MINISTRY OF FINANCE
Debt and Aid Management Division

ANNUAL REVIEW OF THE PUBLIC EXTERNAL AND DOMESTIC DEBT PORTFOLIO

(JULY 2010 – JUNE 2011)

October 2011

PREFACE

This report is a review of developments in the public external and domestic debt portfolios in Malawi during the 2010/11 financial year ie July 2010 – June 2011. The report aims at increasing public awareness on public debt issues and statistics to compliment the on-going efforts in strengthening public finance management through increased transparency and accountability.

The report is structured into three sections. The first section discusses the external debt portfolio, focusing on the magnitude and composition of debt by creditor and by currency. The second section reviews the domestic debt portfolio in terms of its structure, focusing on the main instruments, and holders of debt and the yield curve analysis. The last section analyses the risks associated with the public debt portfolio.

The report is available on the Ministry's website: http:/www.finance.gov.mw. Any queries and/or comments on the contents of the report should be addressed to the Director of Debt and Aid Management on the address below:

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ACCRONYMS AND ABBREVIATIONS

AfDB	African Development Bank
ADF	African Development Fund
BADEA	Arab Bank for Economic Development of Africa
DAD	Debt and Aid management Division
DOD	Disbursed Outstanding Debt
EIB	European Investment Bank
IDA	International Development Association
IFAD	International Fund for Agricultural Development
IMF	International Monetary Fund
NDF	Nordic Development Fund
OPEC	Organization of Petroleum Exporting Countries
SDR	Special Drawing Right
US$	United States Dollar

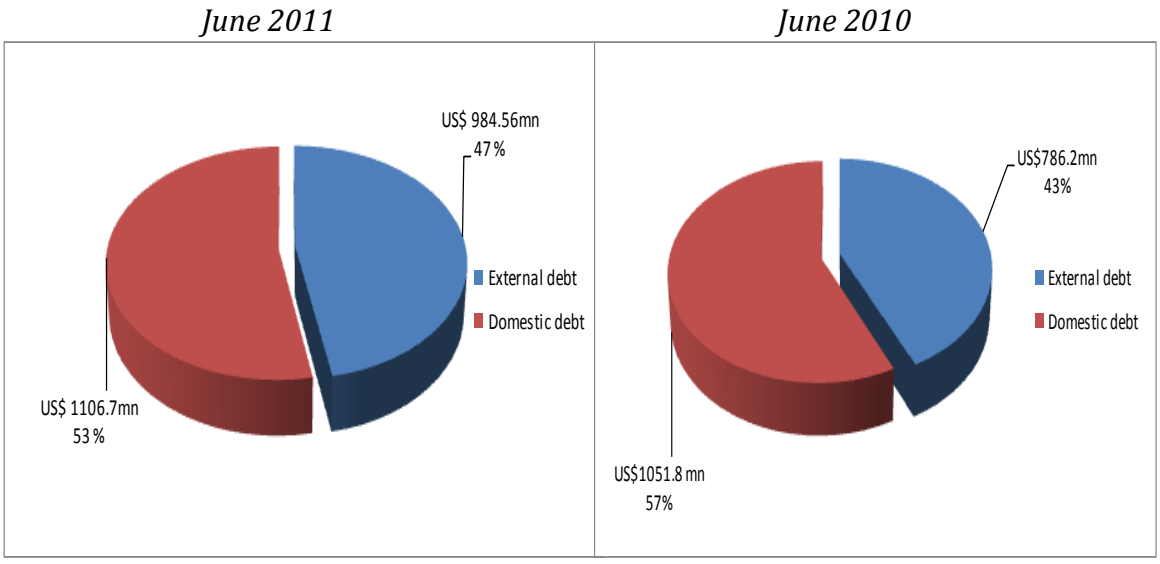
SECTION I: PUBLIC EXTERNAL DEBT REVIEW

A. Public External and Domestic Debt Stock

1. As of end June 2011, Malawi's total public external and domestic debt stock amounted to MK313.49 billion (US$2,091.3 million), equivalent of 33.6 percent of Gross Domestic Product (GDP), compared to MK275.5 billion (US$1,838 million) or 34 percent of GDP in the corresponding period in 2010. The total public debt stock has increased by 13.8 percent from June 2010, mainly due to external debt relative to domestic debt.

2. Of the outstanding total public debt stock in June 2011, the external debt stock amounted to MK147.6 billion (US$984.6 million) while domestic debt was MK165.9 billion (US$1,106.7 million), representing 47 percent and 53 percent of total debt stock respectively. In terms of national output, the external and domestic debt stock was equivalent to 15.8 percent and 17.8 percent respectively. The evolution and composition of the external and domestic debt during the period under review is discussed below.

Chart 1.1: External and Domestic Debt in millions of US dollars



B. External Debt Portfolio

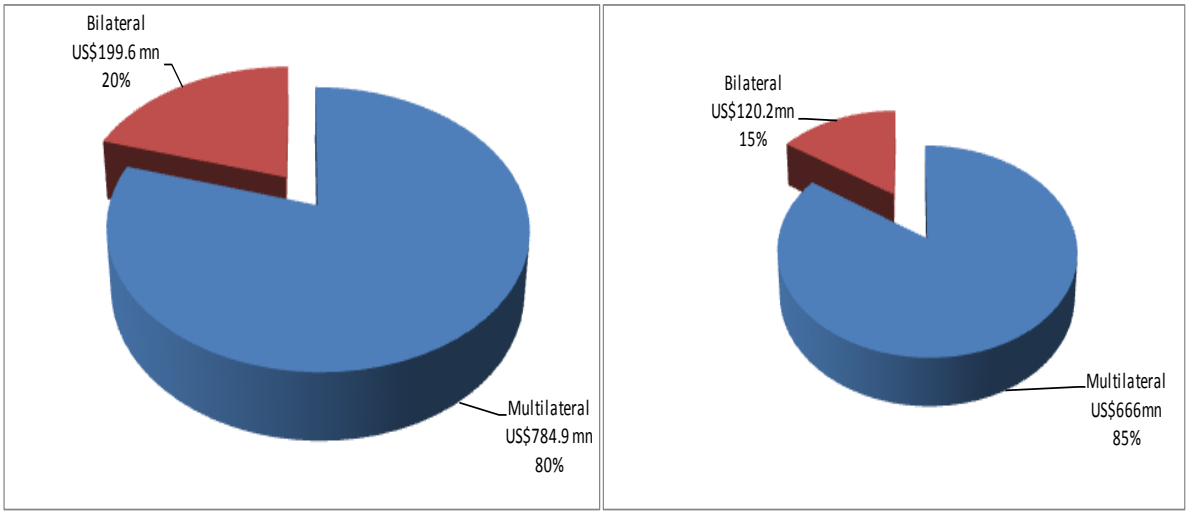
3. The external debt stock increased by 25.2 percent from US$ 786.2 million in June 2010 to US$ 984.6 million in June 2011 due to more disbursements compared to repayments during the period under review. Specifically, there were more disbursements on loans from the Peoples Republic of China, International Development Association (IDA) of the World Bank Group, International Monetary Fund (IMF) and the African Development Fund (ADF).

C. Creditor Category of External Debt

4. The composition of external debt by creditor category remained the same as at 30th June 2011 relative to the corresponding period in 2010, with a significant proportion of the outstanding debt stock still owed to multilateral creditors. As of June 2011, the debt stock owed to multilateral creditors amounted to US$784.9 million, representing 80 percent of DOD while bilateral was US$ 199.6 (or 20 percent), (chart 1.1)

Chart 1.2: External Debt by Creditor Category in millions of US dollars

June2011 *June 2010*



Source: Ministry of Finance, Debt and Aid Division

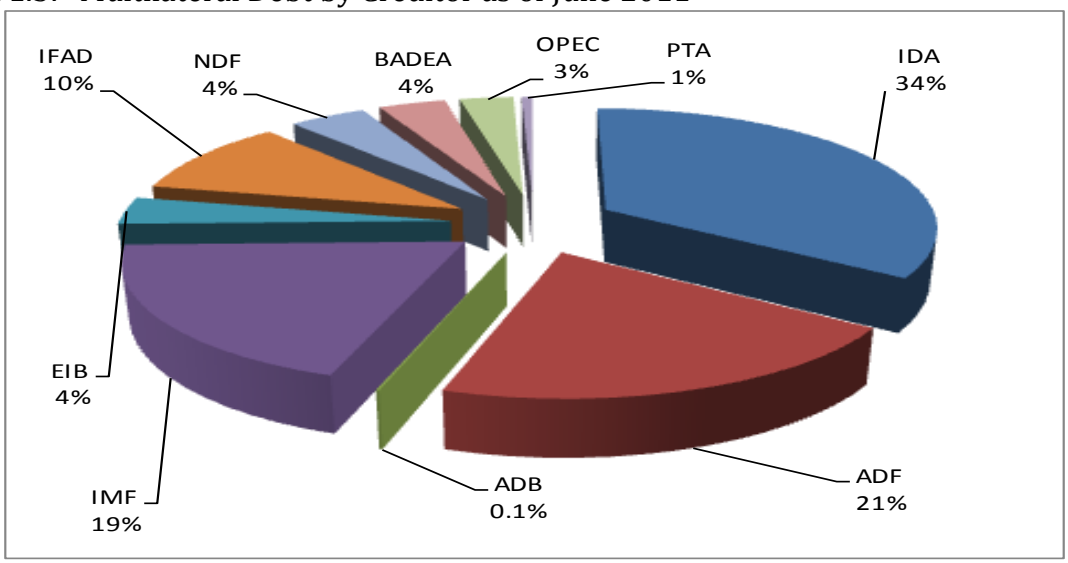
5. Overall, the proportional share of multilateral debt decreased relative to bilateral debt from 85 percent in June 2010 to 80 percent in June 2011. In nominal

terms, however, there was an increase in multilateral debt from US$666 million in June 2010 to US$784.9 million in June 2011. The share of bilateral debt in the total debt stock increased from 15 percent to 20 percent mainly due to significant disbursements on loans from the Peoples Republic of China towards the construction of the Hotel and International Conference Centre in Lilongwe and Malawi University of Science and Technology in Thyolo district. There were also disbursements from Import and Export Bank of India under the Line of India credit in support of the Greenbelt Initiative Programme. In nominal terms, bilateral debt increased to US$199.6 million in June 2011 from US$120.2 million in the corresponding period in 2010.

D. Composition of Multilateral Debt

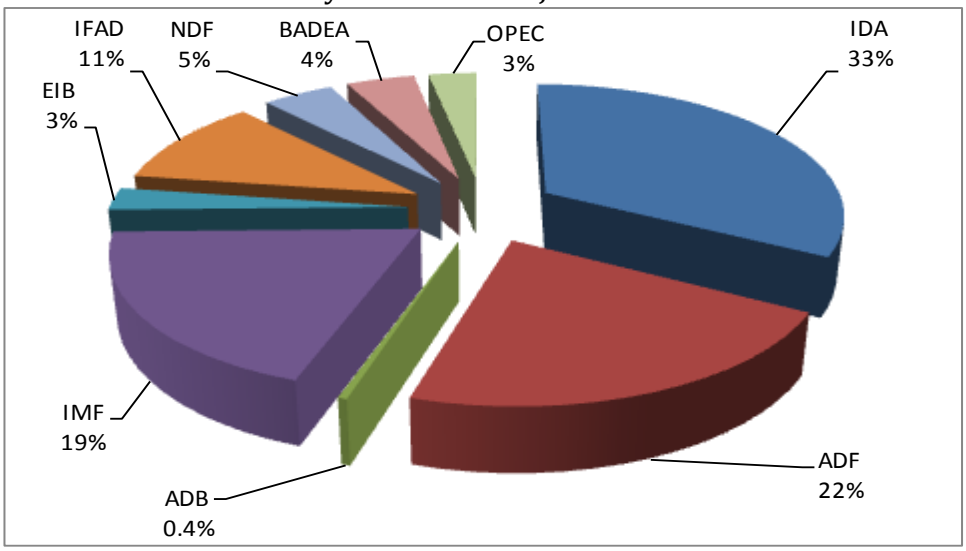
6. The creditor composition of multilateral debt was relatively similar to that of June 2010 as IDA continued to be the major creditor, accounting for 34 percent of multilateral debt and 27.4 percent of the total external debt stock. The African Development Fund (ADF) was the second largest creditor, accounting for 21 percent of multilateral debt, followed by the International Monetary Fund (IMF) and the International Fund for Agriculture Development (IFAD) at 19 and 10 percent, respectively (charts 1.3 and 1.4).

Chart 1.3: Multilateral Debt by Creditor as of June 2011



Source: Ministry of Finance, Debt and Aid Division

Chart 1.4: Multilateral Debt by Creditor as of June 2010

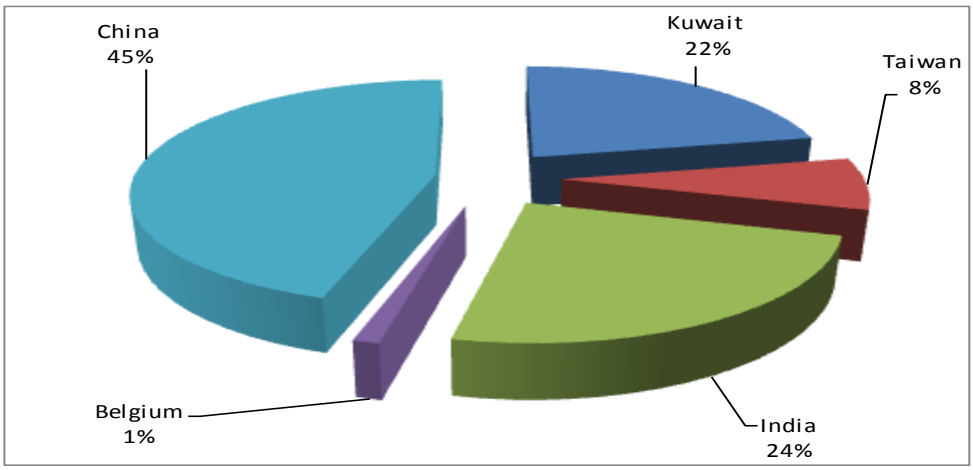


Source: Ministry of Finance, Debt and Aid Division

E. Composition of Bilateral Debt

7. Malawi`s bilateral debt portfolio consists of five creditors, namely the People`s Republic of China, Taiwan, India, Kuwait Fund and the Government of Belgium. As indicated above, the bilateral debt stock was USD199.6 as of June 2011 compared to USD129.6 million in June 2010.

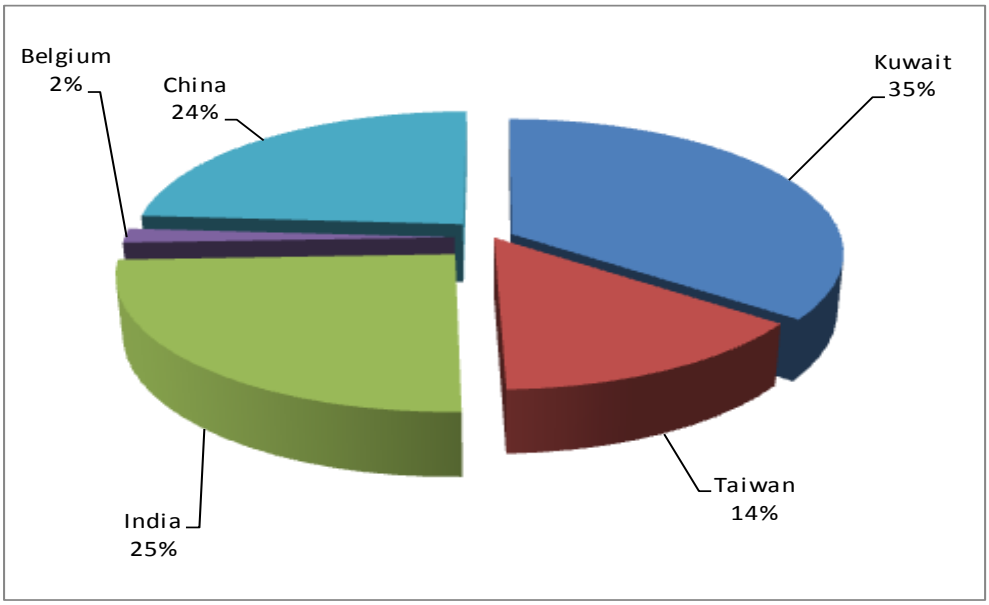
Chart 1.5: Bilateral Debt Creditors – June 2011



Source: Ministry of Finance, Debt and Aid Division

8. Most of the total bilateral debt is owed to the People`s Republic of China, which is a new creditor following the establishment of diplomatic relations with Malawi in 2008. As of June 2011, the outstanding debt owed to the People`s Republic of China amounted to USD90.3, representing 45 percent of bilateral debt compared to USD28.61 million (or 24 percent) recorded in June 2010 (charts 1.5 and 1.6). As discussed in section 1.3, this increase is mainly due to larger and quick disbursements on Chinese projects. The debt owed to India amounted to USD48.4 million, representing 24 percent of the bilateral debt stock while the share of debt owed to the Kuwait Fund is 22 percent. Taiwan and Belgium altogether accounted for 9 percent of bilateral debt as at 30th June 2011.

Chart 1.6: Bilateral Debt Creditors – June 2010

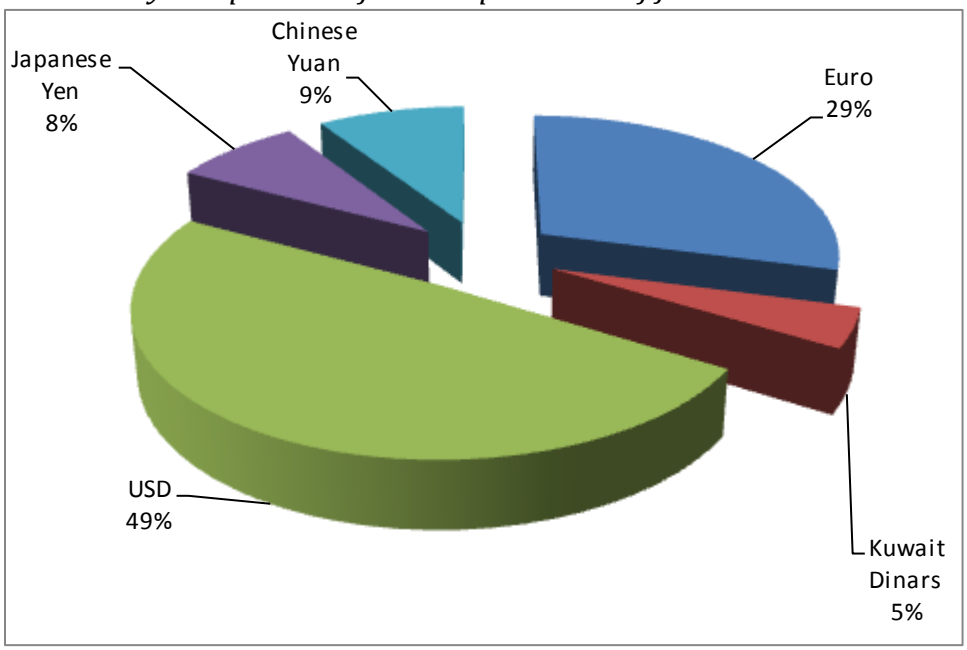


Source: Ministry of Finance, Debt and Aid Division

F. Currency composition of external debt

9. Most of Malawi`s external debt stock is denominated in Special Drawing Rights (SDR), accounting for 52.6 percent of the outstanding liabilities as at 30th June 2011. However, SDR is a basket of four currencies namely; the United States dollar (USD), Japanese Yen, Euro and the British Pound Sterling (GBP). After decomposing the SDR, the USD and Euro are the dominant currencies, accounting for 49 percent and 29 percent of Malawi`s external debt stock, respectively (chart 1.7). Due to the significant disbursements, the share of the Chinese Remnimbi`s Yuan has increased from 3.58 percent in June 2010 to 9 percent in June 2011.

Chart 1.7: Currency Composition of Debt in percent as of June 2011



Source: Ministry of Finance, Debt and Aid Division

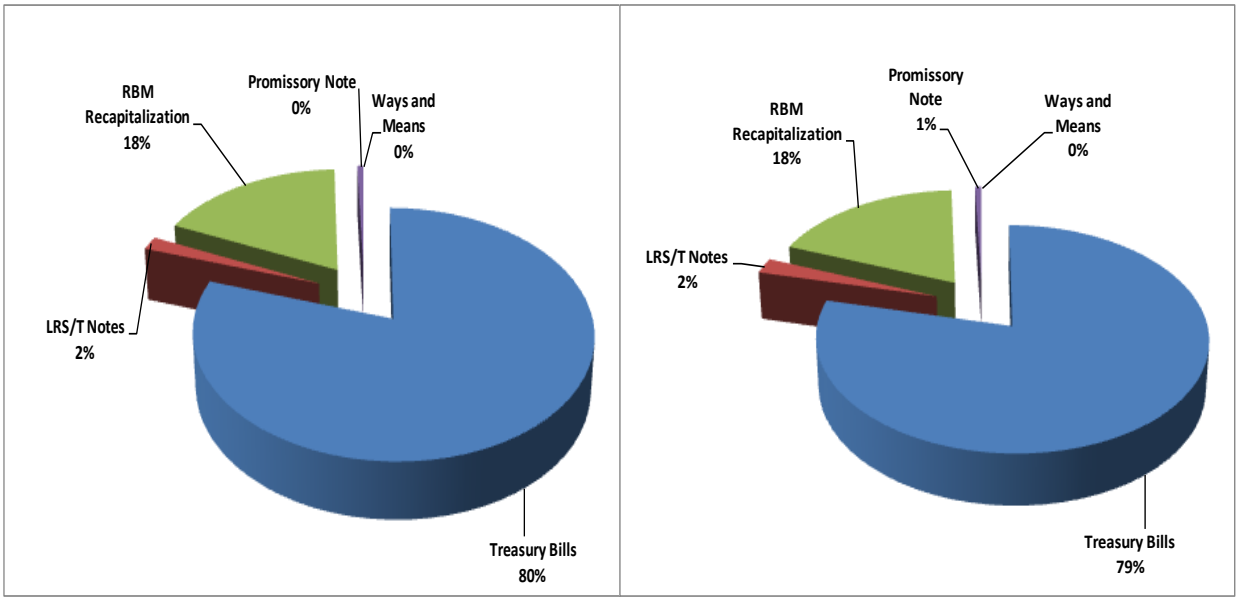
SECTION II: PUBLIC DOMESTIC DEBT REVIEW

A. Structure of Domestic Debt

1. Malawi's gross domestic debt stock amounted to MK 165.9 billion as of end June 2011 compared to MK 158.8 in June 2010, representing a 4.5 percent increase. Lower than expected donor inflows during January-June 2011 led to fiscal pressures which were financed through domestic borrowing.

The main characteristic of Malawi's domestic debt is the dominance of the short term treasury bills that mature in less than one year. This structure is mainly due to the underdeveloped domestic debt market, with few participants. In June 2011, treasury bills accounted for 80 percent of the domestic debt stock, while the remainder was in the form of relatively longer term debt instruments, (chart 2.1).

Chart 2.1: Composition of Domestic Debt in June 2011 and June 2010 Respectively



Source: Ministry of Finance, Debt and Aid Division

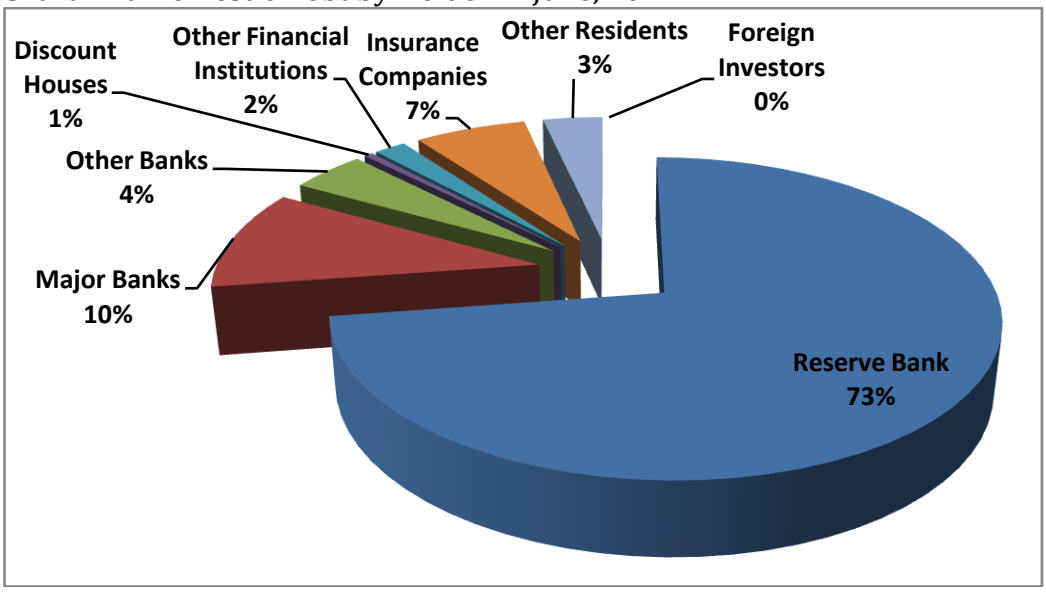
The long-term instruments that are currently in use include the Promissory Note which was issued by the Ministry of Finance to recapitalize the Reserve Bank of Malawi (RBM) in 2008 and the local registered stocks which were issued to

securitize arrears to suppliers of goods and services to the Malawi Government. The Promissory Note accounted for 18 percent of domestic debt while local registered stocks, which are held by the private sector, accounted for the remainder of the domestic debt stock (chart 2.1).

B. Distribution of Domestic Debt by Holders

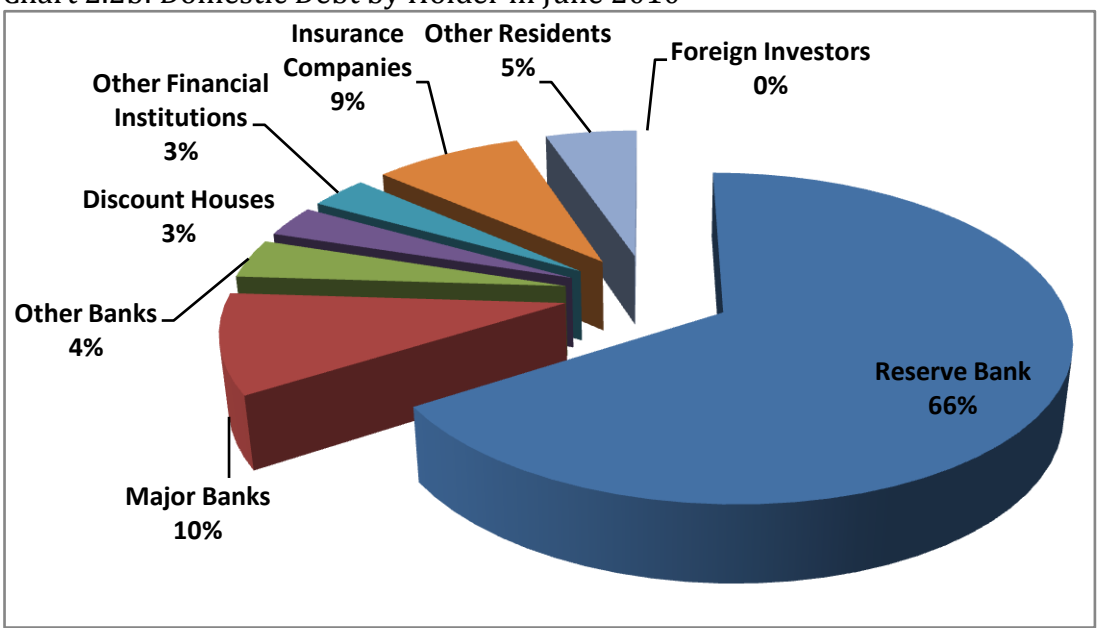
3. The central government domestic debt stock is concentrated in few participants, with most of the debt held by the Reserve Bank of Malawi. As of end June 2011, RBM was holding 72.7 percent of the domestic debt stock compared to 63.1 percent in June 2010. This is followed by the major commercial banks which held 10.5 percent of the government domestic debt. Consequently, there was a reduction in the share of holdings by the non-banking sector, discount houses, insurance companies and Pension Funds as at 30th June 2011 relative to the corresponding period in 2011 (charts 2.2a & 2.2b). However, with the passing of the Pension bill in Parliament, the share of the Pension funds in government securities is expected to increase as most companies and organization are likely to introduce pension schemes for their employees. These schemes are potential investors in the low risk government securities.

Chart 2.2a Domestic Debt by Holder in June, 2011



Data source: Ministry of Finance, Debt and Aid Division

Chart 2.2b: Domestic Debt by Holder in June 2010



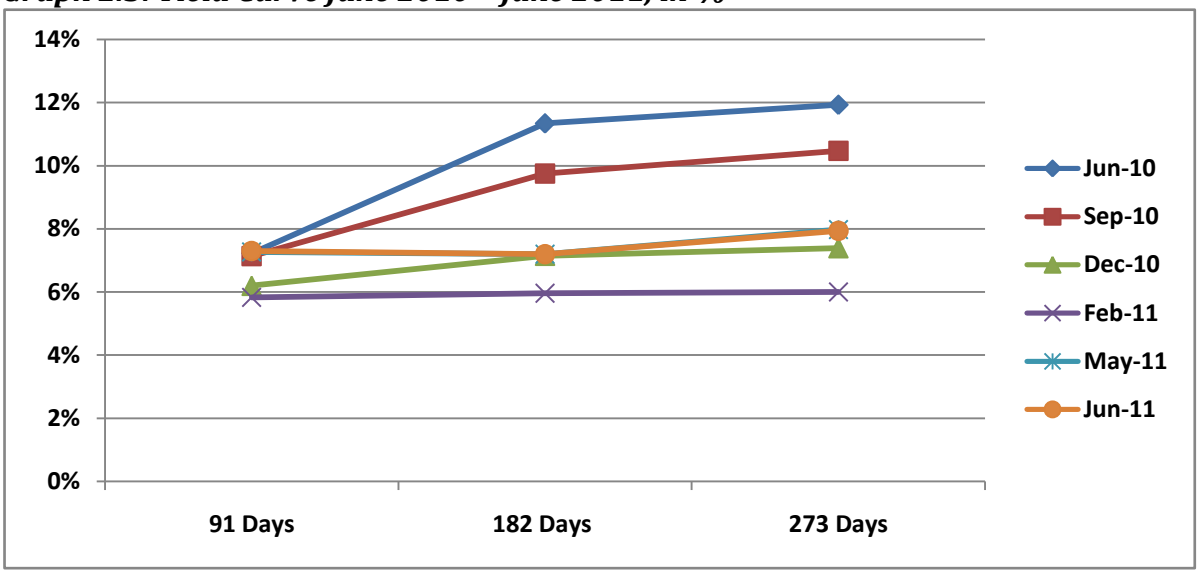
Data source: Ministry of Finance, Debt and Aid Division

C. Domestic Debt Yield Curve Analysis

2. The yield curve shows the relationship between the interest rates and the time to maturity of debt instruments of different maturity periods at a given point in time. It can be used to estimate the indicative interest rate for a debt instrument, given its maturity period.

3. Malawi does not have a meaningful yield curve due to the undeveloped domestic debt market that is dominated by treasury bills. In view of this, the yield curve below is only for treasury bills which are issued in three tenors; the 91 day, 182 days and 273 days.

Graph 2.3: Yield Curve June 2010 – June 2011, in %



Data source: Ministry of Finance, Debt and Aid Division

4. The yield curve for June 2010 show a wider spread between the shorter-end and the longer-end of the TB tenors. This implies that the investors attached a high risk premium to the longer term instruments than the short term instruments. From December, 2010, the average interest rates for the 182 days and the 273 days TBs show a downward trend and converge towards 7 percent which has been the interest rate of the 91 days TBs during the entire period. This is due to lack of investment opportunities owing to shortages of foreign exchange. This has led to high liquidity in the market thereby increasing the demand for the risk free government securities hence driving down the yields.

5. The average interest rate for the 182 days treasury bills moved downwards from 11.6 percent in July 2010 to 7.15 percent in December 2010 and 5.41 percent in May 2011. The interest rate of the 273 days treasury bills moved from 12.48 percent in July 2010 to 7.39 percent in December 2010 and to 6.88 percent in May 2011.

SECTION III: RISK ANALYSIS OF THE DEBT PORTFOLIO

A. Definition of Risk

1. Risk is the potential for the cost of debt to deviate from its expected outcome. There are various types of risks including market risk, operational risk and liquidity risk. In this analysis, the focus is on market risk, which arises from the volatility of the underlying factors in the market such as interest rate and exchange rate volatility. Exposure of the debt portfolio to market risk is captured using a range of indicators, including refinancing risk, interest risk and exchange risk. It is important to assess the costs and risks associated with the debt portfolio because such information enables decision makers to design forward looking strategies on the optimal debt structure in terms of maturity, interest rate and exchange rate. This section presents a brief discussion on the types of risks that will be used to analyse the market risks associated with Malawi's external and domestic debt portfolio.

B. Refinancing risk

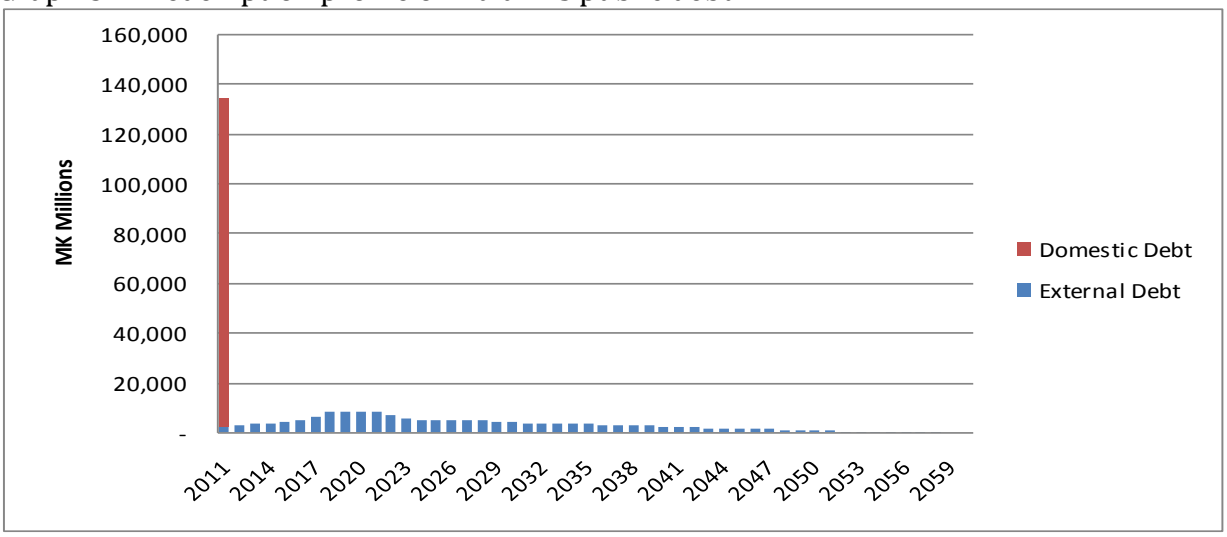
2. Refinancing risk captures the exposure of the debt portfolio to higher interest rates when debt is being rolled over. Two measures are used to assess the exposure of Malawi's public debt to refinancing risk, namely: the maturity/redemption profile of debt and the Average Time to Maturity (ATM) of the debt stock as discussed below.

i) Analysis of refinancing risk using redemption profile

3. The redemption or maturity profile refers to the outstanding debt stock or the amount of debt that is falling due in a given period of time. This is a powerful indicator of exposure to refinancing risk because it highlights the specific points of a country's vulnerability, which is manifested by high debt service payments in the debt repayment schedule.

4. The redemption profile of Malawi's public debt indicates that most of the debt (48 percent) is falling due in the first year of projection ie 2011/12 financial year. This is due to domestic debt which comprises mostly of short term treasury bills that mature in less than one year. Thus, the short term nature of Malawi's domestic debt exposes the debt portfolio to high rollover risks. However, from 2012 onwards, the redemption profile is exclusively composed of external debt, with significantly lower annual debt repayments through to 2059, reflecting the concessionality of foreign debt (graph 3.1).

Graph 3.1: Redemption profile of Malawi's public debt



5. Excluding domestic debt from the analysis shows that only 1.4 percent of Malawi's external debt matures in the first year of projection (ie July 2011 to June of 2012), implying very low refinancing associated with external debt.

ii) Analysis of refinancing risk using Average Time to Maturity

6. The other measure of refinancing risk is the Average Time to Maturity (ATM), which measures how long it takes on average to rollover or refinance the debt portfolio. The Average Time to Maturity of the debt portfolio is calculated as follows:

$$ATM = \frac{\sum_{t-1}^{T} (A_t * t)}{\sum_{t-1}^{T} A_t}$$

Where: A_t equals the principal repayment in the debt portfolio t^{th} period.

7. A low value of ATM indicates that a high share of the debt will be due for payment or roll over in the near future, implying a substantial exposure to refinancing risk if resources are not available to meet or roll over the maturing debt. On the other hand, a high value of ATM indicates that a low proportion of the debt will be maturing in the near future, implying a low exposure to refinancing risk.

8. The ATM of Malawi's total public external and domestic debt is 8.4 years. This implies that it will take 8.4 years before the total debt portfolio matures and is subject to rolling over if funds are not available. Comparing with other African countries, the ATM for Malawi's debt portfolio is similar to that of Kenya[1] at 8.4 years but below that of Tanzania[2] at 15.7 years.

9. Excluding domestic debt from the analysis, the Average Time to Maturity for external debt only is 15.4 years which is longer than the ATM for the total public debt. This is due to the high degree of concessionality of external loans in the debt portfolio. This ATM implies that it will take a long period of time (on average 15.4 years) before external debt is due for repayment, reflecting a lower refinancing risk.

10. The ATM of domestic debt only is 0.5 years, reflecting the short term nature of Malawi's domestic debt. This implies that all the domestic debt that was issued for Central Government fiscal operations is due for repayment within six months, indicating a high refinancing risk. In practice, however, the Government has been rolling over the treasury bills as they fall due. Nevertheless, this is a source of risk if it is not possible to roll over all or part of the maturing domestic debt.

C. Interest rate risk

11. Interest rate risk refers to the exposure of the portfolio to changes in the market interest rates. Three measures are used to assess the exposure of the debt portfolio to interest rate risks, as follows:

1 Source: Kenya's Medium Term Debt Strategy (MTDS) report -June 2011
2 Source: Tanzania's MTDS report -June 2011

a) The ratio of debt that has *fixed or floating interest rates* in the total portfolio.
b) *Debt that is exposed to interest rate re-fixing within a specific time period*. This refers to maturing debt or variable debt whose interest rate is subject to change within a given period. Maturing debt may be exposed to interest risk if resources are not available to redeem it and, thus, it has to be rolled over.
c) *Average Time to Re-fixing (ATR)* indicates the average time required to reset the interest rate portfolio for the debt portfolio. The formula for calculating ATR is as follows:

$$ATR_t = \frac{w^f * \sum_{t=1}^{T}\left(A_t^f * t\right) + w^v * \sum_{s=1}^{S}\left(D_{t,s}^v * S\right)}{D_t}$$

Where:

- w^f and w^v are the respective shares of the variable and fixed rate outstanding debt in the total debt portfolio.
- A_t^f is the amortization payments of fixed rate debt at time t;
- D_t^v is the variable rate debt outstanding;
- S is the time to the next interest rate reset, and;
- D_t is the total outstanding debt at time t.

12. ATR shows how long it takes on average to re-fix interest rates of the debt portfolio. A low value of ATR indicates that a high share of the debt will be re-fixed in the near future, i.e. exposure to risk. On the other hand, a high value of ATR indicates that a low proportion of the debt will be re-fixed in the near future, thus implying low exposure of the debt to the risk of interest rate re-fixing.

i) Analysis of Interest Rate Risk of Public Debt Based on Fixed and Floating Rates Mix

13. Malawi's public external and debt portfolio is exclusively composed fixed rate instruments. This implies that adverse interest rate movements on external and domestic debt instruments would not affect Malawi's interest burden on the budget.

Malawi's position in terms of low exposure to interest risk is strengthened by the fact that most of the external debt was contracted on concessional terms with significantly low interest rates that are below the market rates, ranging between 0-3 percent per annum.

ii) Analysis of interest rate risk of Public debt based on exposure to refixing

14. Exposure to interest rate risk is best captured by the portion of the debt portfolio that is subject to interest rate re-fixing within a specified period because it captures the vulnerability of funding costs to higher market interest rates when variable interest rates are being reset at the time of either rolling over the variable rate. Using this measure, the interest risk associated with Malawi's total public debt is very high owing to the significant amount of domestic debt that is expected to be rolled over in the first year of projection ie in the 2011/12 financial year.

iii) Analysis of interest rate risk of Public debt using Average Time to Refixing

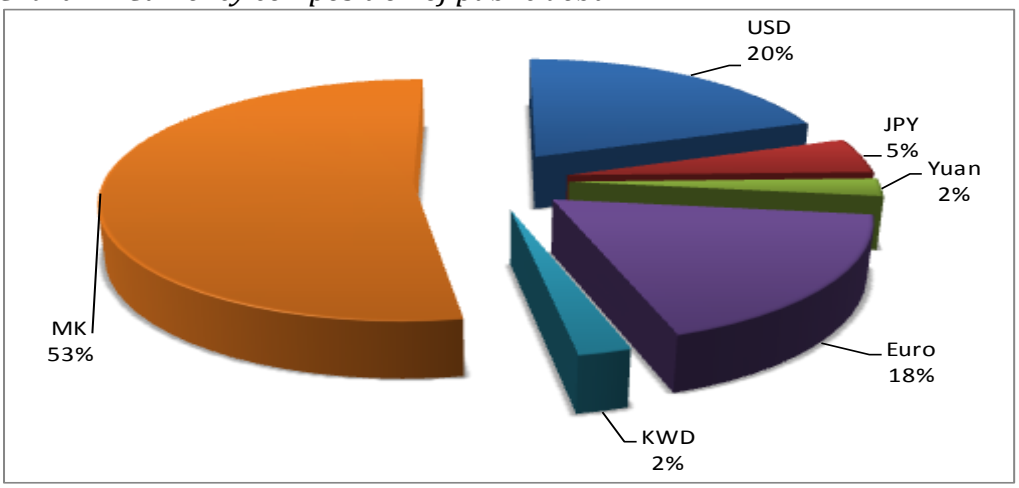
15. The Average Time to Refixing of the total debt portfolio 8.4 years, implying that it takes an average of 8.4 years to refax interest rates of the portfolio. The ATR for domestic debt only is about 6 months. Such a low value demonstrates that a high share of the debt will be re-fixed in the near future, indicating a high exposure to interest rate risk. The Average Time to Refixing (ATR) of external debt shows that it takes an average of 15.6 years to reset the interest rate of the external debt portfolio. Such a high value demonstrates that a high share of the debt will be re-fixed in the long term, indicating a low exposure to interest rate risk. This confirms the long term nature of Malawi's external debt.

D. Exchange rate risk

16. As of end June 2011, Malawi's public debt was comprised of 53 percent domestic debt that is denominated in local currency (the Malawi Kwacha), while the remainder was external debt and is denominated in various foreign currencies

(chart 3.1). This currency composition implies that 47 percent of the total debt portfolio is exposed to foreign exchange risk, arising from foreign currency fluctuations vis-à-vis the Malawi Kwacha. Thus, any significant depreciation/devaluation of the Malawi Kwacha against foreign currencies is expected to higher debt service payments in local currency terms, leading to higher payments in the budget than projected.

Chart 3.1 Currency composition of public debt



Data source: Ministry of Finance, Debt and Aid Division

ANNEXES

Annex 1: Disbursed Outstanding Debt as of end June 2010 and 2011

	US$	US$
CREDITOR	**Jun-10**	**Jun-11**
I) Multilateral		
IDA	219.5	269.7
ADF	145.1	162.4
ADB	2.8	1.1
IMF	130.0	152.4
EIB	18.1	28.8
IFAD	70.9	78.7
NDF	30.3	33.8
BADEA	29.0	29.7
OPEC	20.38	23.75
PTA		4.63
Sub-total Multilateral	**666.0**	**784.9**
II) Bilateral		
Kuwait	42.4	43.8
Taiwan	17.0	14.7
India	29.9	48.4
Belgium	2.1	2.4
China	28.8	90.3
Sub-total Bilateral	**120.2**	**199.6**
III) COMMERCIAL		
FMO (Netherlands)	0.0	0.0
Sub-total Commercial	**0.0**	**0.0**
GRAND TOTAL (I+II+III)	**786.2**	**984.6**

Source: Debt and Aid Division, Ministry of Finance

Annex 2: Loan agreements signed in 2010/11 Financial Year

Loan Title	Creditor	Amount
Jenda - Edingeni Road Project	Abu Dhabi Fund for International Development	Emirates Dirhams 36,730,000
Line of Credit	India	USD 50,000,000
Malawi university of Science and technology	Exim (Mainland China)	CNY 540 million
Local Economic Development Project	ADF	UA14 million
Improving Education Quality in Malawi	IDA	XDR33 million