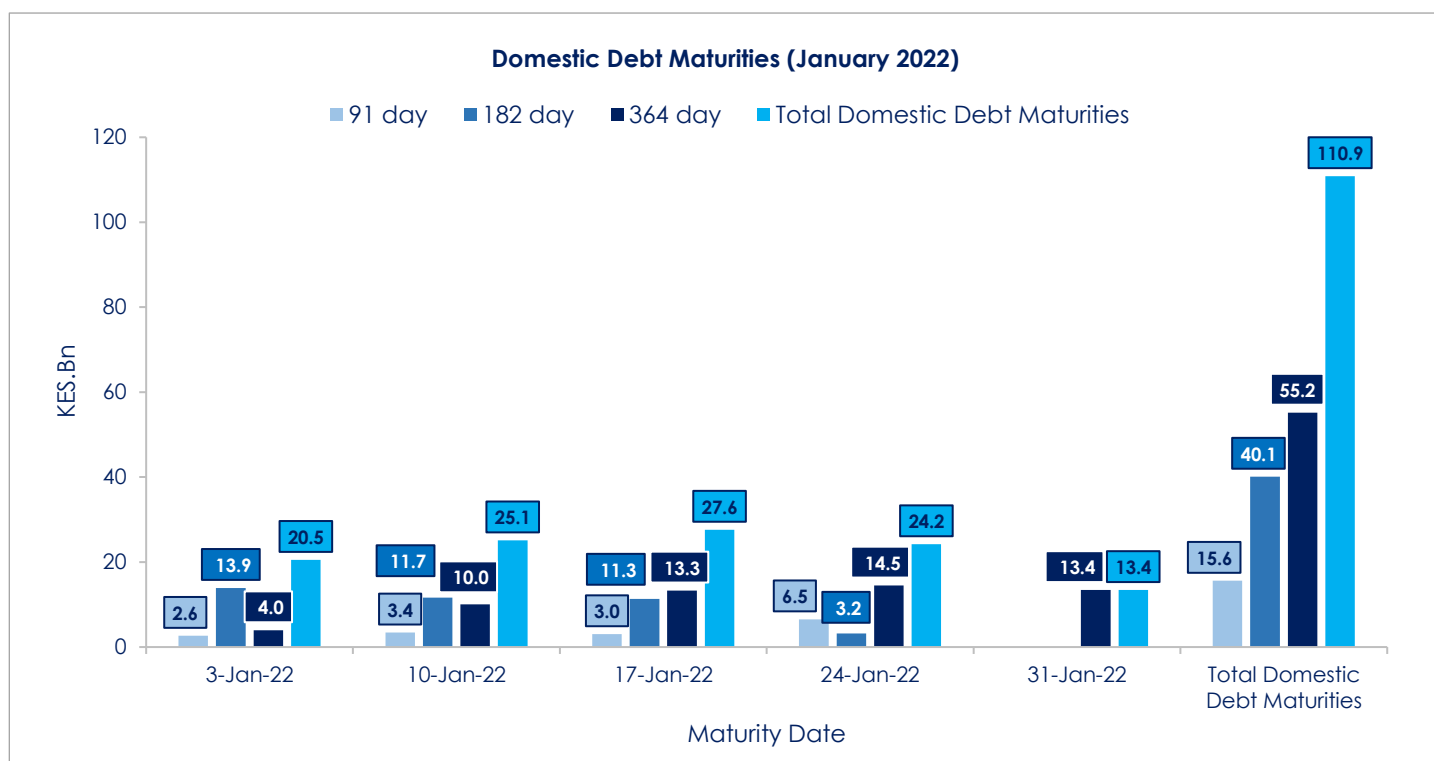
- Total domestic debt service for the month of January 2022 is KES.146.5Bn comprising of KES.110.9Bn and KES.35.7Bn in T-Bills and coupon payments respectively (Figure.8).
- Redemptions for the 91, 182 and 364-day T-Bills during the month are KES.15.6Bn, KES.40.1Bn and KES.55.2Bn respectively with the third week of the month having the highest redemptions at KES.27.6Bn (Figure.9).
- Total debt service will rise to KES.147.6Bn in February 2022 made up of KES.113.8Bn in T-Bill redemptions and KES.33.9Bn in coupon payments.

**Figure.8: January 2022 domestic debt service rises to KES.146.5Bn**



Source: Central Bank of Kenya

**Figure.9: Weekly debt maturities January 2022**



Source: Central Bank of Kenya

### Domestic borrowing remains above 2021/22 fiscal year target

- The National Treasury remained below our linear target run rate of 41.7% on both tax (40.3%) and total revenue (37.1%) as at the end of November 2021 which is five months into the 2021/22 fiscal year (Table.6 and Figure.10).
- Note that our linear target run-rate assumes a flat monthly target and therefore differs from that of the Kenya Revenue Authority (KRA) which has reported that it is ahead of its revenue target.
- As has been the case this fiscal year, the National Treasury remains ahead of its domestic borrowing target having raised KES.430.1Bn equivalent to 42.6% of the fiscal year's total domestic borrowing target.
- The National Treasury is yet to revise its revenue, expenditure and borrowing targets through a supplementary budget which we see likely in early 2022 with a likely revision of the domestic borrowing target upwards.

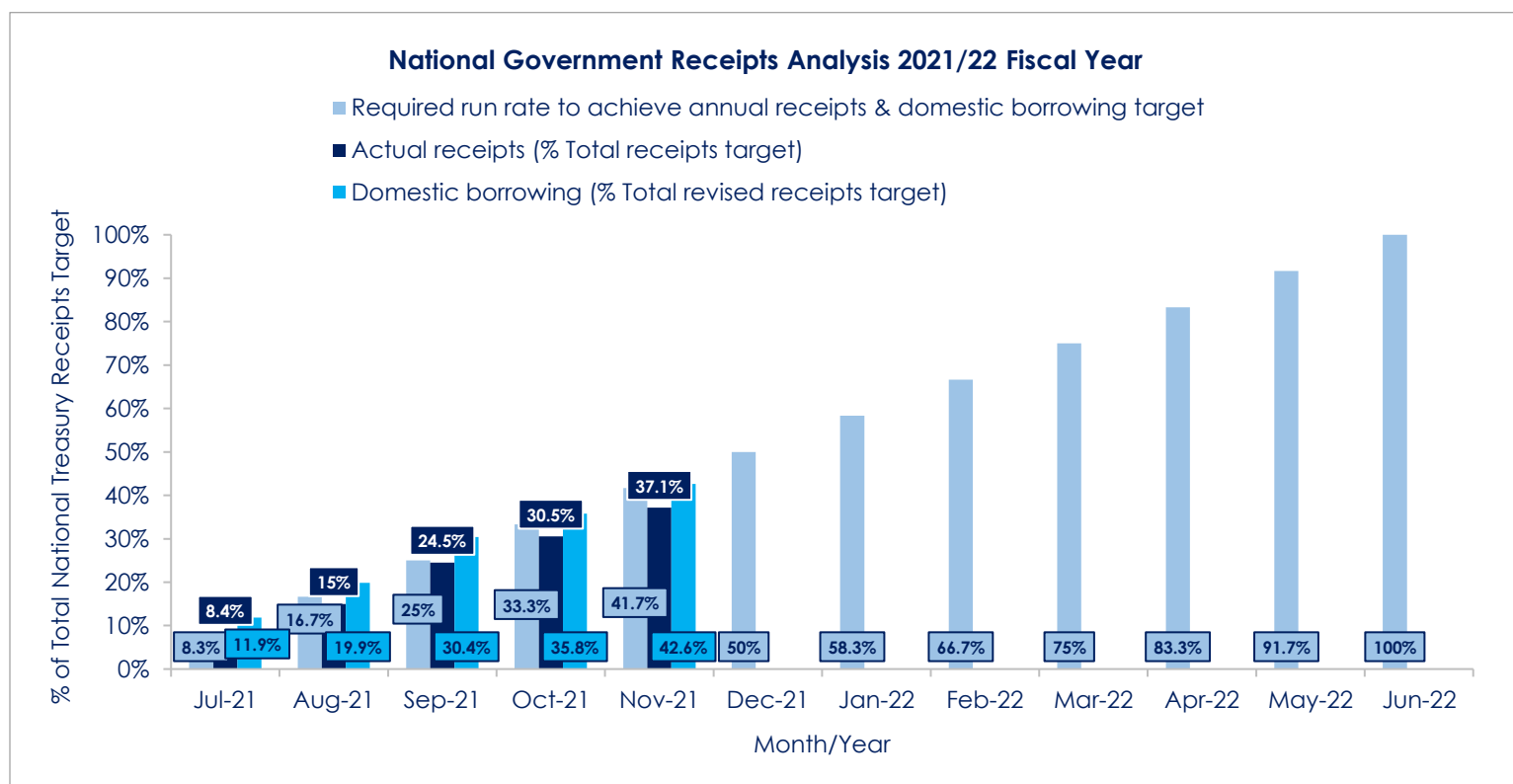
**Table.6: 2020/21 fiscal year domestic borrowing above target run-rate**

Receipts	Original Estimates July 2021 (KES.Bn)	Actual Receipts 31 <sup>st</sup> Oct 2021 (KES.Bn)	Actual Receipts 30 <sup>th</sup> Nov 2021 (KES.Bn)	Proportion of Total Receipts as at 30 <sup>th</sup> Nov 2021 (%)
Opening Balance (1 <sup>st</sup> July 2021)		21.3	21.3	-
<b>Tax Revenue</b>	<b>1,707.4</b>	<b>548.4</b>	<b>688.1</b>	<b>40.3</b>
Non-Tax Income	68.2	28.9	30.7	45
<b>Domestic Borrowing*</b>	<b>1,008.4</b>	<b>360.8</b>	<b>430.1</b>	<b>42.6</b>
External Loans & Grants	379.7	10.8	11.8	3.1
Other Domestic Financing	29.3	4.2	4.2	14.2
<b>Total Revenue</b>	<b>3,193</b>	<b>974.3</b>	<b>1,164.8</b>	<b>37.1</b>
<b>Linear Run Rate target (5 months of fiscal year)</b>				<b>41.7</b>

\* Note 1: Domestic Borrowing of KES.1, 008.4Bn = Net Domestic borrowing KES.661.6Bn & Internal Debt Redemptions (Roll-overs) KES.346.8

Source: The Kenya Gazette Vol. CXXIII - No.253 10<sup>th</sup> December 2021

**Figure.10: National Treasury at 43% of 2021/22 fiscal year domestic borrowing target**

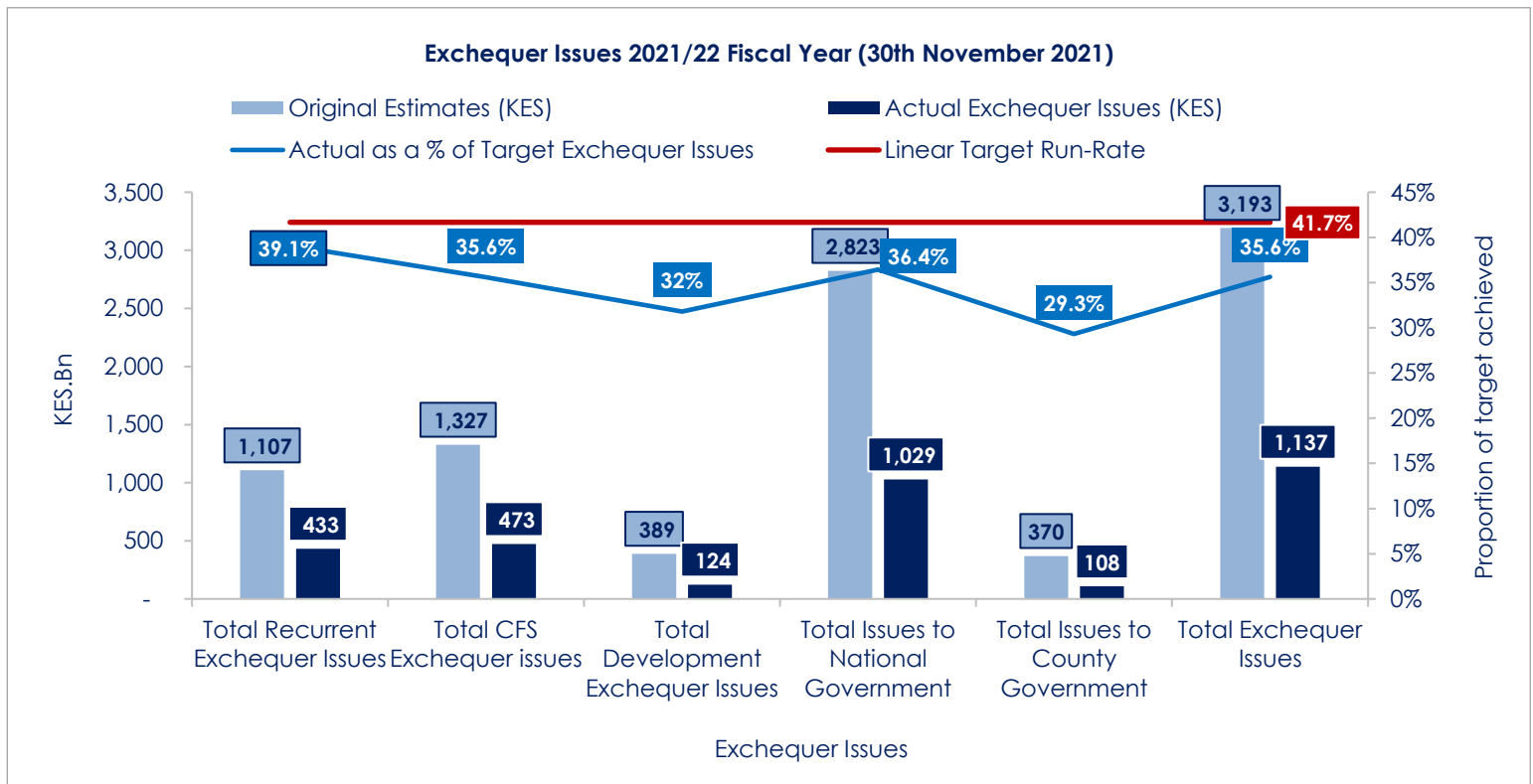


Source: The Kenya Gazette Vol. CXXIII - No.253 10<sup>th</sup> December 2021

## Government expenditure remains below 2021/22 fiscal year expenditure run-rate targets

- Our linear target run rate after the first five months of the 2021/22 fiscal year (ending November 2021) is 41.7% which remains well above all actual exchequer issues (Figure.11).
- Actual Total Government expenditure stood at KES.1.14Tn equivalent to 35.6% of the total fiscal year target of KES.3.19Tn.
- Notable is the underperformance of total issues to the county Governments which stood at KES.108Bn or 29.3% of the total fiscal year target.
- Revenue absorption remains low based on the illustration below which suggests that the National Treasury continues to face a financing challenge even with a sharp improvement in revenue collection following the uptick of economic activity in the current fiscal year.
- Relatively low spending therefore is a capital preservation strategy at this point in time although we expect this to improve in the second half of the fiscal year especially in distinct expenditure items such as recurrent spending and county transfers.

**Figure.11: Government expenditure remains below target run-rate estimates**



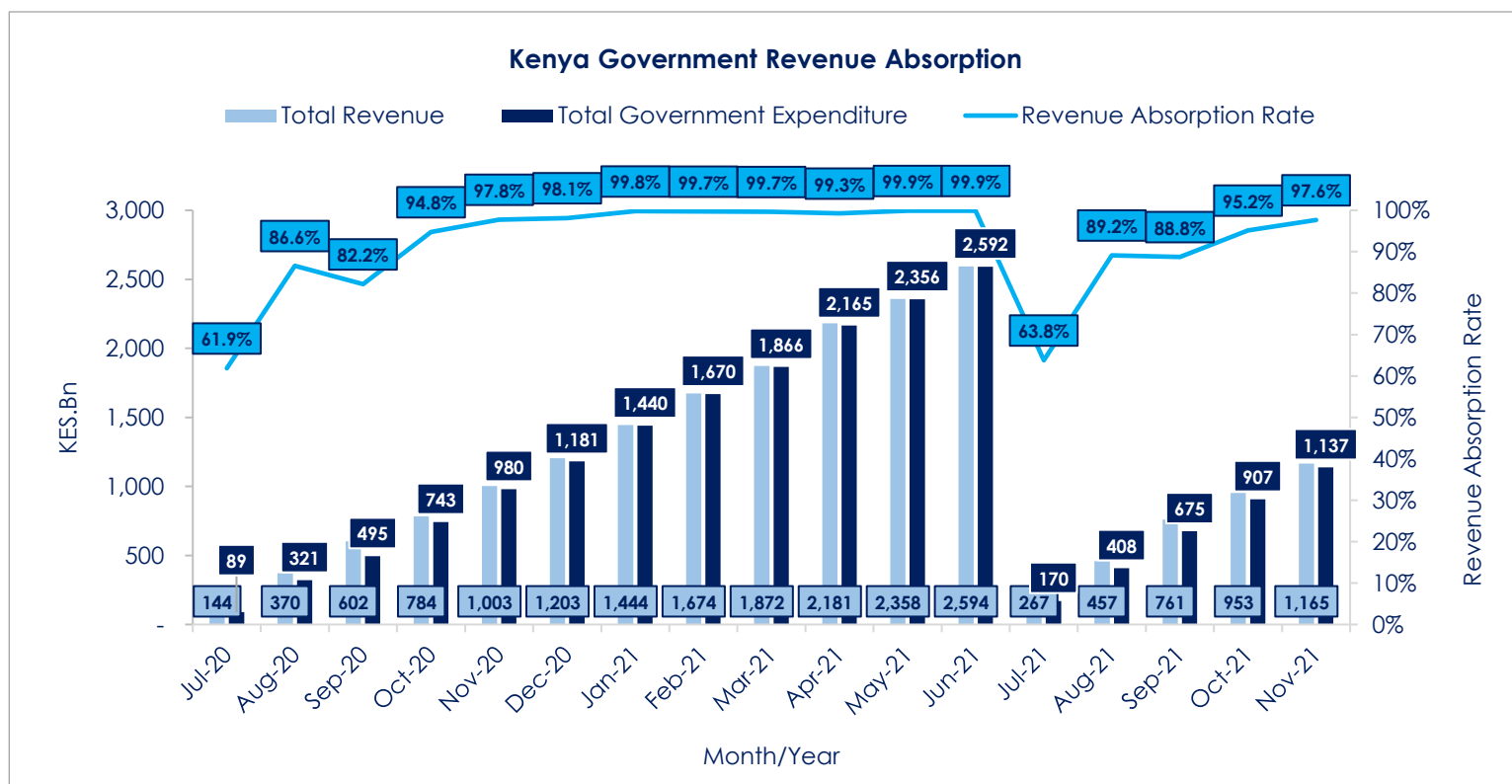
Source: The Kenya Gazette Vol. CXXIII - No.253 10<sup>th</sup> December 2021



## Government Revenue Absorption inches towards full utilization

- Revenue Absorption Rate (RAA) which is the proportion of Government receipts used to finance expenditure stood at 97.6% in November 2021 almost unchanged from the same period in 2020 (97.8%) (Figure.12).
- This is also an increase from October where the RAA was 95.2%.
- RAA moves closer towards full utilization towards the end of the year and into the new year.
- This also means that the revenue authorities and the CBK will also come under pressure to raise revenue and capital to finance Government expenditure

**Figure.12: Kenya ordinary estimate declines to 2018/19 level**

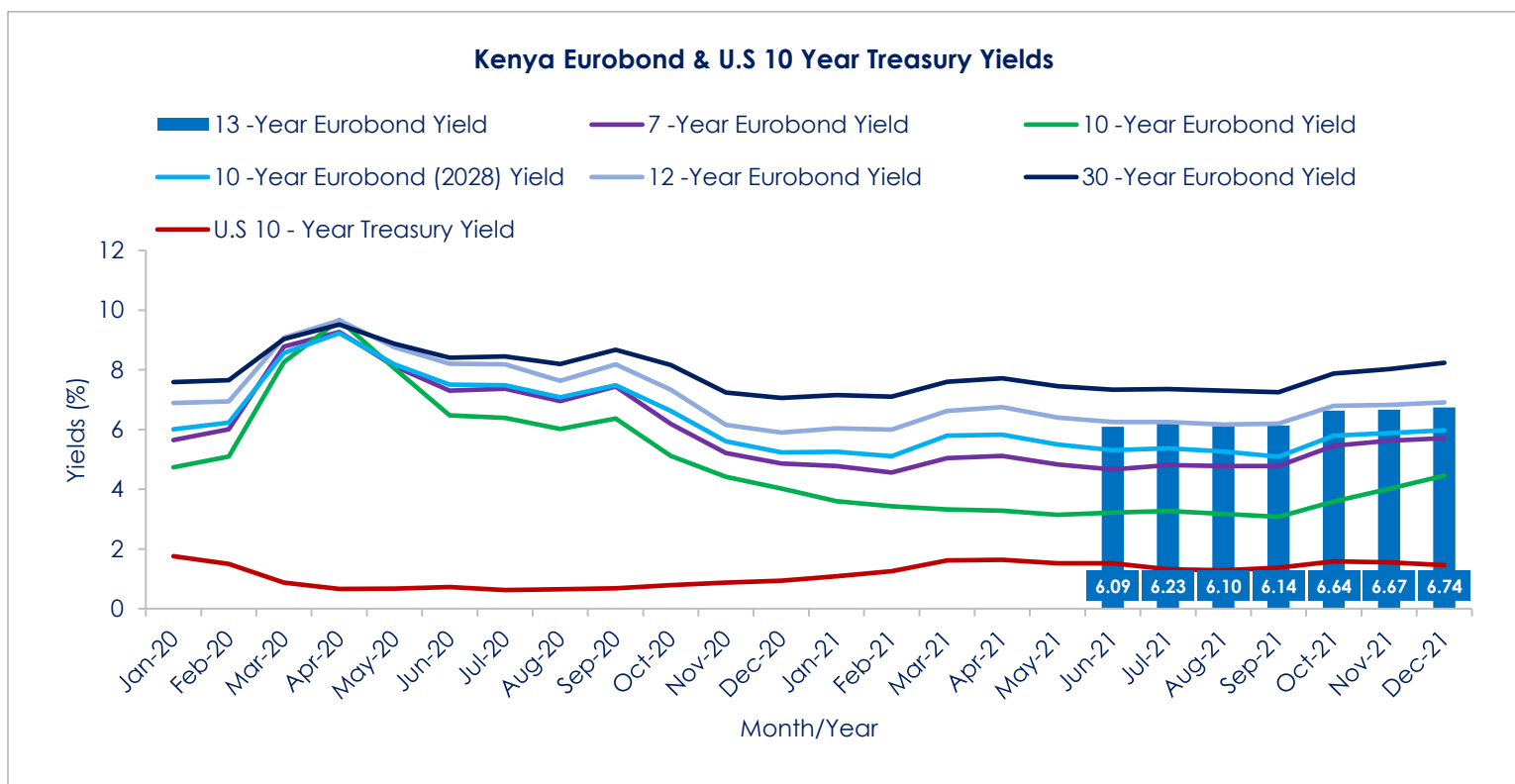


Source: The Kenya Gazette Vol. CXXIII – No.230 12<sup>th</sup> November 2021

## Kenya Eurobond yields rise in December 2021

- Average Government of Kenya Eurobond yields rose in November compared to November 2020 with the largest increase being on the 10 Year Bond (Figure.13).
- We attribute this increase to investor concerns over rising public debt service costs especially with the depreciation of the KES against the U.S\$.
- The National Treasury has indicated that it intends to issue at least to sovereign debt issues before the end of the current fiscal year.

**Figure.13: Kenya Eurobond yields rise in December 2021**

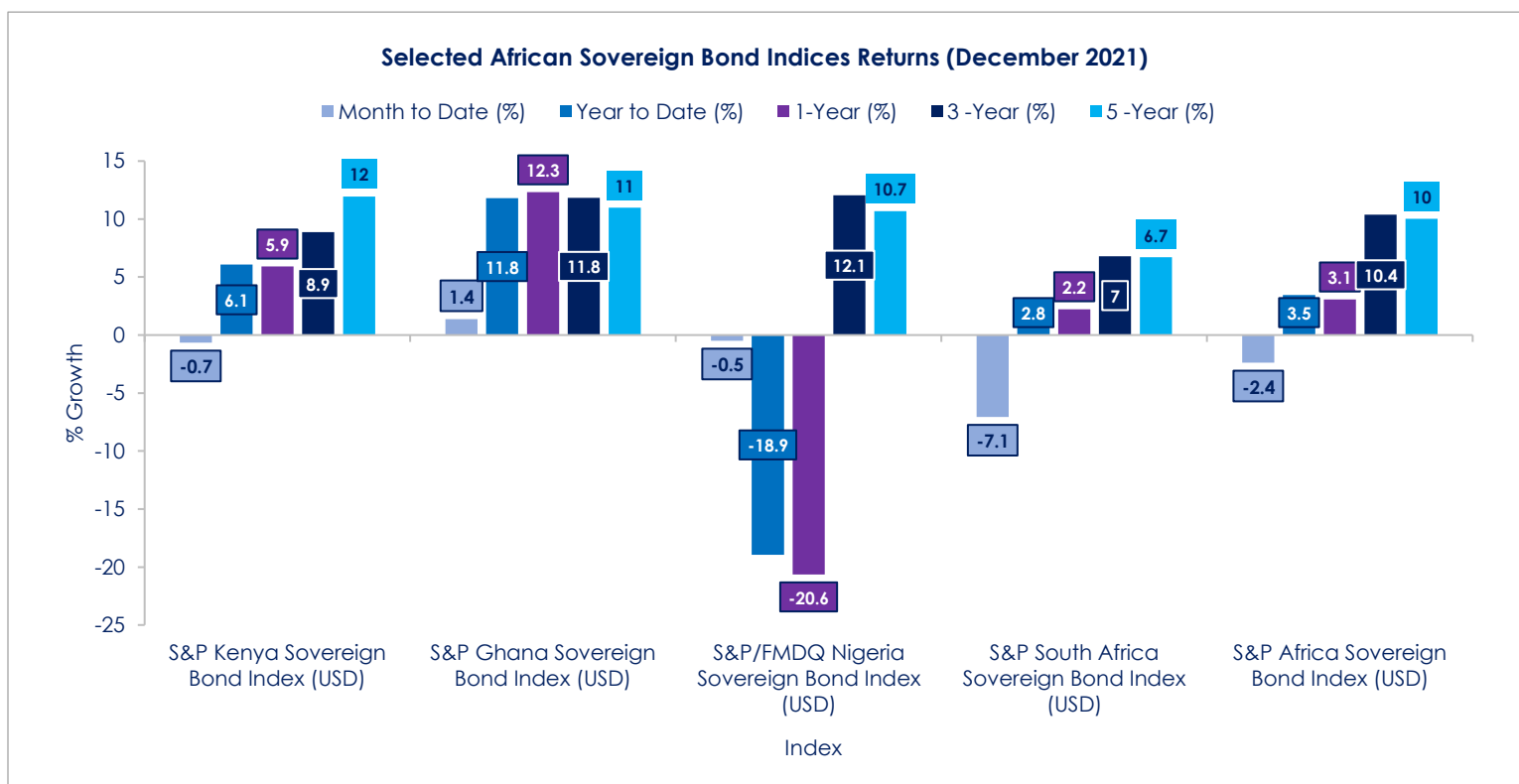


Source: Central Bank of Kenya

## Kenya sovereign bond index returns positive in December 2021

- The S&P Kenya Sovereign Bond index recovered in the Month of December posting a return of 0.2% compared to a negative return of 0.7% in November (Figure.14).
- The S&P South African Bond Index was the top performer during the month with a return of 6.2%.
- Over the last one year, the Kenya bond index has returned 5.9% but lagged behind the S&P Ghana Sovereign Bond Index which is the top performing index amongst our comparables with a return of 12.3%.

**Figure.14: S&P Kenya Sovereign bond returns to positive territory in December 2021**



Source: S&P Global

### NSE yield curve has shifted upwards over the last one year

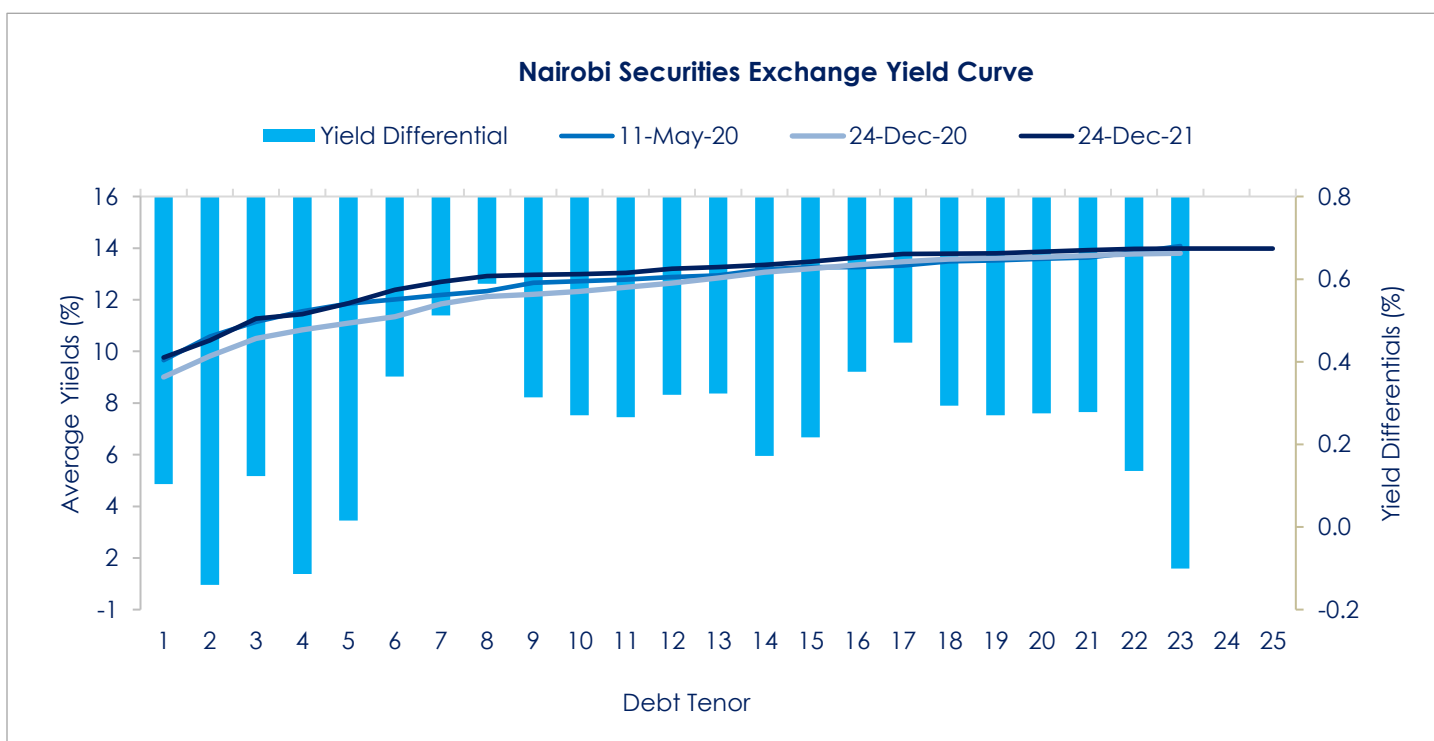
- A comparison of average bond yields in the NSE on 11<sup>th</sup> May 2020 (issuance FXD1/2020/5) and 24<sup>th</sup> December 2021 shows an increase in the long-term debt tenors while yields on short-term and medium debt tenors showed mixed trends particularly on the two and ten-year tenors. (Table.7 and Figure.15).
- However, a comparison of average yields in December 2021 compared to the same month in 2020 shows an increase in yields on all debt tenors.
- The upward shift in the yield curve over the last one year is a direct result of the CBK being accommodative of more aggressive investor bids to encourage subscription for Government debt.
- We predict gradual increases in yields on all debt tenors over the next few months due to the persistent fiscal budget deficit financing.
- Due to the prospect of rising interest rates, we expect to see higher demand of short-term debt with some investors preferring to invest in T-Bills particular the 91 and 182 Day T-Bills.

**Table.7: Yields on the short, medium and long-end of the yield curve have increased over the last one year**

Tenor	Yields (11 <sup>th</sup> May 2020)	Yields (24 <sup>th</sup> December 2020)	Yields (24 <sup>th</sup> December 2021)	YoY Δ 24 <sup>th</sup> December 2021 vs 2020 (Bps)	Δ 24 <sup>th</sup> December 2021 vs 11 <sup>th</sup> May 2020 (Bps)	Sterling Capital yield Curve (December 2021)
1	9.1610	8.5080	9.2650	75.7	10.4	9.3
2	10.0703	9.3167	9.9298	61.3	-14.0	10.0
5	11.3528	10.6000	11.3684	77.1	12.3	11.4
10	12.2224	11.8223	12.4925	60.9	-11.4	12.5
15	12.7633	12.7091	12.9803	76.8	1.6	13.0
20	13.0821	13.1529	13.3571	103.9	36.4	13.4

Source: Nairobi Securities Exchange & Sterling Capital Research

**Figure.15: The yield curve has shifted upwards over the last one year**

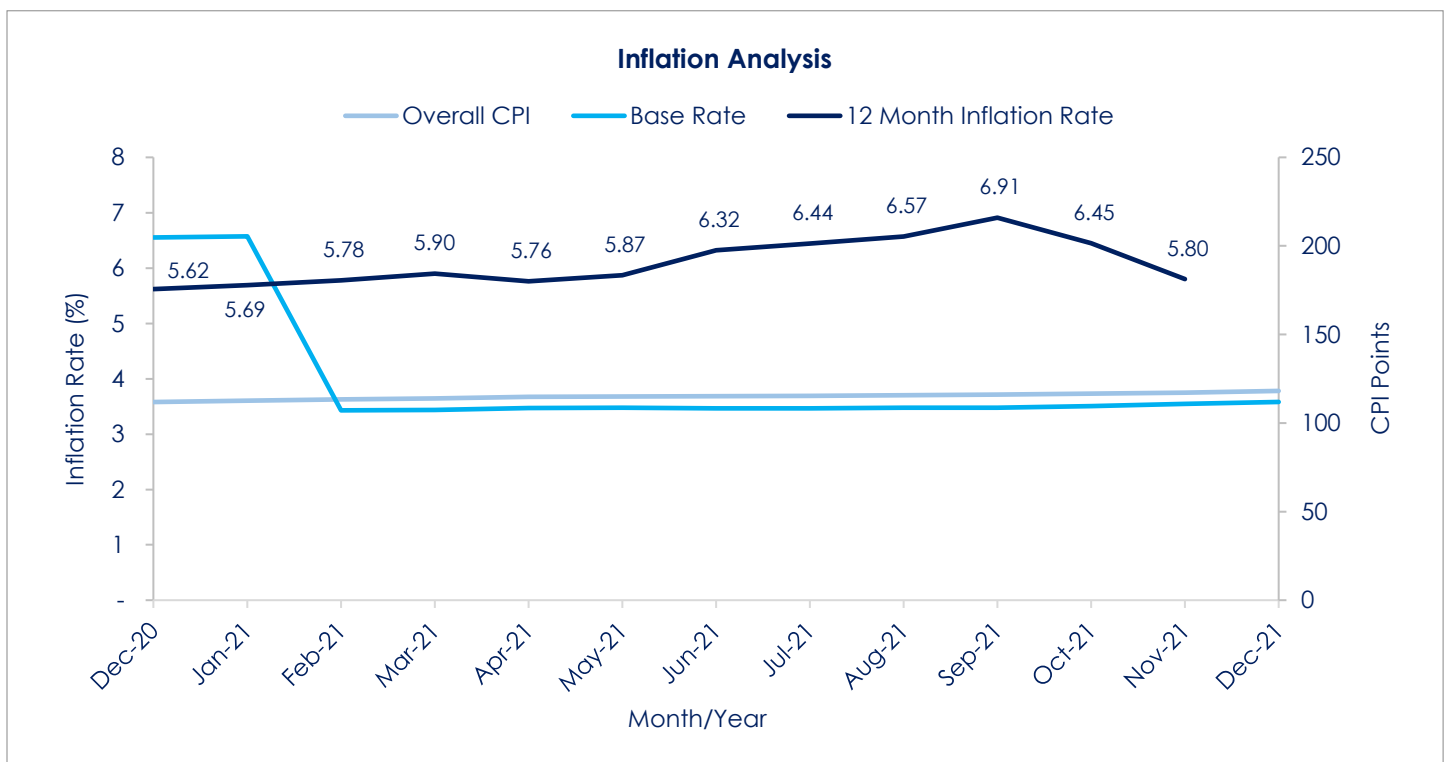


Source: Nairobi Securities Exchange

## December 2021 inflation to rise on higher transport and food prices

- Inflation for the month of November 2021 declined to 5.8% from 6.5% in October 2021 (Figure.16).
- This was however significantly higher than the inflation rate for November 2020 (5.3%) but the lowest inflation rate since May 2021 (5.87%).
- The year on year increase was mainly attributable to an increase in prices of commodities under; food, and non-alcoholic beverages (9.9%), transport (8.1%) and housing, water, electricity, gas and other fuels (6.2%).
- We predict December inflation to be in the range of 6% - 7%, which is still within the CBK's 2.5% - 7.5% target range, with food and transport indices the main drivers.

**Figure.16: Short-term inflation forecast 5.5% - 6.5%**



Source: Kenya National Bureau of Statistics

## **Monetary Policy Committee to meet at the end of January 2022**

- The Monetary Policy Committee meets at the end of January 2022 with the main focus being inflation levels and the depreciating Kenya Shilling (KES) which has been trading at KES.113 to the United States Dollar (U.S\$) over the last week.
- That said, we do not expect a revision in the Central Bank Rate (CBR) and Cash Reserve Ratio (CRR) at 7% and 4.25% respectively.

## 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.