



CENTRO DE INTEGRIDADE PÚBLICA  
Anticorrupção - Transparência - Integridade

# PUBLIC FINANCES

24<sup>th</sup> April de 2023 | Edition nrº 04 | Free Distribution | [www.cipmoz.org](http://www.cipmoz.org)

## THE GOVERNMENT'S STRATEGY OF BORROWING TO PAY OFF DEBT IS UNSUSTAINABLE IN THE MEDIUM AND LONG TERM

- The cumulative balance of the difference between disbursements and repayments of internal debt from previous years has already reached more than MZN 131,653.5 million, which corresponds to 57.9% of the stock of internal debt

By: Gift Essinalo

### 1. Introduction

As Mozambique began to suffer financing constraints in the international market and cut off support from programmatic partners as part of the hidden debt findings, domestic debt began to grow sharply. Over the period 2016 to 2021, the internal debt increased from MZN 87,709.6 million to MZN 227,451.8 million, representing a growth of 159.3%. The growth in internal debt results from a greater issuance of Treasury Bills (TBi) and Treasury Bonds (TBo)<sup>1</sup>, which reached a growth of 390.1% and 378.5% respectively.

The biggest problem in the growth of domestic debt has to do with the accumulation of outstanding balances, resulting from the difference between disbursements (receivable) and repayments (payable). By the end of 2021, these balances totalled about MZN 131,653.5 million, corresponding to 57.9% of the *stock of* domestic debt.

The accumulation of these balances constitutes a risk to the sustainability and management of public debt insofar as these balances could force the government to: (1) accumulate large sums of money to meet the concentration of repayments; and/or (2) contract new debt to meet debt repayments; and/or (3) issue new debt (TBi and TBo) to substitute maturing debt.

In a context of recurrent fiscal deficit, the most likely scenario presented is that the Government will opt to pay off the existing debt by contracting new debt and/or refinance the existing debt.<sup>2</sup>

This paper analyses the risks of the accumulation of debt balances and their implications for the management of the public debt, in a context in which its issuance continues to grow and the Government does not have a guideline for managing refinancing risks with a view to reducing the vulnerability of the domestic public debt.

<sup>1</sup> Treasury Bills (TBi) are short term public debt securities (maximum maturity 1 year), used to borrow funds to finance cash deficits, while Treasury Bonds (TBo) are medium and long term financial instruments (maturity over 1 year) of the State used to borrow funds to finance development projects.

<sup>2</sup> Debt refinancing consists in the issuance of new TBi and/or TBo to substitute the TBi's/TBo's with maturity. This phenomenon is also known as debt rollover.

In case of doubts, suggestions and issues related to this note, contact: [gift.essinalo@cipmoz.org](mailto:gift.essinalo@cipmoz.org)

## 2. The Government has been running up domestic debt balances at a rate of 33% per annum

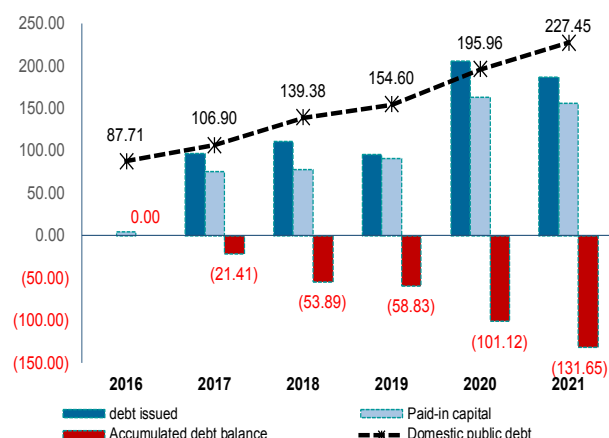
The internal debt experienced accelerated growth in the period from 2016 to 2021, rising from MT 87,709.6 million to MT 227,451.8 million, an increase of 159%. The issues of Treasury Bills and Treasury Bonds, which account for more than 70% of the domestic debt, grew by 390.1% and 378.5% respectively during the same period.

The volume of issuances (disbursements) and principal repayments reveal that the Government has been accumulating debt balances at a rapid pace. From 2017 to 2021 these have grown by 514.8%. They went from 21,414.95 million MT to 131,653.52 million MT, as illustrated in graph 1. By the end of 2021 these flows represented more than 57.9% of the *stock of* domestic debt.

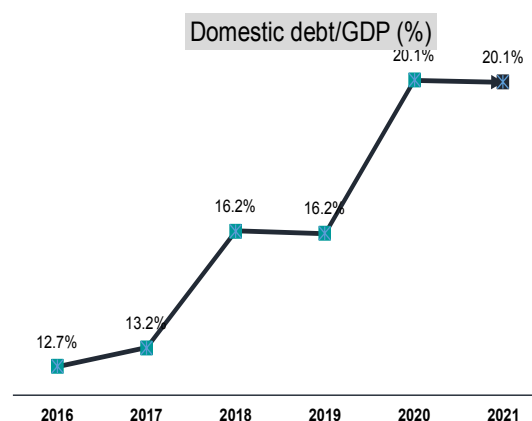
The debt dynamics equation<sup>3</sup> considers that growth is only problematic if the difference between its growth in relation to GDP is significant in several consecutive years. From a static perspective, the debt-to-GDP ratio shows how well the growth of debt is or is not in line with the performance of the economy. Thus, a low debt-to-GDP ratio indicates that the economy is growing more than the debt and therefore the country will be able to mobilise resources to pay it back, while a high ratio indicates that the debt is growing more than the economy's capacity to generate revenues to pay it back.

Chart 2 shows that, over the period under analysis, the debt-to-GDP ratio grew significantly. It rose from 12.7% in 2016 to 20.1% in 2021, representing an increase of 7.3pp. Therefore, it can be stated that the level of growth of the domestic debt is incompatible with the performance of the economy. Hence, the rate of growth of the domestic public debt can be considered problematic.

**Chart 1:** Evolution of accumulated domestic debt balances, 2016-2021 (in MT billion)<sup>4</sup>



**Chart 2:** Evolution of debt/GDP (%), 2016-2021.



Source: MEF - Public Debt Report, 2016-2021.

Rising debt overhangs constitute a refinancing risk in the medium and long term because they can cause future debt contracting to be geared towards repaying existing debts, to the detriment of investment projects, thus breaking the “Golden Rule of the Budget”<sup>5</sup>. Refinancing the debt increases the cost of debt since interest payments are largely determined by the size of the debt.

*It is important to note that the high growth of debt and the relative stagnation of GDP, in the period under analysis, are set against a background of financing constraints on the international market and the cut-off of support from programmatic partners as part of the discovery of hidden debts, aggravated by the effects of the Covid-19 pandemic in the years 2019 to 2021.*

<sup>3</sup> The equation for the dynamics of public debt is given by  $\frac{D_t}{GDP_t} = \frac{\delta}{1+g} \frac{D_{t-1}}{GDP_{t-1}} + \frac{D_t - \delta D_{t-1}}{GDP_t}$ , where  $\frac{D_t}{GDP_t}$  is the ratio of the primary deficit to GDP,  $g$  is the GDP growth rate,  $\delta$  is the interest rate on public debt and  $\frac{D_{t-1}}{GDP_{t-1}}$  is the debt-to-GDP ratio of the previous year. According to the *all else constant* equation, faster GDP growth reduces the debt burden and hence improves the primary deficit, while a higher interest rate raises the primary deficit and hence fewer resources to pay down the debt, which may open up room for the need to issue additional debt.

<sup>4</sup> For the purposes of this research paper, the term accumulated debt stock has been used to refer to the sum of the differences between issuances and principal payments.

<sup>5</sup> The Golden Rule of the Budget is a principle of fiscal policy that states that the Government can only contract debt to finance investment projects and not to pay current expenditures, including debt service. Based on this rule, the Government should incur debt counting that it will be paid back with tax revenue (IMF, 2007). Exceptions may occur in times of war, pandemic and economic crises (*Idem*).

Table 1 shows the evolution of refinancing risk indicators, to highlight: i) *Average Time to Maturity (ATM)*, which shows the weighted average maturity of the debt portfolio. Based on this indicator, a longer maturity period is desirable as it allows space for the Government to mobilise resources to meet the debt and; ii) the proportion of debt with a maturity of up to 1 year, which shows the concentration of debt due to be paid within 12 months. Based on this indicator, a higher concentration of debt with this profile implies that the government should, in a short space of time, have cash balances to pay it off, which can generate pressure for refinancing or rolling over the debt in the short term.

**Table 1:** Evolution of domestic debt refinancing risk, 2016-2021

Indicators	2016	2017	2018	2019	2020	2021	Δ 2016-2021
Total debt stock (MT million)	699,791.69	662,449.84	735,598.63	750,316.08	907,600.77	890,747.65	27.3%
Domestic debt stock (MT million)	87,709.64	106,899.61	139,377.17	154,595.16	195,963.73	227,451.82	159.3%
Total debt stock (% of GDP)	101.53	81.90	85.63	78.42	93.12	78.55	-22.6%
Domestic debt stock (% of GDP)	12.73	13.22	16.23	16.16	20.11	20.06	57.6%
<b>Refinancing risk</b>							
Average time to maturity - ATM (in years)	4.00	4.00	4.50	4.46	3.80	7.70	-
Domestic debt maturing in 1 year (% of total)	26.00	32.80	23.10	23.10	44.50	31.30	-
Domestic debt maturing in 1 year (% of GDP)	3.31	4.34	3.75	3.73	8.95	6.28	-

Source: MEF-Fiscal Risk Report, 2018-2021.

The results in table 1 show that the average maturity of the domestic debt was 4 years in almost the entire period, with the exception of 2021 when it rose to 7 years. This can be interpreted as a debt management strategy through the substitution of instruments with relatively short maturities for instruments with relatively long maturities, in order to provide room for the government to mobilize resources. Although considered a good strategy, this change can also be considered problematic if the government is using the medium-long term government bonds to finance cash deficits.

With regard to the proportion of debt maturing within 1 year, the results show that this was at high levels, with greater emphasis on the years 2020 and 2021, when it reached about 44.5% and 31.3% respectively, as shown in table 2. The high concentration of short-term debt is a risk factor for the Government's cash management. This indicator also shows a high variability of values which can be interpreted as a lack of monitoring and application of strategies to mitigate this type of risk.

The monitoring and application of a refinancing risk mitigation strategy opens space for the need for the government to define the maximum proportion of debt permissible for rollover as well as the maximum ceilings for short-term debt concentration that do not place its sustainability at risk. Portugal is one of the countries that has defined the maximum limits for debt concentration by maturity profile, as illustrated in Table 2. <sup>6</sup>

**Table 2:** Debt ratio limits by maturity.

Proportion of debt	Time period
25%	12 months
40%	24 months
50%	36 months

Source: IGCP.

As shown in Table 2, Portugal has set the maximum concentration level of debt with maturities of up to 1, 2 and 3 years at 25%, 40% and 50% of total debt, respectively. These ceilings indicate to policy makers that during the debt issuance process, the debt should not exceed the limits set.

The benefits of establishing refinancing limits as well as the proportion of debt permissible for rollover reside in the fact that at each moment the Government knows the debt profile to issue or to seek alternative financing that does not jeopardise debt sustainability or increase exposure to refinancing risk.

<sup>6</sup> [https://www.igcp.pt/fotos/editor2/OrientacoesGestDiv\\_definicoes\\_2\\_2004.pdf](https://www.igcp.pt/fotos/editor2/OrientacoesGestDiv_definicoes_2_2004.pdf)

### 3. Final considerations

Domestic public debt has been growing at an accelerated pace. It rose from MZN 87,709.64 million in 2016 to MZN 227,451.82 million in 2021, an increase of 57.9%. The high growth of internal debt results from the accumulation of previous debt balances, which until 2021 would make up about 57.9% of the internal debt *stock*. Additionally, there is a higher concentration of short-term domestic debt, which may put pressure on the government to accumulate cash balances to meet these obligations.

The combination of cumulative debt balances and concentration of short-term debt constitute the main refinancing and debt sustainability risks in the short, medium and long term. The management of these risks requires the Government to establish refinancing risk reference limits within the Public Debt Management Strategy. These limits should indicate the maximum permissible percentage of debt with maturities of up to 1, 2 and 3 years, as well as the proportion of public debt acceptable for roll-over. These limits will make it possible not only to monitor the refinancing risk, but also to look for financing alternatives that do not increase the vulnerability of the public debt.

### 4. Consulted documents

IGCP (N/A). Guidelines for the Management of Direct State Debt by IGCP. Available at [https://www.igcp.pt/fotos/editor2/OrientacoesGestDiv\\_definicoes\\_2\\_2004.pdf](https://www.igcp.pt/fotos/editor2/OrientacoesGestDiv_definicoes_2_2004.pdf).

IMF (2007), The Golden Rule and the Economic Cycles. Available at [www.elibrary.imf.org](http://www.elibrary.imf.org).

MEF (2022), Public Debt Reports 2021. Maputo. Available at [www.mef.gov.mz](http://www.mef.gov.mz)

\_\_\_\_ (2021), Public Debt Reports 2020. Maputo. Available at [www.mef.gov.mz](http://www.mef.gov.mz)

\_\_\_\_ (2020), Public Debt Reports 2019. Maputo. Available at [www.mef.gov.mz](http://www.mef.gov.mz)

\_\_\_\_ (2019), Public Debt Reports 2018. Maputo. Available at [www.mef.gov.mz](http://www.mef.gov.mz)

\_\_\_\_ (2018), Public Debt Reports 2017. Maputo. Available at [www.mef.gov.mz](http://www.mef.gov.mz)

\_\_\_\_ (2016), Public Debt Reports 2015. Maputo. Available at [www.mef.gov.mz](http://www.mef.gov.mz)

MEF (2022), Fiscal Risk Reports 2023. Maputo. Available at [www.mef.gov.mz](http://www.mef.gov.mz)

\_\_\_\_ (2021), Fiscal Risk Reports 2022. Maputo. Available at [www.mef.gov.mz](http://www.mef.gov.mz)

\_\_\_\_ (2020), Fiscal Risk Reports 2021. Maputo. Available at [www.mef.gov.mz](http://www.mef.gov.mz)

\_\_\_\_ (2019), Fiscal Risk Reports 2020. Maputo. Available at [www.mef.gov.mz](http://www.mef.gov.mz)

\_\_\_\_ (2018), Fiscal Risk Reports 2019. Maputo. Available at [www.mef.gov.mz](http://www.mef.gov.mz)

Zenghelis, D; Manley, A; & J. Wdowin (2020), Public Debt, Public Wealth and Economic Dynamics. Bennett Institute Working Paper. [www.bennettinstitute.cam.ac.uk](http://www.bennettinstitute.cam.ac.uk)



CENTRO DE INTEGRIDADE PÚBLICA  
Anticorrupção - Transparência - Integridade

---

Partners:



Schweizerische Eidgenossenschaft  
Confédération suisse  
Confederazione Svizzera  
Confederaziun svizra



Norwegian Embassy



Suécia  
Sverige

Embaixada da Suíça em Moçambique



Reino dos Países Baixos



## Editorial Information:

**Director:** Edson Cortez

**Author:** Gift Essinalo

**Peer Review:** Borges Nhamirre, Rui Mate,  
Estrela Charles

**Language Review:** Samuel Monjane

**Propriety:** Centro de Integridade Pública

Rua Fernão Melo e Castro,  
Bairro da Sommerschild, nº 124  
Tel: (+258) 21 499916 | Fax: (+258) 21 499917  
Cel: (+258) 82 3016391  
[f](#)@CIP.Mozambique [t](#)@CIPMoz  
[www.cipmoz.org](http://www.cipmoz.org) | Maputo - Moçambique