
Wednesday, 31 March 2021

STERLING CAPITAL LIMITED

# Fixed Income Note

## April 2021

### "New restrictions, new risks to public finances"

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## Executive Summary

- Our fixed income report for the month of March 2021 titled **"New restrictions, new risks to public finances"** is an analysis of the Central Bank's (CBK) second and third Infrastructure Bond (IFB2021/18) in the current calendar and fiscal year respectively.
- The IFB with an implied term to maturity tenor of 13.5 years seeks to raise KES.60Bn to finance the budget deficit.
- Our weighted average bid predictions on what we expect to be oversubscribed issue are as follows:

  **Weighted Average Rate (WAR) of investor bids: 12.89% - 12.99%**

  **Weighted Average Rate of accepted bids: 12.69% - 12.79%**

- The report analyses investor primary auction preferences, short-term domestic debt interest rates, secondary market trading activity and market liquidity.
- Domestic maturities have a huge impact on CBK's borrowing strategy and this debt service is analysed in the report.
- We also give trading ideas based on current and expected yield curve movements.
- Also analysed is domestic debt auction activity in terms of subscription, trading activity and interest rates.
- The country's fiscal position; revenue, expenditure, financing deficit and borrowing needs are also covered in this report.
- The report includes an analysis of the yield curve over selected periods in the last two years.
- We 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 18-year amortized IFB the third of 2020/21 fiscal year

- The Central Bank of Kenya (CBK) is inviting bids for a 18-Year amortized Infrastructure Bond (**IFB1/2021/18**), to raise KES.60Bn in this month's bond issue (Table.1).
- The second IFB issue in 2021 but the third in the 2020/21 fiscal year will have a market determined coupon.
- Redemption will be in two tranches, with the first tranche of 50% redeemed in April 2030 and the remaining 50% at expiry in April 2039.
- CBK has issued a third IFB in the 2020/21 fiscal year to enable the Government bridge its fiscal deficit and lengthen debt maturity amid falling revenues.
- We expect the issue to be oversubscribed as is often the case with IFBs on account of its tax-free status and capital flight by risk averse investors from the Nairobi Securities Exchange (NSE).

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

| **Issue Number** | **IFB1/2021/18** |
|---|---|
| Total Amount Offered | KES.60Bn |
| Tenor (Years) | 18 Years |
| Effective Tenor | 13.5 Years |
| Coupon Rate (%) | Market Determined |
| Issue Price | Discounted/Premium/Par |
| Period of Sale | 26th March 2021 to 6th April 2021 |
| Auction Date | 7th April 2021 |
| Value Date | 12th April 2021 |
| **Yield Curve (%) (Weighted Average tenor - 13.5 years) 31st Dec 2020** | **12.6622** |

Source: Central Bank of Kenya

## IFB1/2021/18 amortized redemption structure

- IFB1/2021/18 has an amortizing redemption structure making its effective tenor 13.5 years (Table.2).

**Table.2: Amortized redemption tenor is 13.5 years**

| **Redemption Period** | **% of principal** | **Tenor Calculation** | **Weighted Tenor** |
|---|---|---|---|
| 9 Years (Apr 2021 - Apr 2030) | 50% | 50%*9 years | 4.5 years |
| 18 Years (Apr 2020 - Apr 2039) | 50% | 50%*18 years | 9 years |
| Effective tenor | | | 4.5 + 9.0 = 13.5 years |

Source: Central Bank of Kenya & Sterling Capital Research

## Our weighted average and accepted bids averages

- We arrived at our market weighted investor and CBK accepted bids estimates using by analysing yields of securities of similar tenors on the NSE as at 26th March, 2021 and discussions with fixed income traders (Table.3).

**Table.3: Auction bid predictions**

| Rate | IFB1/2021/18 |
|---|---|
| Market Weighted Average Rate (%) | 12.89% - 12.99% |
| Weighted Average Rate of Accepted Bids (%) | 12.69% - 12.79% |

Source: Sterling Capital Research

## Our predicted rates are guided by historical debt issues

- In our determination of possible investor's bids, we used implied yields of bonds of almost similar tenors to maturities on the NSE as at 26th March, 2021 (Table.4).

**Table.4: 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 |
|---|---|---|---|---|---|---|
| **IFB1/2019/16** | 28th Oct 2019 | 11.8 | 8th Oct 2035 | 14.5 (5,309) | 11.8500 | 12.3000 |

Source: Central Bank of Kenya

IFBs generally attract heavy investor demand due to tax status.

- Historic review of IFB auction results show the popularity for issues with tenors less than 20 years, more so the 12, 15 and 16-year (Table 5).
- The last most recently issued IFB (January 2021) - IFB1/2021/16 had a coupon rate of 12.26% and was oversubscribed (251%) largely due to its risk-free status and a relatively liquid market.
- Notable undersubscriptions included IFB1/2015/9 issued during a period of relatively high private sector lending and IFB1/2020/6 whose subscription was limited to investors in the maturing Treasury Bill Issue No. 2236/364.
- IFB1/2018/20 was undersubscribed due to the uncertainty in the interest rate environment at the time coupled with a short bidding period of only two days whereas issue IFB1/2019/25 had a long tenor.
- The risk free status and the "flight to safety" by equity investors to the more predictable fixed income securities due to the uncertainty in the market after the return of strict COVID-19 control measures will support our view on the subscription rate for this issue.
- CBK will likely accept more than its borrowing target due to high financing needs brought about by shortfall in revenue collection targets for the current fiscal year.

**Table.5: Historical primary market auction performance**

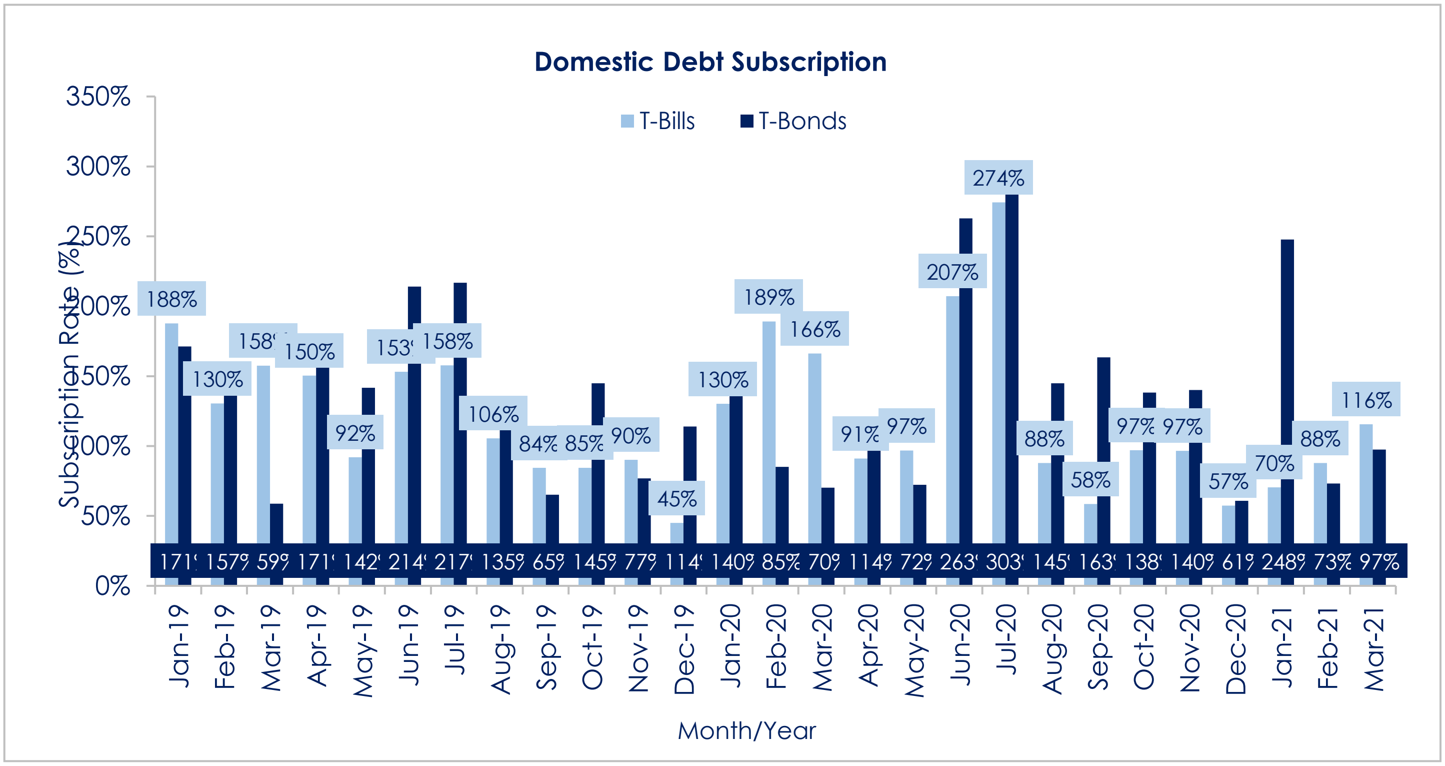
| Issue | Offered (KES.Bn) | Bids Received (KES.Bn) | Amount Accepted (KES.Bn) | Performance Rate (%) | Coupon Rate (%) | Implied Yield |
|---|---|---|---|---|---|---|
| IFB1/2014/12 | 15 | 38.8 | 15.8 | 258.5 | 11.00 | 10.2000 |
| IFB1/2015/12 | 25 | 51.7 | 25.7 | 206.6 | 11.00 | 10.4475 |
| IFB1/2015/12 (Tap) | 25 | 51.7 | 24.0 | 97.5 | 11.00 | 10.4475 |
| IFB1/2015/9 | 30 | 16.6 | 14.0 | 55.3 | 11.00 | 10.0680 |
| IFB1/2016/9 | 30 | 39.4 | 34.9 | 269.8 | 12.50 | 10.0210 |
| IFB1/2016/15 | 30 | 35.1 | 30.6 | 117.0 | 12.00 | 11.0800 |
| IFB1/2017/12 | 30 | 35.0 | 6.0 | 116.8 | 12.50 | 10.6750 |
| IFB1/2017/12 (Tap) | - | 8.0 | 7.6 | - | 12.50 | 10.6750 |
| IFB1/2017/7 | 30 | 45.9 | 42.0 | 153.0 | 12.50 | 10.2482 |
| IFB1/2018/15 | 40 | 55.8 | 5.0 | 139.4 | 12.50 | 11.3569 |
| IFB1/2018/15 (Tap) | | - | 36.3 | | 12.50 | 11.3569 |
| IFB1/2018/20 | 50 | 40.4 | 27.6 | 80.8 | 11.95 | 11.6998 |
| IFB1/2018/20 (Tap) | | - | 8.73 | - | 11.95 | 11.6998 |
| IFB1/2019/25 | 50 | 29.4 | 16.3 | 58.8 | 12.20 | 11.9422 |
| IFB1/2019/16 | 60 | 86.9 | 68.5 | 144.9 | 11.75 | 11.8500 |
| IFB1/2020/9 | 60 | 68.4 | 39.0 | 114.0 | 10.85 | 10.8476 |
| IFB1/2020/9 (Tap) | 21 | 37.8 | 35.4 | - | 10.85 | 10.8476 |
| IFB1/2020/6 | 26 | 21.2 | 19.3 | 82.7 | 10.20 | 9.9583 |
| IFB1/2020/11 | 70 | 101.5 | 78.6 | 145.0 | 10.90 | 11.0721 |
| IFB1/2021/16 | 50 | 125.5 | 81.1 | 251.0 | 12.26 | 11.7617 |

Source: Central Bank of Kenya

## T-bills subscriptions soar in March 2021

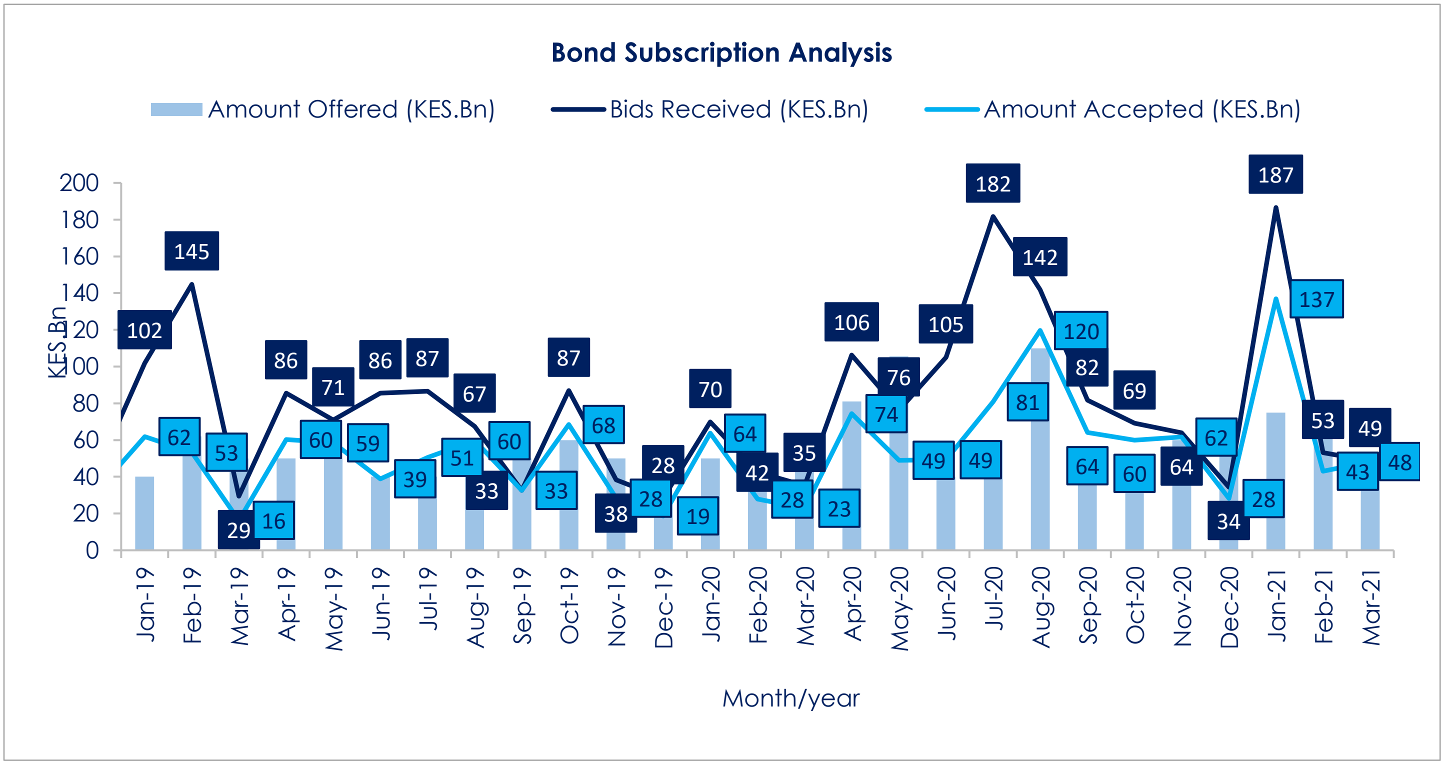
- The CBK received T-bills bids worth KES.138.7Bn against KES.120Bn offered in March 2021, translating to a subscription rate of 115.6% compared to 87.9% in February (Figure.1).
- The 364-day T-Bill recorded the highest subscription at 156.1%, attributable to the gradual rise in interest rates while the 91-day and 182 -day papers subscription stood at 132% and 68.5% respectively.
- The re-opened T-Bonds (FXD1/2013/15 & FXD1/2012/20) received bids worth KES.41.9Bn against KES.50Bn offered (83.8% subscription rate) while the Tap sale (KES.18Bn) received bids worth KES.11.2Bn, equivalent to a 62.2% subscription rate (Figure.2).

**Figure.1: T-bond subscriptions increase in March 2021**




Source: Central Bank of Kenya

**Figure.2: Bond subscriptions increase slightly in March 2021**

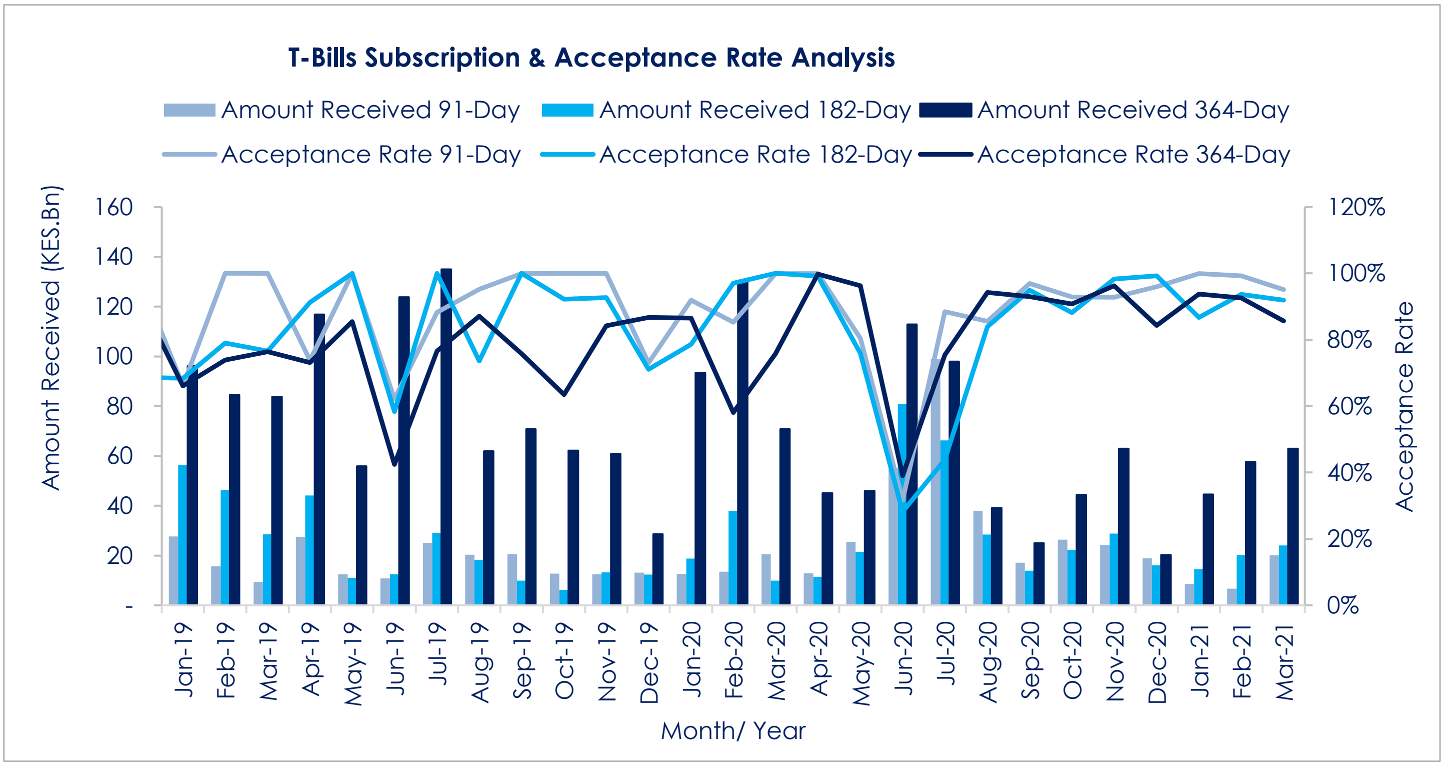



Source: Central Bank of Kenya

## Average T-Bill rates up in March 2021

- The rising budget deficit has resulted in increased pressure on the CBK to accept higher rates in T-Bill auctions, resulting in a gradual rise in short term domestic debt interest rates (Figure.3).
- The CBK continued the recent trend with a high acceptance rate of 87.7% during the period under review.

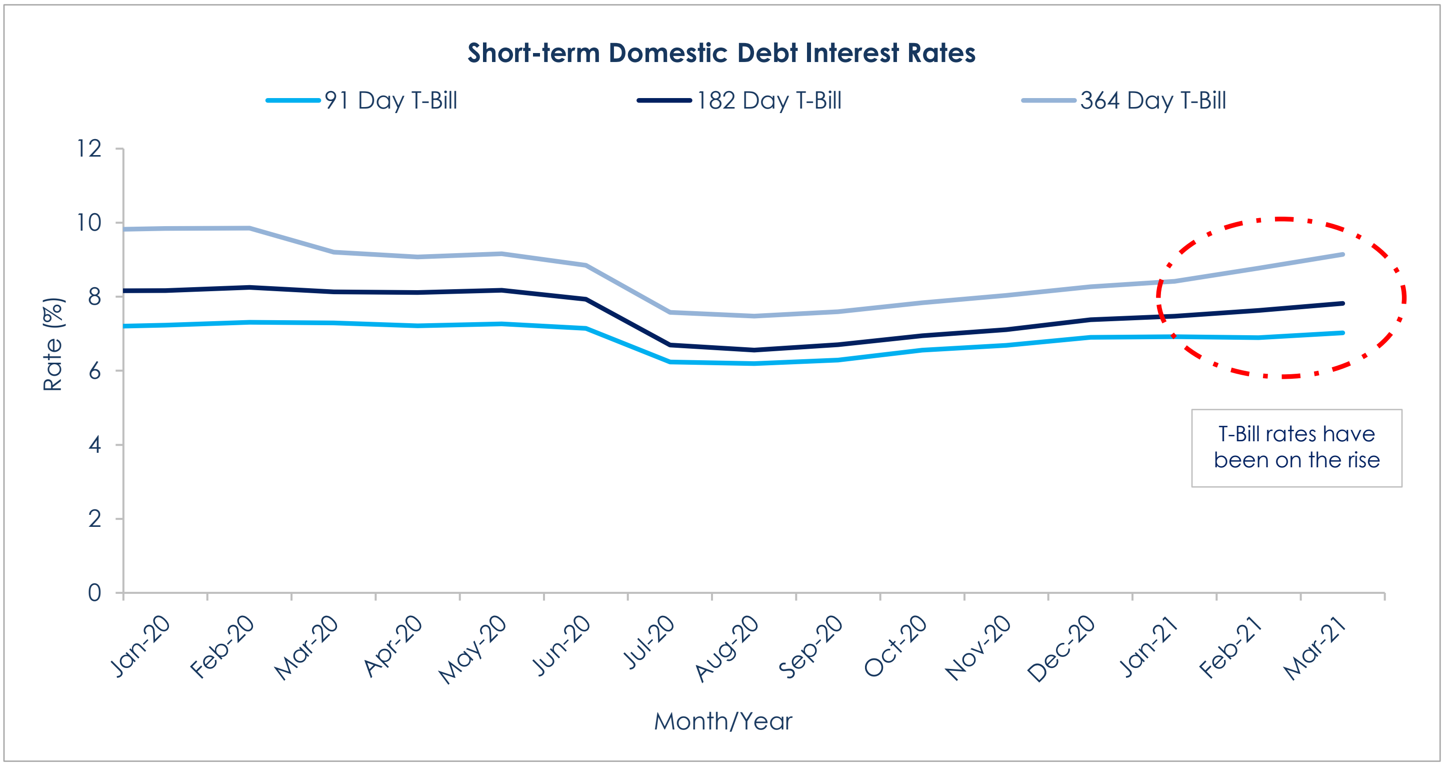
**Figure.3: CBK accommodating on higher investor bids due to budget financing pressure**




Source: Central Bank of Kenya

- Average interest rates for the 91, 182 and 364-day debt issues in March stood at 7%, 7.8% and 9.1% respectively a slight increase from 6.9%, 7.6% and 8.8% respectively (Figure.4).
- We expect the upward pressure on the short-end of the yield curve to continue in upcoming auctions due to the reasons mentioned above.

**Figure.4: Interest rates on short-term debt securities edge upwards**

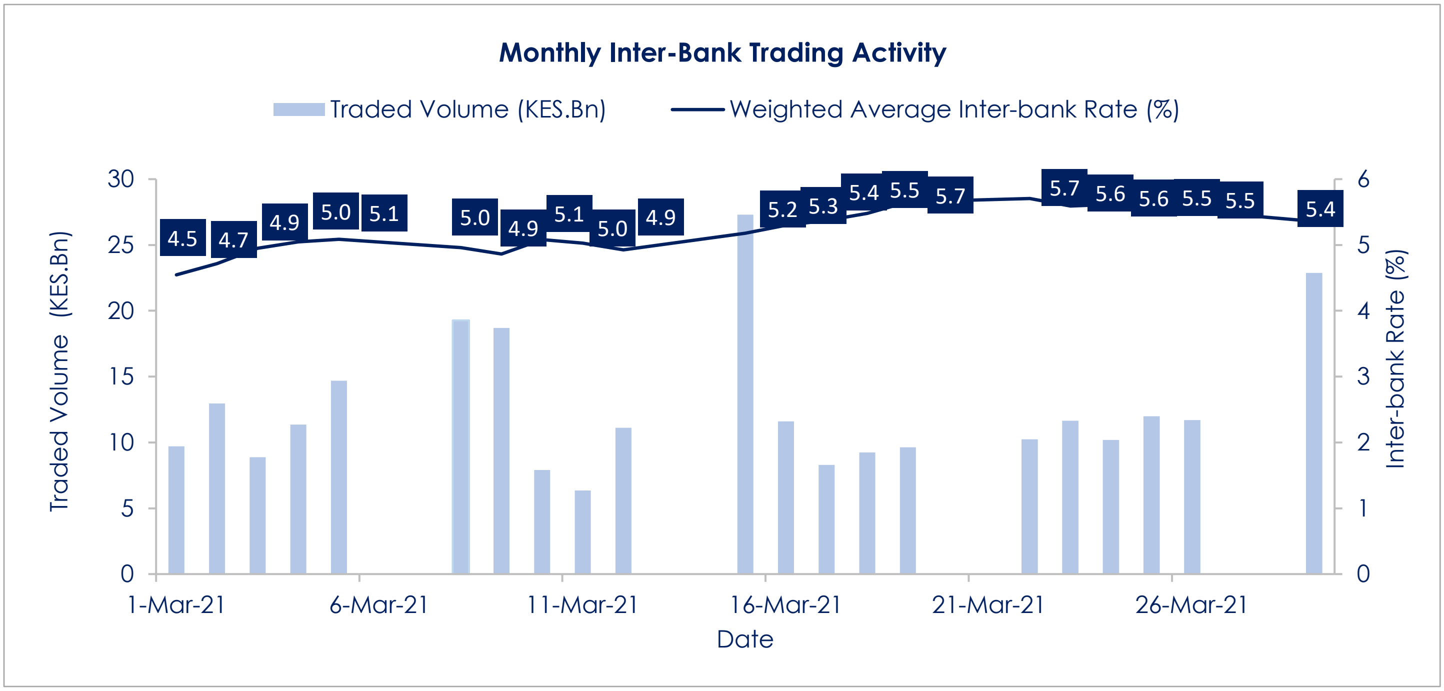



Source: Central Bank of Kenya

## Average inter-bank rate falls in February 2021

- The average inter-bank rate edged up in March 2021 to 5.2% compared to 4.5% in February as a result of declining market liquidity brought about by high investor participation in the primary bond market(Figure.5).
- Total inter-bank trading volumes increased 1.9% to KES.265.7Bn during the period under review.
- Our forecasted inter-bank rate for March 2021 is 5% - 5.5% as we anticipate high participation in the IFB by the banks, reducing market liquidity.

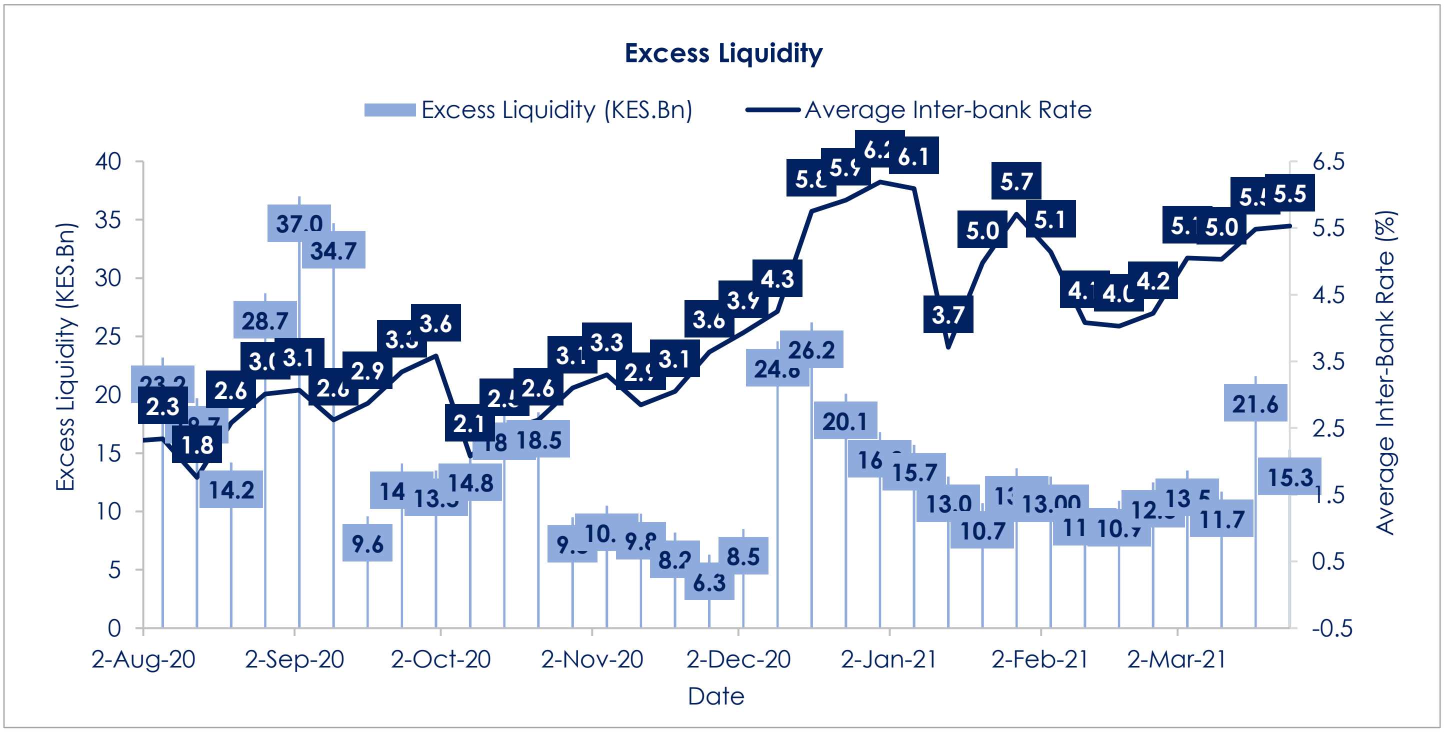
**Figure.5: Inter-bank rates to range between 4.5% and 5% in March 2021**




Source: Central Bank of Kenya

- Excess reserves (additional liquidity above the minimum 4.25% Cash Reserve Ratio (CRR)) over the same period stood at KES.62.1Bn an increase from KES.47.4Bn pointing to declining market liquidity (Figure.6).

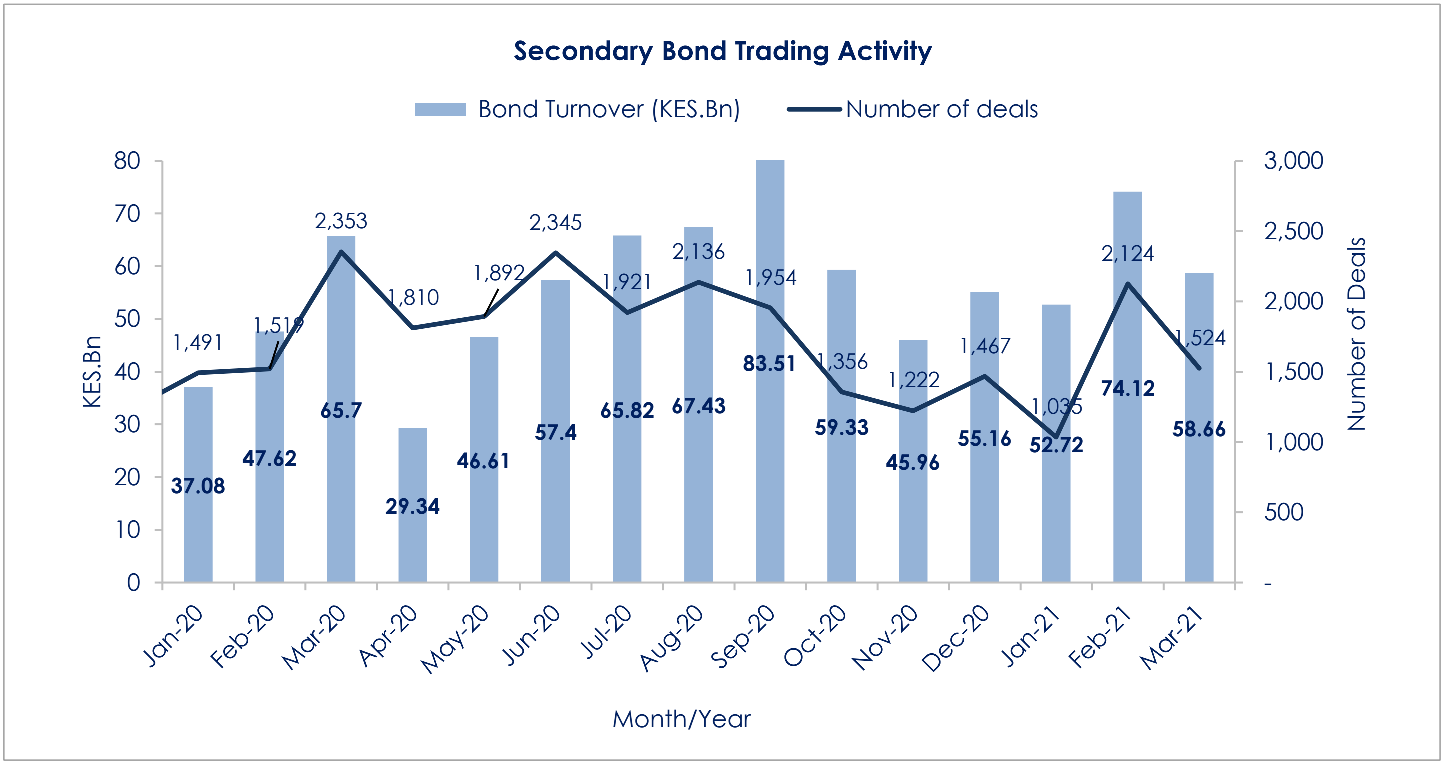
**Figure.6: Excess commercial bank reserves declined in March 2021**




Source: Central Bank of Kenya

- Secondary trading activity fell 20.9% in March 2021 compared to the previous month to KES.58.7Bn with the number of deals over the same period declined 28.2% to 1,524 (Figure.7).
- We attribute this to high market participation in the primary market, that moped up liquidity.
- We expect secondary turnover In April to decline compared to March as a result of high investor interest in this month's IFB issue.

**Figure.7: Secondary trading activity set to decline in March 2021**




Source: Nairobi Securities Exchange & Sterling Research

## Trading ideas - Buy IFB's

- Government securities remain a favourable investment option during the Covid-19 pandemic with most investors looking for predictable and less risky returns on capital invested.
- Our investment recommendation for investors with a Fixed Income allocation on their portfolio is to focus on IFBs.
- IFBs show significant price appreciation in the market, and we single out IFB1/2020/06 and IFB/2021/16 as suitable investment options (Table.6)

**Table.6: Trading ideas**

| Bond | Tenor (Years) | Coupon (%) | Modified Duration* (%) | Sterling Capital Yield to Maturity (%) | Current Yield** (%) |
|---|---|---|---|---|---|
| IFB1/2020/06 | 6 | 10.200 | 3.81 | 10.10 | 9.78 |
| IFB1/2021/16 | 16 | 12.260 | 6.86 | 12.05 | 11.60 |

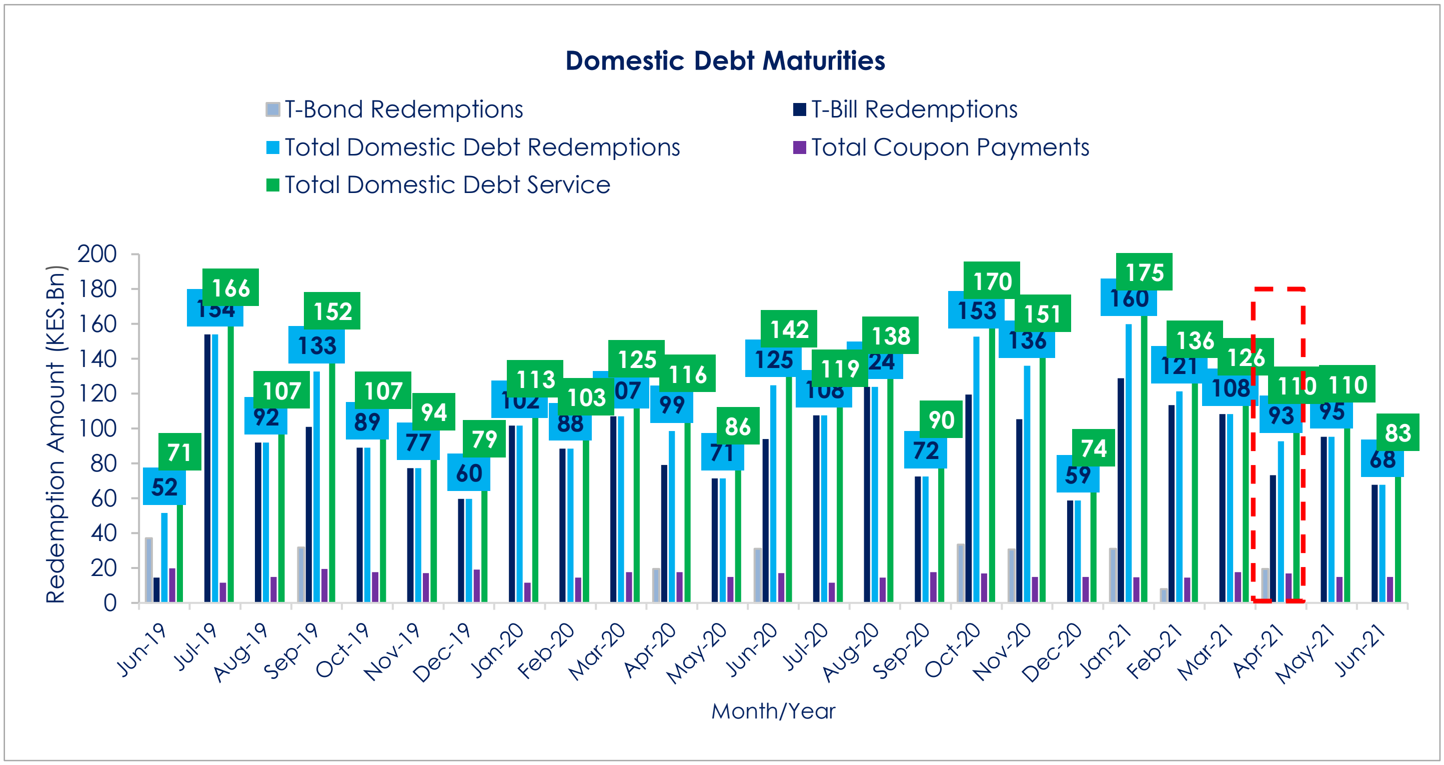
Source: Central Bank of Kenya

*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

## Domestic debt service to fall in April 2021

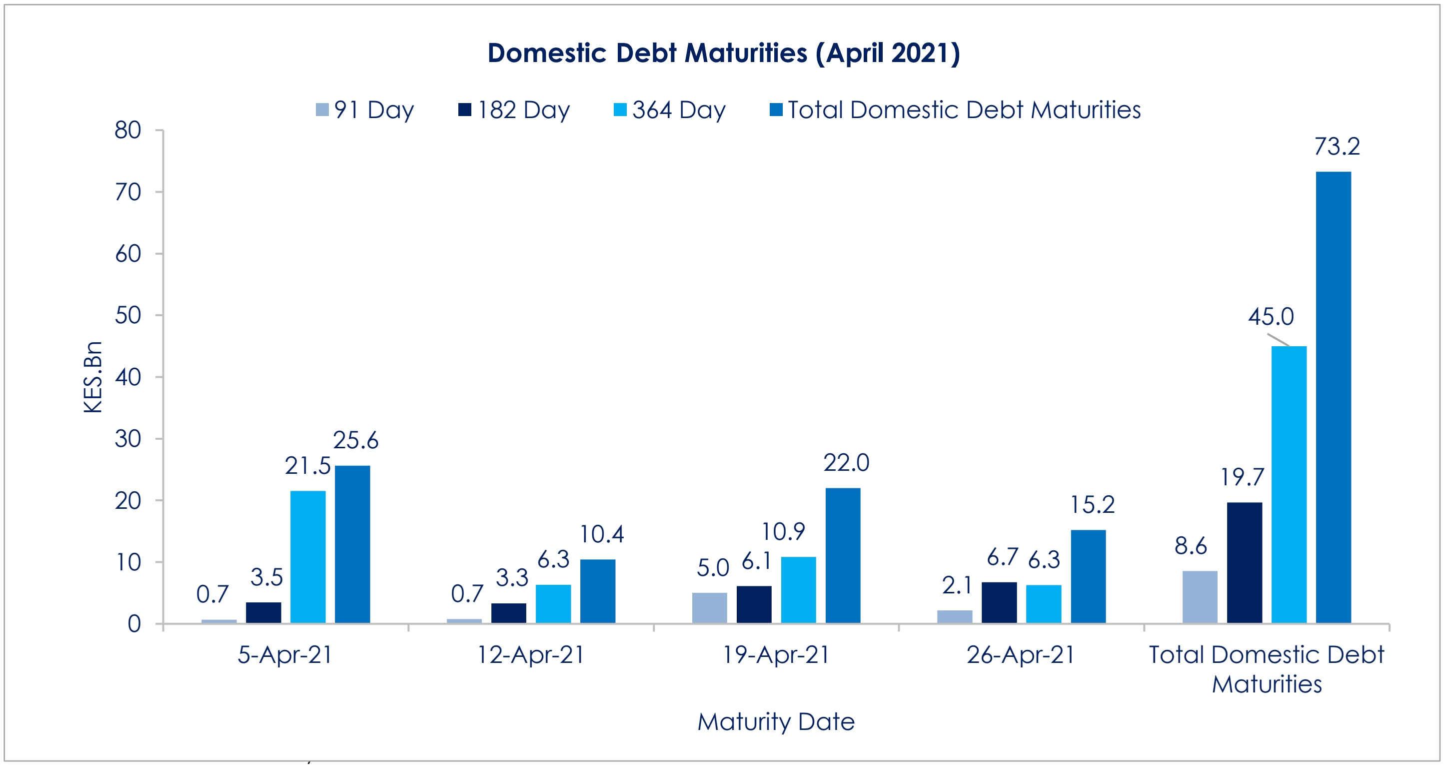
- With no T-Bond redemptions set for April 2021, there will be a reduction in domestic debt service for the month to KES.109.6Bn compared to KES.126Bn in March 2021 (Figure.8).
- This comprises of KES.73.2Bn in T-Bill redemptions and KES.16.8Bn in coupon repayments.
- Redemptions for the 91, 182 and 364-day T-Bills during the month were KES.8.6Bn, KES.19.7Bn and KES.45.0Bn respectively.
- The first week of the month will have the highest total redemptions of KES.25.6Bn (Figure.9).
- We observe that of the KES.143.4Bn raised in domestic debt auctions in March (KES.48.3Bn in T-Bonds and KES.95.1Bn in T-Bills), the 76% of the amount was directed towards debt redemptions (KES.108.3Bn) with the remainder as new borrowing.
- T-Bond and T-Bill redemptions and coupon payments for April 2021 are KES.19.5Bn, KES.73.2Bn and KES.16.8Bn respectively bringing total debt service to KES.109.6Bn.

## Figure.8: April 2021 domestic debt service to decline to KES.110Bn




Source: Central Bank of Kenya

## Figure.9: Weekly debt maturities April 2021




Source: Central Bank of Kenya

## New Covid-19 containment measures a risk to tax revenue generation

New containment measures to negative impact tax revenue and result in increased deficit financing.

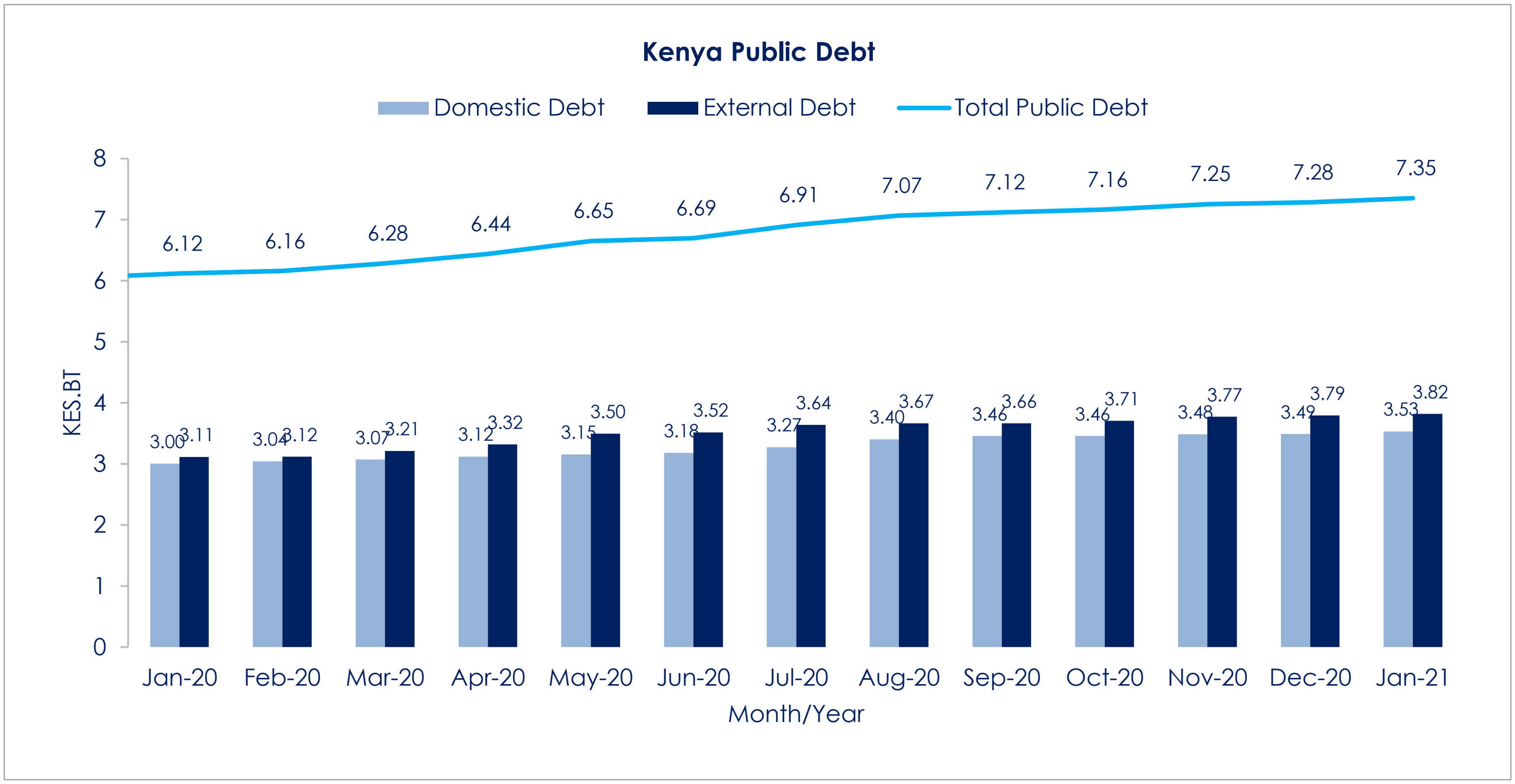
- On 27th March, the Government issued new directives to contain the spread of the Covid.19 virus following a sharp increase in new infections.
- Some of these restrictions including a ban on inter-county travel, revisions to curfew hours, reduction in business operating capacity are expected to have an adverse impact on the performance of economy.
- As was the case with previous containment measures, tax revenue will be severely affected and this will directly affect the ability of Government to finance its expenditure.
- The Government continues to fall well short of its revenue targets and has increased debt financing, a trend that we expect to continue during the period of the pandemic.

## Kenya Public Debt at KES.7.4 Trillion

Total public debt at KES.7.3Tn with a 48%/52% domestic/external debt funding mix

- Most recently available public debt data from the CBK shows Kenya's total public debt at KES.7.4Tn with domestic and external debt at KES.3.5Tn and KES.3.8Tn respectively (Figure.10).
- This is equivalent to a 20.2% increase over the same time in 2020 and is a clear indication of the fast pace at which the country is accumulating debt.
- This accumulation of debt is largely a direct result of the poor performance of tax revenue especially since the onset of the Covid-19 pandemic with the economy operating at less than full capacity.
- We expect a spike in public debt in the next few months as Government revenue continues to underperform against revised estimates and the Government attempts to finance the fiscal deficit through both domestic and external borrowing.
- We see a likely change in the 48%/52% domestic/external funding mix in favour of external debt as the National Treasury accesses the sovereign debt market and the possible issuance of a sovereign green bond both totaling approximately US$2.5Bn (KES.275Bn).

**Figure.10: Kenya Public debt at KES.7.4Tn, expected to rise sharply in the 2020/21 fiscal year**




Source: Central Bank of Kenya

Total tax revenue continues to underperform at 57.8% of 2020/21 fiscal year target

## 2020/21 Domestic borrowing well ahead of target but likely to be revised upwards

- Data from the National Treasury at the end of February 2021 shows domestic borrowing at KES.598.8Bn equivalent to 76.1% of the revised domestic borrowing and well above our linear target run-rate of 66.7% (Table.7 and Figure.11).
- Tax revenue continues to underperform at KES.906.2Bn (57.8% of the revised target.).
- Actual tax revenue at KES.906.2Bn is also equivalent to 56.9% of the supplementary budget 1 revenue target (KES.1,594Bn).
- This underperformance suggests increased borrowing from both domestic and external funding sources with domestic interest rates likely to continue on an upward trend.

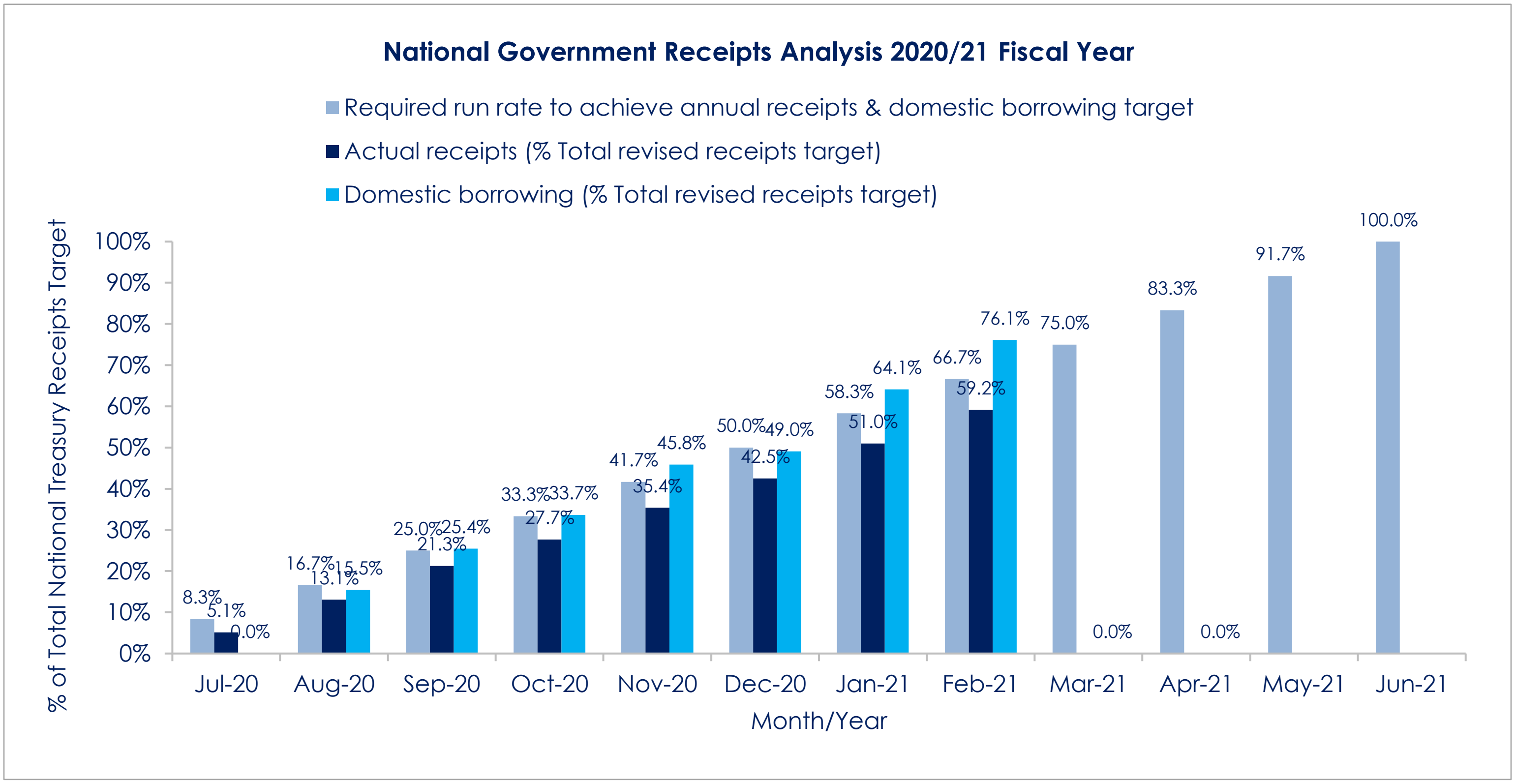
**Table.7: 2020/21 fiscal year revenues remain below target run-rate**

| Receipts | Original Estimates (KES) | Revised Estimates (KES) 31st August 2020 | Actual Receipts (KES) 31st January 2021 | Actual Receipts (KES) 26th February 2021 | Proportion of Receipt Target (KES) 26th February 2021 |
|---|---|---|---|---|---|
| Opening Balance (1st July 2020) | | | 48.0 | 48.0 | - |
| **Tax Revenue** | **1,567.6** | **1,567.6** | 784.9 | 906.2 | 57.8% |
| Non-Tax Income | 66.1 | 66.1 | 55.1 | 65.4 | 98.8% |
| **Domestic Borrowing** | 756.9 | 786.6 | 504.3 | 598.8 | 76.1% |
| External Loans & Grants | 373.2 | 373.2 | 48.3 | 53.0 | 14.2% |
| Other Domestic Financing | 36.8 | 36.9 | 3.0 | 3.0 | 8.3 |
| **Total Revenue** | **2,800.7** | **2,830.4** | **1,203.1** | **1,674.4** | **59.2%** |

* Note 1: Domestic Borrowing of KES.786.6Bn = Net Domestic borrowing KES.524.7Bn & Internal Debt Redemptions (Roll-overs) KES.262

Source: The Kenya Gazette Vol. CXXIII - No.51 12th March 2021

**Figure.11: 2020/21 Total revenue underperforming**




Source: The Kenya Gazette Vol. CXXIII - No.51 12th March 2021

## Steeper yield curve expected due to rising fiscal budgetary pressure

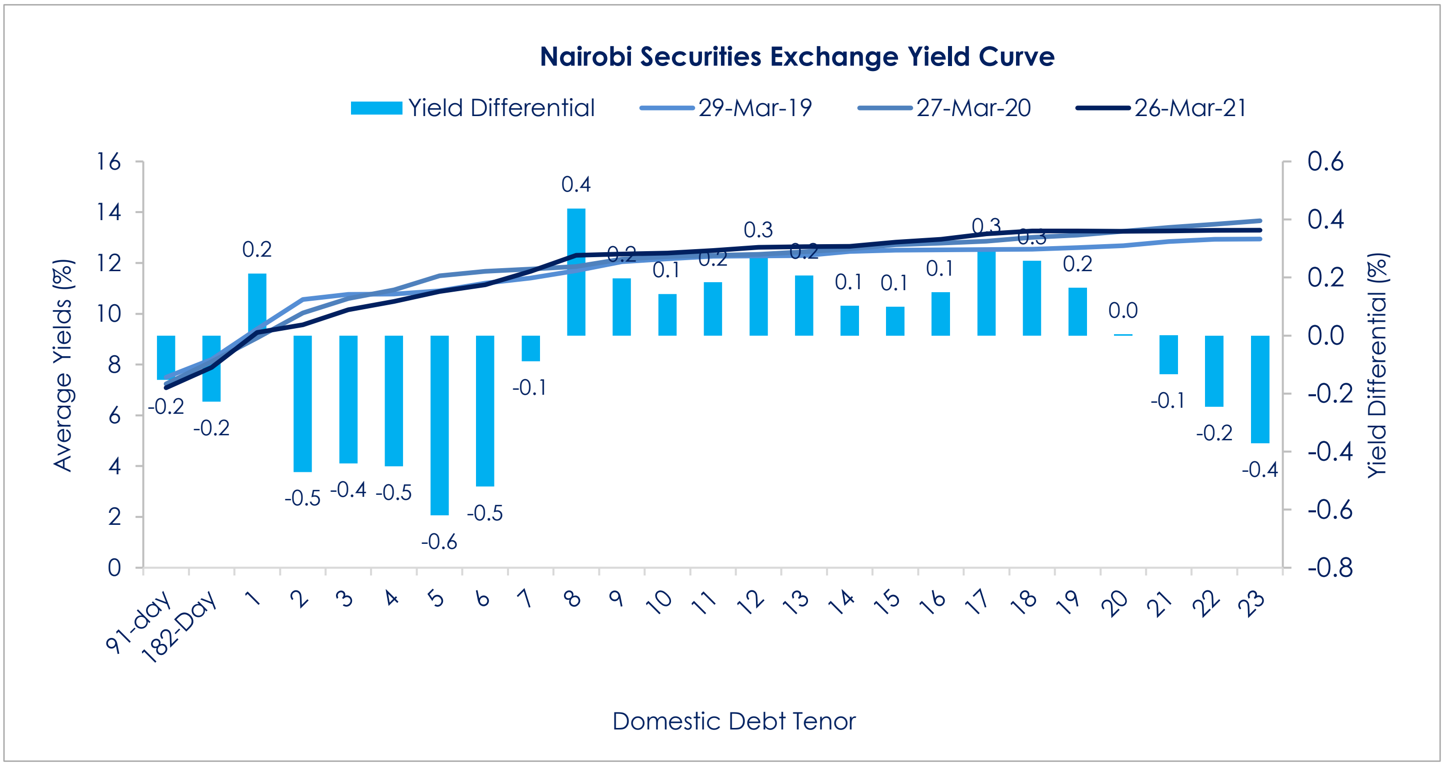
- A comparison of the NSE yield curves on 26th March 2021 and 29th March 2019 shows a significant decline in yields particularly on the short and medium tenors while those on the long-end rose (Table.8 and Figure.12).
- However, a comparison of yields on 26th March 2021 and 27th March 2020 shows a dip in 2-Year and 5-Year yields while those on the 1-Year and long end rose.
- The rise in yields on longer dated debt are a direct result of the CBK's strategy of accepting higher investor bids to drive investor demand in a bid to lengthen the debt maturity profile.
- We predict an increase in yields across the yield curve in 2021 due to increased domestic debt financing.
- We maintain our recommendation of **BUY short and HOLD medium-term and long term papers.**

**Table.8: Yields on the short end and medium-term debt issues decline**

| Tenor | Yield (29th Mar 2019) | Yield (27th Mar 2020) | Yield (26th Mar 2020) | YoY Δ 26th Mar 2021 vs 29th Mar 2019 (Bps) | YoY Δ 26th Mar 2021 vs 27th Mar 2020 (Bps) | Sterling Capital yield Curve (30th March 2021) |
|---|---|---|---|---|---|---|
| 1 | 9.4080 | 9.0450 | 9.2590 | ↓14.9 | ↑21.4 | 9.35% |
| 2 | 10.5633 | 10.0375 | 9.5673 | ↓99.6 | ↓47.0 | 9.65% |
| 5 | 10.9000 | 11.5001 | 10.8810 | ↓1.9 | ↓61.9 | 10.85% |
| 10 | 12.1621 | 12.2532 | 12.3964 | ↑23.4 | ↑14.3 | 12.45% |
| 15 | 12.5067 | 12.7196 | 12.8193 | ↑31.3 | ↑10.0 | 12.95% |
| 20 | 12.6875 | 13.2452 | 13.2492 | ↑56.2 | ↑0.4 | 13.35% |

Source: Nairobi Securities Exchange

**Figure.12: Yields on the long-end rising gradually**

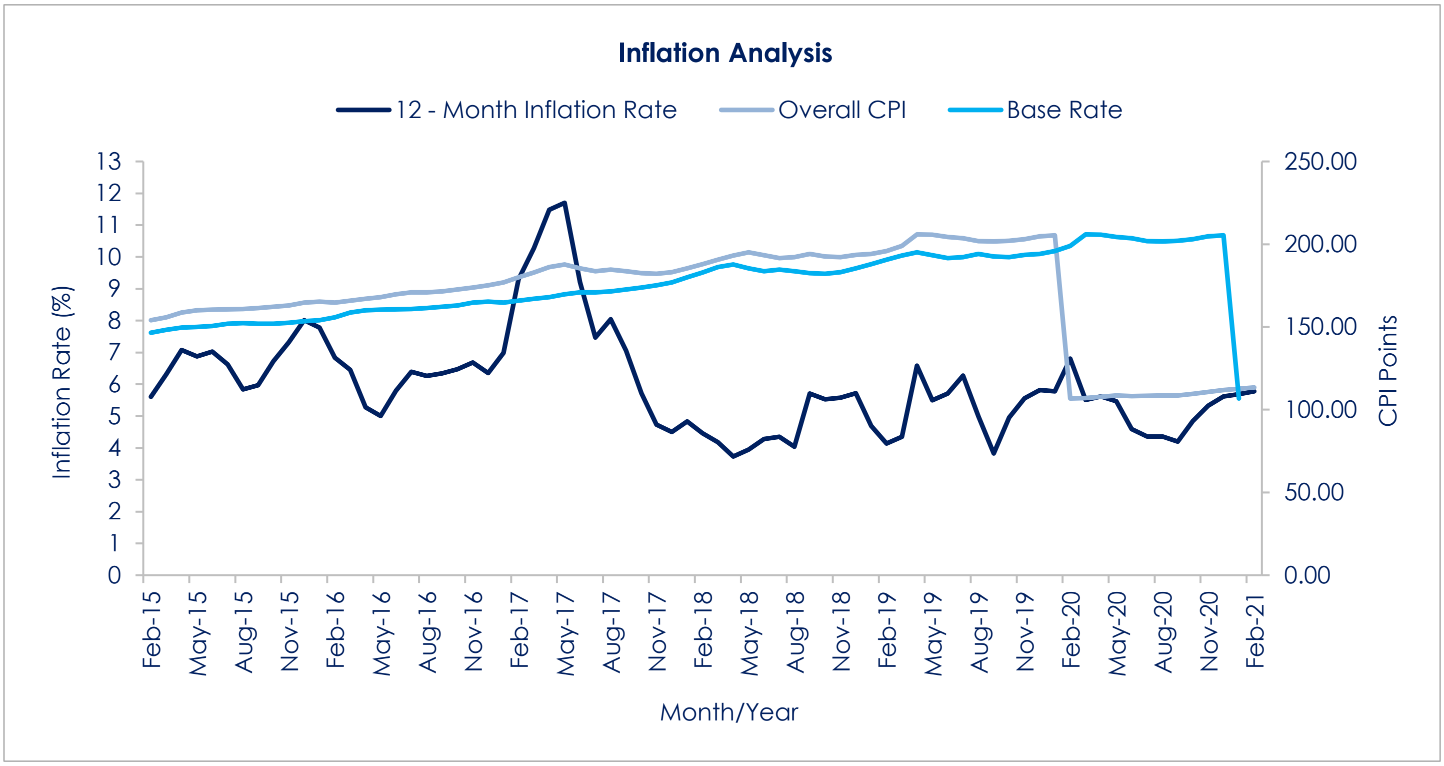



Source: Nairobi Securities Exchange

## March 2021 inflation to rise on higher fuel and transport prices

- Annual inflation rate rose for the fifth straight month to 5.78% in February 2021 from 5.69% in the previous month. (Figure.13)
- This was the highest inflation rate since last April driven by the transport index, costs of food & non-alcoholic beverages, health, restaurants & hotels and housing & utilities.
- On a monthly basis, consumer prices were up 0.7% to 113.37, after increasing 0.63% in the preceding month
- We predict inflation for March at between 5.5% - 6% driven by higher fuel pump prices.
- We however expect inflation to remain within the CBK's 2.5% - 7.5% target range.

**Figure.13: Short term inflation forecast 5.5% - 6%**




Source: Kenya National Bureau of Statistics

## MPC retains CBR at 7% in March meeting

MPC maintains the CBR at 7% in March meeting, benchmark rate expected to remain at current level in 2021.

- The Monetary Policy Committee (MPC) met on 29th March amid the disruption caused by the Covid-19 pandemic, rollout of vaccination programmes, and other measures taken by authorities around the world to contain its spread and impact.
- The MPC considered the implications of the various measures implemented by the Government and assessed outcomes of its policy measures deployed since March 2020 to mitigate the adverse economic effects and financial disruptions from the pandemic.
- It noted that economic prospects have improved in recent months, largely supported by strong performance of agriculture, construction, real estate, finance and insurance, and the wholesale and retail trade.
- Nevertheless, the outlook remains highly uncertain, due to the pace of roll-out of the vaccine, the emergence of new variants of the virus, and reintroduction of containment measures announced on 26th March.
- We expect the MPC to retain the CBR at 7% in the short-term.

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