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STERLING CAPITAL LIMITED

Fixed Income Note
November 2021

"CBK stirs bond market with 5-Year issue"

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Executive Summary

- Our fixed income report for the month of November 2021 is titled **"CBK stirs bond market with 5-year issue"** which is coverage of the Central Bank of Kenya's debt issues.
- This month, the issuing agent intends to raise KES.50Bn through a new (**FXD1/2021/5)** and a re-opened (**FXD1/2019/20)** bond.
- Our weighted average bid predictions are as follows:

  Weighted Average Rate (WAR) of investor bids
  FXD1/2021/5: 11.15% - 11.25%
  FXD1/2019/20:13.40% - 13.50%

  WAR of accepted bids
  FXD1/2021/5: 11.10% - 11.20%
  FXD1/2019/20: 13.30% - 13.40%

- The report gives a summary of the bonds being issued, it examines historic primary auction data and gives our subscription 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.
- Under national accounts we analyze Government revenue and expenditure as well as debt service costs.
- The report also includes an analysis of Eurobond yields and the performance of selected African sovereign debt indices.
- The yield curve section is an analysis of the trends in domestic debt interest rates over selected periods.
- The report concludes with our expectations of inflation and the Monetary Policy Committee (MPC) decision at the end of the month.

CBK's October debt issues target KES. 50Bn

- The Central Bank of Kenya (CBK) invites bids for two treasury bonds; a new 5 year bond FXD1/2021/5 and a reopened 20 year bond FXD1/2019/20 in in a bid to raise KES.50Bn for budgetary support (Table.1).
- The two bonds have a term to maturity of 5 and 17.5 years respectively.
- The 20 year bond has a coupon rate of 12.873% while the five year bond will have a market determined coupon.
- We expect the 5-year issue to be oversubscribed as majority of investors prefer short and medium tenor debt with demand for the 20-Year issue subdued as the secondary debt market is currently saturated with long term papers.

Table.1: Primary Bond issue summary

Issue Number	FXD1/2019/20	FXD1/2021/5
Total Amount Offered	KES.50Bn	
Tenor	20 Years	5 Years
Term to Maturity	17.5 Years	5 Years
Coupon Rate (%)	12.873	Market determined
Price Quote	Discounted/Premium/Par	
Period of Sale	25th October 2021 to 9th November 2021	
Auction Date	10th November 2021	
Value Date	15th November 2021	
Yield Curve (%) (Weighted average tenor - 31st October 2021)	**13.1800**	**10.9645**

Source: Central Bank of Kenya

Our weighted and accepted bids averages

- The analysis of yields of bonds of similar tenors on the Nairobi Securities Exchange (NSE) as at 31st October as well as discussions with fixed income traders resulted in the following bid predictions for the treasury bonds (Table.2).

Table.2: Auction bid predictions

Rate	FXD1/2019/20	FXD1/2021/5
Market Weighted Average Rate (%)	11.15 - 11.25	13.40 -13.50
Weighted Average Rate of Accepted Bids (%)	11.10 - 11.20	13.30 - 13.40

Source: Sterling Capital Research

Historical debt issues provide guidance

- Implied yields of bonds of almost similar tenors to maturity on the Nairobi Securities Exchange (NSE) as at 31st October 2021 have been used 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
5-Year						
FXD1/2016/10	29th Aug 2010	15.04	17th Aug 2026	4.8 (1,751)	10.9022	-
20-Year						
FXD1/2019/20	15th Apr 2020	12.87	21st Mar 2039	17.4 (6,350)	13.1800	13.2556

Source: Central Bank of Kenya

5-Year debt issue to be oversubscribed

- A historical comparison of primary auction results for 5 and 20 year debt issues shows investor (including retail investors and banks) preference for the shorter dated tenor (Table.4).
- FXD1/2019/20 will have comparatively low demand owing to current oversupply of long-tenor bonds in the secondary market.

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 (%)
5-Year						
FXD1/2018/5	40*	37.6	23.1	128.5	12.299	9.3256
FXD1/2019/5	50	41.9	20.6	83.9	11.304	9.7425
FXD3/2019/5	25	28.5	18.7	113.9	11.492	10.0831
FXD1/2020/5	50	34.5	20.8	69.1	11.667	10.1250
20-Year						
FXD1/2018/20	40	13.7	8.5	128.5	13.200	13.1250
FXD2/2018/20	40	13.9	10.5	34.7	13.200	13.1438
FXD1/2021/20	60	43.5	39.5	72.5	13.444	13.3500

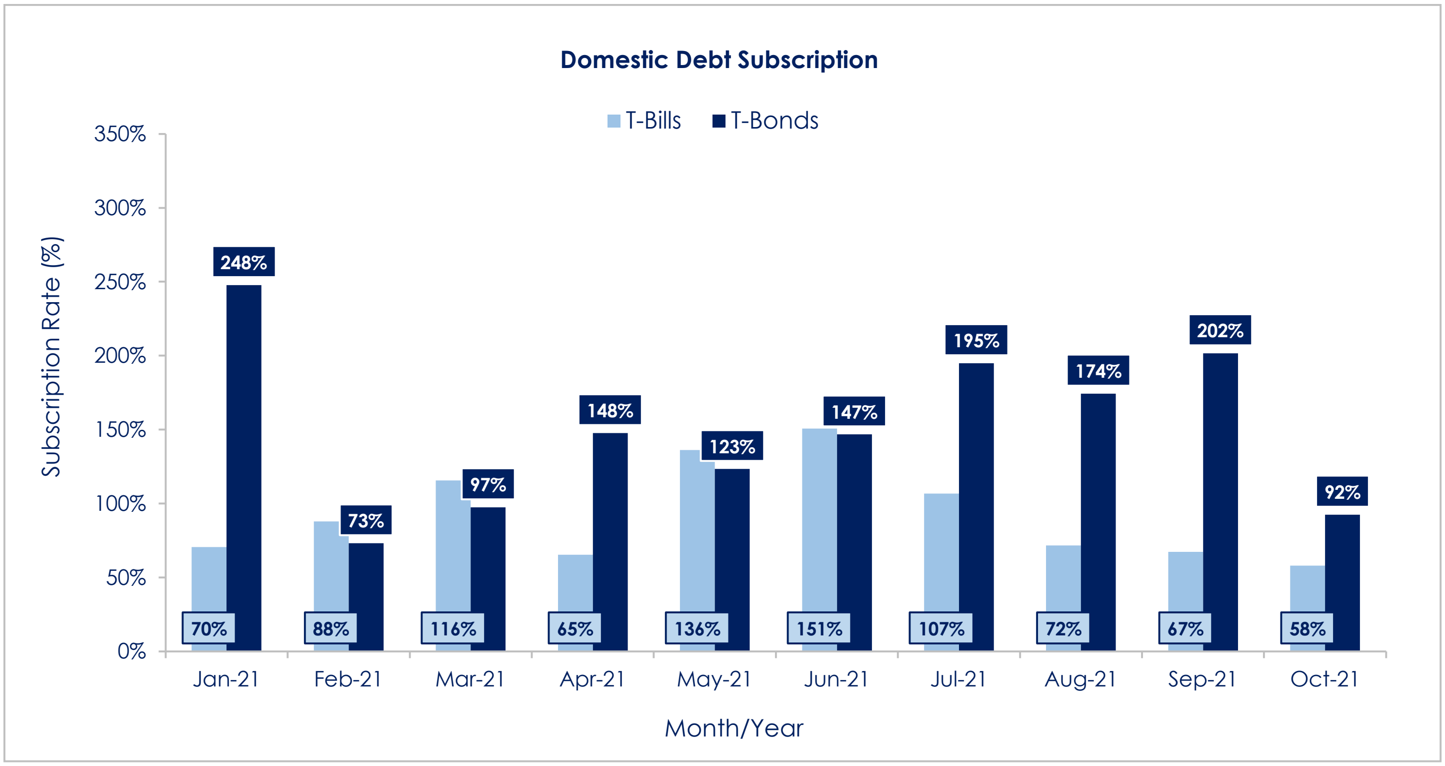
*Amount offered pertains to two issues

Source: Central Bank of Kenya

Subdued T-bill demand continues in October 2021

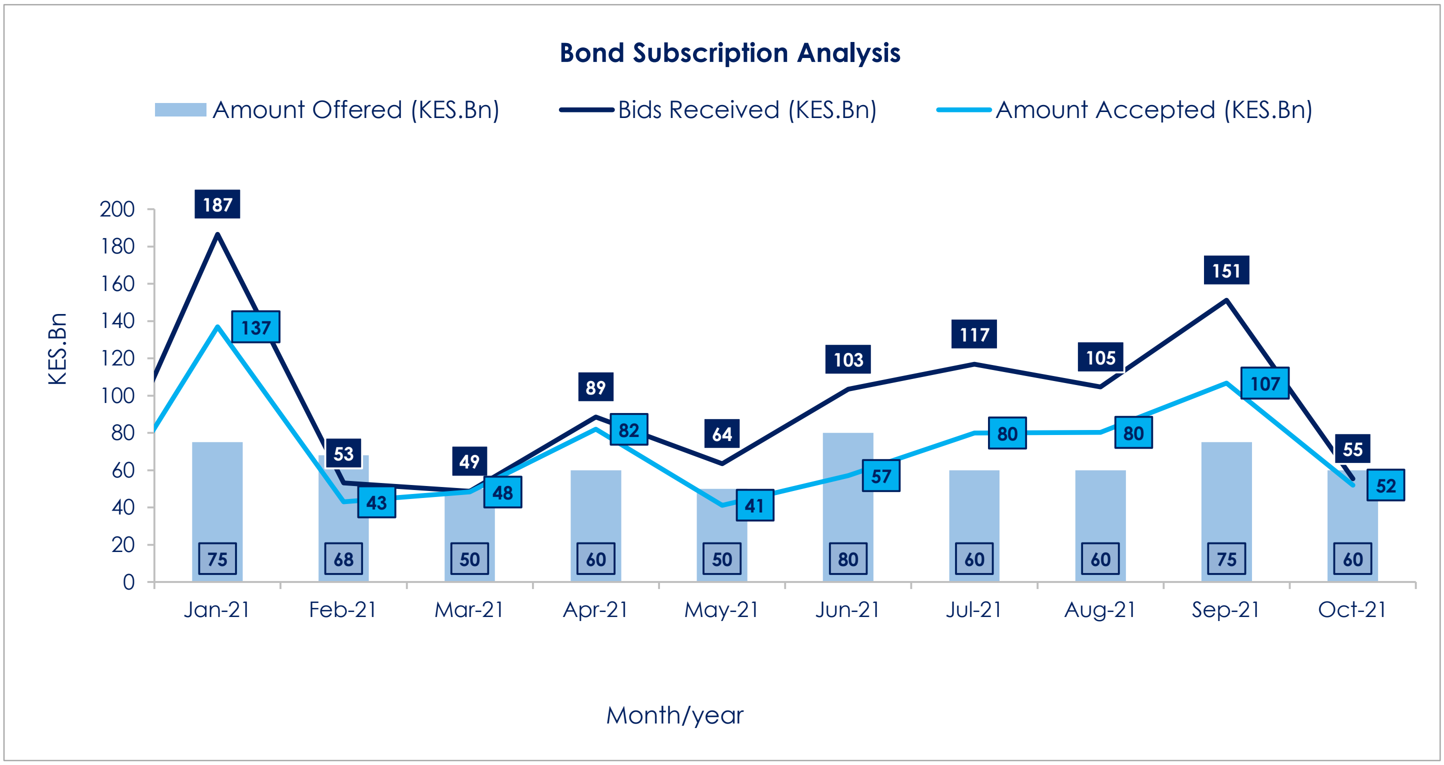
- The subdued demand for Treasury Bills (T-bills) continued in October with the CBK receiving bids worth KES.55.6Bn against KES.96Bn offered translating to a 58% subscription rate (67% in September 2021) (Figure.1).
- Subscription rates for the 91, 182 and 364 day T-Bills stood at 97.5%, 62.1% and 37.9% respectively.
- Re-opened T-Bonds FXD1/2013/15, FXD3/2019/15 and FXD1/2021/25 received aggregate bids worth KES.55.5Bn against KES.60Bn offered, equivalent to a 92.5% subscription rate (Figure.2).
- This we attribute to the combination of the relatively long-tenor of the issues making them less appealing to investors with short-term investment horizons as well as tightening market liquidity.

Figure.1: T-bond subscriptions decrease in October 2021



Source: Central Bank of Kenya

Figure.2: Bond subscriptions fell sharply in October 2021

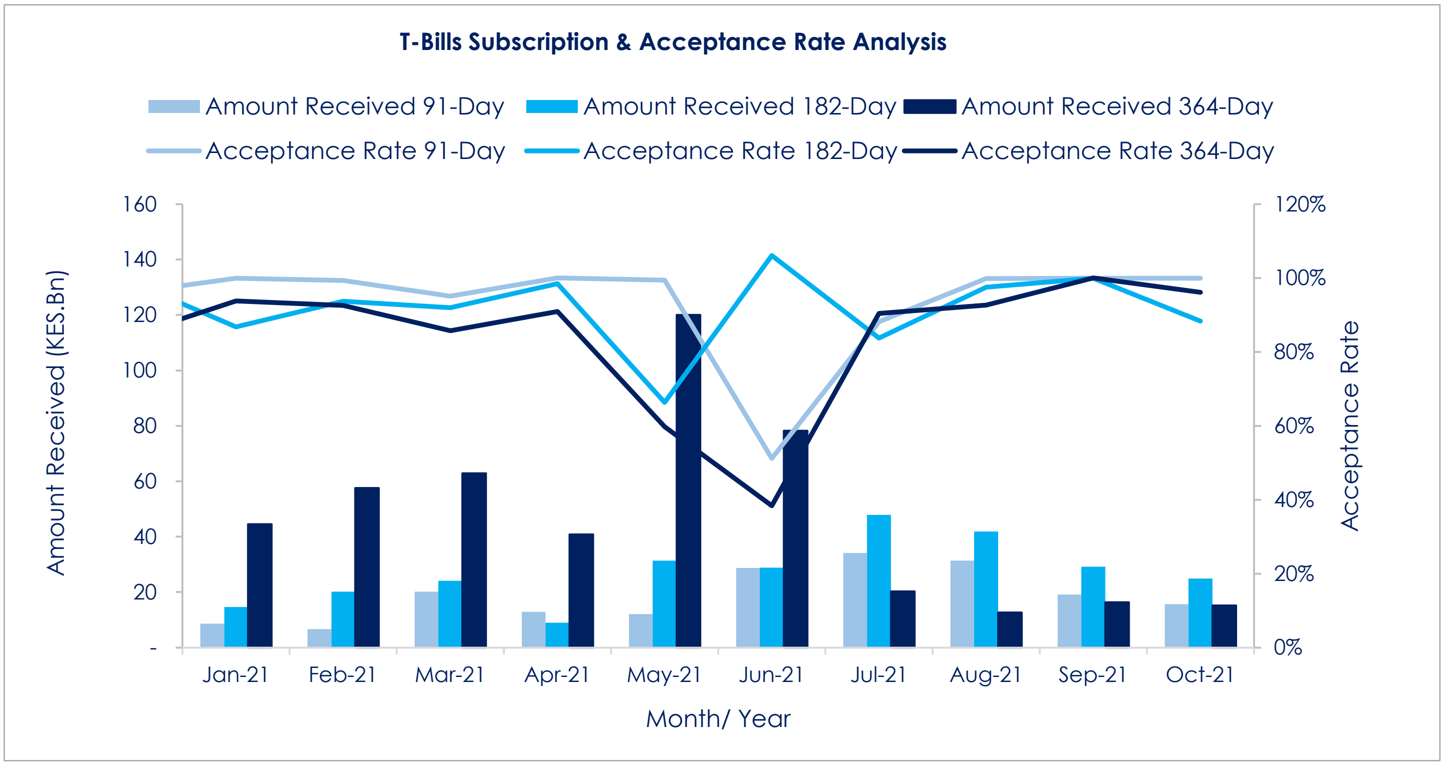


Source: Central Bank of Kenya

T-Bill acceptance rates high as subscription dips

- October 2021 acceptance rates for 91, 182 and 364-Day T-bills were 99.9%, 88.4% and 96.1% respectively (Figure.3)
- The high acceptance rates were a direct result of low subscription in the face of rising budget deficit financing pressures.

Figure.3: Acceptance rate for 91-day and 364-day and 182-day papers acceptance rate goes up

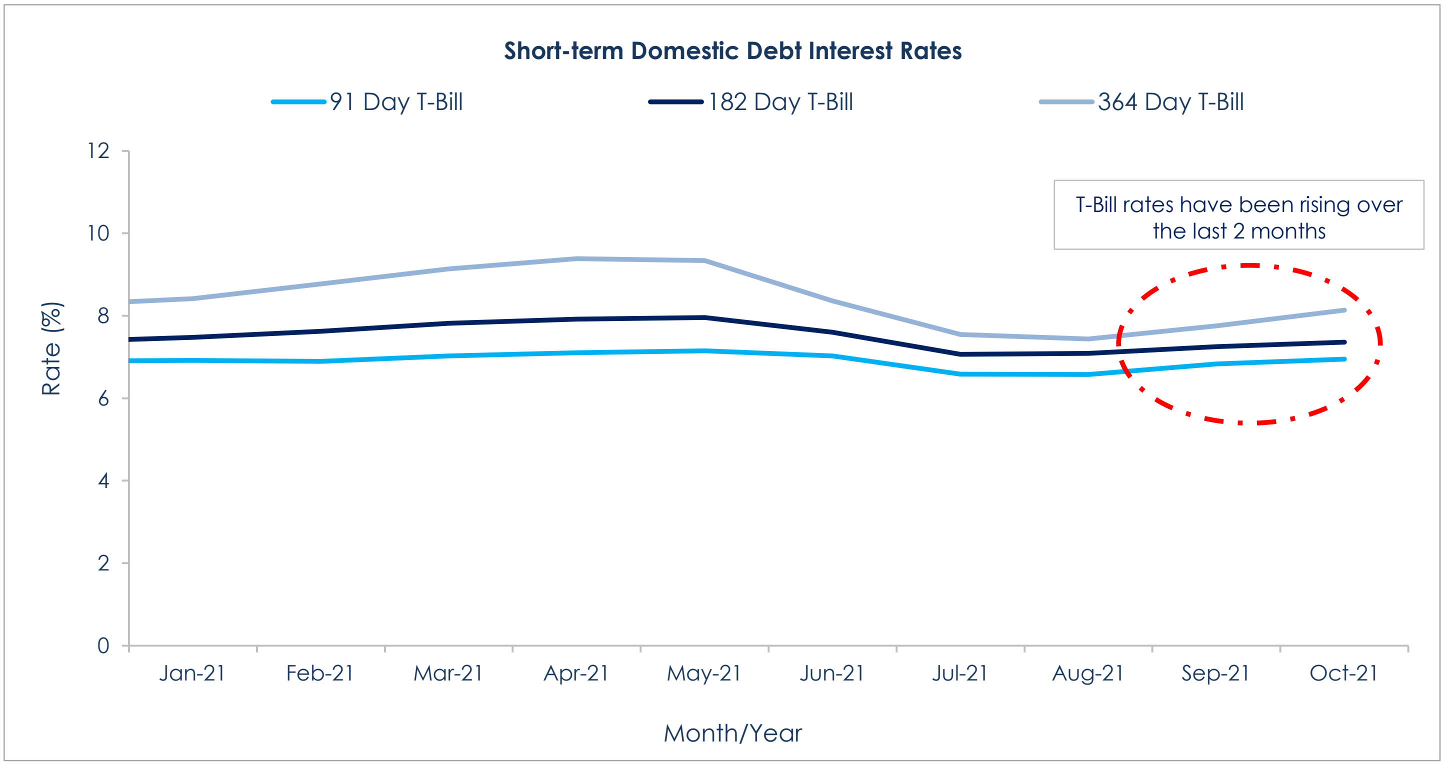


Source: Central Bank of Kenya

T-Bill rates upward trajectory continues in October 2021

- Average interest rates for the 91, 182 and 364-day T-Bills rose in October 2021 to 7%, 7.4% and 8.1% from 6.8%, 7.3% and 7.8% in September 2021 respectively (Figure.4).
- The rising T-bill rates can be explained by a decline in T-Bill demand with the CBK accepting higher investor bids to encourage subscription.
- We expect this increase to continue at least in the short-term as the Government faces the challenge of ever increasing expenditure.

Figure.4: Short-term debt securities interest rates rise

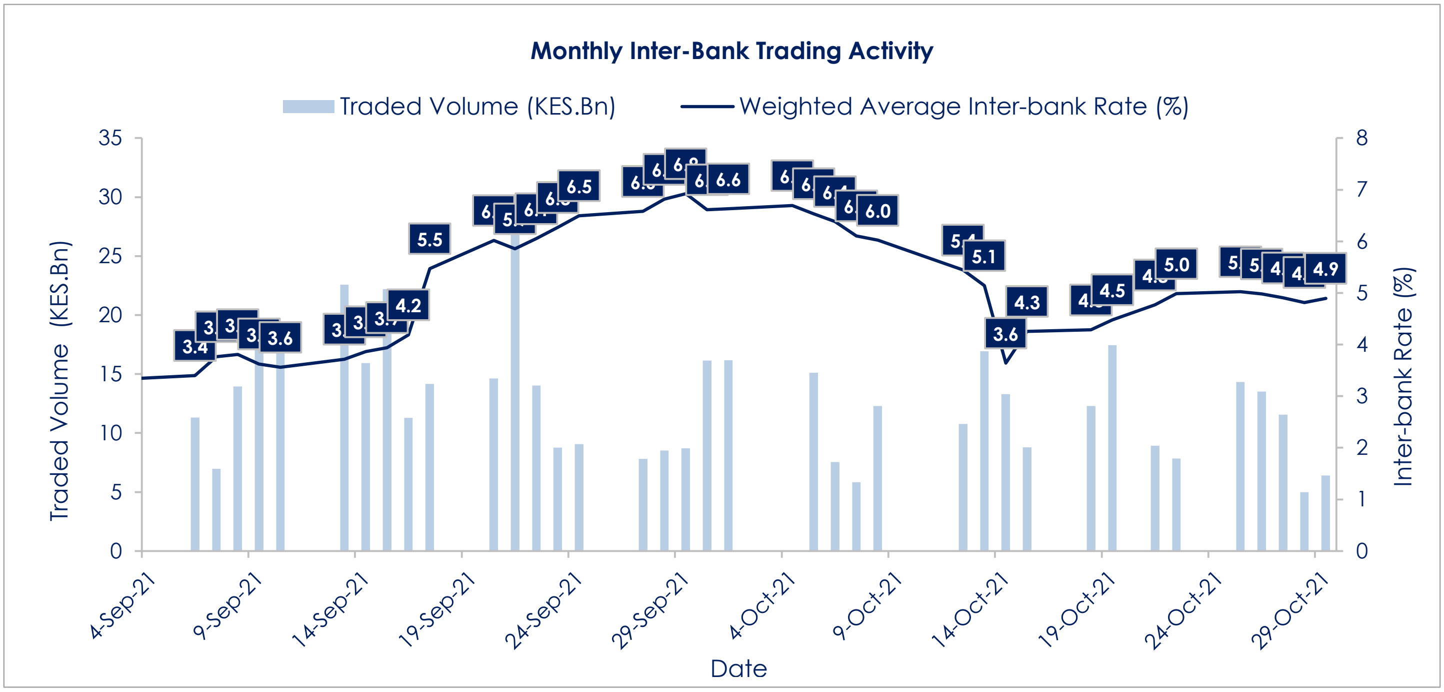


Source: Central Bank of Kenya

Average inter-bank rates rise in October 2021

- Average inter-bank rate for October 2021 rose to 5.3% compared to 4.9% in September while total inter-bank trading volumes over the same period declined to KES.204Bn from KES.311.7Bn. (Figure.5).
- Our forecasted average inter-bank rate for November 2021 is between 4% - 5%.

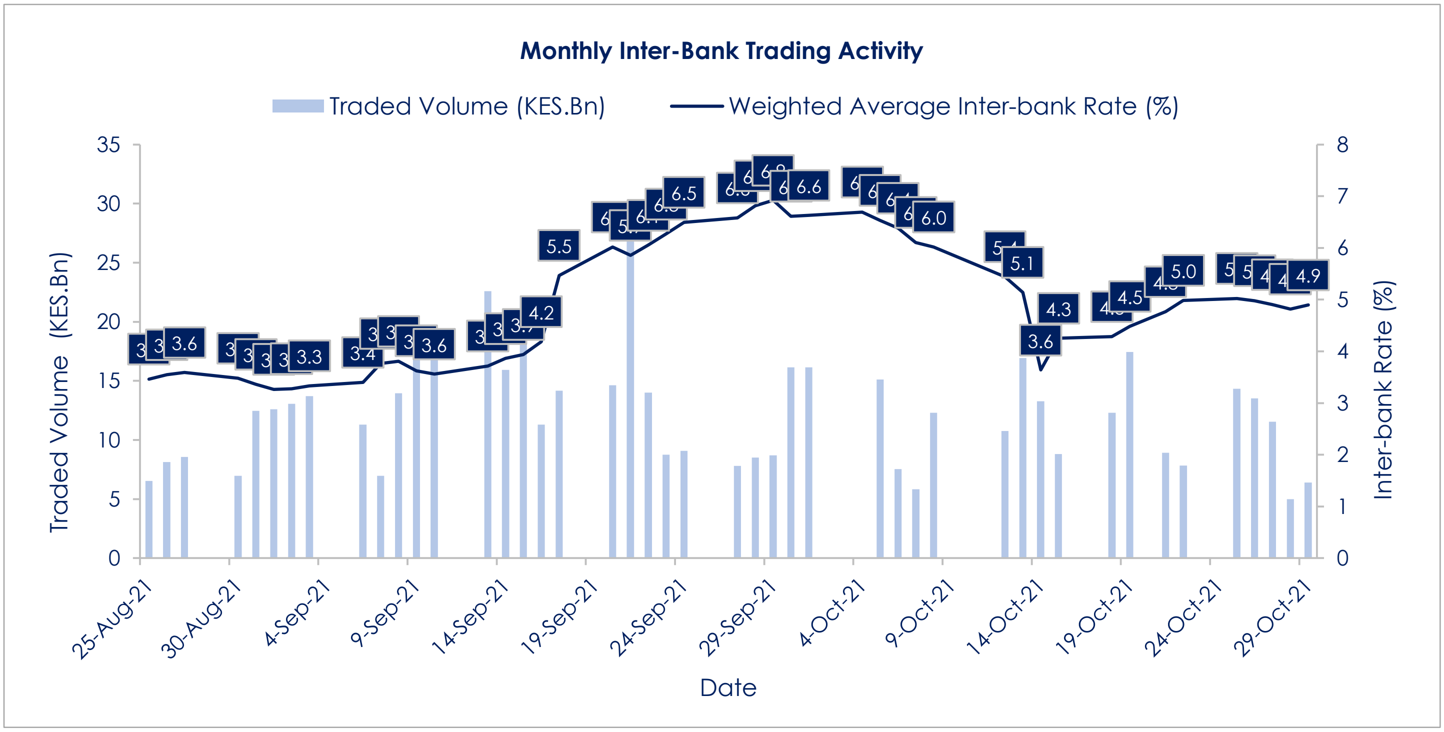
Figure.5: Inter-bank lending rates to range between 4% and 5% in November 2021



Source: Central Bank of Kenya

- Excess reserves (additional liquidity above the minimum 4.25% Cash Reserve Ratio (CRR)) over the same period rose to KES.61.5Bn, compared to KES.31.1Bn in the previous month (Figure.6).

Figure.6: Excess commercial bank reserves increase in October 2021

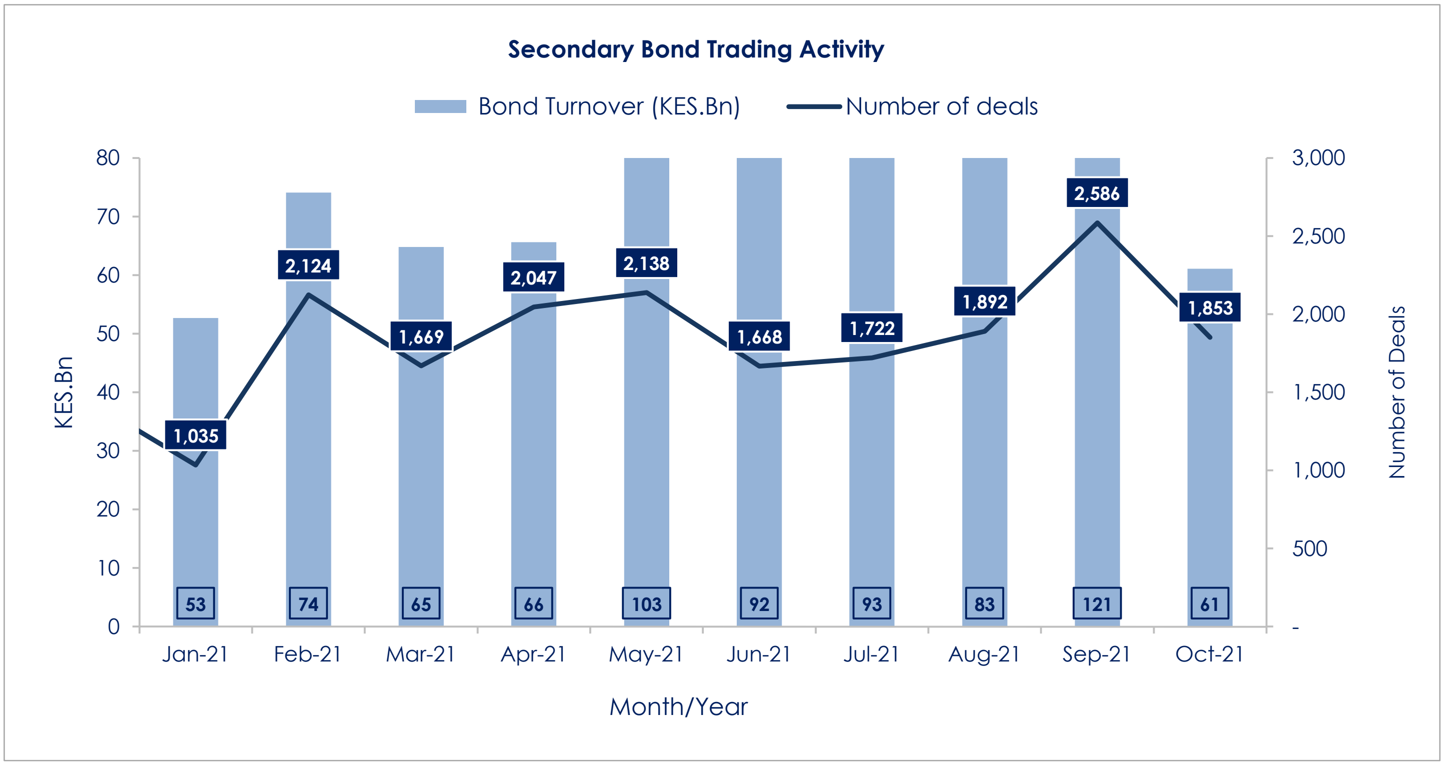


Source: Central Bank of Kenya

Secondary market bond turnover to decline in November 2021

- Secondary market trading activity stood at KES.61.1Bn at the end of October 2021 down from KES.121.3Bn in September with the number of deals over the same period declining to 1,853 from 2,586 (Figure.7).
- The high turnover in September was linked to trading of IFB1/2021/21that was issued in that month.
- Secondary market activity in November will depend largely on trading on the 5 year bond in issue and market liquidity.

Figure.7: Secondary trading activity declines in October 2021



Source: Central Bank of Kenya

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

- Infrastructure Bonds (IFBs) have relatively high yields, favorable return in the secondary market and are tax exempt and we therefore recommend the following bonds for investors with a fixed income allocation portfolio.
- We single out IFB1/2021/18, IFB1/2021/21 and FXD1/2021/25 as suitable investment options (Table.5).

Table.5: Trading ideas

Bond	Tenor (Years)	Coupon (%)	Modified Duration* (%)	Sterling Capital Yield to Maturity (%)	Current Yield** (%)
IFB1/2021/18	17.4	12.67	6.97	12.65	12.27
IFB1/2021/21	20.9	12.74	7.16	12.45	12.31
FXD1/2021/25	24.5	13.92	6.93	13.80	12.87

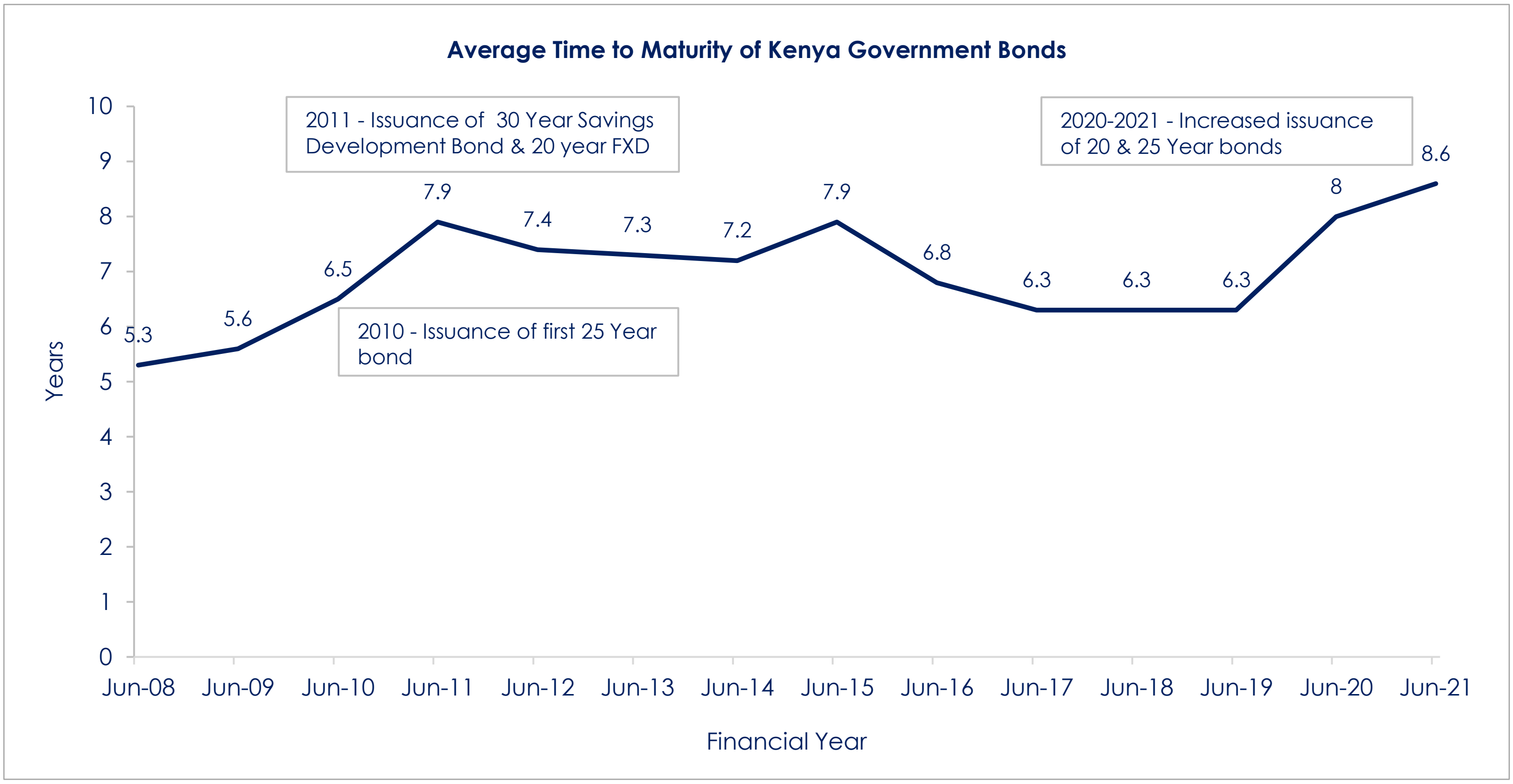
*Modified duration - Expresses the measurable change in the value of a security in response to a change in interest rates (for every 1% movement in interest rates, the bond would inversely move in price by the modified duration)
** Current Yield - Return on investment, for an investor holding a specific bond for 1 year

Source: Central Bank of Kenya

New debt issues consistent with strategy to increase average maturity of Kenya Government bonds

- Data from the National Treasury shows the Average Term to Maturity (ATM) of outstanding Government bonds as at June 2021 at 8.6 years compared to 8 years in June 2020 (Figure.8).
- Our analysis of outstanding bond data to end of October 2021 shows a decline in the ATM to 8.3 years with five bonds with an outstanding amount of KES.121.9Bn with a tenor to maturity of 0.7 years.
- This however, remains consistent with the National Treasury's public debt management strategy to lengthen the ATM of public debt.
- The average tenor of this month's debt issues is 11.25 years (17.5 years and 5 years) and this will increase the ATM further.

Figure.8: Average Term to Maturity of public debt remains above 8 years

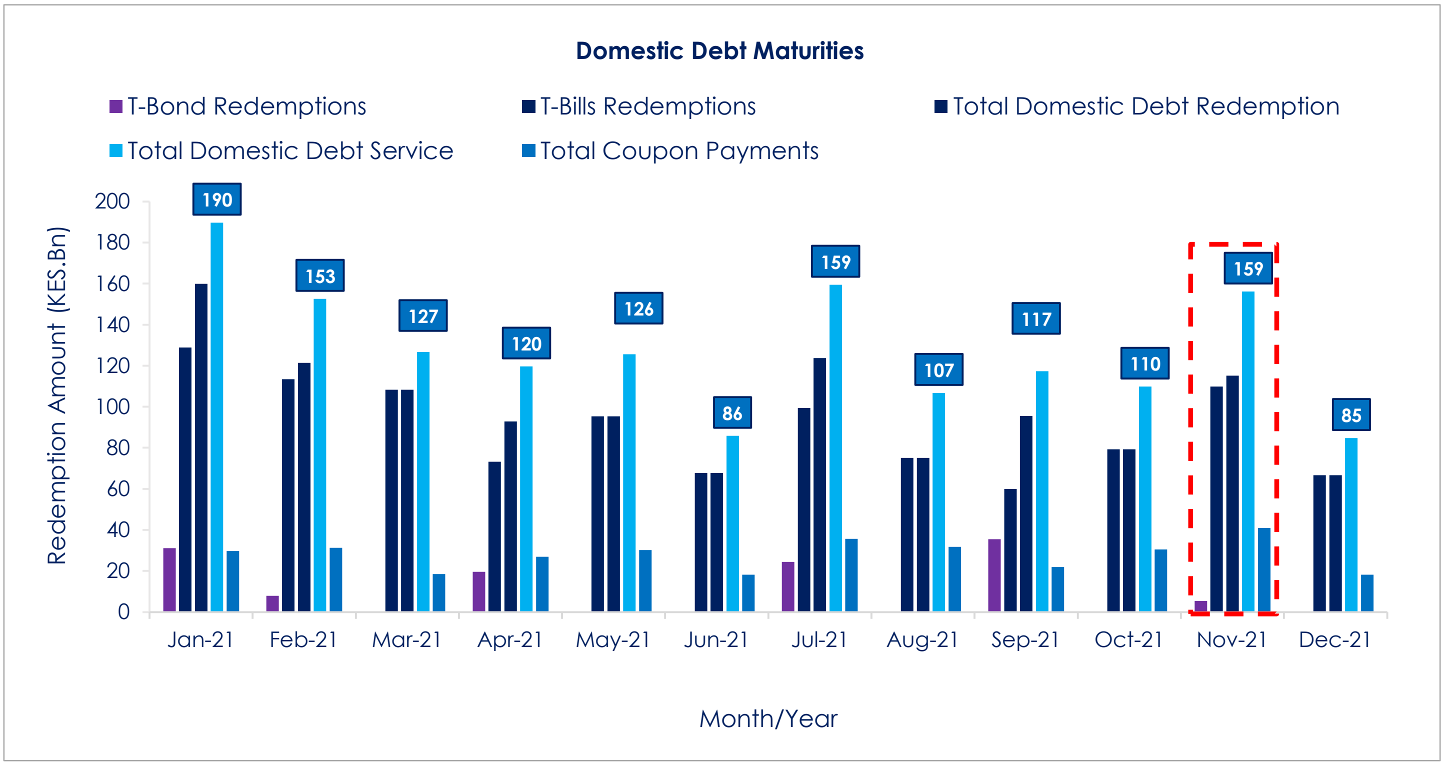


Source: Kenya National Treasury

Total domestic debt service for November is KES.156Bn

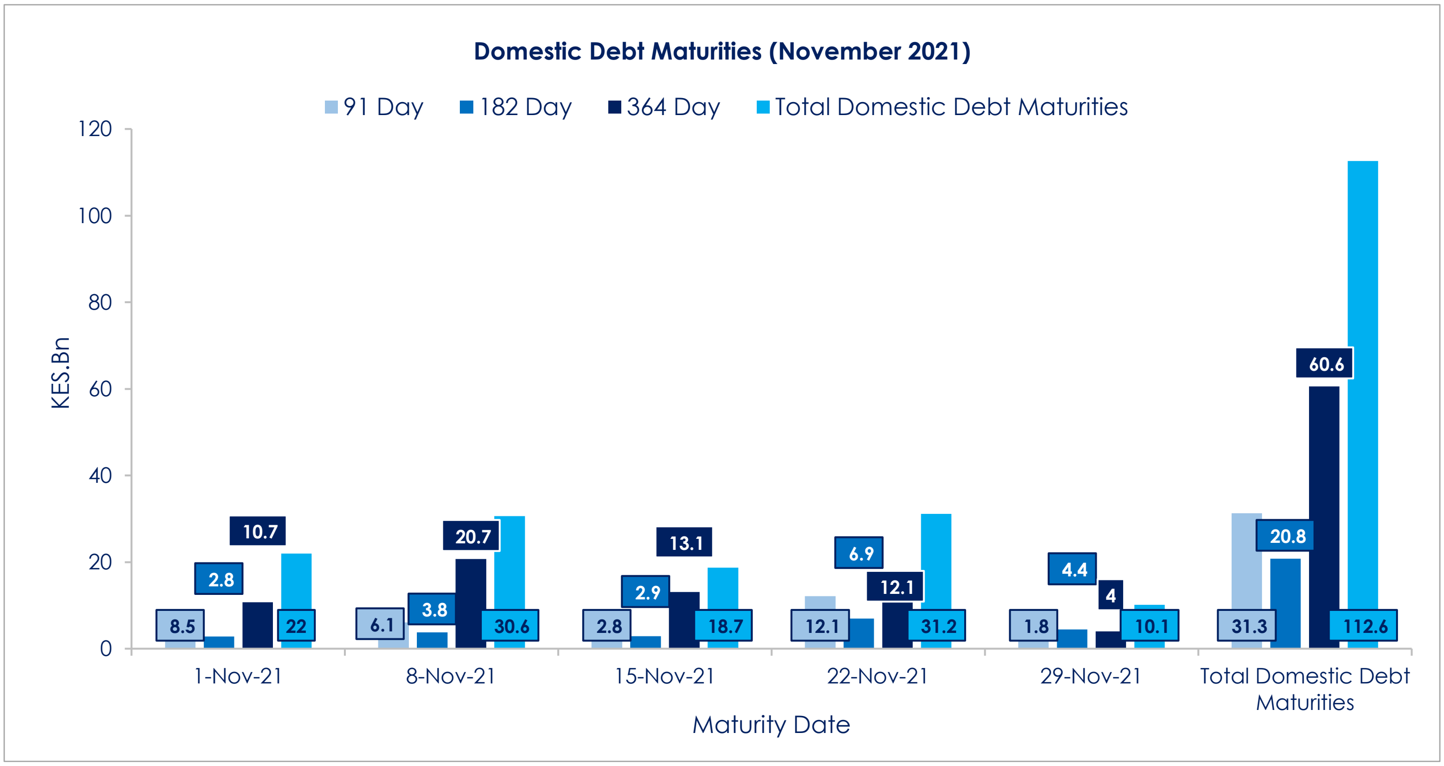
- Total domestic debt service for the month of November 2021 is KES.159Bn comprising of KES.5.4Bn, KES.112.7Bn and KES.40.9Bn in T-Bonds, T-Bills and coupon payments respectively (Figure.9).
- Redemptions for the 91,182 and 364-day T-Bills during the month are KES.31.3Bn, KES.20.8Bn and KES.60.6Bn respectively with the fourth week of the month having the highest redemptions at KES.31.2Bn. (Figure.10).
- Total debt service will decline to KES.84.8Bn in December made up of KES.66.7Bn in T-Bill redemptions and KES.18.1Bn in coupon payments.

Figure.9: November 2021 domestic debt service rises to KES.159Bn



Source: Central Bank of Kenya

Figure.10: Weekly debt maturities November 2021



Source: Central Bank of Kenya

National treasury to fall short of 2021/22 fiscal year targets

- National Treasury national accounts data at the end of the first three months of the 2021/22 fiscal year (Q1 2021/22) shows tax and total revenue marginally below our linear target run-rate (25%) at 24.4% and 24.5% respectively (Table.6 & Figure.11).
- Domestic borrowing at 30.4% of the original estimate is however, is well above our linear target run-rate.
- All three fiscal receipt items were below our linear run-rate target in September 2020 with total tax, total revenue and domestic borrowing at 21.6%, 20.5% and 23.4%.
- The 29.9% increase in total fiscal receipts can be attributed mainly to improved economic activity and its impact on tax collection (+31.2%) and domestic borrowing (+53.4%).
- We expect domestic borrowing to remain above target based on original estimates (KES.1Tn) with an upward revision in the target likely in the second quarter of the 2021/22 fiscal year.

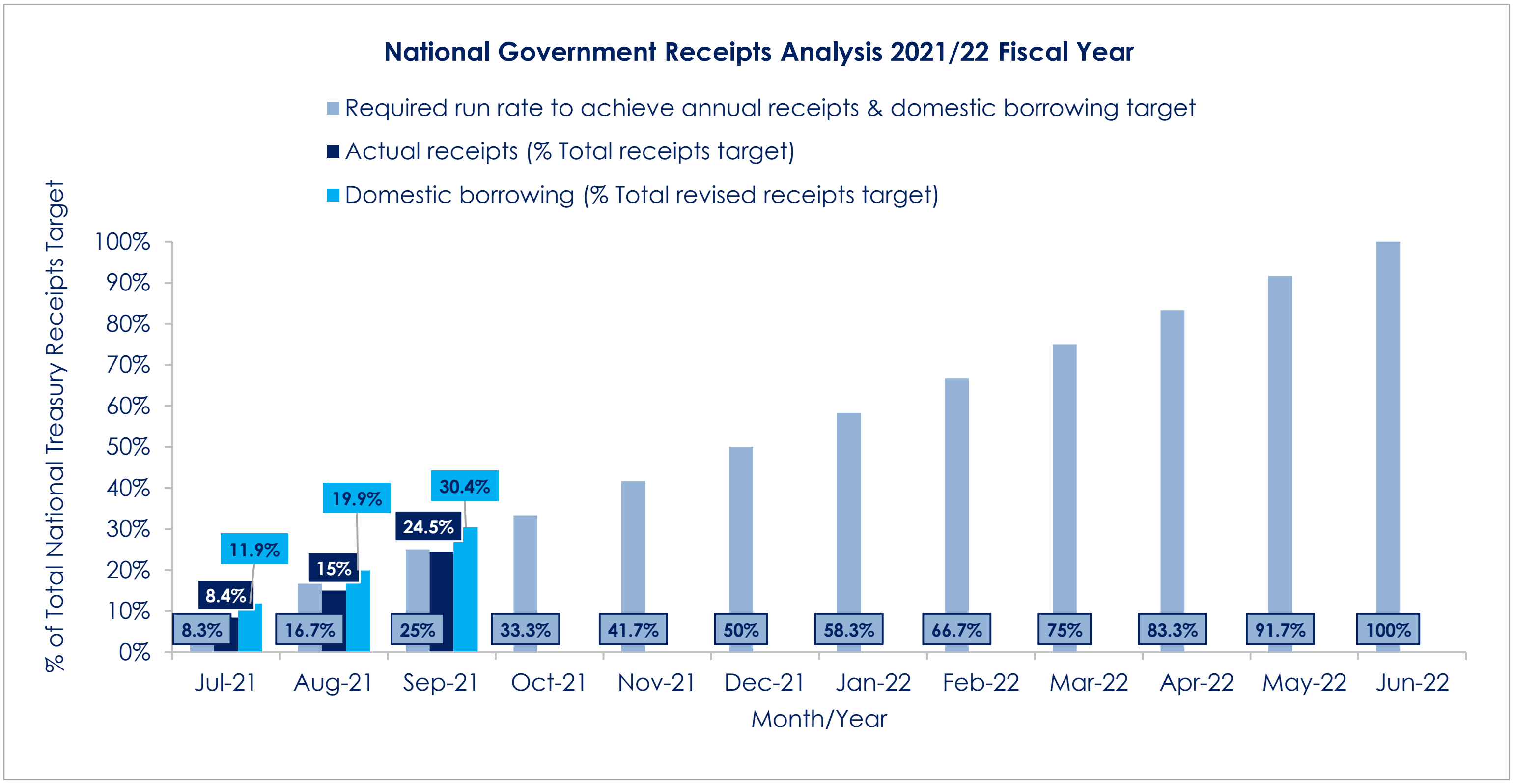
Table.6: 2020/21 fiscal year domestic borrowing above target run-rate

Receipts	Original Estimates (KES) Mar 2021 (KES.Bn)	Actual Receipts (KES) 31st Aug 2021 (KES.Bn)	Actual Receipts (KES) 30th Sep 2021 (KES.Bn)	Proportion of Receipts Target 30th Sep 2021 (%)
Opening Balance (1st July 2021)		21.3	21.3	-
Tax Revenue	**1,707.4**	**247.2**	**416.8**	**24.4**
Non-Tax Income	68.2	3.9	25.4	37.2
Domestic Borrowing	**1,008.4**	**200.3**	**306.8**	**30.4**
External Loans & Grants	379.7	1.7	7.7	2
Other Domestic Financing	29.3	4	4.2	14.2
Total Revenue	**3,193**	**478.4**	**782.2**	**24.5**

* 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.192 17th September 2021

Figure.11: Government ahead of its 2021/22 fiscal year domestic borrowing target



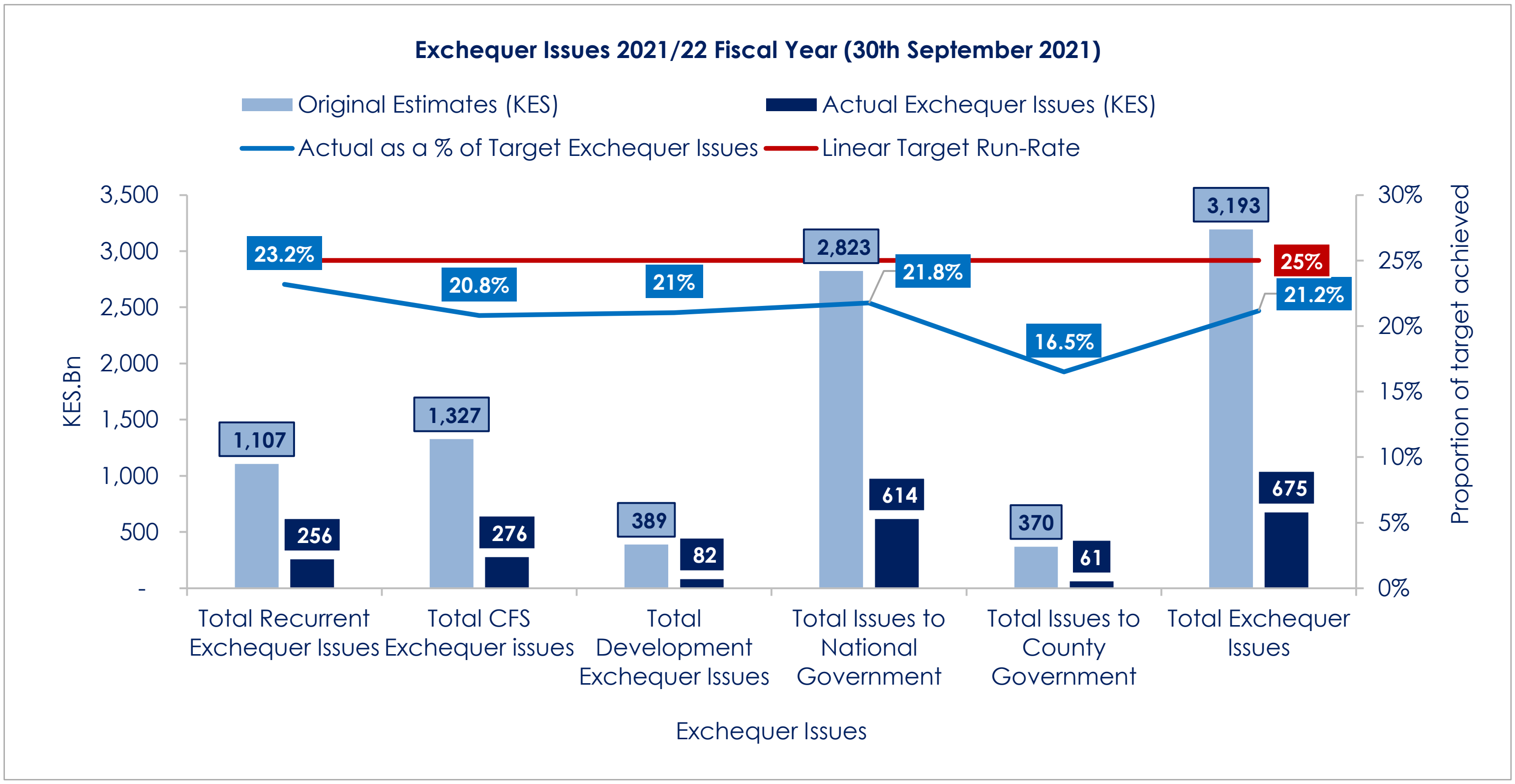
Source: The Kenya Gazette Vol. CXXIII - No.192 17th September 2021

National Treasury below 2021/22 fiscal year expenditure targets

National Treasury expenditure below Q1 2021/22 linear target run-rate.

- The National Treasury is below our linear expenditure targets' run-rate for the 2021/22 fiscal year (Figure.12).
- Notable is the underperformance of transfers to counties at KES.61.1Bn equivalent to 16.5% of the KES.370Bn total estimate.
- The above points to low revenue absorption rates a situation we expect to improve as we approach the end of the first half of the fiscal year.
- This could also be a sign of liquidity constraints on the part of the Government as economic activity and revenue collection is yet to reach optimal levels.

Figure.12: Government expenditure remains below target estimates

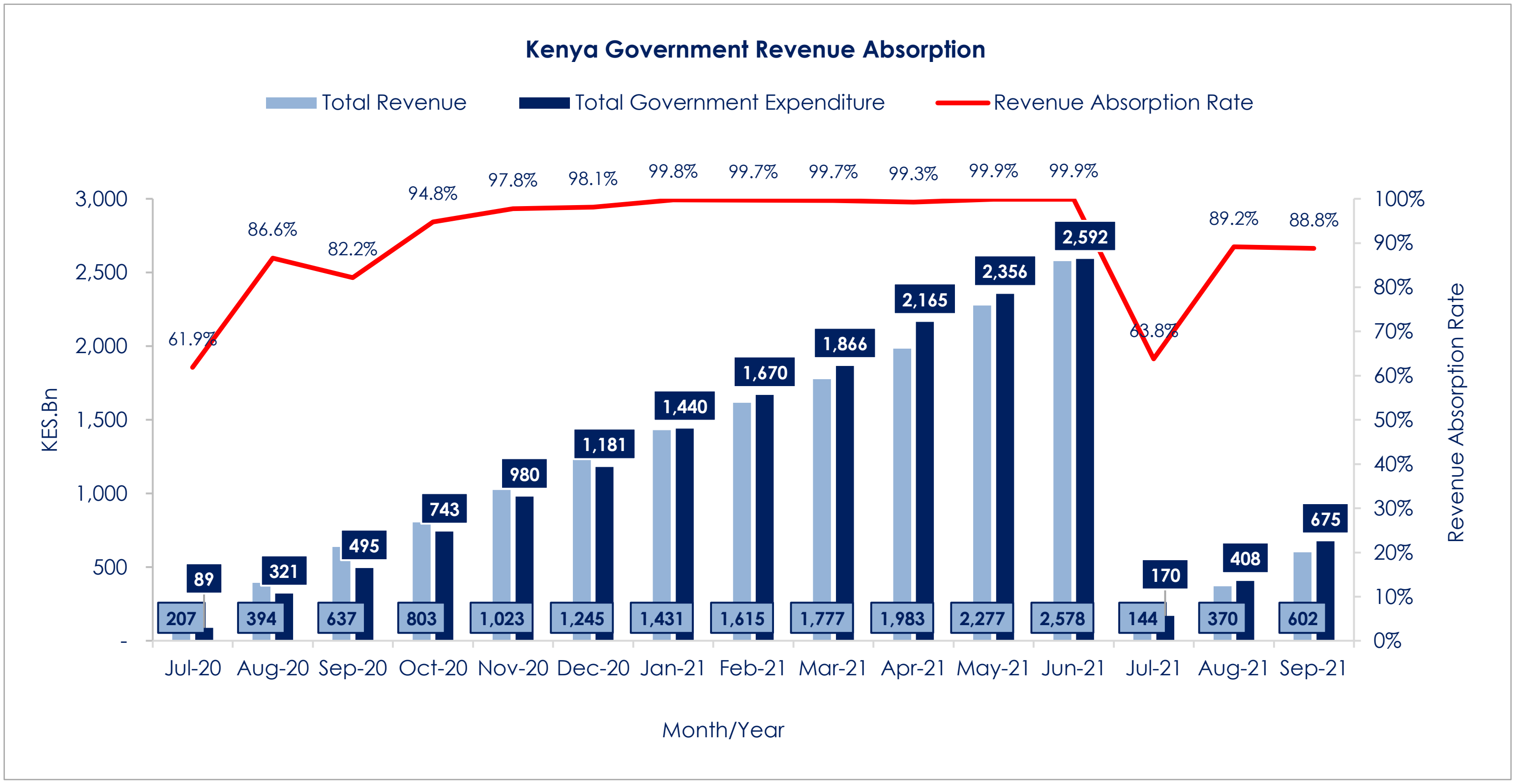


Source: The Kenya Gazette Vol. CXXIII - No.192 17th September 2021

Government Revenue Absorption rate at 89% in September 2021

- Revenue Absorption Rate (RAA) in this context is the proportion of Government receipts used to finance expenditure stood at 88.8% in September 2021 an increase from 82.2% in 2020 (Figure.13).
- We observe higher RAA in the first quarter of the 2021/22 fiscal year compared to 2020/21 a scenario we attribute to a combination of revenue generation constraints and increase in ministerial recurrent and public debt service expenditure.
- We expect RAA to increase closer towards full utilization (99.4% - 99.7%) in line with historic patterns.
- With increased financing needs, we expect Government's domestic and external borrowing needs to rise resulting in heightened primary bond issuance activity.
- In addition, increased funding needs is likely to result in a further increase in domestic debt interest rates.

Figure.13: Kenya ordinary estimate declines to 2018/19 level



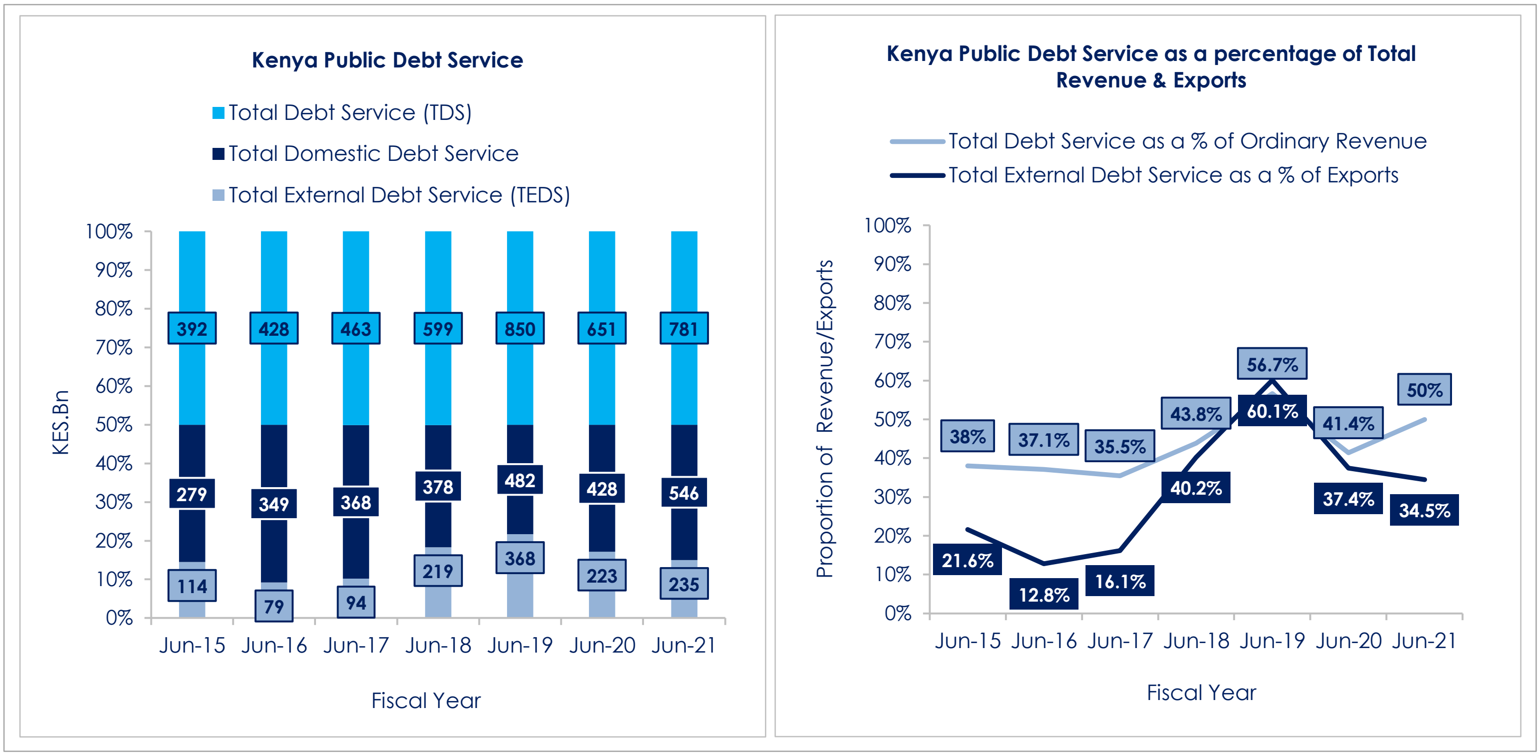
Source: The Kenya Gazette Vol. CXXIII - No.192 17th September 2021

High public debt service costs remain a huge concern

- We are concerned about the high level of Kenya public debt service with National Treasury data showing that total debt service took up 50% of total tax revenue while total external debt service took up 34.5% of total export income (Figure.14a & Figure.14b).
- This compares unfavourably with debt service levels in 2016 where total debt and total external service accounted for 37.1% and 12.8% of tax revenue and exports respectively.
- Tax revenue for the 2020/21 fiscal year declined 0.7% over that of 2019/20 on account of sluggish economic activity resulting from the Covid-19 pandemic.
- We believe that the economy is still operating below its full potential and the fiscal budget ordinary revenue target of KES.1.8Tn is fairly ambitious given the current economic environment.
- Total debt service is estimated to increase at a faster pace (21.2%) than ordinary revenue (15.7%) in the 2021/22 fiscal year meaning a further deterioration in the debt service metric to 52% of total ordinary revenue.

Figure.14a & 14b: Kenya public debt service costs on an upward trend

Figure.14a: Kenya Public Debt Service **Figure.14b: Kenya public debt service metrics**

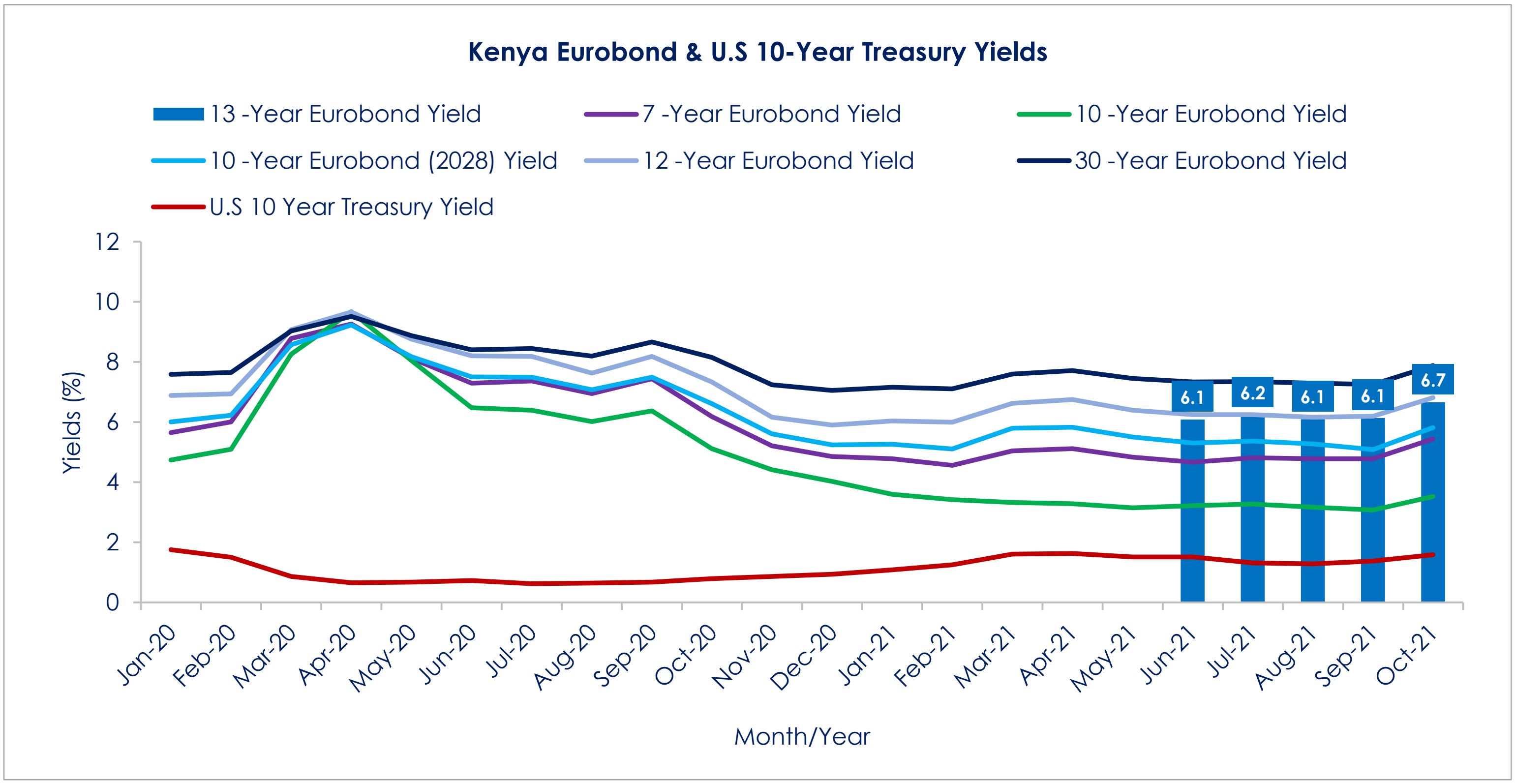


Source: Central Bank of Kenya

Kenya Eurobond yields on the rise over fiscal status concerns

- Average Government of Kenya Eurobond yields for October 2021 increased by the biggest month on month margin (average of 60 bps) in 2021 (Figure.15).
- Average yields on the U.S 10-Year Treasury continued their rapid rise during the month a trend attributable to investor sell-offs driven by concerns over rising inflation (Note the inverse relationship between bond price and yields).
- Current yields on the 10 year Treasuries were last seen in June 2021 and are forecasted to continue rising as investors speculate on the next benchmark rate (Fed Rate) hike.
- The rise in Kenya Eurobond yields can be attributed to a combination of the concerns mentioned above as well as negative investor sentiment about the fiscal status of the Kenyan Government.
- We expect yields to maintain an upward trend at least in the short-term.

Figure.15: Kenya Eurobond yields on the rise

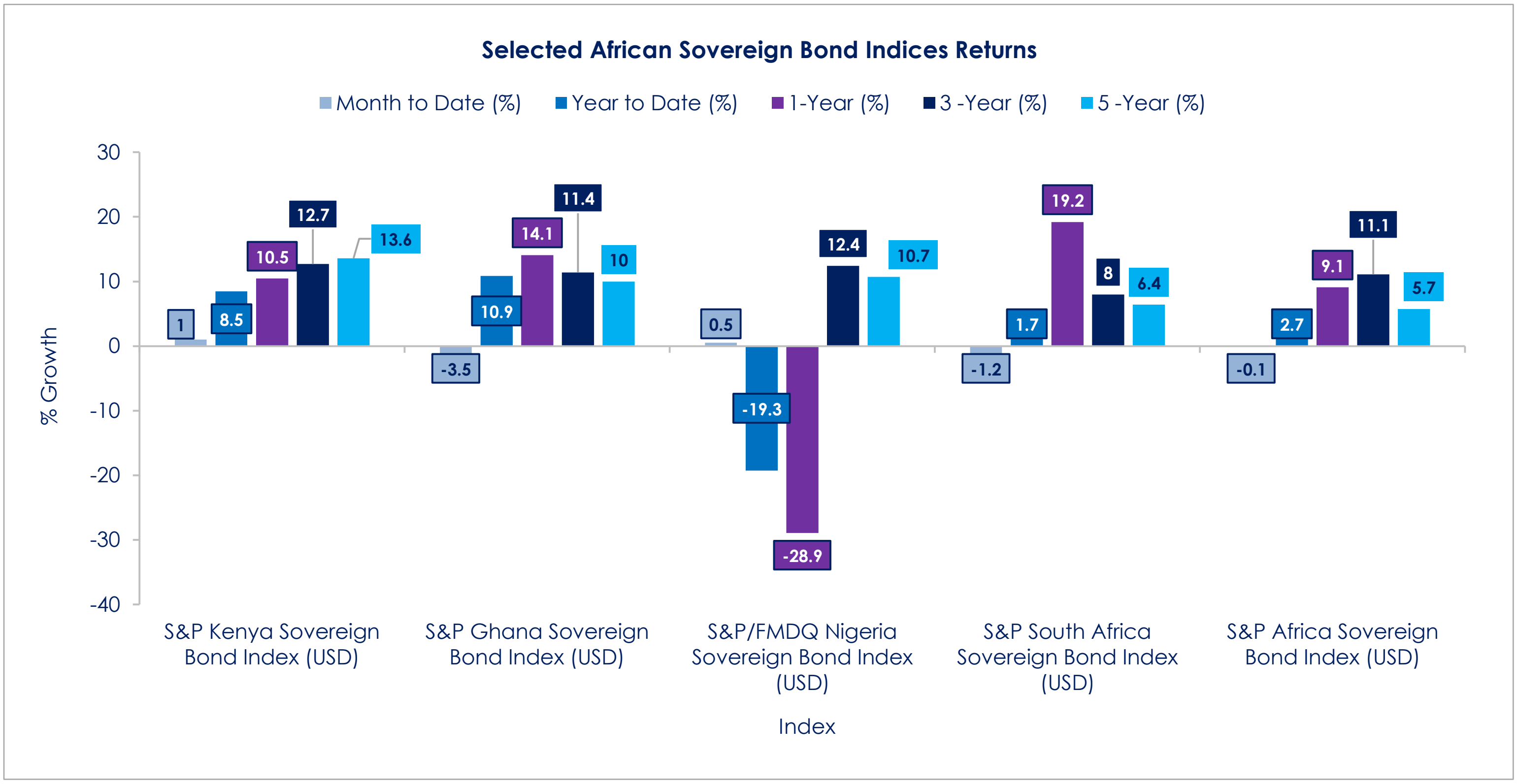


Source: Central Bank of Kenya

Kenya Eurobond index return double digit one year growth

- The S&P Kenya Sovereign Bond index continues to perform well with positive returns over different review periods (Figure.16).
- Only the S&P Ghana Sovereign Bond Index (+10.9%) has outperformed the Kenya's (8.5%) year to date while the S&P South African Bond Index has outperformed our selected comparables with a 1 year return of 19.2%.
- The investment returns on the bond indices save for the S&P/FMDQ Nigeria sovereign Bond index show the inherent value in investing in African sovereign debt also taking into consideration that returns are U.S$ denominated.

Figure.16: Kenya Eurobond yields decline on easing concerns over fiscal position and IMF support



Source: S&P Global

NSE yield curve has shifted upwards over the last one year

- A comparison of average bond yields in October 2021 against the same period in 2020 shows significant increases in yields of all bond tenors (Table.7 and Figure.17).
- We however observe a decline in short term yields when we compare current yields with those at the time of the primary issue of FXD1/2019/20 on 15th April 2019.
- The upward shift in the yield curve over the last one year is a direct result of the following:

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

  2) CBK has over the last few months being more accommodative of aggressive investor bids to encourage subscription following a decline in investor demand for short-term debt instruments.

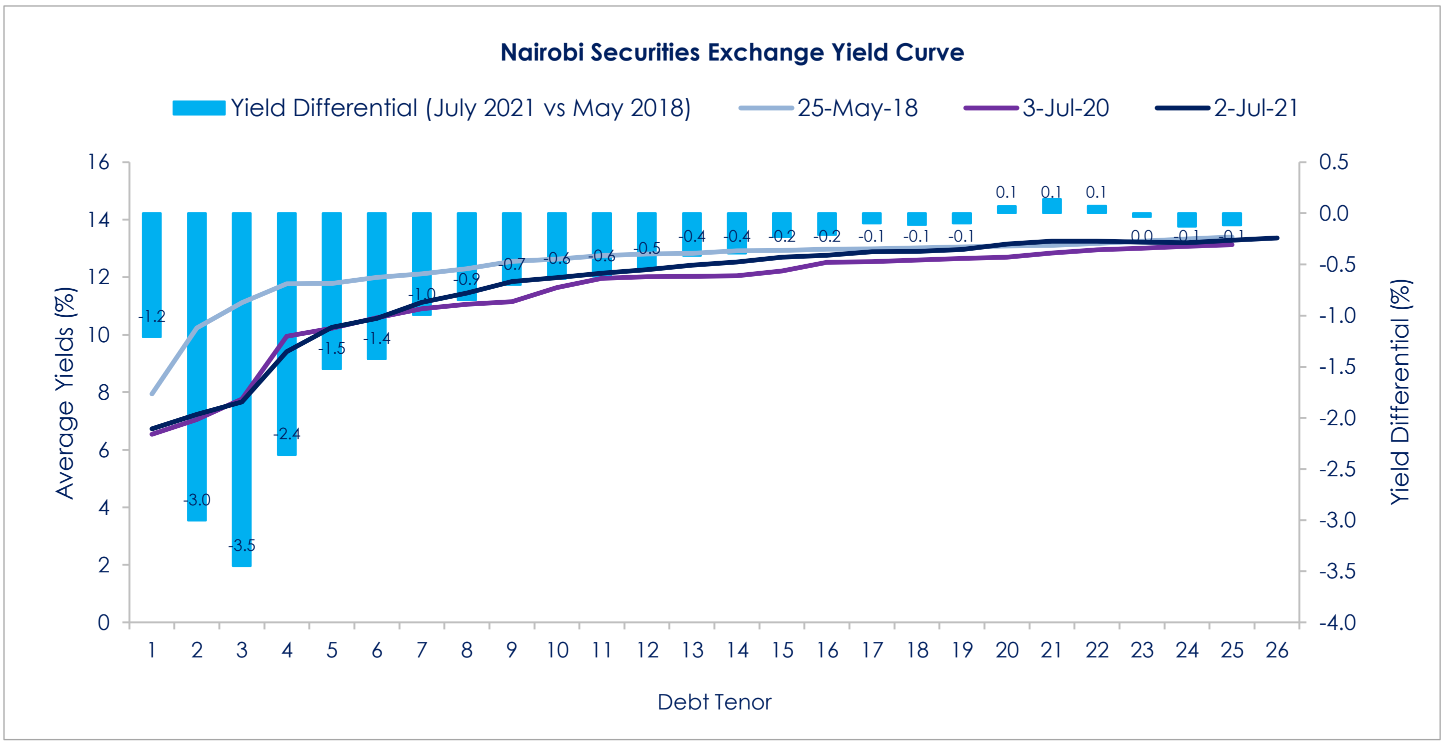
- We predict further gradual increases in yields as CBK faces the challenge of financing the widening fiscal deficit.
- We give a recommendation to **BUY short and medium and HOLD long-term papers.**

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

Tenor	Yields (12th April 2019)	Yields (30th October 2020)	Yields (31st October 2021)	YoY Δ October 2021 vs October 2020 (Bps)	Δ 31st October 2021 vs 12th April 2019 (Bps)	Sterling Capital yield Curve (October 2021)
1	9.3710	7.9330	8.4890	55.6	-88.2	8.50
2	10.3750	9.2823	9.5527	27.0	-82.2	9.60
5	10.8000	10.3326	10.9645	63.2	16.4	11.00
10	12.1500	11.6021	12.3372	73.5	18.7	12.40
15	12.4875	12.5177	12.9668	44.9	47.9	13.00
20	12.8136	12.9459	13.4751	52.9	66.2	13.55

Source: Nairobi Securities Exchange &Sterling Capital Research

Figure.17: The yield curve has shifted upwards over the last one year

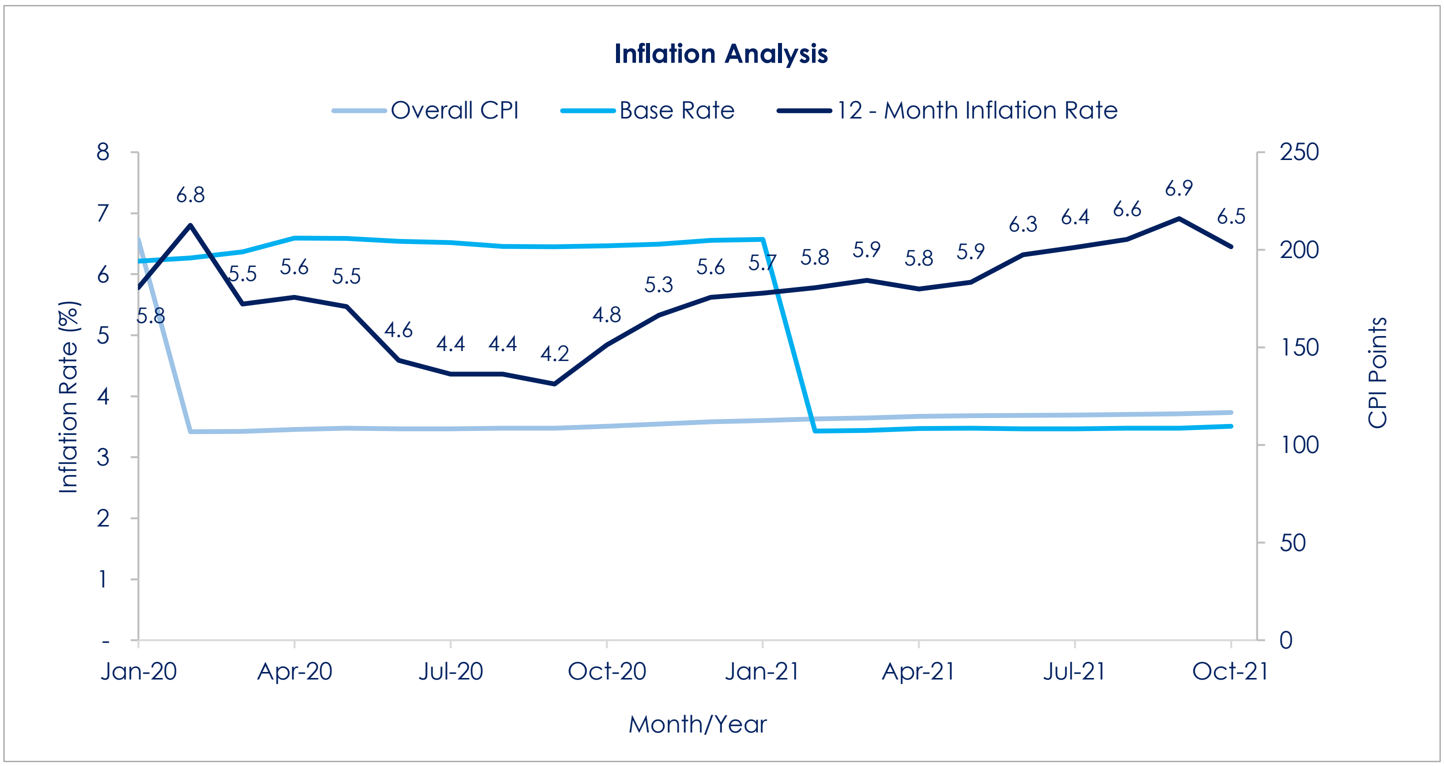


Source: Nairobi Securities Exchange

November 2021 inflation to fall on lower fuel and food prices

- Inflation for the month of October 2021 declined to 6.5% from 6.9% in September 2021 which was within our estimation band of 6.5% - 7.5% in our October Fixed Income Report (Figure.18).
- This was however significantly higher than the inflation rate for October 2020 (4.8%).
- This decline was largely attributable to the decline in fuel inflation to 9.6% from 11.1% in September.
- The transport index declined 0.4% mainly due to a drop in the price of petrol (3.7%) and diesel (4.3%) between September and October 2021.
- We predict November inflation to be in the range of 6% - 6.5%, which is still within the CBK's 2.5% - 7.5% target range, with food and transport indices the main drivers.

Figure.18: October 2021 inflation falls on lower fuel the highest since September 2017



Source: Kenya National Bureau of Statistics

MPC to hold monetary policy steady in November 2021 meeting

MPC to maintain CBR and CRR at 7% and 4.25% respectively in November meeting.

- The MPC meets this month to review the impact of previous policy measures.
- We see the following as the main points of discussion:

1) Rising inflationary pressure with October 2021 inflation still relatively high in spite of a decline over September.

2) The depreciation of Kenya Shilling (KES) with the currency trading in the KES.109.9 - KES.111.20 range against the United States Dollar (U.S$) over the last two months.

   The KES however remained relatively stable against other major international and regional currencies in October 2021.

3) Foreign exchange reserves have remained adequate over the last two months at US$.9Bn (5.43 months of import cover) and U.S$.9.2Bn (5.61months of import cover) as at 2nd September and 28th October 2021 respectively.

   Both periods have maintained at least 4 months and 4.5 months of import cover in accordance to CBK's statutory requirement and EAC region's convergence criteria respectively.

4) Position of private sector credit, Non-Performing Loans (NPLs) within the banking sector, public debt, exports and imports.

- We however feel that the above developments will not warrant a revision to monetary policy and the CBR and Cash Reserve Ratio will remain at 7% and 4.25% respectively.

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