REVIEW OF THE IMPLEMENTATION OF THE MEDIUM-TERM DEBT STRATEGY IN KENYA

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Elizabeth.W. Njiru,
Public Finance Management Research Fellow,
Institute of Public Finance
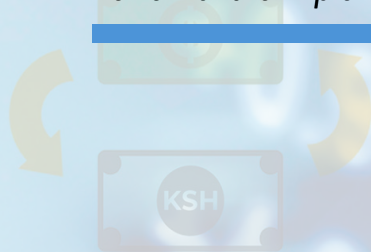
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ABSTRACT

A Medium-Term Debt Strategy (MTDS) is a critical policy tool designed to optimize a country's debt portfolio by balancing the government's financing needs with associated costs and risks. Since 2009, Kenya has developed annual MTDS documents with the aim of minimizing debt costs and risks. However, despite over a decade of implementing the strategy, Kenya continues to experience rising nominal debt and increasing debt service costs, with little improvement in key risk indicators.

This paper reviews the implementation of Kenya's MTDS from FY2016/17 to FY2022/23, addressing three central questions:

(1) How accurately does the government predict exchange rate depreciation in its MTDS?

(2) Is there a relationship between actual depreciation and the level of borrowing?

(3) Does the government's over- or underestimation of depreciation impact USD-denominated borrowing?

The findings reveal significant gaps in the government's ability to predict exchange rate depreciation. A five-year rolling average of actual depreciation outperformed the government's forecasts, suggesting that its projection model is insufficiently robust. Moreover, contrary to expectations, the government tends to increase USD borrowing when depreciation is high, effectively taking on more debt when it is more expensive. This counterproductive borrowing behavior points to shortcomings in debt management practices.

The study concludes with two key recommendations: first, that the Public Debt Management Office (PDMO) adopt average historical depreciation rates when formulating future depreciation assumptions in the MTDS; and second, that a clear policy be developed to guide USD borrowing decisions in response to currency depreciation or appreciation. These changes would enhance the accuracy of debt management strategies and reduce the long-term cost of debt for Kenya.

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1.0 INTRODUCTION

Prudent debt management is essential for a country to maintain sustainable debt levels. Effective debt management signals to creditors that the government can meet its debt obligations, thereby enhancing the country's financial credibility. Conversely, poor debt management can lead to excessive borrowing, which increases debt service costs. This rise in public debt heightens the perceived risk of investing in the country, often resulting in higher interest rates that make the debt even more expensive (Makhlouf, 2019).

The sharp increase in public debt levels across African countries has become a significant concern for policymakers. Soko (2022) attributes this rise to weak debt management practices and governance failures. In Sub-Saharan Africa (SSA), including Kenya, the shift from concessional to non-concessional loans, coupled with slowing economic growth, depreciating domestic currencies, and rising interest rates, has further aggravated the debt crisis (Mupunga & Ngundu, 2020).

To address these challenges, the International Monetary Fund (IMF) and the World Bank, collectively known as the Bretton Woods Institutions, designed the Medium-Term Debt Strategy (MTDS) template. The primary aim of the MTDS is to help countries formulate strategies that enable them to manage public debt effectively by balancing their financing needs with cost and risk considerations. The Bretton Woods Institutions also provide technical assistance to improve national debt management strategies. While these efforts aim to improve debt decisions over time, several SSA countries, including Kenya, continue to experience unsustainable levels of public debt.

1.1 RESEARCH QUESTION

The MTDS relies on assumptions about the future direction of the economy. Faulty assumptions can lead to poor design of the optimal borrowing strategy or make it difficult to implement. The Kenyan government has consistently strived to achieve its external to domestic borrowing mix commitment by selecting the borrowing strategy with lowest cost indicators and prudent level of risks, but over the years, it has deviated from its optimal medium-term debt strategy (that is, external-domestic borrowing mix targets) (Appendices 1 and 2). These deviations are caused by the government having overoptimistic assumptions in its MTDS that are difficult to implement. One of the assumptions is on the depreciation of exchange rate. However, what remains unclear is the extent to which the exchange rate assumption is to blame for the government decisions on USD borrowing in the event of depreciation of the local currency against the US dollar.

1.2. Specific Research Questions.

Kenya has maintained a high proportion of USD-denominated debt, averaging 67% from 2016 to 2023. This substantial reliance on foreign currency debt exposes the country to increased financial risks, particularly in the event of local currency depreciation against the USD. Exchange rate fluctuations, especially the depreciation of the Kenyan shilling, have been identified as major contributors to rising debt and increasing interest payments. However, there is limited empirical research assessing whether the government's assumptions about

exchange rate depreciation are reasonable or whether these assumptions directly influence USD-denominated borrowing decisions.

In theory, accurate exchange rate projections should guide prudent borrowing strategies, minimizing exposure to costly debt. But in practice, the effectiveness of these assumptions remains unclear. This paper seeks to interrogate the reasonableness of the assumptions made by the Public Debt Management Office (PDMO) regarding exchange rate depreciation and to evaluate their impact on borrowing decisions. To do this, the review focuses on answering the following critical questions:

1. How accurately does the government predict exchange rate depreciation?

2. Is there a relationship between actual depreciation rates and the level of USD borrowing?

3. Does the government's over- or underestimation of depreciation affect the extent of USD borrowing?

2.0. METHODOLOGY

This study employed a descriptive and exploratory approach to analyze Kenya's exchange rate depreciation assumptions and their impact on USD-denominated debt. The data for the analysis was drawn from multiple sources. Exchange rate data was sourced from the Central Bank of Kenya, while depreciation assumptions were obtained from various Medium-Term Debt Strategy (MTDS) documents. Additionally, data on USD-denominated debt was collected from Kenya's Annual Public Debt Reports and Quarterly Economic and Budgetary Review reports for the fiscal years FY2016/17 to FY2022/23.

The study involved a detailed review of the MTDS for each fiscal year to examine how the government formulates its exchange rate depreciation assumptions. It also evaluated the extent to which these assumptions were implemented in practice. By comparing the projected depreciation with actual exchange rate fluctuations, the study aimed to determine the accuracy of the government's forecasts and assess the relationship between exchange rate movements and USD borrowing decisions.

Through this methodology, the study was able to provide insights into whether the assumptions guiding Kenya's debt management strategies were reasonable, and how they influenced the level of USD-denominated debt.

3.0. RESULTS AND DISCUSSIONS

The review sought to first find out whether the government does a good job of predicting the depreciation.

This was done by comparing the exchange rate assumption as projected by the government in the MTDS, the actual depreciation and historical depreciation of each fiscal year. The results are presented in Table 1 below.

Table 1: Projected versus Annual Depreciation

	Jun-16	Jun-17	Jun-18	Jun-19	Jun-20	Jun-21	Jun-22	Jun-23
Average depreciation for the last 5 years (- means depreciation)	-4.1	-2.5	-3.9	-3.1	-2.8	-1.5	-1.5	-2.5
MTDS assumption (Government projection)	-5	-5	-5	-5	-5	-3	-3	-1.6
Annual depreciation (- means depreciation)	-10.9	-0.4	0.1	1.2	-2.4	-5	-3.7	-11.9
Deviation of the annual depreciation from government projection	-5.9	4.6	5.1	6.2	2.6	-2	-0.7	-10.3
Deviation of the 5-year depreciation average from the government projection.	0.9	2.5	1.1	1.9	2.2	1.5	1.5	-0.9
Deviation of annual depreciation from average depreciation of the last 5 years	-6.8	2.1	4	4.3	0.4	-3.5	-2.2	-9.4

Source: MTDS, Annual Public Debt report, PDMO's Monthly Bulletins and author computation

The table 1 demonstrates that in five out of eight years, the 5-year depreciation average is a more accurate predictor The government was more accurate thrice , that is, in 2016, 2021 and 2022. Clearly, the government's model for exchange rate depreciation performs worse than a simple average of 5-year performance.

The review further measured the accuracy of the predictions by taking the average of the absolute value of the difference between the government projection and the actual projection and compared it to the average for the difference between the 5—year projection and actual depreciation. The findings reveal that the deviation for the government is 4.7 while for the 5-year depreciation is 4.1. Although this difference is modest, it also implies that if the government used the 5-year figure to

project the depreciation, it would do better than it does currently. In short, the government's model does not predict the exchange rate particularly well.

Secondly, the review wanted to find out whether the government responds to actual depreciation by changing its borrowing behavior. Even if the projections are not accurate (and exchange rate projection is difficult), the government should respond to changes in the environment. If borrowing becomes more expensive, it should try to curb reliance on it. If it becomes cheaper, it may expand its use of credit. To answer this question, the review analyzed the average growth in USD denominated debt in years when the actual depreciation is above average, versus below average.

Table 2: Relationship Between Annual Depreciation and USD borrowing

	External Debt Stock	Total New Loan	Change of Stock	Depreciation	% of USD debt	USD New Loan	% growth in USD new loan	Annual Depreciation	Real GDP growth %
Jun-16	1,796,198	269,924	372,945	103,021	60.4	163,034	32%	-10.9%	5.8
Jun-17	2,294,153	385,745	497,955	112,210	67.5	260,378	60%	-0.4%	5.4
Jun-18	2,568,399	331,641	274,246	-57,395	71.7	237,787	-9%	0.1%	5.6
Jun-19	3,023,139	414,518	454,740	40,222	70.3	291,406	23%	1.2%	5.7
Jun-20	3,515,812	340,431	492,673	152,242	67.3	229,110	-21%	-2.4%	2.4
Jun-21	3,999,541	323,310	483,729	160,419	66	213,385	-7%	-5%	3.7
Jun-22	4,305,835	142,524	306,294	163,770	68.3	97,344	-54%	-3.7%	6.2
Jun-23	5,446,561	257,267	1,140,726	883,459	66.9	172,112	77%	-11.9%	5.2

Source: Annual Public debt report, PDMO Monthly Bulletins and author computation

[1]The review anticipated that in years when the depreciation is higher, USD borrowing should be lower and in years when the depreciation is lower, USD borrowing is higher. But Table 2 shows that by the end of FY 2015/16 and FY2022/23 the government borrowed a relatively higher quantity of USD debt despite the currency depreciating at a higher rate. This happened despite the economy growing at 5.8 percent and 5.2 percent in the two years respectively, so the higher borrowing and depreciation were not jointly caused by a poor economic environment. Moreover, an appreciation of the currency in June 2018 led to a drop in USD borrowing which was contrary to expectation of more USD borrowing. This reveals that the government is

not responsive to appreciation or depreciation of the KSH against the USD.

The average annual depreciation of the exchange rate for the period under review was 4.13%. From Table 1, when the average annual depreciation is more than 4.13%, the average growth in USD borrowing is 34%. The average growth in USD borrowing is negative 0.2 % when the annual depreciation is less than 4.13 %. Again, borrowing is higher when the Kenyan currency is weaker, which is contrary to expectations. When depreciation is higher the government should undertake less USD borrowing and with lower depreciation, more USD debt should be procured. This behavior explains why depreciation of the local currency against the US dollar has been contributing to rising nominal debt and cost of debt in the country.

1 The government should base its borrowing on the expected exchange rates not the current exchange rates. But the current exchange rates are the best predictor of the future exchange rates.

Another way of looking at this issue is to ask whether the government is responsive to surprise. The review sought to investigate whether there is any impact of government under or over projection of the historical depreciation on USD borrowing. This was analyzed by testing two scenarios. Firstly, it is expected that when the exchange rate depreciates more than anticipated, the government should borrow less USD denominated debt to reduce currency risk and higher external debt stock and interest payments exposure. Secondly, when the exchange rate depreciates less than predicted, it is expected that the government borrows more US denominated debt.

From Table 1, however, there is only one year when the historical depreciation was more than predicted (2023). In all the other years it was less than projected. The average borrowing growth rate from June 2016 to June 2022 when the depreciation was less than anticipated was 3.43%. The average growth rate in USD borrowing in June 2023 was 77% and this is when the historical depreciation was more than predicted. While this is too small a sample to be conclusive, it is true that when historical depreciation was higher than expected, there was more USD borrowing. This confirms the earlier findings that the government borrows more when the depreciation is higher and less when the depreciation is lower.

To determine the timing of the depreciation, the review went ahead to find out whether the borrowing occurs before depreciation. This argument was tested using quarterly data to find out whether there was more or less depreciation in the quarter of highest borrowing. The results (see in Appendix 3) reveal that in the FY2016/17 and 2017/18, the government borrowed heavily in quarter three but from FY 2018/19 onwards, the government borrowed heavily in the fourth quarter. Further, the results showed that increased borrowing occurred after high depreciation as evidenced in quarter two of FY2016/17 and FY2017/18 and quarter three of FY2020/21 and FY2021/22, thus confirming the previous findings of the review. As expected, quarter three of FY 2018/19, FY2019/20 and FY2022/23 had appreciation that was followed by high borrowing in the subsequent quarter. While appreciation could justify the heavy borrowing, the high depreciation in aforementioned quarters that was followed by heavy borrowing signifies a lack of policy to guide the USD borrowing when the local currency is depreciating. This implies that the government borrows heavily to fill its revenue shortfall with or without depreciation. But later blames depreciation for the rising stock of external debt in its Annual Public Debt reports.

4.0. CONCLUSION

The study makes the following conclusions

i.   The government is not particularly accurate when predicting the future depreciation of the exchange rate. A simple rolling 5-year average of depreciation performs better than the government's model.

ii.   Lack of responsiveness to actual exchange rate fluctuations is associated with more debt taken on when the debt is costlier (KSH has depreciated more relative to the USD). This is poor practice and increases the debt burden.

4.1. RECOMMENDATIONS

The research paper recommends the following.

a.   The PDMO needs to redesign the way it projects the exchange rate in the MTDS. By considering the historical and actual depreciation of the exchange rate when coming up with the exchange rate depreciation assumption in the MTDS, it will ultimately improve the consistency and accuracy of its depreciation projections.

b.   The PDMO needs to develop a policy to guide USD borrowing when the local currency is either appreciating or depreciating against the USD dollar.

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Appendix 1: Overview of Borrowing Mix Targets and Outturns

Composition of Debt by Instrument under Alternative Strategies, (in Percent of Outstanding Portfolio by 2023)								
Instrument	FY2018/19		FY2019/20		FY2020/21		FY2021/22	
	MTDS	Actual	MTDS	Actual	MTDS	Actual	MTDS	Actual
Concessional/ Semiconcessional	46	13.4	44	21.1	35	14	48	15
Commercial/ International Sovereign Bond	14	16.3	19	0.3	22	4.7	11	0
External Financing	60	29.7	63	21.4	57	18.7	59	15
Treasury bills	10	35	13	28	13	21	12	15
Treasury bonds	30	65	24	70	30	79	29	85
Domestic Financing	40	70.3	37	78.6	43	81.3	41	85

Source: Various MTDSs and Annual Public Debt Reports

Appendix 2: Overview of Optimal Borrowing Strategy Versus Outturn

Risk Indicators		FY2018/19		FY2019/20		FY2020/21		FY 2021/22		FY2022/23	
	Nominal debt as % of GDP	58.2	61.6	59.3	65.5	47.6	66	48.7	67.3	48.8	70.8
	Present value debt as % of GDP	50.2	50.7	51.9	61.3	39.7	58.8	40.7		43.1	64.4
	Interest payment as % GDP	3.8	3.9	3.5	4.3	3.3	4.6	2.9		3.2	5.5
Refinancing Risk	Debt maturing in 1yr (% of total)	15.2	27.4	15.6	11.6	19.4	14.8	19.3		17.8	12.7
	Debt maturing in 1yr (% of GDP)	8.9	13.8	9.3	8.6	9.2	10.2	9.4	9.2	8.7	10
	ATM External Portfolio (years)	11.7		11.1	11	11.9	10.8	12.2	10.5	12.6	9.3
	ATM Domestic Portfolio (years)	4.1		3.6	5.5	3.5	6.9	4.1	7.9	5.5	7.5
	ATM Total Portfolio (years)	8.8	7.4	8.6	8.9	8.5	9	9.4	9.3	9.7	8.5
Interest Rate Risk	ATR (years)	8.6	7.3	7.7	8.2	8	8.3	9.1	8.6	9.4	7.7
	Debt refixing in 1yr (% of total)	18.7	32.4	25.2	29.2	26.3	25.4	25		23.4	26.7
	Fixed rate debt (% of total)	96.3	91.9	89.8	85.8	92	87.7	93.2		93.1	84.5
Foreign Exchange Risk	FX debt as % of total	59.9	52	64.4	53	56.3	51.3	62.2	50.1	55.3	51.5

Source: Various MTDSs and Annual Public Debt Reports - (blank spaces means unavailability of data)

Appendix 3: Quarterly Borrowing and Depreciation

	External Debt Stock	New Loan	Exchange rate	% of USD debt	Depreciation rate	USD New Loan	% growth in USD new loan
16/17 Q1	1,854,711	39,165.32	101.34	60.50	-0.12%	23,695.02	-85%
16/17Q2	1,896,443	73,377.15	101.73	63.10	-4.30%	46,300.98	95%
16/17Q3	2,101,391	182,361.40	103.39	65.72	-4.15%	119,847.91	159%
16/17Q4	2,294,736	90,840.76	103.36	65.58	0.21%	59,573.37	-50%
17/18Q1	2,310,197	7,212.13	103.51	66.00	-0.64%	4,760.01	-92%
17/18Q2	2,353,795	16,873.82	103.37	67.70	-2.58%	11,423.58	140%
17/18Q3	2,512,431	250,987.56	101.86	69.40	-2.51%	174,185.37	1425%
17/18Q4	2,560,199	56,567.61	100.75	70.40	-1.44%	39,823.60	-77%
18/19Q1	2,605,333	16,832.31	100.71	71.65	-1.78%	12,060.35	-70%
18/19Q2	2,733,734	127,613.27	101.88	71.17	0.67%	90,822.36	653%
18/19Q3	2,731,598	34,463.87	100.75	67.24	5.52%	23,173.51	-74%
18/19Q4	3,023,138	380,054.19	101.30	70.30	-4.55%	267,178.10	1053%
19/20Q1	3,111,767	13,148.16	103.42	68.40	2.70%	8,993.34	-97%
19/20Q2	3,106,823	67,524.48	102.55	68.10	0.44%	45,984.17	411%
19/20Q3	3,212,634	17,681.75	101.91	67.80	0.44%	11,988.23	-74%
19/20Q4	3,515,810	242,450.33	106.49	67.30	0.74%	163,169.07	1261%
20/21Q1	3,663,491	(22,637.37)	107.93	66.10	1.78%	(14,963.30)	-109%
20/21Q2	3,793,285	37,170.43	109.51	64.90	1.82%	24,123.61	-261%
20/21Q3	3,769,867	6,637.73	109.75	65.30	-0.62%	4,334.44	-82%
20/21Q4	3,999,542	302,138.80	107.73	66.00	-1.07%	199,411.61	4501%
21/22Q1	4,058,486	(28,155.00)	109.19	66.90	-1.36%	(18,835.70)	-109%
21/22Q2	4,174,372	41,020.00	111.93	67.00	-0.15%	27,483.40	-246%
21/22Q3	4,209,560	(32,217.00)	113.80	67.30	-0.45%	(21,682.04)	-179%
21/22Q4	4,299,948	161,875.00	116.35	68.70	-2.08%	111,208.13	-613%
22/23Q1	4,334,791	31,117.00	119.41	69.70	-1.46%	21,688.55	-80%
22/23Q2	4,673,144	95,170.00	121.95	68.10	2.30%	64,810.77	199%
22/23Q3	4,851,095	80,111.00	126.54	67.30	1.17%	53,914.70	-17%
22/23Q4	5,446,561	310,759.00	137.26	66.90	0.59%	207,897.77	286%

Source: QEBRs and PDMO's Monthly Bulletins