ANALYSIS OF THE MAIN RISKS TO PUBLIC DEBT SUSTAINABILITY IN THE MEFMI POST-HIPC COUNTRIES - The Case Study of Malawi, Tanzania and Uganda.

By

Stan Nkhata,
Ministry of Finance,
Debt and Aid Management Division,
Lilongwe, MALAWI.

July 2009

1 This paper is submitted to the Macroeconomic and Financial Management Institute of Eastern and Southern Africa (MEFMI) in partial fulfilment of the requirements of the MEFMI Fellows Development Programme.
# TABLE OF CONTENTS

List of Tables ................................................................................................................................. iii
List of Figures ................................................................................................................................. iii

EXECUTIVE SUMMARY ............................................................................................................. iv

SECTION 1: INTRODUCTION .................................................................................................... 1
  1.1 Background ............................................................................................................................ 1
  1.2 Statement of the Problem ....................................................................................................... 2
  1.3 Objectives and Significance of the Study ............................................................................ 3
  1.4 Organization of the Paper .................................................................................................... 4

SECTION 2: REVIEW OF THE PUBLIC EXTERNAL DEBT PORTFOLIO ....................... 5
  2.1 Review of Malawi’s Public Debt Portfolio ........................................................................ 5
  2.2 Overview of Tanzania’s Public Debt Portfolio .................................................................. 9
  2.3 Overview of Uganda’s Public Debt Portfolio .................................................................... 10

SECTION 3: KEY MACROECONOMIC ASSUMPTIONS FOR PUBLIC DEBT SUSTAINABILITY IN MALAWI ............................................................................................................ 11
  3.1 Introduction ........................................................................................................................ 11
  3.2 Real Sector Assumptions ..................................................................................................... 11
  3.3 External Sector Assumptions .............................................................................................. 12
  3.4 Fiscal Sector Assumptions .................................................................................................. 12
  3.5 Monetary Sector Assumptions ............................................................................................ 13

SECTION 4: DISCUSSION OF PUBLIC DEBT SUSTAINABILITY INDICATORS ...... 14
  4.1 Introduction ........................................................................................................................ 14
  4.2 External Debt Sustainability Indicators ............................................................................. 14
  4.3 Domestic Debt and Total Debt Sustainability Indicators .................................................. 16

SECTION 5: RESULTS OF PUBLIC DEBT SUSTAINABILITY and RISK ANALYSIS IN MALAWI, TANZANIA AND UGANDA ................................................................. 17
  5.1 Introduction ........................................................................................................................ 17
  5.2 External Debt Sustainability Analysis under the Baseline Macroeconomic Scenario .... 17
  5.3 External Debt Sustainability Analysis in Malawi under Alternative Scenarios ............. 18
  5.3.1 Analysis of Risks to External Debt Sustainability in Malawi ....................................... 18
  5.3.2 Effects of Low GDP Growth on External Debt Sustainability in Malawi ................. 19
  5.3.3 Effects of Low Exports Growth on External Debt Sustainability in Malawi .......... 20
  5.3.4 Effects of Increase in Interest Rates on Debt Sustainability in Malawi .................... 21
  5.4 Domestic Debt Sustainability Analysis in Malawi ........................................................... 22
  5.5 Analysis of Total Public Debt Sustainability in Malawi .................................................. 23
  5.6 Public Debt Sustainability and Risk Analysis in Tanzania ............................................. 25
  5.6.1 Findings of External Debt Sustainability Analysis in Tanzania ................................. 25
  5.6.2 Findings of Public Debt Sustainability Analysis in Tanzania .................................... 26
  5.7 Public Debt Sustainability Analysis in Uganda ............................................................... 27
  5.7.1 Findings of External Debt Sustainability Analysis in Uganda ................................. 27
  5.7.2 Findings of Domestic and Total Public Debt Sustainability Analysis in Uganda ... 28

SECTION 6: CONCLUSIONS AND POLICY RECOMMENDATIONS ............................ 31
  6.1 Summary of study findings ............................................................................................... 31
  6.2 Policy Recommendations ................................................................................................. 33
List of Tables

Table 1: Malawi’s External Debt Indicators ................................................................................................. 1
Table 2: Key debt indictors in Tanzania ....................................................................................................... 9
Table 3: Debt Sustainability Indicators and Thresholds under DSF ........................................................... 15
Table 4: Malawi’s External Debt Sustainability Indicators under the Baseline Scenario, 2009-2029 ...... 17
Table 5: Malawi’s External Debt Sustainability Indicators under Low GDP growth, 2009-2029 .......... 19
Table 6: Malawi’s External Debt Sustainability Indicators under Lower Exports Growth, 2009-2029 ..... 21
Table 7: Malawi’s External Debt Sustainability Indicators under Unfavourable New Loans, 2009-2029 22
Table 8: Malawi’s Public Debt Sustainability Indicators under Alternative Scenarios, 2009-2029........ 24
Table 9: Uganda External Debt Sustainability ratios under the Baseline Scenario, 2008-2018 ............. 28

List of Figures

Figure 1: Total Debt Stock in US$ million: 1999-2008............................................................................. 5
Figure 2: Multilateral Debt in Dec 2008 in % ....................................................................................... 7
Figure 3: Uganda’s Domestic debt (in % of GDP) ................................................................................ 29
EXECUTIVE SUMMARY

The main feature of the external debt management environment in the MEFMI post HIPCs is that the foreign debt indicators are currently significantly lower following the external debt cancellations under the Enhanced Heavily Indebted Poor Countries (HIPC) and Multilateral Debt Relief Initiatives (MDRI). For example, Malawi’s external debt stock was reduced from US$2.97 billion as of end-2005 before debt relief to US$0.49 billion as of December 2006 and was estimated at US$0.68 billion as of end-2008. As a proportion of Gross Domestic Product (GDP), the external debt stock was reduced from 104% before debt relief to 14.2% in 2006 after debt relief.

Uganda’s external debt stock was also reduced significantly due to MDRI from US$7.0 billion (or 20.7% of GDP) at end the 2005/06 financial year (FY) to US$5.0 billion (or 12.5% of GDP) at end of 2006/07FY. Similarly, the external debt cancellations under MDRI and HIPC have had a significant impact on Tanzania’s debt indicators. The external debt stock was reduced from 37% of GDP before debt relief in 2005/2006FY to 16.6% of GDP after debt relief in the 2007/08 financial year.

The significant reduction in the external debt indicators in the above MEFMI member countries have led to highly sustainable external debt situations thereby increasing the space for additional public external borrowing. The main risk arising from this scenario is that the Governments may be tempted to acquire new external financing that is not sufficiently concessional thereby leading to future external repayment problems. In addition, future external debt sustainability may be compromised by several risk factors, including the possibility of low GDP and exports growth which are some of the main binding constraints to debt sustainability in low income countries. An additional problem for Malawi is that the overall fiscal sustainability of public debt is still fragile despite the significant reductions in the external debt stock.

In view of the above, this paper seeks to assess the impact of the main risks to public external and domestic debt sustainability after the HIPC and MDRI debt cancellations in the Malawi. Specifically, a Debt Sustainability Analysis (DSA) will be conducted as a basis for assessing the
impact of adverse developments in the main variables that affect Malawi’s external debt sustainability, including low GDP and export growth and contraction of external loans on non-concessional terms. In addition, this paper reviews the recent public debt sustainability reports of Tanzania and Uganda in order to have a broad view of the main risks to public external and domestic debt sustainability in the post HIPC period in these countries.

Using the Debt Sustainability Framework (DSF), this paper has confirmed that Malawi’s external is projected to remain highly sustainable in the period 2009-2029 under the baseline macroeconomic scenario. The ratio of the present value (PV) of external debt to exports is estimated at 56% in 2009 and is projected to remain below the sustainability threshold of 150% in the period 2009-2009. The ratios of the present value of external debt to GDP and domestic budget revenue are projected to remain below the sustainability thresholds of 40% and 250%, respectively, through to 2029.

The case studies of Tanzania and Uganda also show that external debts were projected to remain highly sustainable from 2008 through to 2029 (Tanzania and Uganda DSA reports, 2008). The debt sustainability analysis conducted by the Government of Tanzania found that all debt indicators fall below the sustainability thresholds of these strong performers under DSF. The ratio of the present value of Tanzania’s external debt to GDP was estimated at 15.1% in 2009 and was projected to remain below 10% for most of the projection period 2009-2029, which is significantly below the sustainable threshold of 50% for strong performers. In Uganda, the ratio of the present value of external debt to GDP was projected at 14.9% in 2008, which is also highly sustainable and was expected to remain below the PV/GDP threshold of 50% through out the projection period 2009-2029.

However, this paper suggests that Malawi’s external debt is subject to the risk of low GDP and export growth which may lead to the breach of the relevant sustainability thresholds in the period under review. The results show that lower GDP growth leads to a steady increase in the ratio of PV of debt to exports from 56% in 2009 and breaches the sustainability threshold of PV/XGS of 150% by 2014 and remain unsustainable thereafter. On the other hand, lower exports growth leads to an increase the ratio of PV of external debt to exports from 54% in 2009 and exceeds the
sustainable threshold by 2010 and remains unsustainable thereafter through to 2029. This analysis has also found that Malawi’s total public debt (including domestic and external debt) is vulnerable to the risks of low GDP and export growth and increased primary deficit. It is observed that adverse movements in GDP and exports lead to significant increases in almost all the debt ratios during the projection period compared to the baseline, indicating public debt may not be sustainable from the fiscal point of view.

The case study of Tanzania shows total public debt (external and domestic debt) is marginally sensitive to low GDP growth and worsening primary balance since all the debt ratios do not significantly increase over the baseline projections. The case of Uganda shows that external debt is vulnerable to the risks of both low GDP and exports growth since the relevant debt ratios tend to worsen significantly during the projection period under the pessimistic macroeconomic scenario compared to the baseline scenario.

The vulnerability of external debts in these countries to increased lending rates suggests that Governments should analyse all new external borrowing proposals so that new debts are sufficiently concessional in a way that promotes future debt sustainability. Non concessional financing may only be considered for activities that are strategic, have high economic value and generate the future repayment capacity. It is further recommended that the international donor community should consider providing more grants financing in order to improve the future prospects of external debt sustainability in Low Income Countries (LICs) prospects while meeting their financing requirements.

The sensitivity of public debt sustainability to lower GDP growth and exports, and higher primary deficits confirms that good economic management is crucial to improving the sustainability of public domestic and external debt. It is recommended that the Government authorities should remain committed to implementing sound macroeconomic policies in order to support their debt sustainability prospects.

It is also recommended that countries in the MEFMI region should prepare robust national debt strategies to guide their debt management operations. The key elements of these strategies should
include specifying the linkages between public debt and macroeconomic frameworks in order to monitor the developments either way. In addition, the strategies should include country specific reference benchmarks for domestic debt and total public debt which do not have internationally agreed benchmarks for assessing the changes in these variables.
SECTION 1: INTRODUCTION

1.1 Background

The main feature of the external debt management environment in most post HIPC countries is that the foreign debt indicators are currently significantly lower following the external debt cancellations under the Enhanced Heavily Indebted Poor Countries (HIPC) and Multilateral Debt Relief Initiatives (MDRI). Through these initiatives, the disbursed outstanding debt stocks of the concerned countries have been significantly reduced. For example, Malawi’s external debt stock was reduced from US$2.97 billion as of end-2005 before debt relief to US$0.49 billion as of December 2006 and was estimated at US$0.68 billion as of end-2008. As a proportion of Gross Domestic Product (GDP), the external debt stock was reduced from 104% before debt relief to 14.2% in 2006 and was projected at 16% as of end-2008 (table 1). The results of the Debt Sustainability Analysis (DSA) conducted by the Malawi Government in April 2008 indicated that external debt was highly sustainable as of end-2008 and would remain sustainable over the projection period 2008-2028. The ratio of the Present Value of external debt to exports of goods and services (PV/XGS) was 40.5% in 2007, which is significantly below the sustainable threshold of 150% compared to the unsustainable position of 229% that was recorded prior to the HIPC Completion Point in 2005 (table 1).

Table 1: Malawi’s External Debt Indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Threshold</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt/GDP (%)</td>
<td>104</td>
<td>14.2</td>
<td>14.4</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>PV/Exports (%)</td>
<td>150</td>
<td>229</td>
<td>31.3</td>
<td>41.9</td>
<td>47</td>
</tr>
<tr>
<td>PV/Revenue (%)</td>
<td>250</td>
<td>231</td>
<td>31.3</td>
<td>47</td>
<td>51</td>
</tr>
<tr>
<td>PV/GDP (%)</td>
<td>40</td>
<td>38</td>
<td>8</td>
<td>8.2</td>
<td>9</td>
</tr>
<tr>
<td>Debt Service Ratio (%)</td>
<td>20</td>
<td>24</td>
<td>2.1</td>
<td>3.2</td>
<td>3.5</td>
</tr>
</tbody>
</table>

Source: Ministry of Finance, Malawi

Uganda’s external debt stock was also reduced significantly due to MDRI from US$7.0 billion (or 20.7% of GDP) in the 2005/06 financial year (FY) to US$5.0 billion (or 12.5% of GDP) in the 2006/07FY. According to the IMF DSA report (2006), the ratio of the present value of
external debt was reduced from an unsustainable position of 169% in 2006 before MDRI to 45% after debt relief. The debt sustainability analysis conducted by the Uganda Government in 2008 found that external debt was highly sustainable as of end-2007 under the baseline macroeconomic scenario. The ratio of PV of debt to exports was estimated at 51.4% in 2008 and was projected to remain below the sustainable threshold of 200% for Uganda in the period 2008-2028.

Like Malawi and Uganda, the case study of Tanzania also demonstrates that the external debt cancellations under MDRI and HIPC have had a significant impact on the debt indicators. Tanzania’s external debt stock was reduced from 37% of GDP before debt relief in 2005/2006FY to 16.6% of GDP after debt relief in the 2007/08FY. The debt sustainability analysis conducted by the Government of Tanzania in 2008 concluded that external debt was sustainable as of end-2008. The Present Value of Debt to Export (PVD/XGS) ratio was projected at 68.6% in 2008/09 FY which is below the acceptable threshold of 200% for Tanzania. This was projected to decline to about 35% in 2018/19FY and to 18.1% in 2027/28FY.

1.2 Statement of the Problem

The significant reduction in the external debt indicators in the above MEFMI member countries has led to highly sustainable external debt positions thereby increasing the scope for additional public external borrowing. The main risk arising from this scenario is that the Governments may be tempted to acquire new external financing that is not concessional (e.g., external borrowing on high interest rates) thereby leading to future external repayment problems. In addition, future debt sustainability in the post HIPCs may be compromised by several risk factors including the possibility of lower GDP and exports growth which are believed to be the main binding constraints to debt sustainability in Low Income Countries.

An additional problem for Malawi is that the overall fiscal sustainability of the public debt is still fragile despite the significant reductions in the external debt stock under the HIPC and MDRI. Total interest payments in the budget remain high mainly because of domestic debt service. The domestic debt burden stems from the fiscal indiscipline which increased the fiscal deficit in the
period 2001-2003 from -5.8% of GDP in 2000/01 to -7.9% in 2001/02 and increased further to -11.6% of GDP in the following fiscal year. Consequently, there was a rapid accumulation of the domestic debt stock from under 7% of GDP in 2001 to 27% of GDP in 2004. Domestic debt will, therefore, be the main challenge for the Malawi Government considering that it is mainly in the form of Treasury Bills which have a short term maturity period of less than one year with high interest rates of at least 10%. This poses major fiscal and refinancing risk to the Government in the medium to long term.

1.3 Objectives and Significance of the Study

In view of the above, this paper seeks to conduct a debt sustainability analysis as a basis for assessing the impact of the main risks to public external and domestic debt sustainability in the future after debt relief. Specifically, the paper will:

a) Assess the impact of adverse developments in the main variables that affect Malawi’s external debt sustainability, including low GDP and exports growth, and contraction of external loans on non-concessional terms. Given the prominence of domestic debt in Malawi, the overall sustainability of the total public debt (including domestic and external debt) will be analysed.

b) Review the recent public debt sustainability reports of Tanzania and Uganda in order to have a broad view of the main risks to public external and domestic debt sustainability in the post HIPC period.

This study is relevant because its results will stimulate debate on the major risks to public debt sustainability in the MEFMI region in the post HIPC period as a basis for policy action at country, regional and global level in order to prevent a return to the debt burden of the period before debt relief.
1.4 **Organization of the Paper**

After the above introduction, the rest of this paper is organized as follows: the following section is a review of Malawi’s public external and domestic debt situation as of end-2008. This chapter will also briefly review the public debt portfolios of Tanzania and Uganda. The assumptions used in deriving the projections of Malawi’s macroeconomic data will be discussed in section 3. The indicators of debt sustainability will be briefly discussed in section 4. The results of the public external and domestic debt sustainability in Malawi and the related risks are discussed in section 5. This section will also review the recent studies on debt sustainability in Tanzania and Uganda in the post HIPC period. The last section summarizes the findings of the study and their implications on public debt and economic management policy at country, regional and global level.
SECTION 2: REVIEW OF THE PUBLIC EXTERNAL DEBT PORTFOLIO

2.1 Review of Malawi’s Public Debt Portfolio

2.1.1 Evolution of External Debt

Malawi’s stock of external debt as of end-2008 was estimated at US$0.68 billion in nominal terms, equivalent to 16% of Gross Domestic Product (GDP). Prior to the Completion Point in 2006, Malawi external debt was estimated at US$2.97 billion as of end-2005, equivalent to 104% of Gross Domestic Product (fig 1).

Figure 1: Total Debt Stock in US$ million: 1999-2008

![Graph showing Total Debt Stock from 1999 to 2008](image)

Source: Ministry of Finance, Malawi

2.1.2 Creditor and borrower Composition of External Debt Stock

The composition of external debt at the end of 2008 remained unchanged from the position before the debt cancellations, with most of the debt still owed to the multilateral creditors which accounted for US$0.61 billion or 89% of the debt stock while the bilateral creditors were owed
US$0.72 billion or 11%. There was no outstanding commercial debt as of end-2008, having been fully repaid or written off under the Paris Club agreement of October 2006 between the Malawi Government and the concerned creditors. As a matter of policy, the Malawi Government is limited from contracting commercial loans in order to promote debt sustainability. This is also part of the International Monetary Fund supported economic programme which limits the Government’s external borrowing to concessional loans only.

Multilateral debt is mostly owed to the International Development Association (IDA) of the World Bank Group which accounted for 30.7% of multilateral debt and 27.7% of the total outstanding external debt stock as of end-2008. Before the HIPC Completion Point, IDA was also the largest creditor, accounting for 65% of the multilateral debt as of end-2005. The African Development Fund (ADF) was the second largest multilateral creditor as of December 2008, accounting for US$129 or 20.6% of the multilateral debt followed by the International Monetary Fund and the International Fund for Agricultural Development (IFAD) at 20.3% and 12.0%, respectively (fig 2). The other multilateral creditors are the Nordic Development Fund (NDF), Arab Bank for Africa Development (BADEA), European Investment Bank (EIB), OPEC Fund for International Development (OFID), and the African Development Bank (ADB) which accounted, collectively, for 16% of the multilateral debt stock.
Unlike multilateral debt, the composition of bilateral debt has changed significantly after the debt cancellation since all the debts owed to the Paris Club creditors was written off. The remaining bilateral creditors are the Kuwait Fund, the Export and Import Bank of China (Taiwan) and the Export and Import Bank of India, which accounted for of 65.8%, 30.4 and 3.8% of bilateral debt stock as of December 2008, respectively. However, the Government of the Peoples Republic of China will become Malawi’s forth bilateral creditor following the introduction of bilateral relations between the two Governments under which the former will provide concessional loans of about US$200 million over the period 2009-2013.

Most of Malawí’s public external debt is owed by Central Government which accounted for over 86 % of the total external debt stock as of December 2008, followed by the Reserve Bank of Malawi and the public corporations at 13% and 1%, respectively.
2.1.3 Concessionality of External Debt

The current structure of Malawi’s external debt does not constitute a significant source of external debt vulnerability since all the loans in the debt portfolio were obtained on concessional terms. The average grant element of the debt portfolio was 43% as of end-2008. The entire external debt portfolio was composed of external loans that had fixed interest rate, averaging about 1.3% with an average original maturity period of 30 years. All the variable rate debts were cancelled under HIPC Initiative after Malawi reached the Completion Point.

2.1.4 Currency Structure of External Debt

The currency structure of Malawi’s external debt is closely related to the creditor composition of the debt. Most of external debt is denominated in Special Drawing Rights (SDR), which accounted for 60% of DOD as of end-2008 followed by the United States dollar and the Euro at 18% and 10%, respectively. The share of the other currencies (Kuwait Dinar, Japanese Yen, South African Rand) was 11%. This currency structure appears prudent because it closely matches Malawi’s sources of foreign exchange which is used to service the external debt.

2.1.5 Review of Malawi’s Domestic Debt Portfolio

Malawi’s public domestic debt has been reduced significantly in recent years as a result of the Government’s fiscal consolidation programme. As a proportion of GDP, the domestic debt stock of the Central Government declined to 15.5% as of end-2008 compared to 27% in mid 2004. Lapses in fiscal discipline were the major factor that had contributed to the significant increase in domestic debt in the period 2001-2004.

The structure of Malawi’s domestic debt portfolio makes it vulnerable to several risks including the frequent roll-over risk. Domestic debt is mainly concentrated in Treasury Bills, with short term maturity of less than one year. Treasury Bills accounted for 77% of the total domestic debt as of end-2008 compared to treasury bonds at 23%. Treasury bonds are debt instruments with maturities between 3-5 years.
The short maturity structure of domestic debt increases the exposure to interest rates risk, more especially when there are upward adjustments in the domestic interest rates. This is a major fiscal risk to the Government, evidenced by the rising interest costs on domestic debt in the period 2001-2004. In fact, interest payments increased from about 2% of GDP in 2000 to 7% of GDP in 2004.

2.2 Overview of Tanzania’s Public Debt Portfolio

Tanzania’s total public debt indicators have improved significantly in the past three years largely due to the external debt stock cancellations under the Multilateral Debt Relief Initiative (MDRI) and the Heavily Indebted Poor Countries Initiative (HIPC). It reached the Decision Point in April 2000 and the Completion Point in November 2001, which qualified the country for debt stock cancellations under MDRI from the IMF, World Bank and the African Development Bank in 2006. The external debt stock was reduced from US$7.89 billion before debt relief in 2005/06FY to US$4.69 billion in 2006/07. The external debt stock was estimated at US$5.77 billion in 2007/08 FY.

As a proportion of GDP, total public debt has been halved after debt relief from 65.6% in 2000/01 FY to 30.2 of GDP in 2007/08 (table 2). Of this indebtedness, external debt represented 16.6% of GDP as of end-2008 from 38% in 2004/05 FY. On the other hand, domestic debt as percentage of GDP ratio increased from 10.3% in 2000/01FY to 16.6% in 2006/07FY and declined to 13.6% in 2007/08FY.

Table 2: Key debt indictors in Tanzania

<table>
<thead>
<tr>
<th>Indicators</th>
<th>2000/01</th>
<th>2001/02</th>
<th>2002/03</th>
<th>2003/04</th>
<th>2004/05</th>
<th>2005/06</th>
<th>2006/07</th>
<th>2007/08</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public debt as % GDP</td>
<td>65.6</td>
<td>61.6</td>
<td>58.4</td>
<td>53.5</td>
<td>48.9</td>
<td>50.8</td>
<td>48.2</td>
<td>30.2</td>
</tr>
<tr>
<td>External debt as % GDP</td>
<td>55.3</td>
<td>51.5</td>
<td>47.7</td>
<td>43.0</td>
<td>37.6</td>
<td>36.3</td>
<td>31.6</td>
<td>16.6</td>
</tr>
<tr>
<td>Domestic debt as % GDP</td>
<td>10.3</td>
<td>10.1</td>
<td>10.7</td>
<td>10.5</td>
<td>11.3</td>
<td>14.5</td>
<td>16.6</td>
<td>13.6</td>
</tr>
<tr>
<td>Public debt service as % Revenue</td>
<td>18.2</td>
<td>14.6</td>
<td>11.5</td>
<td>11.9</td>
<td>10.2</td>
<td>9.2</td>
<td>3.1</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Source: Tanzania Debt Sustainability Analysis Report, 2008
2.3 Overview of Uganda’s Public Debt Portfolio

Uganda was one of the few countries that benefited from the first phase of HIPC Initiative having reached the Decision Point in 1997 and the Completion Point in 1998. It also qualified from debt relief under the Enhanced HIPC Initiative in February 2000 and reached the Completion Point in May 2000. The Government of Uganda received significant debt stock cancellations under MDRI in 2006 on debts owed to the IMF, World Bank and the African Development Bank. Consequently, the external debt stock was reduced from US$4.3 billion in 2005/06FY to US$1.7 billion at the end of the 2006/07 financial year (Uganda DSA report).

As a result of debt relief under MDRI, Uganda’s total public external and domestic debt stock was reduced from US$7.0 billion (equivalent to 20.7% of GDP) at end of the 2005/06 financial year to US$5.0 (equivalent to 12.5% of GDP) billion at in 2006/07. The public debt stock was estimated at US$5.97 billion in June 2008, of which US$1.8 billion was external debt. Like Malawi, most of Uganda’s external debt stock is owed multilateral creditors which accounted for 85% of total external debt while the remainder is owed to bilateral creditors.
SECTION 3: KEY MACROECONOMIC ASSUMPTIONS FOR PUBLIC DEBT SUSTAINABILITY IN MALAWI

3.1 Introduction

Public debt sustainability and its related risks in Malawi will be assessed for the period 2009-2029 based on some assumptions regarding the future performance of the economy in the real, fiscal, external and monetary accounts. The macroeconomic data to be generated from these assumptions will be fed into the Debt Sustainability Framework (DSF), which is an operational framework for analyzing debt sustainability in low income countries, focusing on both post HIPCs and non-HIPCs.

The baseline macroeconomic framework underlying Malawi’s public debt sustainability analysis is based on the Government’s current economic programme that is supported by IMF under the Exogenous Shocks Facility (ESF). The updated assumptions regarding economic developments are based on the policy discussions between the Malawi Government and the International Monetary Fund during the latter’s mission in March-April 2008. These assumptions are summarized below:

3.2 Real Sector Assumptions

a) Real GDP growth: The Malawi economy is projected to grow by 7.9% in real terms in 2009 compared to 9.7% in 2008 and 8.6% in 2007. Despite the global financial crisis, this high growth forecast is premised on expectations of strong agricultural production, the start of uranium production and exports in Karonga District (in Northern Malawi) and the continued growth in service sectors such as telecommunications. It is further projected that the economy will grow by 6%, 5.4% and 5.3% in real terms in 2010, 2011 and 2012, respectively. In the longer term, growth rates are assumed to converge to 5%, which is marginally below the projected average growth rate for the Sub-Saharan Africa growth rate of 5.3% (World Economic Outlook, April 2009).
b) **Inflation:** The annual average rate of inflation is expected to remain at a single digit levels, projected 9.7 percent in 2009 compared to 8.4% in 2008. It is projected that inflation will be 7.8% in 2010 and 6.9% in 2011. It will average 6% from 2012 to 2029.

### 3.3 External Sector Assumptions

a) **Exports and Imports:** Exports of goods and non-factor services are expected to growth at an average of 8.5% in the period 2009-2019, largely due to the proceeds from the uranium mining. Exports growth will average about 5.5 percent for the rest of the projection period from 2020 to 2029. Imports of goods and non-factor services as a proportion of GDP are projected to decline from 33.4% in 2008 to average 31.8% of GDP in 2011. Imports are expected to decline further and average 26.1% in the period 2009-2029.

b) **New External Financing:** Following the HIPC Completion Point, it is assumed that the Government will continue contacting of the foreign financing on concessional terms from multilateral and bilateral creditors. However, it is assumed that there will be limited borrowing on non-concessional terms. Its also assumed that the Paris Club creditors will continue providing grants instead of loans. It is further assumed that grant financing will be reduced from 15% in 2008 to 11% in 2009 and will average 10% for the rest of the projection period.

### 3.4 Fiscal Sector Assumptions

a) **Revenue Performance:** Due to the improvements in the revenue collection over the past 5 years, it is assumed that budget revenues (excluding grants) will increase to 21.5% in the financial years 2009-2011 from 20.8% in 2008/08FY and 19% in 2007/08FY. It assumed that revenues will average 17.5% in the period 2012-2029.

b) **Expenditure Performance:** Government expenditure is estimated at 33.8% of GDP in the 2009/10FY from 38.5% in the 2008/09FY. It is further projected that Government
expenditure will be 32.4% in 2010/11. In line with the Government’s fiscal consolidation programme, expenditure will be reduced and average 28% of GDP thereafter up to 2029.

c) **Domestic Debt:** Consistent with the fiscal reforms embarked in 2004, it is projected that public domestic debt of the Central Government will be gradually reduced in the projection period from 16% of GDP in 2008 to 7.5% of GDP in 2015 and will average 5% thereafter.

3.5 **Monetary Sector Assumptions**

It is projected that the bank rate will be reduced gradually from the current rate of 15.5% and will average less than 10% from 2015-2029.
SECTION 4: DISCUSSION OF PUBLIC DEBT SUSTAINABILITY INDICATORS

4.1 Introduction

This section provides an overview of the indicators and thresholds that will be used to assess public debt sustainability in Malawi, Tanzania and Uganda.

4.2 External Debt Sustainability Indicators

Under the IMF/World Bank Debt Sustainability Framework (DSF), a country’s debt sustainability is assessed by considering the quality of its policies and institutions as measured by the World Bank’s Country Performance and Institutional Assessment (CPIA) scoring criteria. The major assumption of DSF is that countries with stronger (weaker) policies and institutions can sustain higher (lower) levels of debt. Countries are rated as strong, medium and weak performers depending on the quality of their policies and institutions using the CPIA.

The DSF uses five debt indicators to determine external debt sustainability, namely: the ratio of the Present Value (PV) of debt to GDP; ratio of PV of debt to exports of goods and services; ratio of PV of debt to budget revenue; ratio of debt service to exports; and ratio of debt service to budget revenue (table 3). The threshold for sustainability for each of these indicators varies according to the ranking of the country on the CPIA. For example, weak performers (ie those with a CPIA score of equal to or less than 3.25) will not be able to sustain debt levels beyond 30 percent of PV of debt to GDP.

Unlike the HIPC Initiative, which uses fixed ratios for all countries, a country can face different thresholds under the DSF if its CPIA ranking changes upon annual assessments by the World Bank. Malawi is a medium performer according to the latest CPIA ranking by the World Bank. This implies that Malawi’s external debt will be unsustainable if the ratio of PV of debt to GDP is above 40% or if the ratio of PV of debt to exports is greater than 150%. External debt of
medium performers is also classified as unsustainable if the ratio of PV of debt to budget revenue is above 250%.

Table 3: Debt Sustainability Indicators and Thresholds under DSF

<table>
<thead>
<tr>
<th>Debt Sustainability Indicators</th>
<th>Country Policy and Institutional Assessment Score (CPIA)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strong (CPIA ≥ 3.75)</td>
</tr>
<tr>
<td>PV of Debt/GDP</td>
<td>50%</td>
</tr>
<tr>
<td>PV of Debt/exports</td>
<td>200%</td>
</tr>
<tr>
<td>Debt service/Exports</td>
<td>25%</td>
</tr>
<tr>
<td>PV of Debt/budget revenue</td>
<td>300%</td>
</tr>
<tr>
<td>Debt service/ budget revenue</td>
<td>35%</td>
</tr>
</tbody>
</table>

The debt sustainability indicators cited above also known as solvency indicators, which focus on whether a country would have the resources to pay all of its external debt at a given point in time. The other type of debt indicators are known as liquidity indicators which focus on whether the liquid assets and the available financing are sufficient to meet or roll over maturing liabilities or debt service of a country in a given year. Liquidity indicators relate the debt service of a country in a given period with measures of repayment capacity such as exports, reserves and revenues. External debt of medium performers is classified as unsustainable if the ratio of debt service to exports is greater than 20% or if the ratio of debt service to domestic budget revenues exceeds 30% (table 3).

The relevant debt sustainability indicators for strong performers like Tanzania and Uganda are those in the second column of table 3. It is argued that strong can sustain external debt levels of up to 200% of the ratio of PV of debt to exports ratio or up to 50% of the PV of debt to GDP ratio. External debts of strong performers are also considered as sustainable up to 300% of the ratio of PV of debt to budget revenue. In terms of the liquidity indicators, external debts of strong performers is considered as sustainable when the ratio of debt service to exports is below 25% or when the ratio of debt service to budget revenue is below 35%.

The above indicators and thresholds are used in the sections below to assess the sustainability of external debt and the related risks in Malawi, Tanzania and Uganda as may be applicable.
4.3 Domestic Debt and Total Debt Sustainability Indicators

Unlike external debt, there are no internationally agreed indicators and thresholds for assessing domestic debt and total debt sustainability. The commonly used indicators of sustainability include the ratios of nominal domestic debt or debt service to Gross Domestic Product, budget revenue (excluding grants) and government expenditures. International agreement on the indicators and acceptable levels of domestic debt is limited by, among other things, the lack of a common definition of domestic debt or guide on how record domestic debt. Some of the debt ratios and thresholds currently being used for low income countries are outlined below:

a) Under the West African Monetary Zone (WAMZ) and Union Economique et Monétaire Quest Africaine (UEMOA), total public debt (domestic and external) is considered as unsustainable if the ratio of debt to GDP exceeds the range of 60%-70%. In addition, the grouping has set an informal guideline on its member states for total debt service/ budget revenue not to exceed 15%.

b) According to the IMF/World Bank Debt Sustainability Framework, the domestic debt is considered as unsustainable if the ratio of nominal domestic debt stock to GDP ratio is above the range of 15-20%. Unlike external debt sustainability which is assessed in present value terms, the sustainability of domestic debt is assessed in nominal terms since it is mostly contracted on commercial terms. This indicator and threshold will be used to assess debt sustainability in this paper.

Due to lack of agreed thresholds for assessing the sustainability of total public debt (including domestic and external debt), this paper will use the ratio of the present value of total debt to GDP to analyze the total public debt sustainability in Malawi, Tanzania and Uganda. It will also use the ratio of debt service to domestic budget revenues. Public debt sustainability will be assessed by observing the year-on-year movements in these ratios. In addition, comparisons will be made on these ratios between the baseline and alternative scenarios.
SECTION 5: RESULTS OF PUBLIC DEBT SUSTAINABILITY and RISK ANALYSIS IN MALAWI, TANZANIA AND UGANDA

5.1 Introduction

This section discusses the results of the external and domestic debt sustainability analysis under the baseline macroeconomic scenario outlined in the previous section. It also discusses Malawi’s debt sustainability analysis under alternative scenario, which is an assessment of the impact of the main risks to Malawi’s public debt sustainability. Further, the section reviews the recent public debt sustainability reports in Tanzania and Uganda in order to establish the key debt sustainability issues facing these countries.

5.2 External Debt Sustainability Analysis under the Baseline Macroeconomic Scenario

The results of the debt sustainability analysis under the baseline macroeconomic scenario confirm that Malawi’s external debt was highly sustainable as of end-2008 and will continue to be sustainable for the next 20 years (table 4). The ratio of the present value of external debt to exports is projected at 56% in 2009, which is significantly below the sustainable threshold of 150%. This debt ratio is expected to increase gradually to 112% in 2015 and will reach a peak of 132% in 2023 and declines to 123% in 2029, reflecting the reduction in the rates of external debt accumulation in the long term. The ratio of PV of debt to GDP is estimated at 12% in 2009 and is projected to remain below the acceptable level of 40% throughout the projection period 2009-2029. It is also projected that the ratio of the present value of debt to domestic budget revenue will be 54% in 2009, which is significantly below the sustainable level of 250% and remains below the acceptable threshold throughout the projection period (table 4).

Table 4: Malawi’s External Debt Sustainability Indicators under the Baseline Scenario, 2009-2029
Similarly, the results of the DSF also indicate that Malawi may not breach any of the liquidity indicators throughout the projection period under the baseline macroeconomic scenario. The ratios of both external debt service to exports and domestic budget revenue are projected at 2% in 2009, which is highly sustainable compared to the acceptable level of 20% and 30%, respectively (table 4). These ratios are projected to increase gradually over the projection period, but remain below the respective sustainable thresholds. These results confirm the earlier findings of the debt sustainability analysis conducted by the IMF and the Ministry of Finance in 2007 and 2008, respectively.

5.3 External Debt Sustainability Analysis in Malawi under Alternative Scenarios

5.3.1 Analysis of Risks to External Debt Sustainability in Malawi

This section analyses the impact of the major risks to Malawi’s external debt sustainability including low GDP and export growth, and contracting loans on less concessional terms. It is assumed that key variables such as GDP will remain at their historical averages in the projection period 2009-2029, growing at less than 3.5% in real terms. It is further assumed that exports will also grow at their historical averages, remaining persistently at the lower level throughout the projection period. Finally, it is assumed that new external loans will be contracted on less concessional terms than in the baseline scenario.
5.3.2 Effects of Low GDP Growth on External Debt Sustainability in Malawi

The results of the debt sustainability analysis indicate that Malawi’s external debt sustainability is subject to the risk of low GDP growth in the period under review. The DSA results show that lower GDP growth leads to a steady increase in the ratio of PV of debt to exports from 56% in 2009 and breaches the sustainability threshold of PV/XGS by 2014 and increases rapidly to 244% in 2019. It increases further thereafter to 347% in 2029 (in table 5).

Table 5: Malawi’s External Debt Sustainability Indicators under Low GDP growth, 2009-2029

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PV of debt-to GDP ratio (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>11.7</td>
<td>15.8</td>
<td>18.3</td>
<td>20.1</td>
<td>20.7</td>
<td>20.4</td>
<td>19.6</td>
<td>18.4</td>
<td>17.2</td>
<td>15.8</td>
<td></td>
</tr>
<tr>
<td>Low GDP Growth</td>
<td>11.7</td>
<td>16.5</td>
<td>21.3</td>
<td>28.3</td>
<td>34.9</td>
<td>39.8</td>
<td>43.2</td>
<td>45.1</td>
<td>45.7</td>
<td>45.5</td>
<td>44.7</td>
</tr>
<tr>
<td>PV of debt-to-exports ratio (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>55.8</td>
<td>79.7</td>
<td>97.7</td>
<td>112.2</td>
<td>121.1</td>
<td>127.0</td>
<td>131.2</td>
<td>132.0</td>
<td>130.4</td>
<td>127.3</td>
<td>122.5</td>
</tr>
<tr>
<td>Low GDP Growth</td>
<td>55.8</td>
<td>83.2</td>
<td>113.9</td>
<td>158.0</td>
<td>204.4</td>
<td>244.4</td>
<td>278.4</td>
<td>304.4</td>
<td>323.5</td>
<td>337.5</td>
<td>347.2</td>
</tr>
<tr>
<td>PV of debt-to-revenue ratio (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>54.4</td>
<td>87.8</td>
<td>110.2</td>
<td>121.5</td>
<td>125.2</td>
<td>125.3</td>
<td>123.4</td>
<td>118.5</td>
<td>111.7</td>
<td>104.0</td>
<td>95.5</td>
</tr>
<tr>
<td>Low GDP Growth</td>
<td>54.4</td>
<td>91.6</td>
<td>128.4</td>
<td>171.2</td>
<td>211.3</td>
<td>241.0</td>
<td>262.0</td>
<td>273.3</td>
<td>277.1</td>
<td>275.8</td>
<td>270.7</td>
</tr>
<tr>
<td>Debt service-to-exports ratio (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>1.9</td>
<td>2.7</td>
<td>3.8</td>
<td>7.3</td>
<td>9.5</td>
<td>9.7</td>
<td>10.6</td>
<td>11.5</td>
<td>12.2</td>
<td>12.3</td>
<td>12.3</td>
</tr>
<tr>
<td>Low GDP Growth</td>
<td>1.9</td>
<td>2.7</td>
<td>4.0</td>
<td>7.5</td>
<td>10.2</td>
<td>11.6</td>
<td>13.9</td>
<td>16.7</td>
<td>19.0</td>
<td>20.8</td>
<td>22.2</td>
</tr>
<tr>
<td>Debt service-to-revenue ratio (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>1.8</td>
<td>2.9</td>
<td>4.2</td>
<td>7.9</td>
<td>9.8</td>
<td>9.6</td>
<td>10.0</td>
<td>10.4</td>
<td>10.5</td>
<td>10.0</td>
<td>9.6</td>
</tr>
<tr>
<td>Low GDP Growth</td>
<td>1.8</td>
<td>3.0</td>
<td>4.5</td>
<td>8.1</td>
<td>10.6</td>
<td>11.5</td>
<td>13.1</td>
<td>15.0</td>
<td>16.3</td>
<td>17.0</td>
<td>17.3</td>
</tr>
</tbody>
</table>

Source: Calculations by author using DSF

Low GDP growth also leads to an unsustainable debt burden when the other debt indicators are used. For example, the ratio of PV of debt to GDP increases rapidly from 12% under the baseline in 2009 and reaches the sustainable threshold for Malawi of 40% in 2019 and remains unsustainable thereafter to 2029. Similarly, the ratio of PV of debt to domestic budget revenue increases from 54% in 2009 under the baseline scenario and breaches the sustainable threshold of 250% in 2020 and remains above the revenue threshold thereafter (table 5).
Similarly, low GDP growth also leads to unsustainable external debt when the liquidity indicators of debt sustainability are used. The results of the DSF indicate that lower GDP growth leads to an increase in the ratio of external debt service to exports from 1.9% in 2009 under the baseline scenario to 11.6% in 2019 and breaches Malawi’s sustainability threshold of 20% by 2026 (table 5). Finally, low GDP growth leads to a significant increase in the ratio of debt service to domestic budget revenue from 1.8% in 2009 to 11.5% 2019 compared to 9.5% under the baseline scenario. This ratio increases to further to 17.3% in 2029 compared to 9.6% under the baseline scenario. However, lower GDP growth does not lead to a breach the of the sustainability threshold during the projection period.

5.3.3 Effects of Low Exports Growth on External Debt Sustainability in Malawi

Under this scenario, the effects of low exports growth on external debt sustainability will be assessed using the ratio of PV of debt to exports and the ratio of external debt service to exports since these indicators are directly affected by the developments in the export sector. Assuming that Malawi’s exports grow at their historical low levels, the DSF results indicate that external debt will be unsustainable during the projection period. It is found that lower exports growth will lead to a rapid increase in the ratio of the PV of external debt from 56% under the baseline scenario and breaches the sustainability threshold of 150% by 2010 and remain above this level thereafter up to 2029 (table 6).

The effects of low exports growth is the same when the liquidity indicator of the ratio of external debt service to exports is used. This ratio is projected to increase from under 2% in 2009 under the baseline scenario to over 20% in 2022 and remains above the sustainable level through to 2029 (table 6).
Table 6: Malawi’s External Debt Sustainability Indicators under Lower Exports Growth, 2009-2029

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PV of debt-to-GDP ratio (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>11.69</td>
<td>15.80</td>
<td>18.2</td>
<td>20.0</td>
<td>20.6</td>
<td>20.6</td>
<td>20.3</td>
<td>19.5</td>
<td>18.4</td>
<td>17.1</td>
<td>15.7</td>
</tr>
<tr>
<td>Low Exports Growth</td>
<td>11.69</td>
<td>23.47</td>
<td>25.3</td>
<td>26.6</td>
<td>26.7</td>
<td>25.7</td>
<td>24.5</td>
<td>22.9</td>
<td>21.1</td>
<td>19.2</td>
<td>17.3</td>
</tr>
<tr>
<td>PV of debt-to-exports ratio (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>55.78</td>
<td>79.72</td>
<td>97.6</td>
<td>112.1</td>
<td>121.0</td>
<td>127.0</td>
<td>131.1</td>
<td>132.0</td>
<td>130.4</td>
<td>127.2</td>
<td>122.5</td>
</tr>
<tr>
<td>Low Exports Growth</td>
<td>55.78</td>
<td>177.11</td>
<td>202.6</td>
<td>223.2</td>
<td>234.6</td>
<td>236.7</td>
<td>236.4</td>
<td>231.7</td>
<td>223.6</td>
<td>213.6</td>
<td>201.5</td>
</tr>
<tr>
<td>PV of debt-to-revenue ratio (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>54.36</td>
<td>87.79</td>
<td>110.1</td>
<td>121.5</td>
<td>125.1</td>
<td>125.3</td>
<td>123.4</td>
<td>118.5</td>
<td>111.7</td>
<td>103.9</td>
<td>95.5</td>
</tr>
<tr>
<td>Low Exports Growth</td>
<td>54.36</td>
<td>130.36</td>
<td>152.8</td>
<td>161.7</td>
<td>162.1</td>
<td>156.0</td>
<td>148.7</td>
<td>139.0</td>
<td>128.0</td>
<td>116.6</td>
<td>105.0</td>
</tr>
<tr>
<td>Debt service-to-exports ratio (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>1.87</td>
<td>2.67</td>
<td>3.7</td>
<td>7.2</td>
<td>9.4</td>
<td>9.6</td>
<td>10.5</td>
<td>11.5</td>
<td>12.2</td>
<td>12.2</td>
<td>12.2</td>
</tr>
<tr>
<td>Low Exports Growth</td>
<td>1.87</td>
<td>4.68</td>
<td>7.3</td>
<td>12.5</td>
<td>16.8</td>
<td>18.8</td>
<td>19.8</td>
<td>20.9</td>
<td>21.6</td>
<td>21.5</td>
<td>21.2</td>
</tr>
<tr>
<td>Debt service-to-revenue ratio (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>1.82</td>
<td>2.94</td>
<td>4.2</td>
<td>7.8</td>
<td>9.7</td>
<td>9.5</td>
<td>9.9</td>
<td>10.3</td>
<td>10.4</td>
<td>10.0</td>
<td>9.5</td>
</tr>
<tr>
<td>Low Exports Growth</td>
<td>1.82</td>
<td>3.44</td>
<td>5.5</td>
<td>9.0</td>
<td>11.6</td>
<td>12.4</td>
<td>12.5</td>
<td>12.5</td>
<td>11.7</td>
<td>11.0</td>
<td></td>
</tr>
</tbody>
</table>

Source: Calculations by author using DSF

5.3.4 Effects of Increase in Interest Rates on Debt Sustainability in Malawi

Under this scenario, it is assumed that that new external borrowing will be contracted at interest rates of 2% higher than the baseline. The results of the DSA show that increased interest rates lead to deterioration in external debt sustainability for all solvency indicators compared to the baseline scenario. The ratio of the PV of debt to GDP is projected to increase from 11.7% in 2009 under the baseline to 24% in 2020 as a result in increased interest rates while the ratio of PV of debt to domestic budget revenue is expected to increase from 54% in 2009 to 146% in 2021, both of which are below the respective sustainable thresholds of 40% and 250%, respectively (table 7).
Table 7: Malawi’s External Debt Sustainability Indicators under Unfavourable New Loans, 2009-2029

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PV of debt-to GDP ratio (%)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>11.7</td>
<td>15.8</td>
<td>18.3</td>
<td>20.1</td>
<td>20.7</td>
<td>20.7</td>
<td>20.4</td>
<td>19.6</td>
<td>18.4</td>
<td>17.2</td>
<td>15.8</td>
</tr>
<tr>
<td>Unconcessional Loans</td>
<td>11.7</td>
<td>16.2</td>
<td>19.1</td>
<td>21.6</td>
<td>23.1</td>
<td>23.8</td>
<td>24.2</td>
<td>23.9</td>
<td>23.3</td>
<td>22.4</td>
<td>21.3</td>
</tr>
<tr>
<td><strong>PV of debt-to-exports ratio (%)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>55.8</td>
<td>79.7</td>
<td>97.7</td>
<td>112.2</td>
<td>121.1</td>
<td>127.0</td>
<td>131.2</td>
<td>132.0</td>
<td>130.4</td>
<td>127.3</td>
<td>122.5</td>
</tr>
<tr>
<td>Unconcessional Loans</td>
<td>55.8</td>
<td>81.7</td>
<td>102.1</td>
<td>121.0</td>
<td>135.3</td>
<td>146.4</td>
<td>155.6</td>
<td>161.3</td>
<td>164.6</td>
<td>165.9</td>
<td>165.5</td>
</tr>
<tr>
<td><strong>PV of debt-to-revenue ratio (%)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>54.4</td>
<td>87.8</td>
<td>110.2</td>
<td>121.5</td>
<td>125.2</td>
<td>125.3</td>
<td>123.4</td>
<td>118.5</td>
<td>111.7</td>
<td>104.0</td>
<td>95.5</td>
</tr>
<tr>
<td>Unconcessional Loans</td>
<td>54.4</td>
<td>90.0</td>
<td>115.2</td>
<td>131.2</td>
<td>139.9</td>
<td>144.4</td>
<td>146.4</td>
<td>144.8</td>
<td>140.9</td>
<td>135.6</td>
<td>129.0</td>
</tr>
<tr>
<td><strong>Debt service-to-exports ratio (%)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>1.9</td>
<td>2.7</td>
<td>3.8</td>
<td>7.3</td>
<td>9.5</td>
<td>9.7</td>
<td>10.6</td>
<td>11.5</td>
<td>12.2</td>
<td>12.3</td>
<td>12.3</td>
</tr>
<tr>
<td>Unconcessional Loans</td>
<td>1.9</td>
<td>2.7</td>
<td>4.5</td>
<td>10.1</td>
<td>13.6</td>
<td>16.0</td>
<td>18.6</td>
<td>20.2</td>
<td>23.5</td>
<td>26.7</td>
<td>27.2</td>
</tr>
<tr>
<td><strong>Debt service-to-revenue ratio (%)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>1.8</td>
<td>2.9</td>
<td>4.2</td>
<td>7.9</td>
<td>9.8</td>
<td>9.6</td>
<td>10.0</td>
<td>10.5</td>
<td>10.0</td>
<td>10.5</td>
<td>9.6</td>
</tr>
<tr>
<td>Unconcessional Loans</td>
<td>1.8</td>
<td>3.0</td>
<td>5.1</td>
<td>8.6</td>
<td>11.6</td>
<td>13.9</td>
<td>14.2</td>
<td>17.3</td>
<td>19.3</td>
<td>21.1</td>
<td>26.2</td>
</tr>
</tbody>
</table>

Source: Calculations by author using DSF

However, the effect of increased interest rate is more pronounced on the ratio of the PV of external debt to exports which increases from 56% in the baseline to 146% in 2019 and breaches the sustainability threshold of 150% in 2021 and remains unsustainable thereafter. On the other hand, it is projected that the debt service to exports ratio will increase from 2% in 2009 under the baseline scenario to 16% in 2019 and breaches the sustainable level of 20% in 2023 through to 2029. The ratio of debt service to budget revenue will remain below the sustainable level of 30% under DSF, increasing from 2% in 2009 to 26.2% in 2029.

5.4 Domestic Debt Sustainability Analysis in Malawi

The baseline results of the debt sustainability analysis indicate that Malawi’s domestic debt boarders on unsustainability since the ratio of nominal domestic debt to GDP is estimated at 15.5% in 2009, which is within the sustainable upper range of 15-20%. In the medium to long term, it is projected that domestic debt will decline to 7.4 of GDP in 2014 in line with the
Government’s policy of reducing domestic debt. It is projected to decline further to and remain below 5% of GDP from 2017 to 2029.

The major risk to domestic debt sustainability in Malawi is the refinancing or rollover risk because of the heavy concentration of debt in a few instruments with very short-term maturities of less than one year. Currently treasury bills account 77% of the Government debt in 2008 and are projected to dominate the structure of domestic debt in the medium term until the Government restructures its debt in favour of long term instruments. The short maturity structure and constant rollover of the domestic debt stock also increases the exposure to interest rates risk, and therefore poses an important fiscal risk to the government particularly when domestic interest rates increase.

5.5 Analysis of Total Public Debt Sustainability in Malawi

This section discusses the results of fiscal sustainability of total public debt, including external and domestic debt. The baseline debt sustainability analysis results show that the total public domestic and external debt is projected to decline for most of the projection period 2009-2029. In present value terms, total public debt is expected to decline from 27% of GDP in 2009 to 21% of GDP in 2029 largely due to the decrease in the domestic debt financing (table 8) as discussed in the preceding section. Similarly, the ratio of the present value of total public debt to domestic budget revenue is projected to decline from 83% in 2009 to 76% in 2029. Consistent with these developments, the ratio of total debt service to revenue is projected to increase marginally to 9.3% in 2017 and decline to 7.4% at the end of the projection period.

Although total public debt is projected to remain sustainable in the period under review, the results of the analysis show that Malawi’s total public debt is vulnerable to several risks including low GDP growth and increasing primary deficit. It is projected that low GDP growth (ie GDP grows at the historical low levels) leads to an increase in the ratio of PV of total public debt to GDP from 27% in 2009 to 40% in 2019 compared to 25% in the baseline scenario. Adverse movements in GDP growth also lead to an increase in the ratio of the PV of debt to
domestic budget revenue from 83.8% in 2009 to 142% in 2019 compared to 93% in the baseline scenario (table 8).

The liquidity indicators also show that Malawi’s public debt sustainability is sensitive to low GDP growth. The ratio of debt service to domestic budget revenue is projected to increase from 7.7% in 2028 to 22% in 2028 if real GDP growth is at its historical low averages, compared to the ratio of 7.4% in 2028 under the baseline scenario (table 8).

Table 8: Malawi’s Public Debt Sustainability Indicators under Alternative Scenarios, 2009-2029

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PV of Debt-to-GDP Ratio (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>27.2</td>
<td>26.0</td>
<td>27.1</td>
<td>26.3</td>
<td>25.7</td>
<td>25.7</td>
<td>25.6</td>
<td>24.0</td>
<td>23.0</td>
<td>21.8</td>
<td>21.2</td>
</tr>
<tr>
<td>Primary balance is unchanged from 2009</td>
<td>27.2</td>
<td>27.3</td>
<td>30.0</td>
<td>32.6</td>
<td>35.8</td>
<td>39.9</td>
<td>42.8</td>
<td>46.2</td>
<td>49.5</td>
<td>52.7</td>
<td>54.3</td>
</tr>
<tr>
<td>Permanently lower GDP growth</td>
<td>27.2</td>
<td>27.1</td>
<td>30.1</td>
<td>32.2</td>
<td>35.5</td>
<td>40.6</td>
<td>45.5</td>
<td>52.2</td>
<td>60.0</td>
<td>69.1</td>
<td>74.3</td>
</tr>
<tr>
<td>PV of Debt-to-Revenue Ratio (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>83.8</td>
<td>89.8</td>
<td>98.0</td>
<td>95.8</td>
<td>93.3</td>
<td>93.4</td>
<td>93.0</td>
<td>87.4</td>
<td>83.7</td>
<td>79.3</td>
<td>76.9</td>
</tr>
<tr>
<td>Primary balance is unchanged from 2009</td>
<td>83.8</td>
<td>94.3</td>
<td>108.6</td>
<td>118.5</td>
<td>130.3</td>
<td>145.0</td>
<td>155.6</td>
<td>168.1</td>
<td>179.9</td>
<td>191.6</td>
<td>197.5</td>
</tr>
<tr>
<td>Permanently lower GDP growth</td>
<td>83.8</td>
<td>92.9</td>
<td>107.5</td>
<td>114.8</td>
<td>125.4</td>
<td>142.4</td>
<td>158.4</td>
<td>180.5</td>
<td>205.8</td>
<td>235.4</td>
<td>251.8</td>
</tr>
<tr>
<td>Debt-to-GDP Ratio (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>35.0</td>
<td>34.7</td>
<td>35.8</td>
<td>35.1</td>
<td>34.4</td>
<td>34.2</td>
<td>32.5</td>
<td>31.2</td>
<td>29.6</td>
<td>27.7</td>
<td>26.7</td>
</tr>
<tr>
<td>Primary balance is unchanged from 2009</td>
<td>35.0</td>
<td>35.7</td>
<td>38.0</td>
<td>39.8</td>
<td>42.0</td>
<td>44.8</td>
<td>46.2</td>
<td>48.1</td>
<td>49.7</td>
<td>51.3</td>
<td>52.1</td>
</tr>
<tr>
<td>Permanently lower GDP growth</td>
<td>35.0</td>
<td>35.8</td>
<td>38.6</td>
<td>40.4</td>
<td>42.9</td>
<td>46.7</td>
<td>49.9</td>
<td>54.4</td>
<td>59.6</td>
<td>65.6</td>
<td>69.1</td>
</tr>
<tr>
<td>Debt Service-to-Revenue Ratio (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>7.7</td>
<td>6.3</td>
<td>7.6</td>
<td>8.5</td>
<td>9.3</td>
<td>8.1</td>
<td>8.1</td>
<td>8.0</td>
<td>7.9</td>
<td>7.6</td>
<td>7.4</td>
</tr>
<tr>
<td>Primary balance is unchanged from 2009</td>
<td>7.7</td>
<td>6.8</td>
<td>8.3</td>
<td>10.1</td>
<td>17.2</td>
<td>12.2</td>
<td>13.6</td>
<td>14.8</td>
<td>16.3</td>
<td>17.6</td>
<td>18.3</td>
</tr>
<tr>
<td>Permanently lower GDP growth</td>
<td>7.7</td>
<td>6.4</td>
<td>8.3</td>
<td>9.9</td>
<td>17.0</td>
<td>11.9</td>
<td>13.7</td>
<td>15.7</td>
<td>18.2</td>
<td>20.9</td>
<td>22.5</td>
</tr>
<tr>
<td>Debt Service-to-GDP Ratio (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>2.5</td>
<td>1.8</td>
<td>2.1</td>
<td>2.3</td>
<td>3.9</td>
<td>3.0</td>
<td>2.2</td>
<td>2.2</td>
<td>2.2</td>
<td>2.1</td>
<td>2.0</td>
</tr>
<tr>
<td>Primary balance is unchanged from 2009</td>
<td>2.5</td>
<td>2.0</td>
<td>2.3</td>
<td>2.8</td>
<td>4.7</td>
<td>3.4</td>
<td>3.7</td>
<td>4.1</td>
<td>4.5</td>
<td>4.8</td>
<td>5.0</td>
</tr>
<tr>
<td>Permanently lower GDP growth</td>
<td>2.5</td>
<td>1.9</td>
<td>2.3</td>
<td>2.8</td>
<td>4.8</td>
<td>3.4</td>
<td>3.9</td>
<td>4.5</td>
<td>5.3</td>
<td>6.1</td>
<td>6.6</td>
</tr>
</tbody>
</table>

Source: Calculations by author using DSF

The results of the analysis also show that Malawi’s public debt will be unsustainable assuming that the primary balances remains unchanged from 2009 to 2029. The ratio of the PV of total public debt to GDP is projected to increase from 27.2% in 2009 to 54% in 2028. Similarly, the ratio of PV of total debt to domestic budget revenue increases from 27.2% in 2009 to 197.5% in
2028 compared to 76.9% under the baseline. The ratio of total debt service to domestic budget revenue also increases significantly from 7.7% in 2009 to 22.5% in 2028 compared to 7.4% under the baseline scenario (table 8).

5.6 Public Debt Sustainability and Risk Analysis in Tanzania

This section reviews the results of the debt sustainability analysis conducted by the Government of Tanzania in November 2008. The DSA was aimed at assessing the future sustainability of debt as basis for updating the existing national strategy on new financing to ensure that the total debt dynamics remain sustainable in post HIPC and MDRI environment (Tanzania DSA Report, 2008). The DSA was based on the assumption of strong economic performance under the baseline scenario, with real GDP growing at 7.3% and 7.6% in 2009 and 2010, respectively, revised from 8% as a result of the global financial crisis. In the long term, the economy was projected to continue registering robust growth rates, increasing to 9.2 percent in 2029.

5.6.1 Findings of External Debt Sustainability Analysis in Tanzania

The report on debt sustainability analysis concluded that Tanzania’s public external debt was highly sustainable as of end 2008 and is projected to remain sustainable in the projection period 2009-2028 under the baseline macroeconomic scenario. The ratio of the present value of external debt to GDP was estimated at 15.1% in 2009, which is significantly below the sustainable threshold of 50% for strong performers under DSF. This ratio is projected to decline to 10.5% in 2018 and fall below 10% for the rest of the projection period up to 2028.

The ratio of the present value of external debt to exports was projected at 66.4% in 2009, which is below the sustainable threshold of 200% for strong performers under the DSF. Likewise, this ratio is projected to decline to 34.5% in 2009 and decline further to 18.1% in 2028. The ratio of the present value of external debt to budget revenue was estimated to be at 84.8% in 2009, which is significantly lower than the sustainable threshold of 300% for strong policy performers. It was projected that this ratio will also decline to 49.7% in 2018 and will reduce further to 30.4% in 2028.
The Tanzania DSA also showed that the liquidity indicators of external debt will remain below the sustainable thresholds throughout the projection period. The ratio of external debt service to exports of goods and services (also known as debt service ratio) was estimated to be 2.4% in 2009, which is below the sustainable benchmark of 25% for strong performers. The debt service ratio was projected to decline to 0.8% and 0.7% in 2018 and 2028, respectively.

Unlike Malawi, the results of the debt sustainability analysis showed that Tanzania’s external debt is not significantly vulnerable to risks of debt distress. The results of the stress test analysis indicated that adverse movements in the key macroeconomic variables like real GDP growth, exports and increase in interest rates lead to marginal increases under the alternative scenario compared the baseline across all debt indicators. In addition, these developments do not lead to a breach of the relevant debt sustainability thresholds for Tanzania. This finding is mainly premised on the historical strong growth rates that Tanzania has registered.

5.6.2 Findings of Public Debt Sustainability Analysis in Tanzania

The results of the DSA also showed that the total public debt dynamics will improve significantly from 2009 through to 2029 under the baseline scenario. The ratio of the PV of total public debt to GDP (including domestic and external) is projected to decline from 28% in 2009 to about 12% in 2029. Likewise, the ratio of the PV of total debt to domestic budget revenue is projected to decline over the projection period from about 129% in 2009 to about 45% in 2029. The total debt service to domestic revenue is also projected to decline from 12.5% in 2009 and stabilise at 5% from 2015 through to 2029.

The stress tests show that Tanzania’s total public debt is sensitive to low GDP growth and worsening primary balance although the debt ratios do not significantly increase over the baseline projections. Assuming an unchanged primary balance over the projection period, the ratio of PV of total debt to GDP generally declines over time, as in the baseline scenario, from 28% in 2009 to 20% in 2029, which is above the baseline projection of 12%. Likewise, the most extreme shock to real GDP growth does not significantly worsen the future debt dynamics compared to the baseline projections. The ratio of the PV of total public debt to GDP is projected
to decline and remain below 28% in 2009 through to 2029 when it is projected to be 22.5%. However, the stress test under the alternative scenario where an international bond is issued suggests that the risk of debt distress could increase in long term due to the fact that Tanzania will be expected to repay the bond on commercial terms of interest rate.

5.7 Public Debt Sustainability Analysis in Uganda

This section reviews the public debt sustainability experiences of Uganda following the external debt cancellations under the Multilateral Debt Relief Initiative (MDRI). The review is based on the debt sustainability analysis conducted by the Government of Uganda in July-August 2008. The analysis was based on three main macroeconomic scenarios: the baseline, optimistic and pessimistic scenarios. The baseline assumptions regarding macroeconomic performance were based on the 2008/09FY Medium-Term Budget. In the real sector, real GDP growth was projected to fall gradually from 8.1 percent in 2007/08, stabilizing and averaging at about 7 percent from 2020 onwards. Annual inflation was expected to decline to 5 percent after 2008/09FY in response to tight monetary policy. The optimistic scenario assumes that real GDP will grow at 7.7% annually over the projection period 2008-2028 while the annual inflation target will remain at 5%. Under the pessimistic scenario, it is assumed that real GDP growth will average 5.4% during the projection period on account of higher recurrent fiscal expenditure and lower government revenue.

5.7.1 Findings of External Debt Sustainability Analysis in Uganda

The results of the HIPC debt sustainability analysis under the baseline macroeconomic scenario suggest that Uganda’s external debt is and will remain highly sustainable over the period 2009-2029 assuming that the Government continues to borrow on concessional terms (Uganda DSA Report, 2008). The ratio of the present value of external debt to GDP was projected at 14.9% in 2008, which is below the sustainability threshold 50% for strong performers under the Debt Sustainability Framework (table 9). This ratio was expected to increase to 23.8% in 2018. The other solvency sustainability ratios, the PV of debt to exports and PV of debt to domestic budget
revenue were also projected to remain significantly below the applicable sustainability thresholds of 200% and 300%, respectively, through out the projection period.

The HIPC DSA results also showed that Uganda may not breach of any of the liquidity thresholds from 2008 to 2028 under the baseline macroeconomic scenario. The debt service-to-exports ratio was estimated at 2.3% in 2008, which is highly sustainable compared to the acceptable threshold of 25% for strong performers. Likewise, the debt service-to-budget revenue ratio was estimated at 2.8% in 2008 which is significantly below the sustainable level of 35%. It was projected to remain below 3% through to 2018 (table 9).

Table 9: Uganda External Debt Sustainability ratios under the Baseline Scenario, 2008-2018

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Solvency Ratios (%)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NPV/GDP</td>
<td>50</td>
<td>14.9</td>
<td>16.2</td>
<td>17.8</td>
<td>17.3</td>
<td>17</td>
<td>18.3</td>
<td>19.5</td>
<td>20.6</td>
<td>21.5</td>
<td>22.5</td>
<td>23.4</td>
</tr>
<tr>
<td>NPV/XGS</td>
<td>200</td>
<td>51.6</td>
<td>60.9</td>
<td>67.1</td>
<td>69.4</td>
<td>71.6</td>
<td>73.3</td>
<td>74.6</td>
<td>76</td>
<td>77.2</td>
<td>78.7</td>
<td>80.2</td>
</tr>
<tr>
<td>NPV/DBR</td>
<td>300</td>
<td>63.2</td>
<td>60.7</td>
<td>65.3</td>
<td>65.4</td>
<td>65.4</td>
<td>69</td>
<td>68.9</td>
<td>70.1</td>
<td>71.4</td>
<td>72.8</td>
<td>74.3</td>
</tr>
<tr>
<td><strong>Liquidity Ratios (%)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TDS/XGS</td>
<td>25</td>
<td>2.3</td>
<td>2.4</td>
<td>2.5</td>
<td>2.5</td>
<td>2.3</td>
<td>2.4</td>
<td>2.5</td>
<td>2.5</td>
<td>2.6</td>
<td>2.7</td>
<td>2.9</td>
</tr>
<tr>
<td>TDS/DBR</td>
<td>35</td>
<td>2.8</td>
<td>2.4</td>
<td>2.4</td>
<td>2.3</td>
<td>2.1</td>
<td>2.2</td>
<td>2.3</td>
<td>2.3</td>
<td>2.4</td>
<td>2.5</td>
<td>2.7</td>
</tr>
</tbody>
</table>


In the pessimistic scenario, the DSA results showed that all the liquidity and solvency ratios, except the ratio of PV of debt to exports, would be below their respective thresholds through out the projection period. It was projected that current CPIA-DSF threshold for Uganda of 200 percent for PV/XGS would be breached by 2012 under the pessimistic scenario, indicating the Uganda’s external debt is sensitive to lower exports growth under this scenario compared to the baseline projections.

5.7.2 Findings of Domestic and Total Public Debt Sustainability Analysis in Uganda

The Uganda authorities also assessed the sustainability of domestic debt based on the Government’s benchmark of the ratio of nominal domestic debt to GDP of 10% as per the 2007 National Debt Strategy. Consistent with this strategy, the ratio of domestic debt stock to GDP
was estimated at 10% in 2008 (fig 3). This is significantly below the sustainable threshold of 15-20% under the IMF/World Bank Debt Sustainability Framework.

Figure 3: Uganda’s Domestic debt (in % of GDP)

![Graph showing Domestic Debt as % GDP](image)


However, domestic debt was projected to increase in the medium term and exceed the benchmark of 10% of GDP by 2011 under the optimistic and baseline macroeconomic scenario. The ratio of domestic debt to GDP was projected to increase further thereafter but it remains within the DSF sustainable range of 15-20% from 2013 to 2018 under the baseline scenario. Under the pessimistic scenario, domestic debt was projected to exceed the Government’s benchmark of 10% in 2009. It was further estimated that domestic debt would exceed and remain above the DSF sustainable range of 15-50% by 2012 under the pessimistic scenario (fig 3).

The DSA results for total public debt (including domestic and external debt) suggest that Uganda’s public debt will remain broadly manageable in the medium to long term under the
baseline macroeconomic scenario. However, under the pessimistic scenario, the results of the DSA show that Uganda’s is vulnerable to the risks of both lower GDP and exports growth since the respective debt ratios tend to worsen during the projection period compared to the baseline scenario.
SECTION 6: CONCLUSIONS AND POLICY RECOMMENDATIONS

6.1 Summary of study findings

The main objective of this paper was to assess the impact of the main risks to public external and domestic debt sustainability in Malawi following the debt stock cancellations under the Heavily Indebted Poor Countries Initiative and the Multilateral Debt Relief Initiative in 2006. It also aimed at reviewing the recent public debt sustainability experiences of Tanzania and Uganda in order to have a broad view of the main risks to public external and domestic debt sustainability in the post HIPC period in these countries. The analysis of debt sustainability in Malawi was conducted using the Debt Sustainability Framework (DSF) developed by the International Monetary Fund and the World Bank. DSF is an operational framework for analysing debt sustainability in low income countries, focusing on both post HIPCs and non-HIPCs. It links the risk of debt distress to the quality a country’s policies and institutions as assessed by the World Bank on the CPIA index.

Malawi was rated as a medium performer by the World Bank in the recent CPIA Index, implying that it can sustain debt levels of up to 150% of the ratio of the present value of debt to exports. This paper has confirmed that Malawi’s external is projected to remain highly sustainable in the period 2009-2029 under the baseline macroeconomic scenario. The ratio of the present value of external debt to exports is estimated at 56% in 2009 and is projected to remain below the sustainability threshold of 150% throughout projection period. The ratios of the present value of external debt to GDP and domestic budget revenue are projected at 12% and 54% in 2009 and are expected to remain below the sustainability thresholds of 40% and 250%, respectively, through to 2029. The analysis also shows that Malawi’s debt may not breach the liquidity thresholds of external debt sustainability throughout the projection period. The ratio of external debt service to exports is projected at 2% in 2009 and is expected to increase to 12% in 2029, well below the sustainable threshold of 20%.

Like Malawi, Tanzania’s and Uganda’s external debts were projected to remain highly sustainable from 2008 through to 2029. The debt sustainability analysis conducted by the
Government of Tanzania found that all the debt indicators were significantly below the DSF sustainability thresholds of the strong performing Low Income Countries. The ratio of the present value of external debt to GDP was estimated at 15.1% in 2009 and was projected to decline to 10.5% in 2018. It was expected to fall below 10% for the rest of the projection period up to 2028, which is below the sustainable threshold of 50% for strong performers. In Uganda, the ratio of the present value of external debt to GDP was projected at 14.9% in 2008 and was expected to remain below the PV/GDP threshold of 50% throughout the projection period.

However, this paper suggests that Malawi’s external debt is subject to the risk of low GDP and export growth which leads to the breach of the DSF sustainability threshold during the projection period. The DSA results show that lower GDP growth leads to a steady increase in the ratio of PV of debt to exports from 56% in 2009 and breaches the sustainability threshold of PV/XGS of 150% by 2014 and increases rapidly to 244% in 2019. On the other hand, lower exports growth increase the ratio of PV of external debt to exports from 54% in 2009 and exceeds the sustainable threshold by 2010 and remains above this level through to 2029. Similar results are obtained when the other indicators of sustainability are used. The DSA further shows that external debt is vulnerable to increases in interest rates since all the debt ratios increase compared to the baseline and they exceed the sustainable levels for indicators of the PV of debt to exports and the debt service ratio.

The analysis also shows that Malawi’s domestic debt boarders on unsustainability since the ratio of nominal domestic debt to GDP is estimated at 15.5% in 2009, which is within the upper sustainable range of 15-20% compared to 27% in 2004. The major risk to domestic debt sustainability is the refinancing or rollover risk because of the heavy concentration of debt in short term Treasury Bills which accounted for 77% of the public domestic debt as of end-2008.

This paper has also found that Malawi total public debt (including domestic and external debt) is vulnerable to the risks of lower GDP and lower export growth and increased primary deficit. It is observed that adverse movements in GDP and exports lead to significant increases in almost all the debt ratios during the projection period compared to the baseline, indicating public debt is not may not be fiscally sustainable.
The case study of Tanzania shows total public debt (external and domestic debt) is marginally sensitive to low GDP growth and worsening primary balance since the relevant debt ratios do not increase significantly compared to the baseline projections. Excluding domestic debt, the Tanzania DSA report shows that the risks to external debt are minimal compared to Malawi since all the debt ratios remain below the applicable debt sustainability thresholds even after taking into account the effect of permanently lower GDP growth, low exports growth and increase interest rates.

The case study of Uganda shows that external debt is vulnerable to the risks of both lower GDP and exports growth since the respective debt ratios tend to worsen during the projection period under the pessimistic scenario compared to the baseline scenario. On the other hand, domestic debt was projected to exceed the Government’s benchmark of 10% in 2009. It was further estimated that domestic debt would exceed and remain above the DSF sustainable range of 15-50% by 2012 under the pessimistic scenario.

6.2 Policy Recommendations

The highly sustainable nature of the external debt as discussed above implies that Malawi, Tanzania and Uganda have significant room for external borrowing to meet their financing needs before breaching the applicable external sustainability thresholds. However, the main risks to future external debt sustainability in these countries include contraction of external loans on non-concessional terms and both lower GDP and exports growth. The vulnerability of external debts in these countries to increased lending rates suggests that Governments should analyse all new external borrowing proposals so that new debts are sufficiently concessional in a way that promotes future debt sustainability. Non concessional financing may only be considered for activities that are strategic or have high economic value and generate the future repayment capacity. However, there is need for careful advance preparation prior to issuing such debt instruments, including assessing the impact of the proposed borrowing on the macroeconomic framework, careful analysis on the appropriateness of the lending terms and ensuring that the size of the borrowing is related to specific productive activities.
The sensitivity of external debts to adverse movements in the foreign lending rates indicates that the international community should also consider providing more grant financing to low income countries in order to improve the future debt external sustainability prospects while meeting their financing requirements.

However, the available amounts of concessional financing may not be sufficient for LICs including Malawi to finance their development programmes. This problem is compounded by the limit on non-concessional borrowing placed on LICs by the International Monetary Fund since it restricts financing options available to LICs Governments even if the commercial resources are meant for activities that have high value. The limit on non concessional lending is a good rationale for countries like Malawi to consider shifting to the long term domestic debt financing instruments as opposed to the short term treasury bills. The Malawi Government may learn from the experiences of Tanzania and other countries on how to restructure the short term debts into the longer debt instruments such as treasury bonds.

The sensitivity of public debt sustainability to lower GDP growth and exports, and higher primary deficits confirms good economic management is crucial to improving the sustainability of public debt. It is recommended that the Government authorities should remain committed to implementing sound macroeconomic policies in order to support their debt sustainability prospects.

It is also recommended that countries in the MEFMI region should prepare robust national debt strategies to guide their debt management operations. The key elements of these strategies should include specifying the linkages between public debt and macroeconomic frameworks in order to monitor the developments either way. In addition, the strategies should include country specific reference benchmarks for domestic debt and total public debt which do not have internationally agreed benchmarks for assessing the changes in these variables.