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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

April 2022

“CBK’s debut 3 Year bond issue”

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Executive Summary

- Our fixed income report for the month of April 2022 is titled “**CBK’s debut 3 year bond**” in reference to the Central Bank of Kenya’s (CBK) first ever issuance of a three year bond.
- The apex bank seeks to raise KES.40Bn through the 3 year issue **FXD1/2022/3** and KES.30Bn through the fifteen year **FXD1/2022/15**.
- While we are optimistic that **FXD1/2022/3** will be oversubscribed, **FXD1/2022/15** is likely to be undersubscribed.
- Our weighted average bid predictions are as follows:

Weighted Average Rate (WAR) of accepted bids:

FXD1/2022/3: 11.60% - 11.75%

FXD1/2022/15: 13.85% - 13.95%

- 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 analysed 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 analyse the yield curve over selected periods showing trends in yields of different tenors.
- We finally give our inflation expectations towards the end of the report, which concludes, with our view on the Monetary Policy Committee (MPC) decision in the short term.

CBK's short and medium term debt issues to raise KES.70Bn in April 2022

- The Central Bank of Kenya (CBK) invites bids for two Treasury Bonds (T-Bonds); **FXD1/2022/3** and **FXD1/2022/15** to raise KES.40Bn and KES.30Bn respectively for budgetary support (Table.1).
- We are optimistic that **FXD1/2022/3** will be oversubscribed while **FXD1/2022/15** partially subscribed.
- Our aggregate estimate for the two bond issues is KES.60 - KES.70Bn with the 3-year issue to receive the bulk of demand as banks and retail investors prefer short investment horizons given the prevailing duration risk.
- Substantial demand is also expected for the 15-year issue from local institutional buyers as they look for stable long-term returns.

Table.1: Primary Bond issues' summary

Issue Number	FXD1/2022/3	FXD1/2022/15
Total Amount Offered	KES.40Bn	KES.30Bn
Tenor	3 Years	15 Years
Coupon Rate (%)	Market Determined	Market Determined
Price Quote	Discounted/Premium/Par	
Period of Sale	24 th March 2022 - 5 th April 2022	24 th March 2022 - 19 th April 2022
Auction Date	6 th April 2022	20 th April 2022
Value Date	11 th April 2022	25 th April 2022
Yield Curve (%) (Weighted average tenor - 25 th March 2022)	-	13.7973

Source: Central Bank of Kenya & Sterling Capital Research

Our weighted average and accepted bids averages

- We arrived at our market weighted and the CBK's accepted bids average estimates by analysing yields of securities of similar tenors on the Nairobi Securities Exchange (NSE) as at 25th March 2022 together with discussions with several fixed income security traders (Table.2).

Table.2: Auction bid predictions

Rate	FXD1/2022/3	FXD1/2022/15
Weighted Average Rate of Accepted Bids (%)	11.60 - 11.75	13.85 - 13.95

Source: Sterling Capital Research

Our predicted rates are guided by historical debt issues

- We used implied yields of bonds of almost similar tenors to maturity on the NSE as at 25th March 2022 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
FXD1/2010/15	29 th Mar 2010	10.25	10 th Mar 2025	1,081	11.2711	-
FXD1/2020/5	11 th May 2020	11.67	5 th May 2025	1,137	11.3000	11.3528
FXD1/2016/20	26 th Sep 2016	14.00	1 st Sep 2036	5,274	13.7956	14.6646

Source: Central Bank of Kenya

- Reviews of historical auction results show higher investor interest in issues with shorter tenors which reinforces our assertions of higher demand for **FXD1/2022/3** in this auction (Table 4).
- We also note the oversubscription of the latest 5-year issue (**FXD1/2021/5**) with the CBK rejecting a significant number of bids.
- We expect aggressive bidding for the 15-year given investor expectations of rising interest rates, higher inflation and understanding of the Government's fiscal financing requirements.
- It is likely that the CBK will accept in excess of KES.50Bn due to high fiscal deficit financing needs.

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 (%)
5-Year							
FXD1/2019/5	25 th Feb 2019	50	41.9	20.6	83.9	11.304	10.9467
FXD2/2019/5	13 th May 2019	50	49.3	39.2	98.6	10.872	11.0373
FXD1/2020/5	11 th May 2020	50	34.5	20.8	69.1	11.667	11.3000
FXD1/2021/5	15 th Nov 2021	50	66.6	53.7	133.2	11.280	11.8555
15-Year							
FXD1/2018/15	28 th May 2018	40	20.2	12.9	50.5	12.650	12.9544
FXD1/2019/15	28 th Jan 2019	40	25.1	14.7	62.7	12.857	13.1003
FXD2/2019/15	13 th May 2019	50	21.5	19.3	43.1	12.734	13.1853
FXD1/2020/15	24 th Feb 2020	50	18.4	5.2	36.9	12.760	13.6084

Source: Central Bank of Kenya

Why would the CBK issue a 3 year bond?

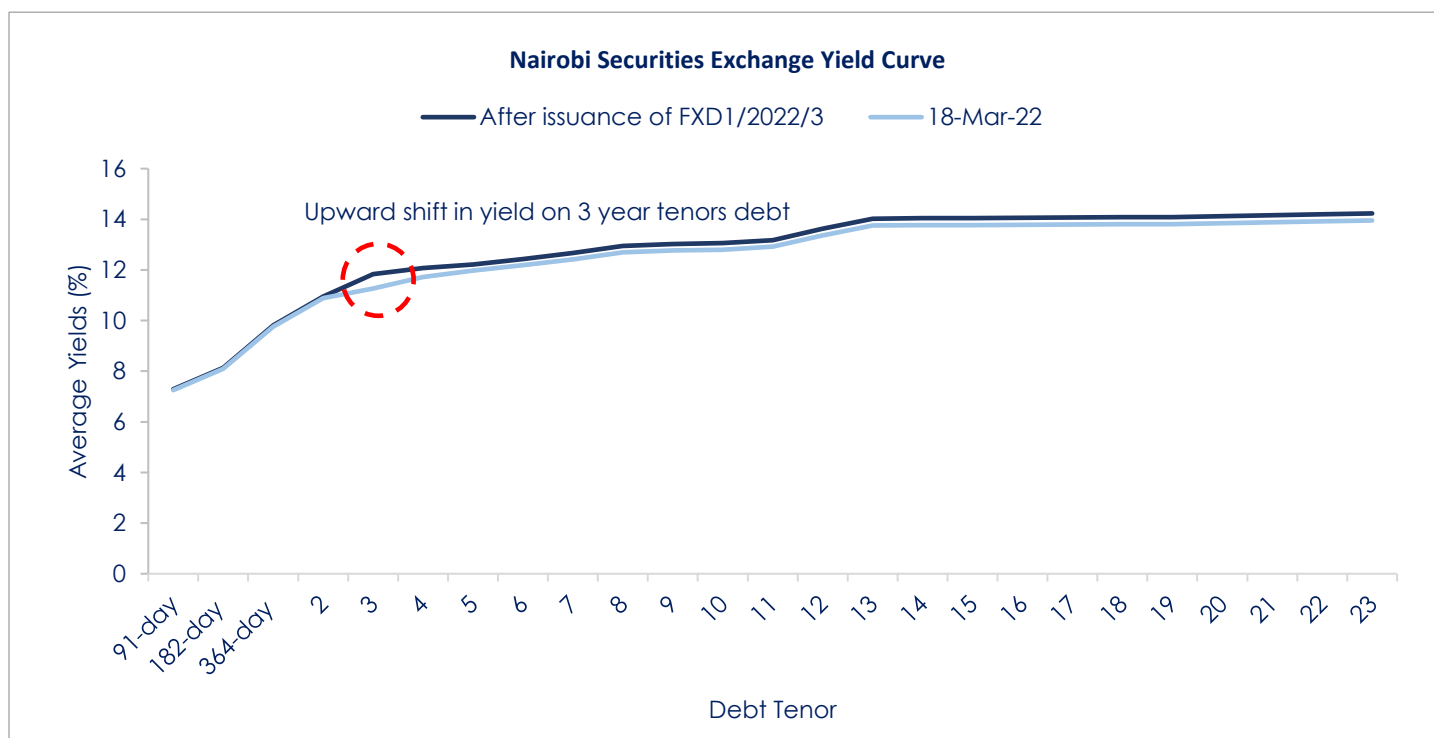
- The issuance of a 3 year bond has surprised analysts and investors and comes at a time when interest rates are on the rise and the Nairobi Securities Exchange (NSE) yield curve is shifting upwards.
- Most recent CBK new and re-opened debt issues have been concentrated in the medium and long-term end of the yield curve.
- We see the following as possible reasons for the issuance of a 3 year paper.
 - 1) To increase investor appetite for Government debt considering that the National Treasury is below its domestic financing target for the 2021/22 fiscal year and recent debt auctions have been undersubscribed.
 - 2) Attempts by the national treasury to manage the overall long-term cost of public debt in the short-term considering that interest rates have been rising and continued issuance of long-term debt at higher interest rates would increase debt service costs and possibly compromise long-term debt sustainability.
 - 3) Issue debt that conforms to the short-term horizon of some investors especially banks whose average loan tenor would match that of a short-term debt issue.
 - 4) **FXD1/2010/15** (2.99 years) **FXD1/2020/5** (3.14) would be considered benchmark issues to the new 3 year debt issue on the basis of current implied yield levels.

However, with coupons of 10.25% and 11.67% respectively they would not be within current market rate levels and this could explain why the CBK decided to issue a new instead of re-opening either of the two bonds.

What is the potential impact of issuance of a 3 year bond?

- The issuance of a short term debt issue is likely to have the following effects:
 - 1) Upward shift in the yield curve in debt tenors of 3 - 5 years in the short-term (Next 1 - 3 months). We estimate a 10-15 bps increase in interest rates on these tenors (Figure.1).
 - 2) In the medium term the yield curve will normalize with interest rates on medium (25 - 35 bps) and longer dated debt tenors rising (30 - 40 bps).
 - 3) Impact on secondary market trading will be muted since most investors are likely to hold **FXD1/2022/3** until maturity.

Figure.1: Expectations of an upward shift in yields on short-term debt following the issuance of FXD1/2022/3

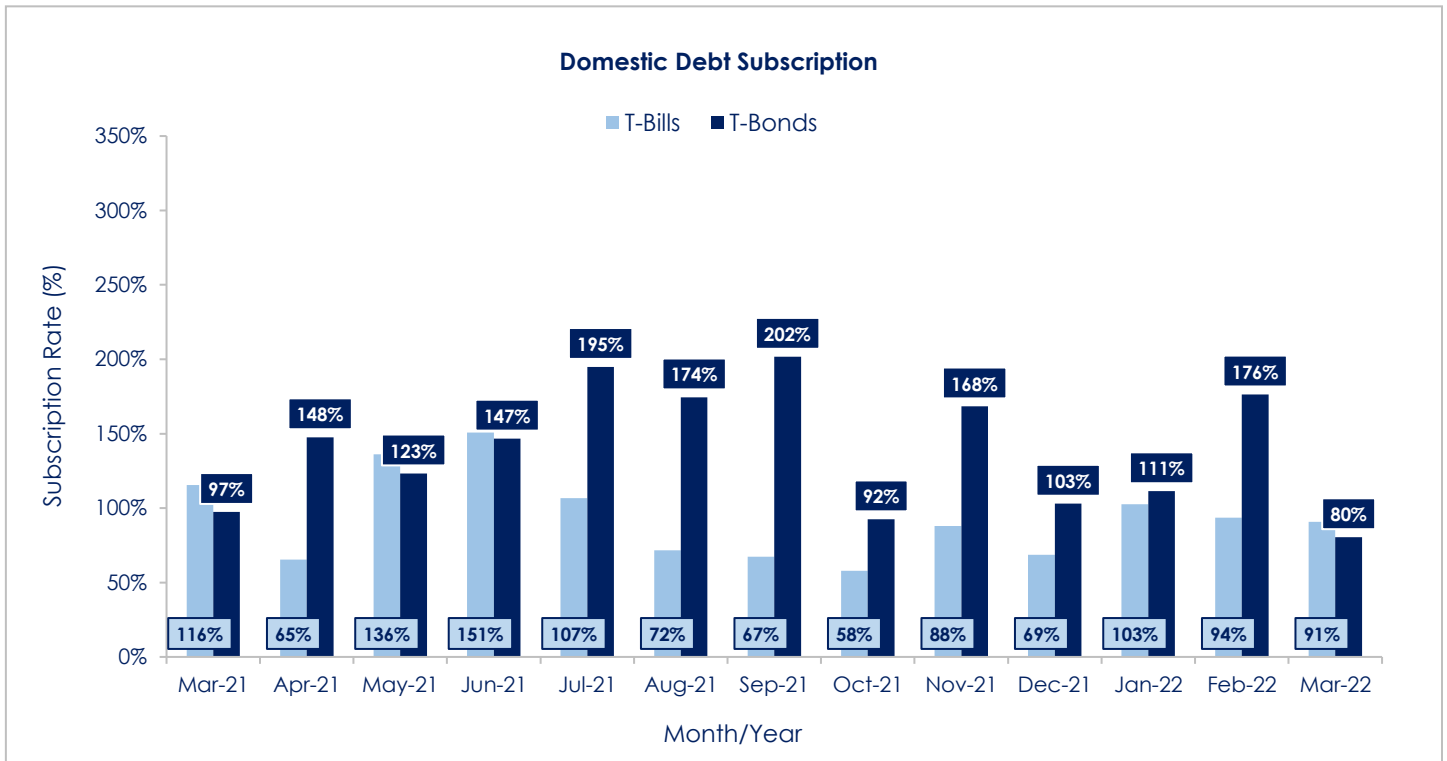


Source: Nairobi Securities Exchange

Subscription rates on T-Bonds drop on lower liquidity

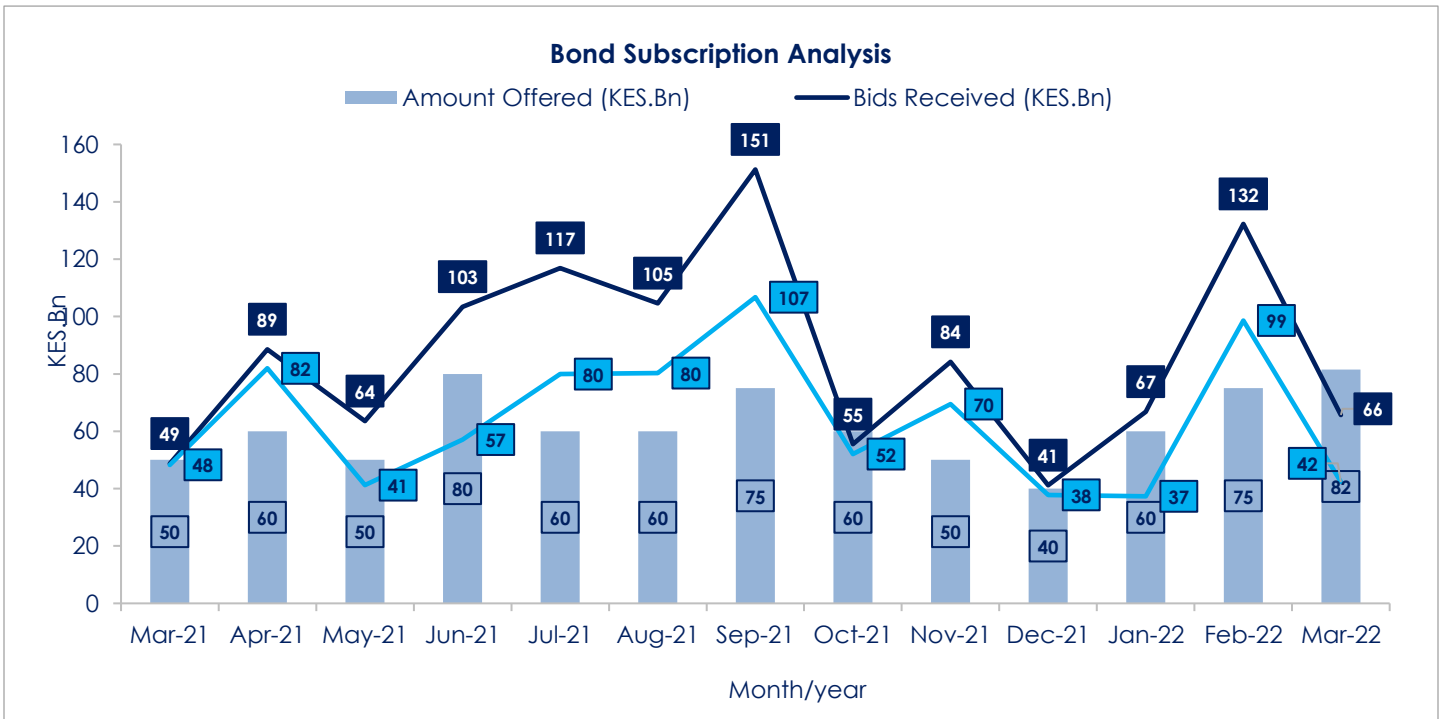
- Investor T-Bond subscription rates dropped from 176% in February 2022 to 80% in March (Figure.2 and Figure.3).
- This was attributable to low market liquidity (after the issuance of **IFB1/2022/19**) as well as the presence of several debt issues of similar tenors trading in the market.
- The cumulative bids received by the CBK for the primary and the tap sale amounted to KES.65.7Bn against an offer amount of KES.81.5Bn.
- There was, notably, a slight drop in the T-Bill subscription rate to 91% from 94% due to tighter liquidity.
- Subscription rates for the 91, 182 and 384 day T-Bill stood at 121.5%, 76.2% and 92.6% respectively compared to 61.1%, 72.1% and 128.2% recorded in February.
- Increased T-Bill interest rate as well as the shift in demand to the IFB mentioned above greatly contributed to the drop in subscription rates for T-Bills.

Figure.2: T-Bill and T-Bond subscription rates declined in March



Source: Central Bank of Kenya

Figure 3: T-Bond subscriptions dip in March 2022

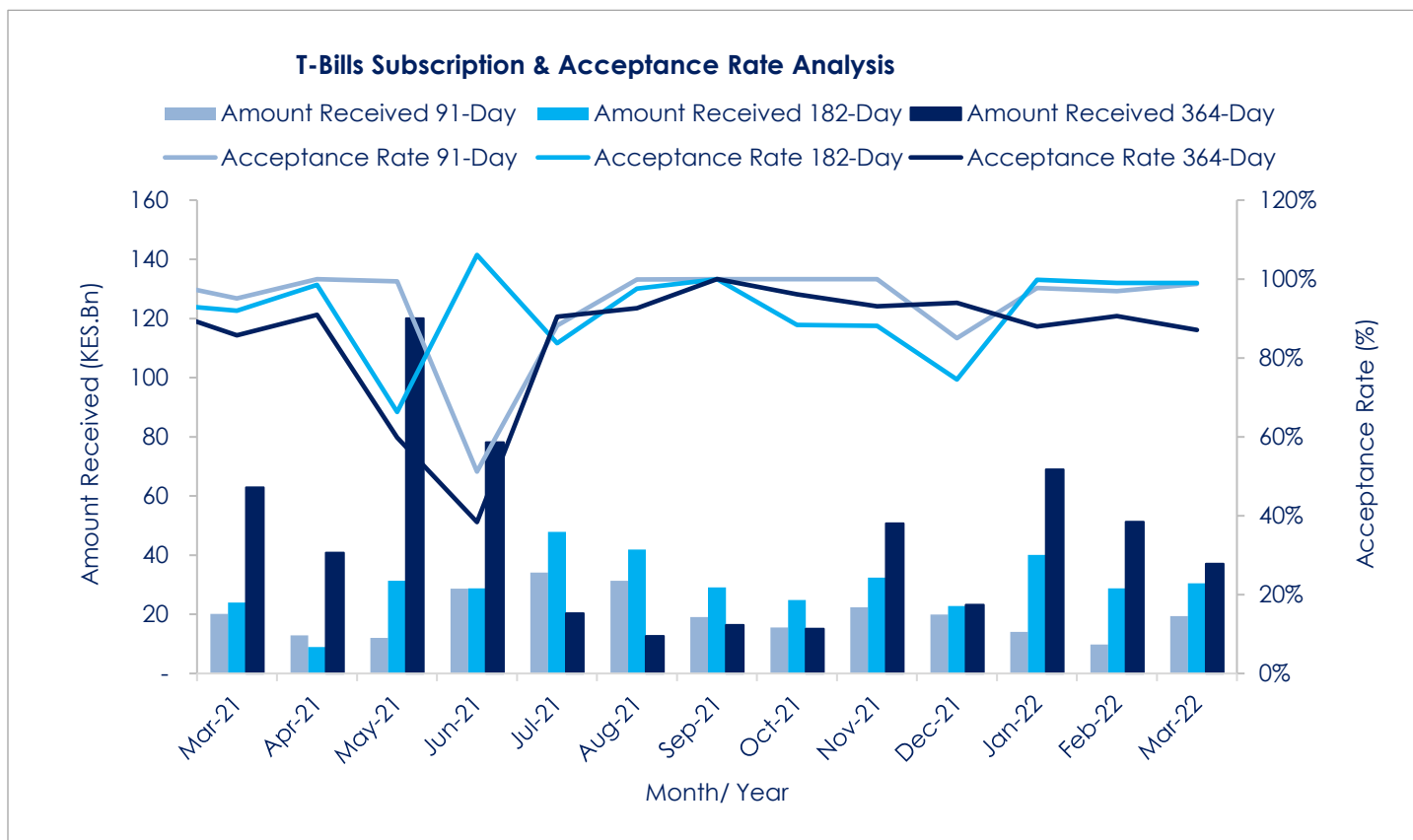


Source: Central Bank of Kenya

CBK T-Bill acceptance close to 100%

- CBK acceptance rates for the 91, 182 and 364-Day T-Bills were relatively high at 98.8%, 99% and 87.1% respectively, a trend we attribute to high deficit financing pressures (Figure.4).

Figure.4: High T-Bill acceptance rate in March 2022

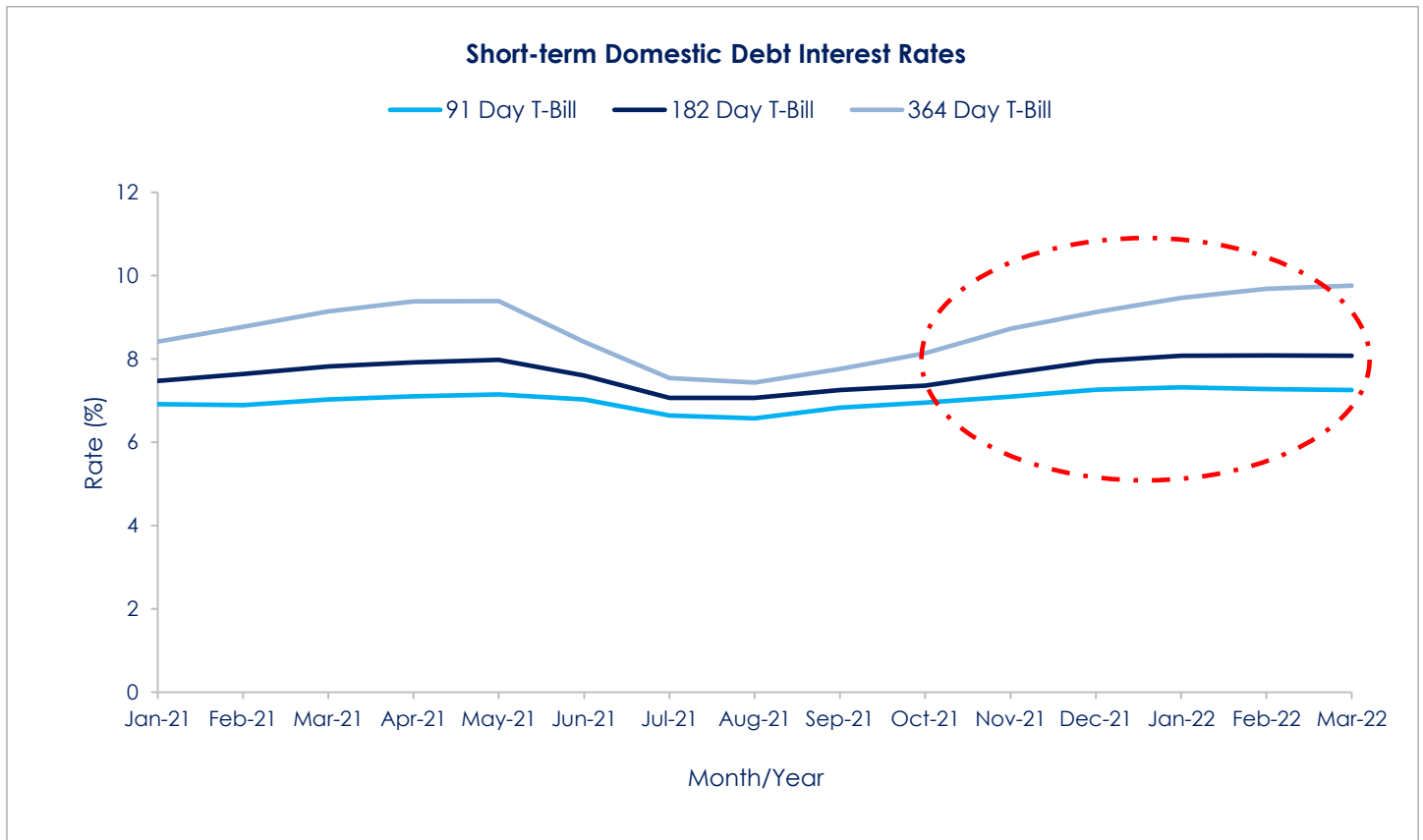


Source: Central Bank of Kenya

Short-term domestic interest rates with mixed trends in March 2022

- Average short-term interest rates declined slightly in March 2022, with the exception of the 364-day paper.
- Interest rates have generally been on an upward trajectory that started in the third quarter of 2021 but have showed signs of stabilizing since February particularly on the 91 and 182 day papers (Figure.5).
- The 91-day and 182-day T-Bill rate declined to 7.25%, 8.08% in March from 7.28% and 8.09% in February respectively while the 364-day T-Bills rate rose from 9.69% to 9.76% over the same period.
- The continued rise on the 364 day paper shows the CBK's intention to reduce refinancing risks by being more accommodative of aggressive investor bids.
- Overall, we expect short-term interest rates to maintain an upward trend in the short-term due to budget deficit financing pressure.

Figure.5: Short-term debt securities interest rates rise

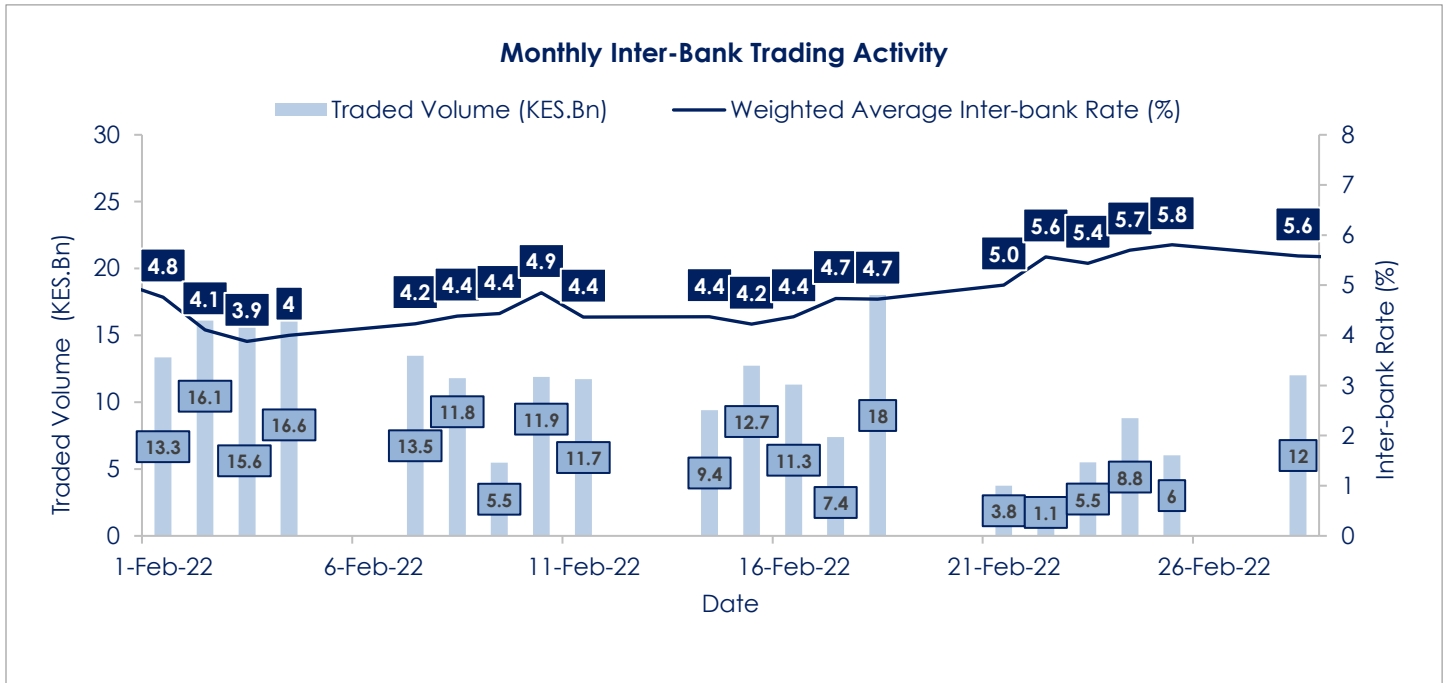


Source: Central Bank of Kenya

Average inter-bank lending rates remained flat in March 2022

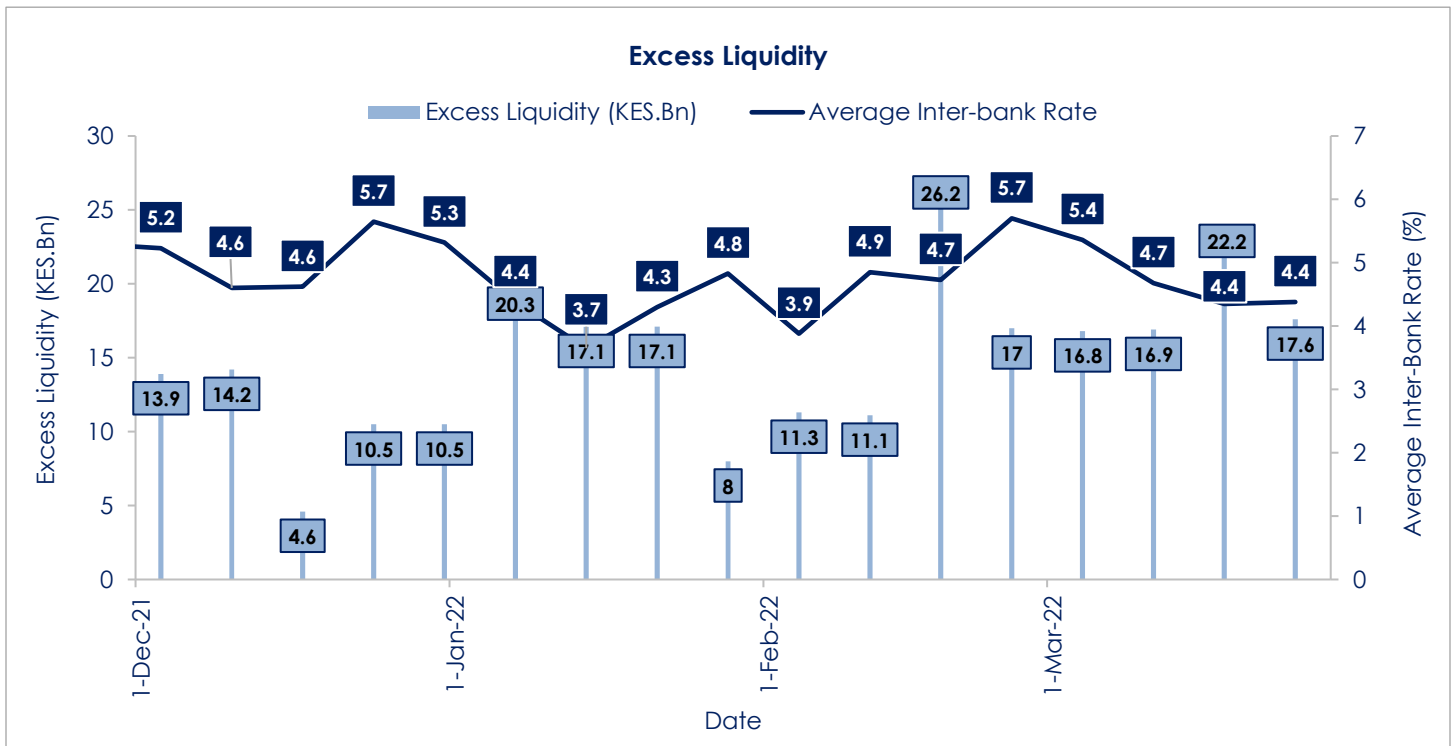
- Average inter-bank rates remained flat at 4.7% in March 2022 compared to the 4.7% in February while total inter-bank trading volumes for the same period rose to KES.259Bn from the KES.212.1Bn in February 2022 (Figure.6).
- This is an indication that market liquidity remained tight but is slightly improving on volumes.
- However, total excess reserves (additional liquidity above the minimum 4.25% Cash Reserve Ratio (CRR)) for the same period increased to KES.73.5Bn, compared to KES.65.6Bn in the previous month (Figure.7).
- Our forecasted average inter-bank rate for April 2022 is between 4.5% - 5.5% as market liquidity continues to improve.

Figure.6: Inter-bank lending rates to range between 4.5% and 5.5% in April 2022



Source: Central Bank of Kenya

Figure.7: Excess commercial bank reserves increase in March 2022

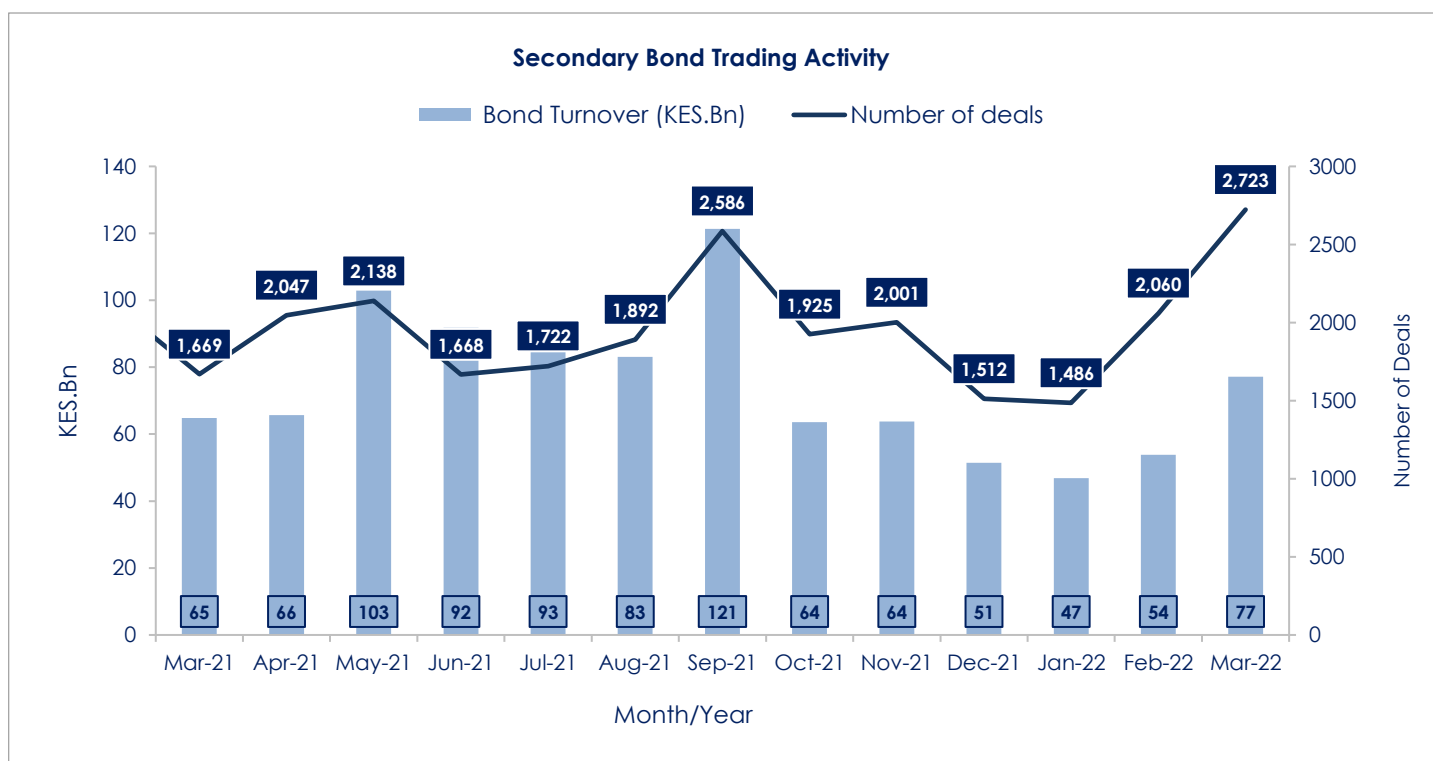


Source: Central Bank of Kenya

Secondary market bond turnover to remain elevated in April

- In line with our prediction at the beginning of March, secondary market trading activity rose in the month with the number of deals increasing from 2,060 to 2,723 as at 28th March (Figure.8).
- Turnover subsequently rose from KES.53.8Bn to KES.77.2Bn.
- The expected increase was generally due to trading of IFB1/2022/19.
- We expect secondary market activity to remain elevated with most trading activity concentrated on recent IFB issues with some activity on the new three-year issue.

Figure.8: Secondary trading activity rises in March 2022

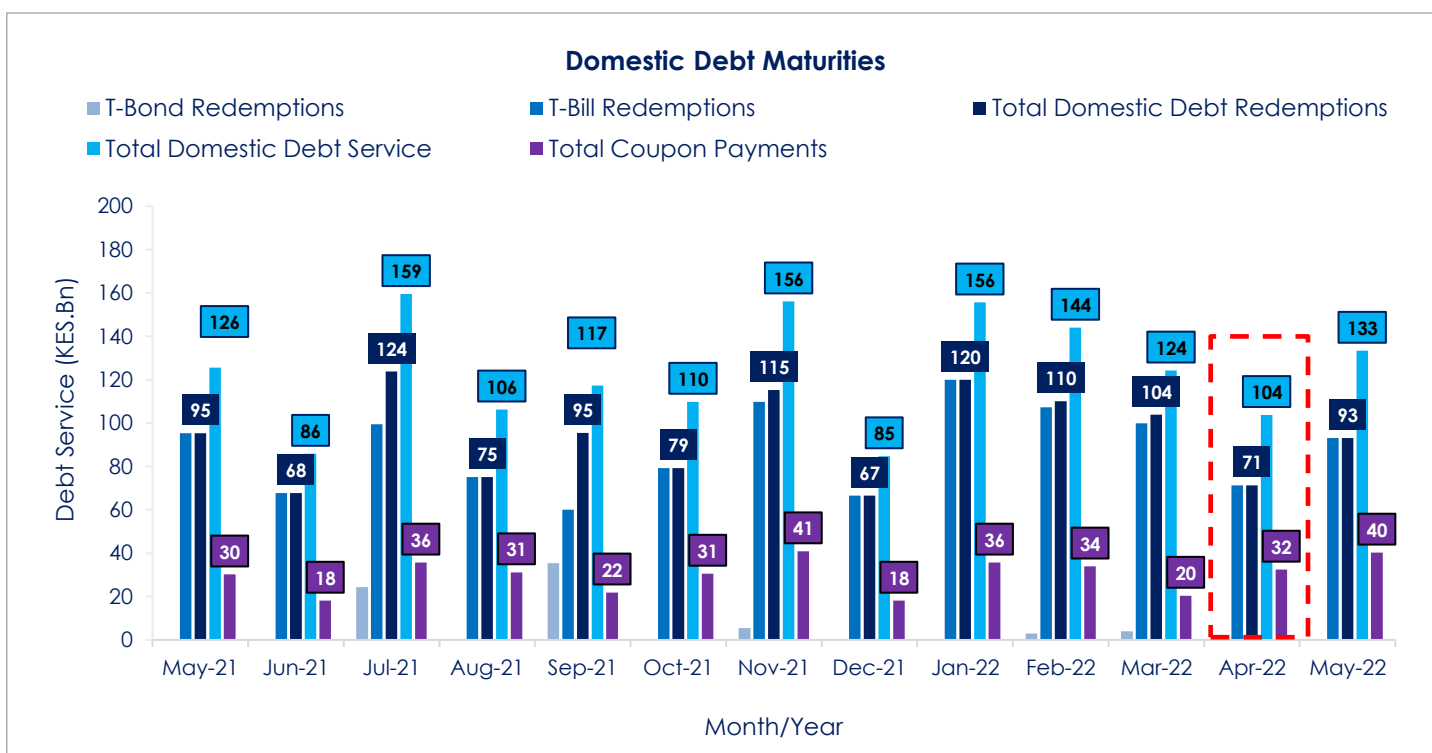


Source: Central Bank of Kenya

Domestic debt service for April 2022 declines to KES.104Bn

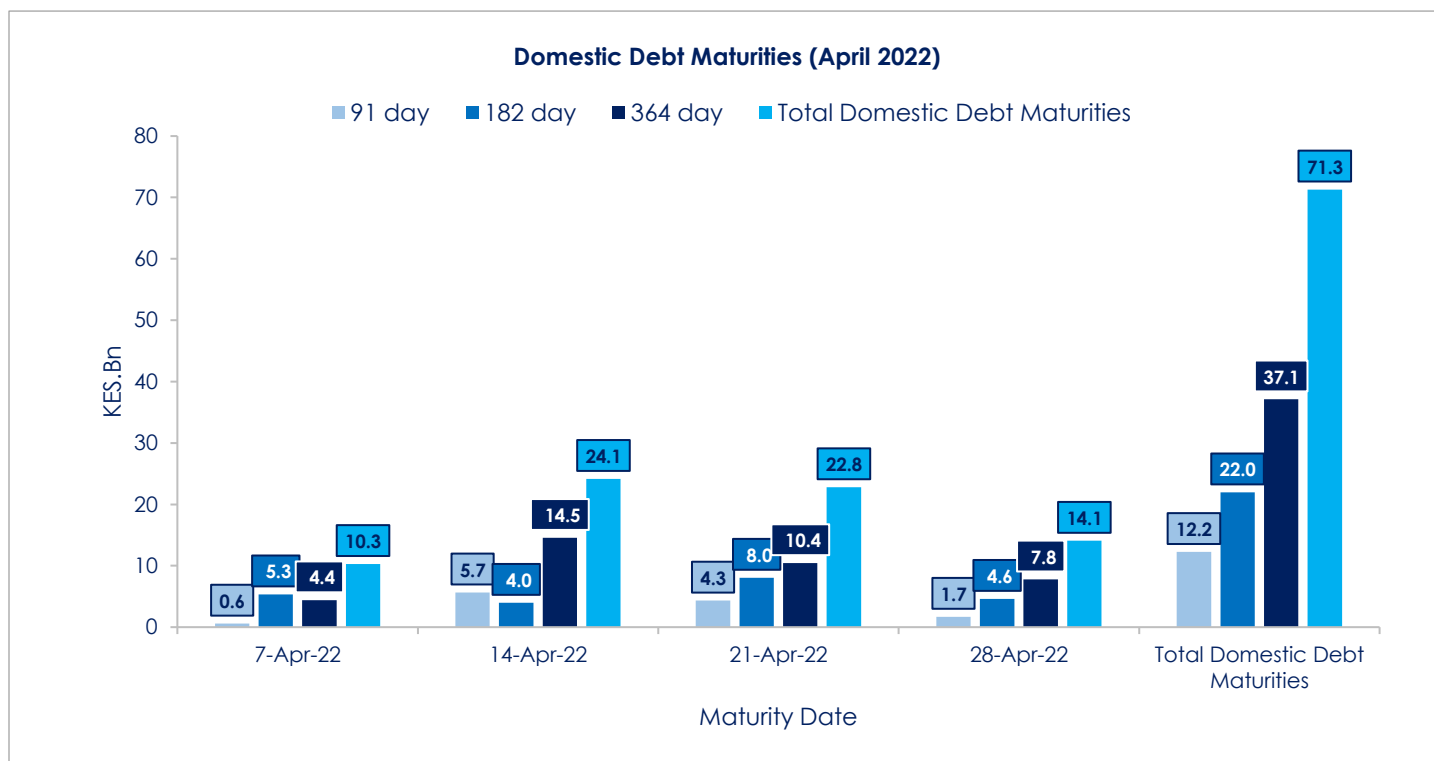
- Debt service for April 2022 amounts to KES.103.7Bn, lower than KES.124.72Bn in March (Figure.9).
- This comprises of KES.71.3Bn and KES.32.4Bn in T-Bill redemptions and bond coupon payments respectively.
- Total redemptions for the 91, 182 and 364-day T-Bills will decline in April to KES.12.2Bn, KES.22Bn and 37.1Bn compared to KES.16.9Bn, KES.29.1Bn and KES.53.9Bn in March respectively (Figure.10).
- The second week of April will have the highest redemptions (KES.24.1Bn).

Figure.9: April 2022 debt service KES.104Bn



Source: Central Bank of Kenya

Figure.10: Weekly debt maturities April 2022



Source: Central Bank of Kenya

Tax revenues fall below 2021/22 fiscal budget run-rate target

- Total tax receipts stood at KES.1.13Tn equivalent to 66% of total estimated tax receipts for the 2021/22 fiscal year - KES.1.7Tn (Table.5 and Figure.11).
- This however is a slight decline below the linear target run rate after 8 months of the fiscal year - 66.7%.
- Tax receipts were above the target run rate in the months of December 2021 and January 2022 showing the positive impact of the lifting of several Covid-19 containment measures in October 2021 on economic activity.
- Domestic borrowing stood at KES.631.1Bn (62.6%) of the fiscal year target still short of our linear target run rate.
- It is on the basis of this trend that we see an increase in CBK bond issuance and acceptance rates in primary debt auctions towards the end of the fiscal year.
- External borrowing stood at KES.50Bn or 13.2% of the fiscal year target, this being before the approval of a KES.750\$Mn (KES.85.9Bn) Development Policy Operation (DPO) loan from the World Bank approved mid-March 2022.
- The issuance of a US\$.1- US\$.1.1Bn Eurobond (KES.114.5Bn - KES.126Bn) will further boost external debt receipts for the current fiscal year.

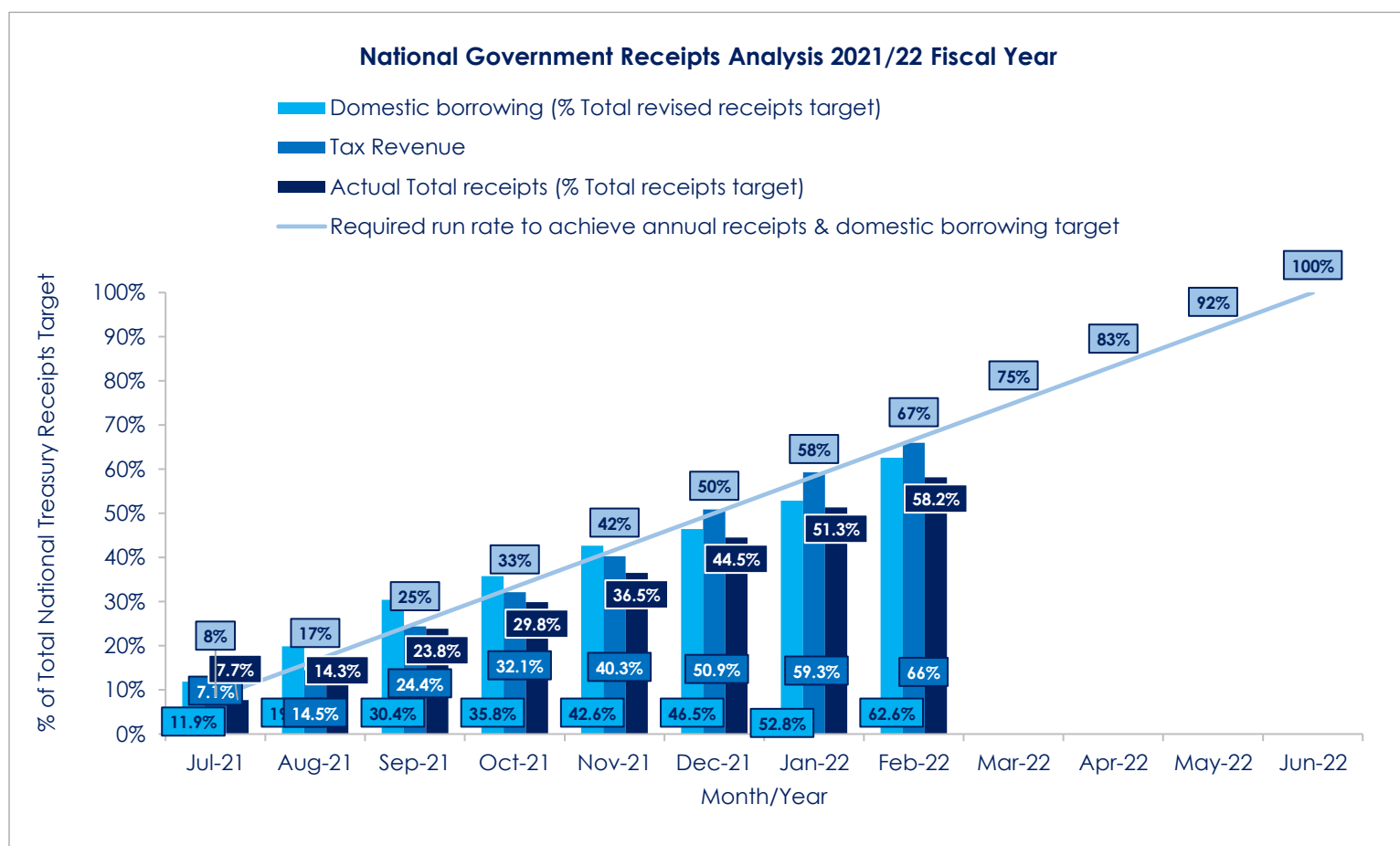
Table.5: 2020/21 tax receipts slip below linear target run-rate

Receipts	Original Estimates July 2021 (KES.Bn)	Actual Receipts 31 st Jan 2022 (KES.Bn)	Actual Receipts 28 th Feb 2022 (KES.Bn)	Proportion of Total Receipts 28 th Feb 2022 (KES.Bn)
Opening Balance (1 st July 2021)		21.3	21.3	-
Tax Revenue	1,707.4	1,011.7	1,126.4	66
Non-Tax Income	68.2	42.3	45.1	66.1
Domestic Borrowing*	1,008.4	532.9	631.1	62.6
External Loans & Grants	379.7	47.3	50	13.2
Other Domestic Financing	29.3	5.3	5.3	18.1
Total Revenue	3,193	1,660.8	1,857.9	58.2
Linear Run Rate target (8 months of fiscal year)				66.7

* 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. CXXIV - No.44 11th March 2022

Figure.11: National Treasury at 43% of 2021/22 fiscal year domestic borrowing target

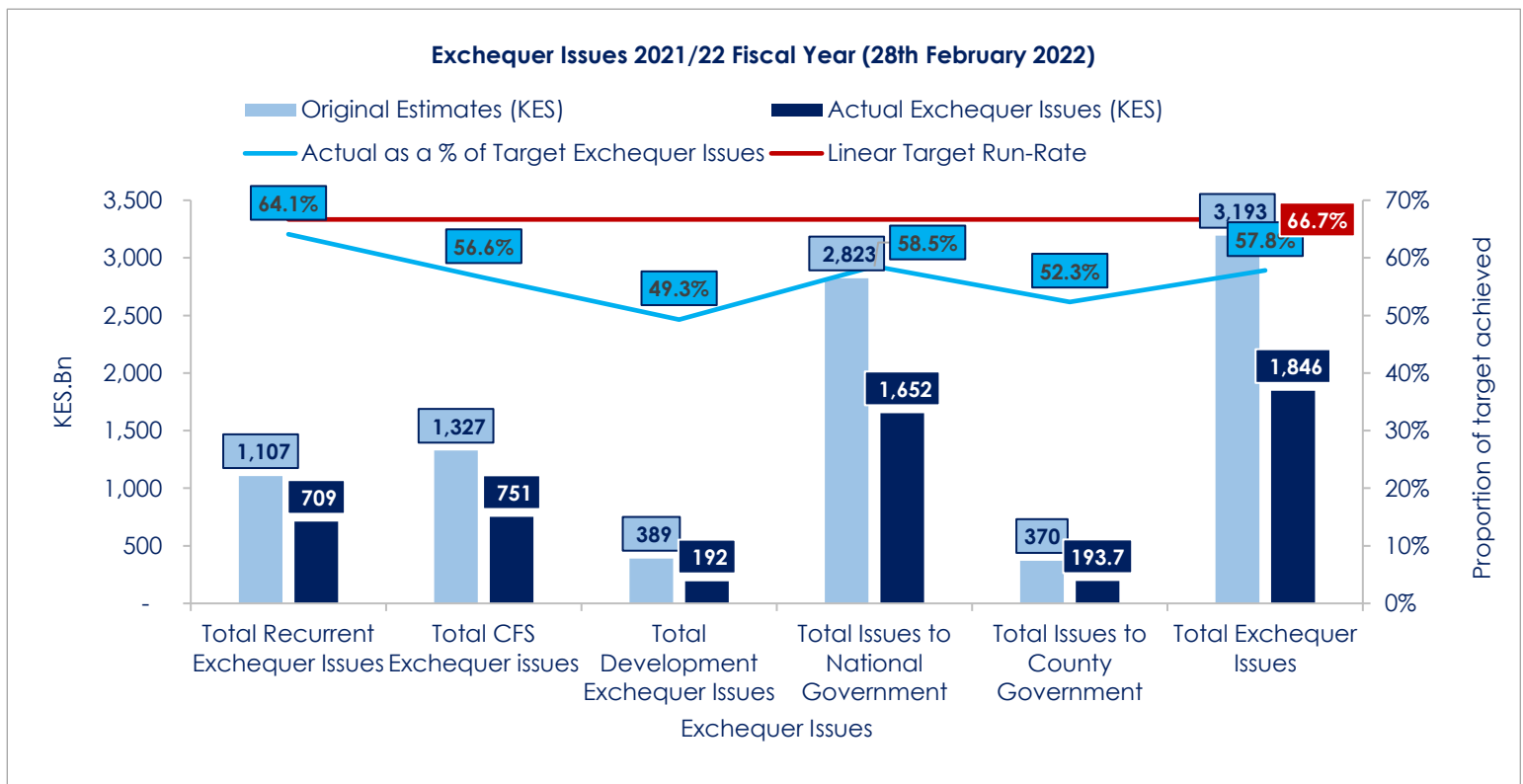


Source: The Kenya Gazette Vol. CXXIV - No.44 11th March 2022

Development expenditure & county transfers remain well below 2021/22 fiscal year run-rate targets

- Actual total Government expenditure as at the end of February 2022 stood at KES.1.85Tn equivalent to 57.8% of the total fiscal year target of KES.3.19Tn (Figure.12).
- This was also below our 66.7% linear target run-rate for the eight months of the 2021/22 fiscal year (Figure.12).
- Development expenditure at KES.191.8Bn (49.3%) and county transfers at KES.193.7Bn (52.3%) remain well below our run rate and it is expected that the National Treasury will ramp this up in the remaining months of the year.

Figure.12: Government expenditure remains below target run-rate estimates

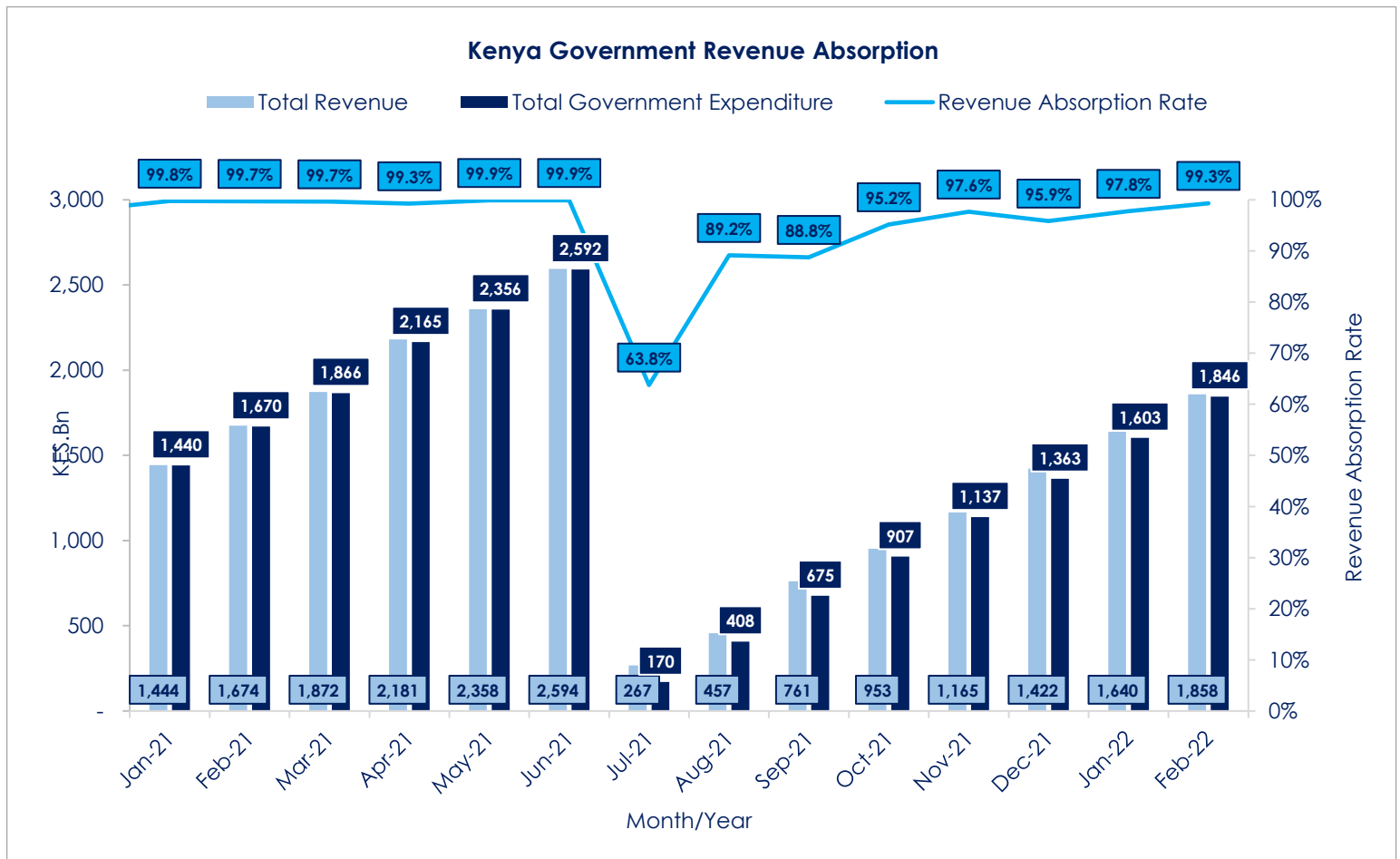


Source: The Kenya Gazette Vol. CXXIV - No.44 11th March 2022

Revenue Absorption improves in January 2022 but still below January 2021

- The Revenue Absorption Rate (RAA) which is the proportion of Government receipts used to finance expenditure stood at 99.3% in February an increase from 97.8% in January 2022 but lower than the same month in 2020 - 99.7% (Figure.13).
- Revenue absorption will remain high and almost at full absorption for the rest of the fiscal year ending June 2022.

Figure.13: Revenue absorption dips in December 2021

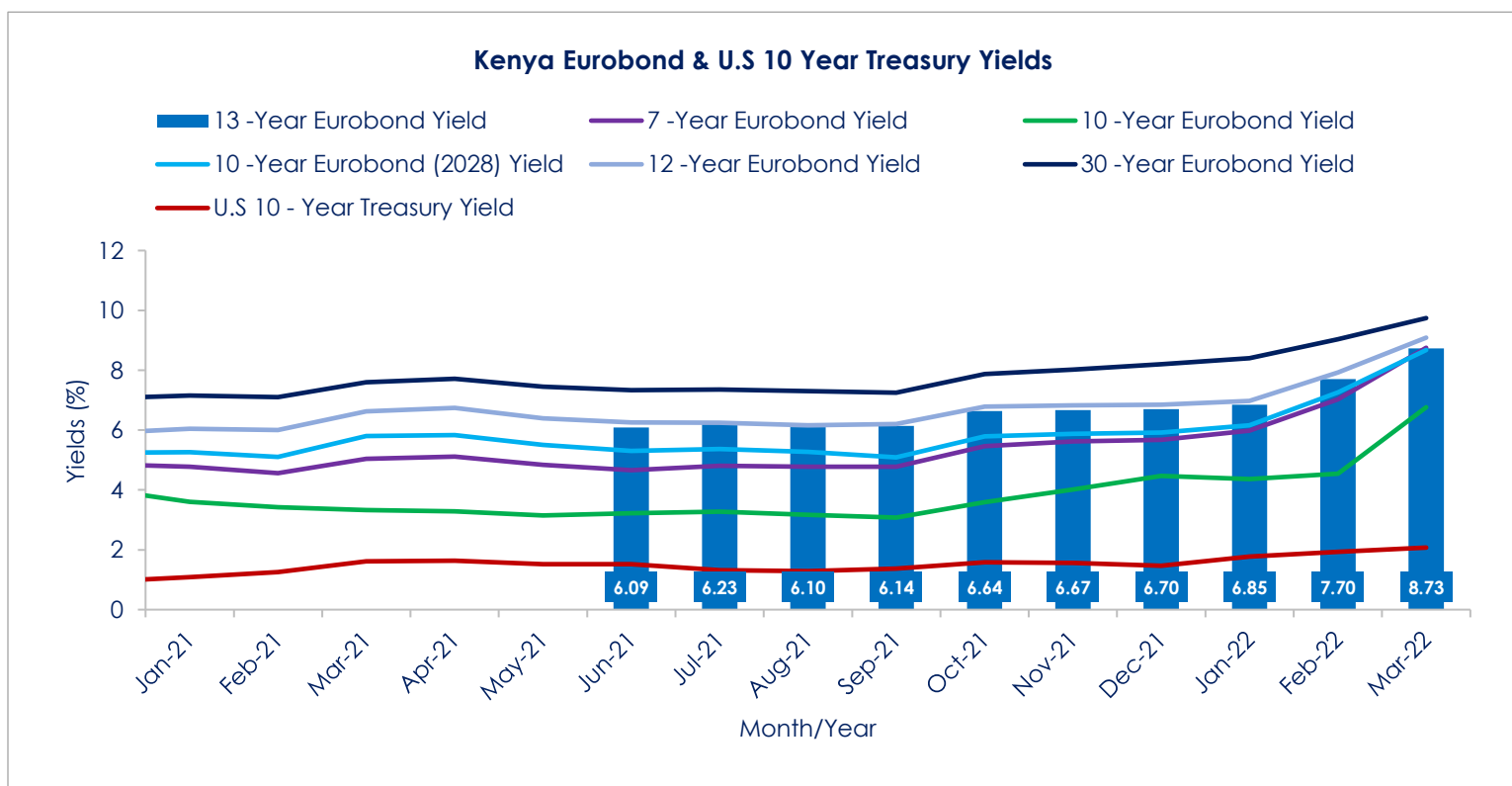


Source: The Kenya Gazette Vol. CXXIV - No.31 18th February 2022

Kenya Eurobond yields rise further with no end to the Russia-Ukraine crisis

- Average yields for all Government of Kenya Eurobond yields rose in March 2022 compared to the previous month (Figure.14).
- The biggest increase was reported in the 10 Year bond with an increase of 223bps.
- Average yields on the U.S 10-Year Treasury over the same period rose 14bps a reflection of the upward revision of the Fed rate to counter inflationary pressure from 0.25% to 0.5% on 16th March, the first revision since 2018.
- We expect the Kenya Eurobond bond yields to rise further due to the upward movement of interest rates and the impact of the Ukraine-Russia war which sparked negative investor sentiment.

Figure.14: Kenya Eurobond yields rise in February 2022

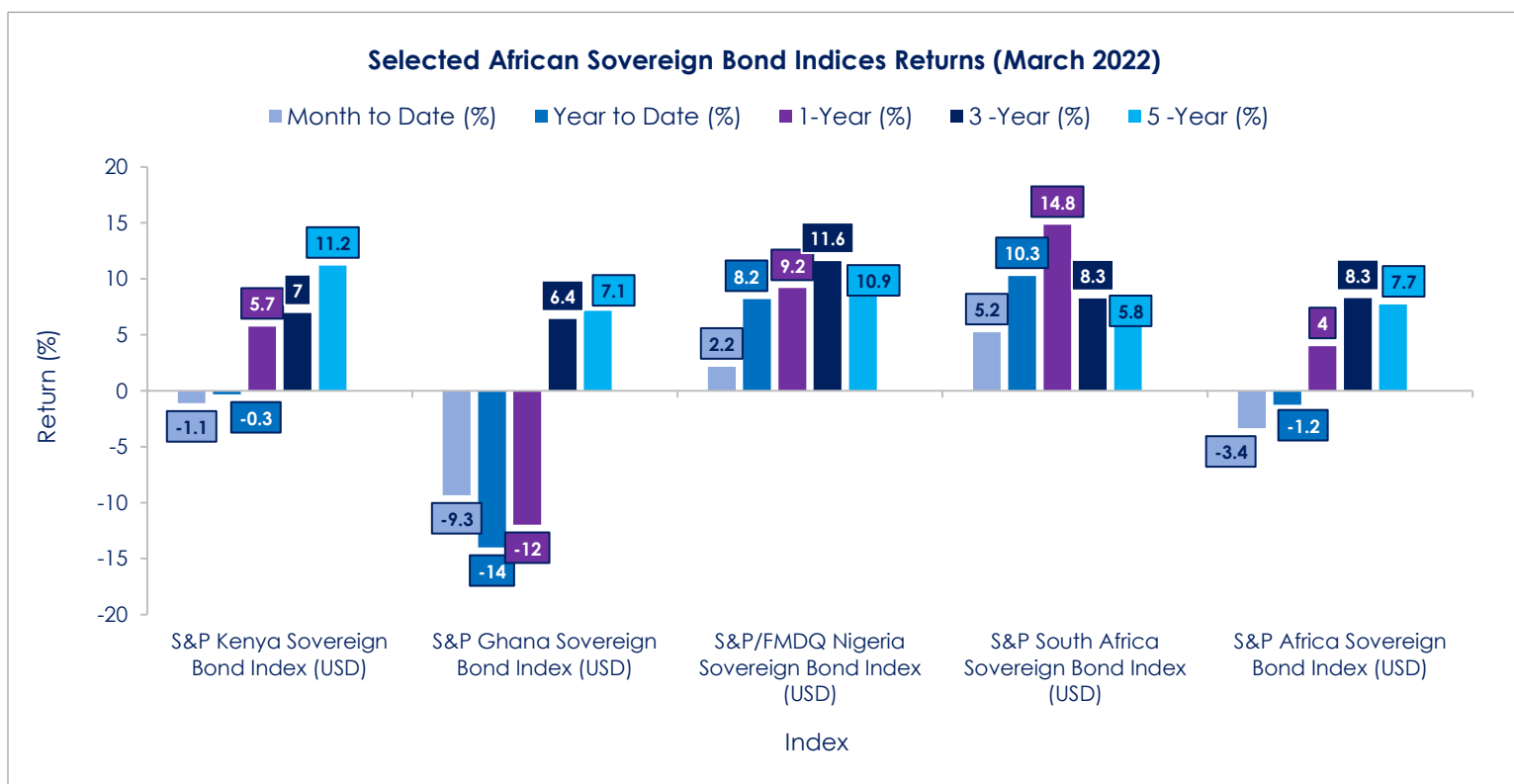


Source: Central Bank of Kenya

Nigerian sovereign bond index tops month and annual performance

- The S&P South Africa Sovereign bond index is the top performing bond index amongst our comparables Year-to-Date (YTD) and over the last 1 year with 10.3% and 14.8% in gains respectively while the Ghanaian index is the worst performer over the same periods (Figure.15).
- The Kenya sovereign bond index is the top performing index over the last 5 years (+11.2%) but has failed to return positive gains over the last 1 year and YTD.
- Poor investor sentiment driven by the Russia-Ukraine crisis, currency depreciation and the upward adjustment of benchmark policy rates are some of the reasons behind this poor index performance which is expected to continue in the short-term.

Figure.15: S&P South Africa bond index top performer year to date and over the last 1 year



Source: S&P Global

Yield curve has shifted upwards over the last year

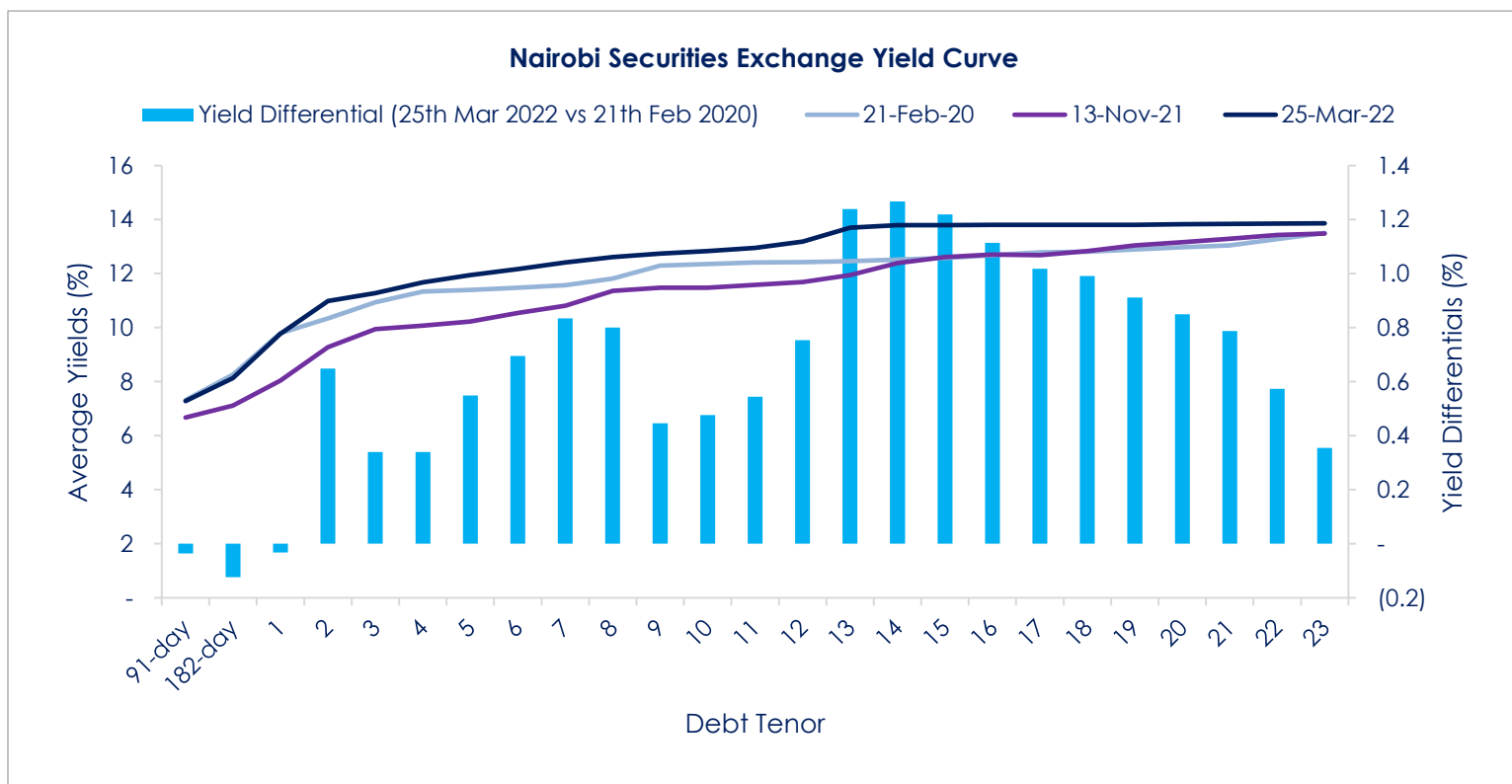
- We have done a comparison of average yields in different periods in our analysis of yield curve movements and as a basis of making a prediction of the future short-term direction (Table.6 and Figure.16).
- The following yield NSE yield curves were selected and the reasons for the section given below:
 - 1) Current yield curve as at 25th March 2022 - Used to identify current market interest rate levels.
 - 2) Yield curve as at 27th March 2021 - Selected for comparison purposes. That is, to show differences in yields over the last 1 year.
 - 3) Yield curve as at 24th February 2020 - Yields at the time of the first issuance of **FXD1/2020/15**, the most recent new 15 - year debt issue.
 - 4) Yield curve as at 13th November 2021 - In the absence of a 3 year debt issue, we selected the most recent 5 - year debt issue **FXD1/2021/5** as a benchmark for the new issue.
- We observe higher yields across all debt tenors in March 2022 compared to the other three periods under review.
- This can be explained by the CBK's efforts to drive demand for longer dated debt by accepting higher investor bids in debt auctions as a strategy to lengthen the Average Tenor to Maturity (ATM) of public debt.
- We anticipate a further gradual increase in interest rates across the yield curve in first half of 2022 due to increased domestic debt financing.
- The expected rise in interest rates is likely to lead to the yield curve further shifting upwards.
- The current yield curve is normal with short-term debt instruments having a lower yield than long-term debt instruments and on this basis we expect a lower yield for FXD1/2022/3 than that for FXD1/2022/15.
- We maintain our recommendation of **BUY short and HOLD long term papers.**

Table.6: Yield curve has shifted upwards Year on year (Yoy)

Tenor	Yields (21 st Feb 2020)	Yields (13 th Nov 2021)	Yields (27 th Mar 2021)	Yields (25 th Mar 2022)	Δ (25 th Mar 2022 vs 21 st Feb 2020) Bps	YOY Δ (25 th Mar 2022 vs 27 th Mar 2021) Bps	Δ (25 th Mar 2022 vs 13 th Nov 2021) Bps	Sterling Capital Yield Curve (April)
1	9.7990	8.0420	9.0450	9.7670	↓ 3	↑ 72	↑ 173	10.00
2	10.3435	9.2857	10.0375	10.9920	↑ 65	↑ 96	↑ 171	11.00
5	11.3965	10.2277	11.5001	11.9451	↑ 55	↑ 45	↑ 172	12.00
10	12.3542	11.4840	12.2532	12.8305	↑ 48	↑ 58	↑ 135	13.80
15	12.5782	12.6184	12.7196	13.7973	↑ 122	↑ 108	↑ 118	13.85
20	12.9750	13.1598	13.2452	13.8245	↑ 85	↑ 58	↑ 66	13.95

Source: Nairobi Securities Exchange

Figure.16: Short, medium and long-term tenors rise Year on year (Yoy)

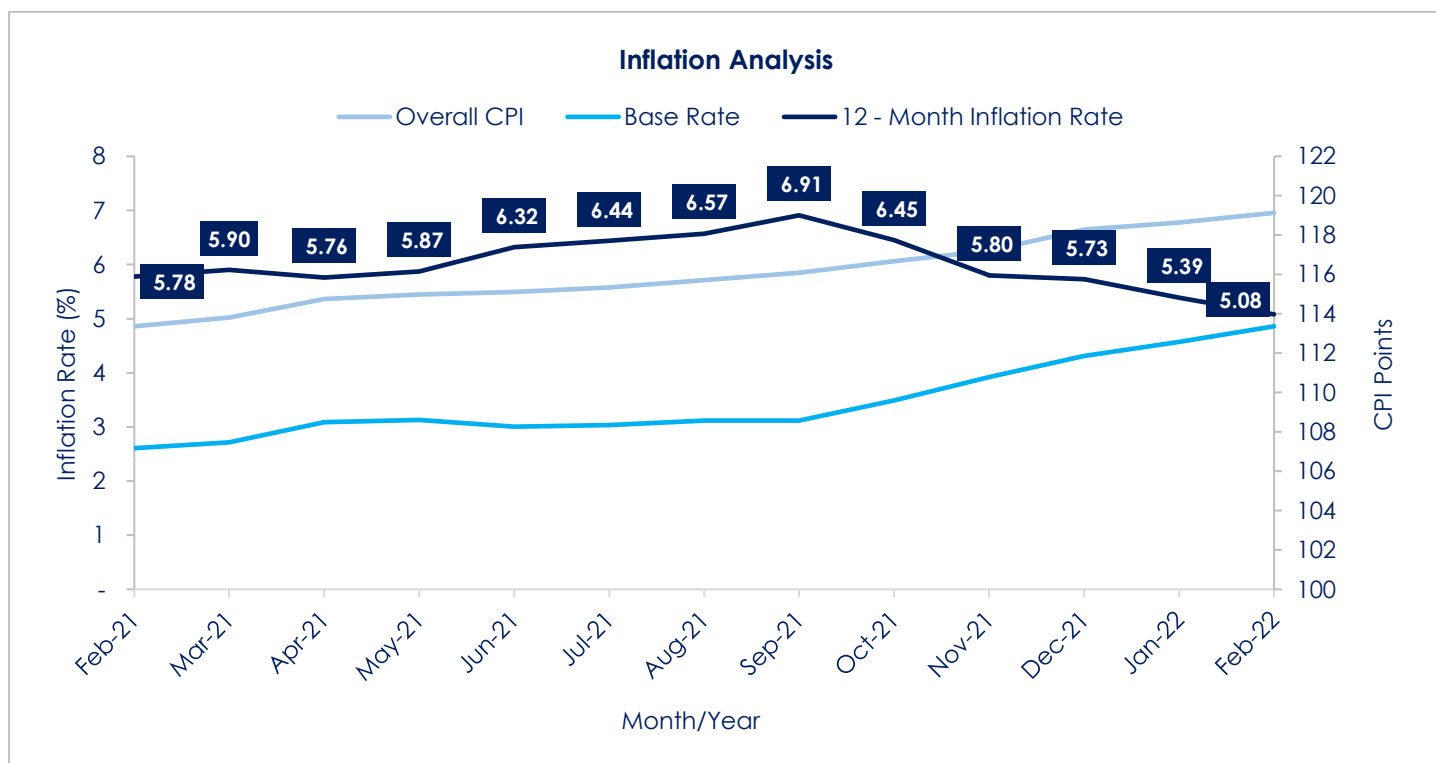


Source: Nairobi Securities Exchange

Uptick in March 2022 inflation expected due to Russian-Ukraine crisis

- Inflation for February 2022 declined to a 16 month low of 5.08% which was also lower than 5.39% in January (Figure.17).
- Sanctions placed on Russia by NATO and her allies have resulted in a sudden decline in the global supply and prices of Russian exports, notably crude oil, natural gas, wheat and cooking oil.
- Kenyan consumers, have been cushioned against the price hikes by the Government fuel subsidy until March 2022 (partial subsidy).
- Manufacturers are expected to pass on the increase in raw material import costs to the end consumer through prices of finished products.
- A combination of the above together with the rising prices of locally produced agricultural products due to adverse weather conditions will result in high food, fuel, transport and other related prices.
- We therefore expect an uptick in inflation for March: 5.5% - 6.5% and see it remaining within the medium and upper inflation bands of 5% - 7.5% through 2022.

Figure.17: Short-term inflation forecast 5.5% - 6.5%



Source: Kenya National Bureau of Statistics

MPC to hold monetary policy steady in March meeting

- The Monetary Policy Committee (MPC) met on Tuesday, 29th March 2022 to review the impact of previous monetary policy measures on the economy.
- The following were the main focus points:
 - 1) Inflation is expected to remain within the target range in the near term, due to muted demand pressures and the policy interventions.
 - 2) Strong performance of the economy is expected in the first quarter of 2022 driven by construction, information and communication, wholesale and retail trade, transport and storage and manufacturing sectors.
 - 3) Resilience of the economy is expected, supported by recovery in agriculture and continued strong performance of the services sector.
 - 4) Exports remained strong, growing by 12.1% in the 12 months to February 2022 compared to a similar period in 2021 due to improved demand for tea exports from traditional markets.
 - 5) Imports of goods increased by 27.8% in the 12 months to February 2022 compared to a decline of 12.3% in the 12 months to February 2021, reflecting increased imports of oil and intermediate goods.
 - 6) CBK foreign exchange reserves, which stand at US\$7,850Mn (4.80 months of import cover) are adequate.
 - 7) Gross Non-performing Loans (NPLs) to gross loans rose to 14% in February 2022, compared to 13.1% in December 2021 attributable to challenges in businesses within certain sectors.
 - 8) Private sector credit increased to 9.1% in February 2022, from 8.6% in December 2021.
 - 9) The continued execution of the Economic Stimulus Programme and the Economic Recovery Strategy were also noted, which are expected to support the economy
- The above developments were not sufficient for a revision of the Central Bank Rate (CBR) and Cash Reserve Ratio (CRR) which will remain at 7% and 4.25% respectively.

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