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Full Length Research Paper

Sources 0f Macroeconomic Imbalances in Malawi And Policy Solutions

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This paper uses a score board to determine the sources of macroeconomic imbalances in the Malawi economy during the period 2003 to 2014. The study employs a scoreboard to capture and assess macroeconomic imbalances. The design of the scorecard is based on the European monetary Union (EMU), developed under the Macroeconomic Imbalance Procedure (MIP) in September 2011. From the external sustainability side, Malawi has high external position vulnerabilities which are depicted in sources of imbalances in the economy namely the persistent current account deficit, Net international Investment Position (NIIP) deficit, unfavorable terms of trade as evidenced by the low export market share and unstable Real Effective Exchange rate (REER). From the internal sustainability perspective, sources of macroeconomic imbalances include volatile gross domestic product, unstable prices, high government domestic debt, low private sector credit, high unemployment and low capacity utilization.

Keywords: Macroeconomic, Exchange rate, Policy, Utilization, Imbalances.

INTRODUCTION

Macroeconomic imbalances are typically defined as the major differences between supply and demand or some distortions in one or more sectors that affect the entire economy. Traditionally, imbalances are classified as either internal or external. On their part, external imbalances often reflect a domestic resource gap or savings-investment imbalance. On the other hand, an internal imbalance occurs when the economy is operating either in excess or significantly below potential output (the level at which existing resources in the economy are essentially fully utilized without giving rise to inflationary pressures). An internal imbalance can rise, for example when aggregate demand exceeds potential output, in which case inflation is likely to emerge. In most developing countries, monetary financing of large fiscal deficits is an important source of internal imbalances causing inflation and sometimes slowing down growth. However, an internal imbalance can also emerge when aggregate demand falls noticeably short of potential output. In this case, the economy often experiences high unemployment, sluggish growth or even recessions.

External imbalances involve imbalances in a country's accounts with the rest of the world. Traditionally, the most studied external imbalance is that of the current account where the sum of a country's balance on goods and services and net official and private transfers differs significantly from zero. Widening macroeconomic imbalances constitute a major concern for future growth prospects and economic stability. These imbalances cause uncertainty and increase the risk of financial instability which have negative impacts on economic growth. Globally, equity markets and commodity and currency markets have become more volatile while short-term capital outflows from some emerging markets have increased. This development has raised fears of a new global financial crisis. However, the turbulence is limited to a number of countries with high current account deficits.

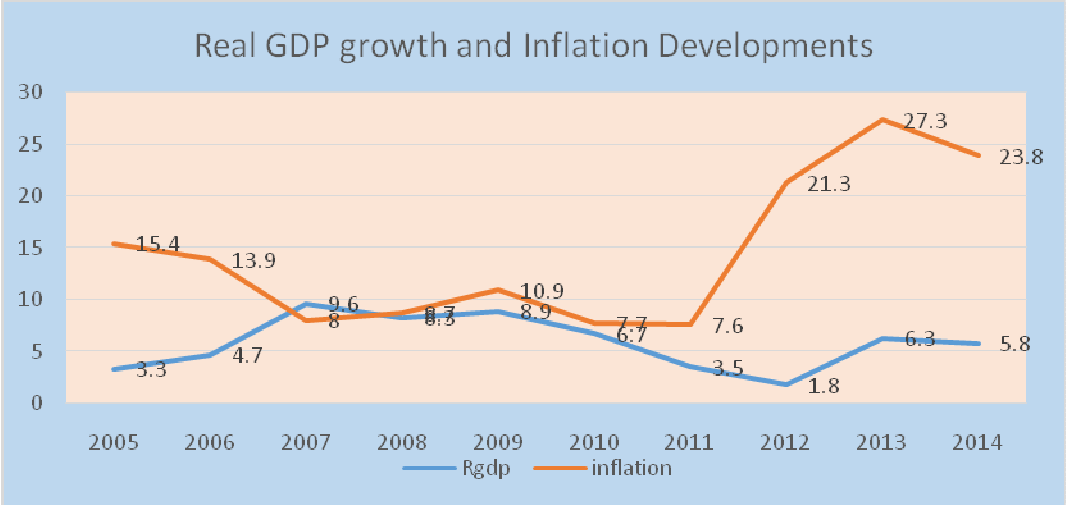

Chart 1 Real GDP Growth and inflation

This paper aims at evaluating the sources of macroeconomic imbalances in Malawi. Identifying sources of imbalances is an important aspect in policy formulation as it would provide a platform to design policy plans to achieve their correction and provide means to effectively enforce it. In addition, identifying macroeconomic imbalances is useful in that it can provide observed risks early to assess their impact on the economy and substantiate policy recommendations if appropriate. Correcting macroeconomic imbalances can also assist authorities to meet targets for macroeconomic convergence in Southern Africa Development Community (SADC) as well as those under COMESA. The study will employ the surveillance procedure to determine macroeconomic imbalances, also called the Macroeconomic Imbalance Procedure (MIP). The MIP was developed by the European Commission and it became into force in December 2011. The MIP is built around a two-step approach. The first step is an alert mechanism which works as a filter. The objective of the alert mechanism is to focus attention to observed risks early on and determine whether, in the second step, more in-depth analysis appears warranted so as to assess the vulnerability of a country and substantiate policy recommendations if appropriate. The alert mechanism consists of an economic reading of a scoreboard with early warning indicators put in place. The paper focuses on the interpretation of the MIP scoreboard which contains macroeconomic indicators which are derived from internal and external sector balance identity where the current account balance of a country is equal to the domestic savings/investment balance. To enhance the analysis on imbalances, the scoreboard also includes factors that influence the imbalances in the internal and external sector macroeconomic identity.

The rest of the paper is organized as follows: Section 2 provides an overview of the Malawi economy, section 3 discusses the methodology for assessing and measuring macroeconomic imbalances, section 4 discusses the MIP scoreboard indicators and section 5 presents and assessment of sources of macroeconomic imbalances. Section presents the conclusion drawn from the analysis and finally section 7 outlines policy recommendations.

The Malawi Economy

Malawi is a landlocked developing country with an estimated population of 15 million and a space of 118.4 Square Kilometers. Although the country seems to have attained food security in the recent years, poverty is widespread as evidenced by a GDP per capita of US$343.6 as of 2013. Per capita GDP has however slightly moved up in the recent years from as a low of US$228.0 in 2008. Of the total population, 90 percent live in rural areas. The country's economy is heavily dependent on agriculture that employs about 85 percent of the total population contributing about 40 percent to Gross Domestic Product (GDP) and 80 percent of foreign exchange earnings.

Malawi has a very narrow export base with tobacco as the major foreign exchange earner, contributing a large percentage of the total foreign exchange earnings each year. Other major foreign exchange earners include tea, sugar, cotton and coffee. Malawi's geographical position, being a landlocked country imposes a structural constraint to trade as manifested through high transportation costs. During the period from 2005 to 2014, Malawi has registered average real growth rate of 6.0 percent, largely owing to a stable macroeconomic environment and good climatic conditions. The

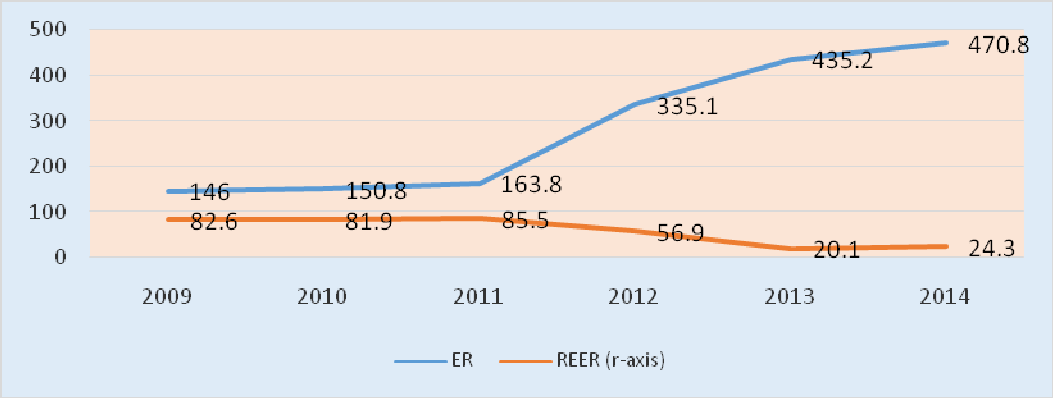

Chart 2 Developments in REER and Nominal Exchange rate

Improvement in the macroeconomic environment permitted the monetary authorities to bring inflation down to single digits while maintaining a stable exchange rate thereby contributing to poverty reduction and savings being channeled to investments projects mainly in infrastructure. During the same period, Malawi's external sustainability was helped by debt relief on reaching the HIPC completion point in mid-2006. Due to curtailed borrowing by government, T-bill rates plummeted and this had a crowing in effect on private sector credit. Credit to the private sector improved from less than 30.0 percent of total credit in mid-2004 to about 70.0 percent in 2008. This development supported private-led growth. Per capita output growth, which was negative over the previous decade, recovered to 3.5 percent.

The land mark in the country's macroeconomic performance leading to 2008 was marked by strong economic activity notwithstanding the adverse external conditions in the wake of the global liquidity squeeze and headwinds from rising fuel and food prices. Macroeconomic outturn was robust with real GDP growth at 9.7 percent, the highest level since 1995 as a result of strong agricultural production and a buoyant communication services. Inflation remained within the single digits averaging 8.7 percent for the year. Government operations were however expansionary in 2008 as evidenced by the widening of the fiscal imbalance to 6.1 percent of GDP compared to 2.2 percent of GDP in the preceding year.

On the international front, due to deteriorating terms of trade resulting from high fertilizer import prices and fuel costs which somewhat offset solid growth in tobacco prices and exports the current account has persistently remained in deficit position. Overall, with an undiversified economy, Malawi remains highly vulnerable to external shocks due to heavy dependence on rain-fed agriculture and tobacco exports and donor finances that constitute approximately 40.0 percent of the expenditures.

In 2009, the country embarked on a number of reforms aimed at dealing with growing macroeconomic imbalances in several sectors of the economy. In the external sector current account deficits have persisted from 2003 to 2014 as the current account deficit averaged -13.6 percent of GDP. This development has mainly been attributed to domestic demand and in particular, private consumption which has grown rapidly over the years. Average inflation though remained in single digits at 7.6 percent in 2011 jumped to 23.8 in 2014. The exchange rate was de-facto fixed and overvalued until early 2012. Consequently, in May 2012, the Kwacha was devalued by close to 50 percent leading to rising inflation. These conditions increased the probability of eventual strain on the financial system through increase in interest rates.

METHODOLOGY FOR MEASURING AND ASSESSING IMBALANCES

Design of the Scorecard

The study employs the scoreboard assessment mechanism to assess macroeconomic imbalances. The design of the scorecard is based on the European monetary Union (EMU), developed under the Macroeconomic Imbalance Procedure (MIP) in September 2011. The scorecard is based on a set of principles used to identify indicators in the economy. The choice of indicators focuses on the most relevant dimensions of macroeconomic imbalances and competitiveness losses, with a particular emphasis on the smooth functioning of the economy. For this reason, the scoreboard consists of indicators which can monitor external imbalances, competitiveness positions and internal imbalances, and encompass variables where both the economic literature and recent experiences.

Table 1 Threshold of MIP Indicators

Indicator	Indicative threshold(percent)
Three-year backward moving average of the C**urrent Account Balance (CAB)** in percent of GDP.	+6.0 and – 4.0
Net International Investment Position (**NIIP**) in percent of GDP	-35.0
Five-year percentage change of **export market shares** measured in values	-6.0
three-year percentage change of the **real effective exchange rates** based on CPI deflators	-/+11.0
Private sector debt in percent of GDP	160.0
Private sector credit flow in percent of GDP	15.0
General Government sector debt in percent of GDP	60.0 percent

Worldwide suggest associations with economic crises Secondly, the scoreboard indicators and thresholds are chosen as to provide a reliable signaling device for potentially harmful imbalances and competitiveness losses. In this case, we choose combination of stock and flow indicators which can capture both shorter-term rapid deteriorations as well as the longer term gradual accumulation of imbalances. Moreover, the indicative thresholds are set at prudent levels which on the one hand avoid excessive numbers of 'false alarms' but which on the other hand are not set so stringently that they only identify problems once they are entrenched. To this end, thresholds are generally established via a statistical approach based on the distributions of the indicators' values, by identifying the thresholds as the lower and/or upper quartiles of the distributions. The thresholds are generally consistent with the values found in the empirical literature. Thirdly, the scoreboard has an important communication role. For this purpose, the scoreboard consists of a limited number of indicators. Moreover, the choice of indicators and transformations is kept as simple and straightforward as possible. The scoreboard consists of the following ten indicators with indicative thresholds.
The table below presents the data transformation formula for the indicators.

Mip Scoreboard Indicators

Current Account Balance

This scoreboard indicator is the three-year backward moving average of the current account balance expressed in percent of GDP, based on data from Balance of Payments statistics, with the indicative thresholds of +6.0 percent and -4.0 percent. This indicative threshold was derived from the data sample starting in 2003 to 2014. This threshold value is also broadly in line with the evidence from the empirical literature on balance of payment crises and sustainability of current account imbalances. There are broadly three strands of this literature, which are relevant for the determination of the threshold: Firstly, a number of research papers investigate past episodes of significant current account adjustments and attempt to identify some regularity, including the levels of current account deficits at which the adjustment starts. Examinations of past episodes of current account adjustments show that a typical current account reversal starts at around -5.0 percent of GDP (summers, 1996). Freund (2005) found on a sample of industrialized countries that the mean for the current account to GDP ratio at the beginning of large current account adjustments was around -6.3 percent (median was -4.9 percent). Similarly, IMF (2007) found on average that past current account reversals in advanced countries started when the current account deficit stood at about 4.1 percent of GDP. Reversals of persistent current account surpluses typically started at the level of 2.4 percent of GDP.
The current account covers all transactions occurring between resident and non-resident entities, and refers to international trade in goods and services, income and current transfers. It should nevertheless be noted that attempts to identify thresholds beyond which current account imbalances pose a problem are mired with conceptual and methodological difficulties. Ghosh and Ghosh (2003) find that countries with current account deficits above 2.5 percent of GDP have a seven-fold greater probability of a crisis than countries with smaller deficits; Secondly, current account norms, i.e. current account to GDP ratios as justified by fundamentals are usually computed based on a reduced form of a panel econometric model in the spirit of Chinn and Prasad (2003). The results have to be interpreted with utmost caution as they are subject to numerous conceptual and methodological caveats.
Finally, much research has focused on assessing the sustainability of current account imbalances. This strand of literature typically attempts to estimate values of current accounts which would stabilise the external position of a country at the current or a predetermined level (e.g. Milesi-Ferretti and Razin, 1996; Edwards, 2001). These results are typically country-specific and do not deliver a general benchmark. The upper value of the

Table 2 Formula for MIP Indicators

Indicator	Indicative threshold(percent)
Three-year backward moving average of the C**urrent Account Balance (CAB)** in percent of GDP.	$\frac{\left(\frac{CA}{GDP}\right)_t + \left(\frac{CA}{GDP}\right)_{t-1} + \left(\frac{CA}{GDP}\right)_{t-2}}{3} * 100$
Net International Investment Position (**NIIP**) in percent of GDP	$\frac{NIIP_t}{GDP_t} * 100$
Five-year percentage change of **export market shares** measured in values	$\frac{\left(\frac{EXP_c}{EXP_w}\right)_t - \left(\frac{EXP_c}{EXP_w}\right)_{t-5}}{\left(\frac{EXP_c}{EXP_w}\right)_{t-5}} * 100$
three-year percentage change of the **real effective exchange rates** based on CPI deflators	$\frac{(REER)_t - (REER)_{t-3}}{(REER)_{t-3}} * 100$
Private sector debt in percent of GDP	160.0
Private sector credit flow in percent of GDP	$\frac{PCRDT_t}{GDP_t} * 100$
General Government sector debt in percent of GDP	$\frac{GGD_t}{GDP_t} * 100$

Threshold is set at +6.0 percent. The upper quartile of the distribution of the three-year backward average of current account balances corresponds to +2.0 percent. To this an additional 4.0 percent margin has been added in line with the intelligent symmetry approach to current account balances. This allows tackling both current account surpluses and deficits but recognizes that the urgency for policy intervention is clearly greater in the case of current account deficits. It also reflects the fact that the risk of negative spillover effects of current account deficits is more prevalent than for current account surpluses due to sustainability considerations.

Economic Rationale

The current external account balance is the major driver of net lending/borrowing of the economy as a whole and thereby provides important information about the economic relations of the country with the rest of the world. A high current account deficit indicates that the economy is borrowing and typically it is importing in excess of its exports. Based on an extensive literature review, Frankel and Saravelos (2010) point out that the current account balance is one of the most frequent statistically significant indicators in explaining crisis incidence. Current external imbalances are not necessarily worrisome if deficits/surpluses are natural responses to changes in underlying structural characteristics and the related adjustment in saving and investment decisions of economic agents. For instance, countries in a catching-up phase often run current account deficits as investing in productive activities increases the prospects of future income. Borrowing from abroad allows them to smooth the inter-temporal profile of consumption. Similarly, countries with ageing population may find it opportune to save today, i.e. run current account surpluses, to avoid a drop in consumption in the future. In addition, the sustainability of a current account deficit is a function of the ability of the country to attract foreign capital and of its repayment prospects given the future growth prospects. Hence, high current account deficits can be sustainable as long as there are willing lenders while much smaller deficits may become unsustainable if the willingness to lend reverses. Current account deficits can be a sign of an excessive imbalance, if, for instance, the volume of borrowing is such that it leads to an unsustainable external debt position. In turn, a high current account surplus may be considered worrisome when it reflects weaknesses in domestic demand. External imbalances often reflect other types of imbalances, e.g. excessive credit expansions in some countries lead to rapid asset price increases and fed back into large external imbalances. The current account balance is therefore an important indicator which provides information about the potential existence of

Table 3 Current Account Statistics

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
3 year backward moving average of current account			-14.4	-14.2	-13.2	-12.5	-12.9	-14.7	-13.8	-14.1	-17.1	-19.2
Current account balance	-10.3	-14.4	-18.4	-9.84	-11.3	-16.4	-11.0	-16.8	-13.6	-11.8	-25.9	-19.8
Balance on Goods and Services	-12.1	-18.4	-25.4	-17.2	-18.1	-23.2	-17.9	-23.7	-22.0	-20.9	-29.8	-27.0
Exports of goods and services	25.55	21.80	22.09	25.20	24.05	23.96	26.79	22.61	28.63	24.2	26.8	27.4
Goods	23.41	19.71	19.65	23.13	22.02	22.22	25.21	21.10	27.17	22.3	24.6	25.6
Services	2.14	2.09	2.44	2.07	2.03	1.74	1.57	1.51	1.46	1.8	2.2	1.8
Imports of goods and services	-37.6	-40.2	-47.5	-42.4	-42.2	-47.1	-44.7	-46.3	-50.7	-45.1	-56.5	-54.3
Balance on Net Income	-3.6	-3.8	-2.9	-2.3	-2.0	-3.5	-2.4	-3.5	-1.7	0.9	-3.4	-3.3
Income credit	0.11	0.06	0.02	0.23	0.04	0.04	0.01	0.02	0.03	0.1	0.0	0.1
Income debit	-3.8	-3.9	-2.9	-2.6	-2.0	-3.5	-2.4	-3.5	-1.8	0.9	-3.4	-3.3
o/w investment income	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	1.0	-3.3	-3.2
o/w Compensation of employees	-0.28	-0.26	-0.25	-0.22	-0.19	-0.14	-0.14	-0.13	-0.12	-0.1	-0.1	-0.1

Macroeconomic imbalances. Surveillance covers both current account surpluses and deficits which, from an economic point of view, pose different types of policy challenges. In particular, unlike current account deficits, large and sustained current account surpluses do not raise the same concerns about the sustainability of external debt and financing capacities, concerns that can affect the smooth functioning of the Malawi economy. Net lending/borrowing versus the rest of the world comprises both the current and the capital account.

Data Transformation, Data Sources and Indicative Threshold

This indicator is calculated as the three-year backward moving average of the current account balance as a percent of GDP. The average over three years is used so as to control for short-term fluctuations of the annual figures and to provide indications of the persistence of a potential imbalance. Data on the current account balance are derived from the Balance of Payments (Bop) statistics reported by the IFS. This source is widely used by other international institutions as well as academics. Bop (and International Investment Position) statistics are the statistical tools expressly built to monitor the relations of a country with the rest of the world.

Economic Interpretation

The current account is typically the key determinant of changes in the net international investment position. Therefore, each deficit/surplus position will be assessed jointly with the level of the outstanding foreign debt/credit of the economy. The potential risks from external deficits need to be qualified by taking into account capital transfers as they can finance in part current account deficits. Similarly, the destination of the capital flows is relevant as strong FDI inflows help to provide a relatively safe financing of current account deficits. Conceptually, the sum of current account and capital account determines the net lending/borrowing of a country and is thus the flow counterpart of the net foreign financial asset position/net international investment position. As indicated in Table 3 above, current account has been persistently in deficit thereby whose poses a big risk to the country's stability. The deficit emanates from higher

Table 4 NIIP Statistics as Percentage of GDP

Variables	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Net International Investment Position	-153.4	-137.7	-128.6	-34.6	-32.3	-36.1	-35.7	-33.9	-34.5	-47.5	-47.3
Assets	9.5	9.5	9.0	7.8	10.5	9.1	6.8	9.9	7.3	17.6	21.7
o/w reserve assets	5.6	4.9	6.1	4.4	6.9	6.1	3.4	5.6	3.6	5.1	9.1
o/w other investments	3.7	4.4	2.7	2.9	2.8	1.9	2.4	2.7	2.4	10.7	10.9
Liabilities	162.9	147.2	137.6	42.4	42.8	45.2	42.5	43.8	41.9	65.0	69.1
o/w loans	137.7	119.4	111.5	17.7	16.2	17.8	16.9	16.9	14.5	31.0	34.3
o/w Equity capital and reinvested earnings	16.7	17.3	13.8	10.3	8.0	10.3	10.5	12.1	9.8	7.0	7.1

Table 5 REER Statistics

Variable/Year	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
REER	76.6	76.2	79.8	77.3	74.8	94.8	82.6	81.9	85.7	56.9	20.1	23.4
3yr % change of REER	-16.2	-48.7	-24.6	0.9	-1.8	18.9	6.9	9.4	-9.6	-30.5	-76.4	-58.9

Source Author's calculation *and Reserve Bank of Malawi*

Demand for imports and net income outflow.

Net International Investment Position

The scoreboard indicator is the net international investment position expressed in percent of GDP based on data from Balance of Payments statistics, with the indicative threshold of -35.0 percent.

Economic Rationale

The net international investment position (NIIP) records the net financial position (assets minus liabilities) of the domestic sectors of the economy versus the rest of the world. It provides an aggregate view of the net external position of a country and it is also frequently used in economic analysis and research, focusing on external vulnerability of countries and the risk of crises (see for example Frankel and Saravelos, 2010; or Furceri et al., 2011a and 2011b)). As it is the stock counterpart to the current account balance, it allows for a stock-flow analysis of external positions. Typically, highly negative NIIPs result from persistently high current account deficits. In this respect, a number of the conceptual balances apply to NIIP as well. Issues discussed in the section on the current account

Data Transformation, Data Sources and Indicative Threshold

This indicator is calculated as a share of GDP to allow for cross-country comparability. As this is a stock indicator, the value for the last available year is used. For consistency reasons, data on the NIIP are derived from the Balance of Payments statistics reported by IFS, i.e. the same data source used for the current account balance. The statistical analysis of the NIIP distribution yields -35.0 percent of GDP as an indicative threshold. It is difficult to establish a level of net external assets which can be considered as risky and economic literature attempting to do this is rather scarce. This is due to the fact that next to the absolute level of net foreign liabilities, it is in particular the composition of both gross assets and liabilities in terms of types or maturities, which determine the overall vulnerability of the external position of a country. Unlike large negative NIIP positions, large positive external asset positions are not a priori considered to be problematic for a country. Therefore, the scoreboard contains an indicative threshold for

Negative NIIP only.

Economic Interpretation

NIIP is a good starting point in the assessment of External positions of Malawi. However, the composition of NIIP is important for a deeper understanding of the Degree of vulnerability of the country. Therefore, also in this case, the economic reading of the scoreboard will take account of additional relevant information. In this sense, it is useful to focus specifically on liabilities that require repayment of principal or interest, separately from non-debt generating liabilities. This provides useful additional information to interpret the overall NIIP as these components have an impact on external solvency of an economy. This distinction is important especially for the specificities of external positions of catching up economies, which experience strong Foreign Direct Investment (FDI) inflows. It can be argued that FDI constitutes a relatively less risky and more stable form of financing than other alternatives and thus these inflows do not increase country's vulnerability to the same extent. In this respect, the economic interpretation will consider the indicator on Net External Debt (NED), which, compared to the NIIP, does not contain portfolio FDI, portfolio equity and financial derivatives. However, the current account balance represents in most cases the bulk of the net lending and borrowing position. FDI is indeed a less risky source of external financing, although it can be argued that high inflows of FDI increase the vulnerability of an economy as FDI can flow out of the country too. This is particularly the case of undistributed profits which are considered as FDI inflows. FDI also generates dividend flows which are reflected in the external position of a country. As shown in Table 4 above, this statistic has also been perpetually in negative territory indicating that Malawi borrows more than it invests abroad.

Real Effective Exchange Rate

The scoreboard indicator is the percentage change over three years of the real effective exchange rate (REER) based on consumer price index deflators, with the indicative thresholds of +/–11.0 percent.

Economic Rationale

The scoreboard includes a measure of the real effective exchange rate based on consumer prices in order to capture the drivers of persistent changes in price and cost competitiveness of the country relative to its major trading partners. In contrast to assessing relative competitiveness through relative production costs, this Indicator accounts for broader price developments and thus casts a more comprehensive picture of global 'price' pressure on domestic producers in a medium-term perspective. Since it is closely related to the terms-of-trade concept, this indicator also exemplifies the attractiveness of imports over domestic production. In the economic literature, the REER has often been found to be a statistically significant predictor of the incidence of economic crises: it is thus frequently considered among early warning indicators (Reinhart et al., 1998).
In particular, Frankel and Saravelos (2010) identify the REER as a very important leading indicator in 48 out of 83 studies on crises occurring before 2008. In an empirical analysis on the determinants of the Great Recession, the same authors find that high past REER appreciations are associated with higher incidence of the current crisis. An important strand of literature also asserts that REER appreciations do not need to be considered as harmful in all cases. For instance, a catching-up economy might experience price level convergence with respect to the Balassa-Samuelson effect. Instead, REER and other price developments pointed to economic imbalances that were partly related to an inappropriate response of wages to productivity in the manufacturing and service sectors. Finally, an important caveat is that the REER only assesses price and cost competitiveness developments. While it focuses on exchange rates and prices, it does hardly account for several aspects of competitiveness like product quality, overhead costs, or marketing efficiency. Therefore, the REER is complemented by other scoreboard indicators such as export market shares.

Data Transformation, Data Sources and Indicative Threshold

The REER indicator results from deflating the nominal effective exchange rate (NEER) by the CPI as price deflator. The NEER is computed as a weighted average of a currency's exchange rates versus several important foreign currencies, and thus aims to measure the global appreciation/depreciation of a currency. In the case of the scoreboard, the NEER is obtained from a weighted average of the exchange rate versus a panel of the most important trading partners of Malawi.
Given that this indicator is meant to monitor the global competitiveness of the country, it is very relevant not to exclude the influence played by the exchange rate developments so to assess the relative price developments conditional on exchange rates. This indicator will not be used as a trigger to discuss exchange rate policy that is outside the scope of the entire exercise. Terms of trade are country-specific and defined as the ratio of export to import prices, which in principle can be understood as a REER for a particular choice of deflators. In contrast to pure external

competitiveness indicators such as export market shares, the REER thus not only embodies price features of exported goods and services to external markets, but also the attractiveness of imports versus domestically produced goods. As a two-sided indicator, it is therefore frequently related to current account developments, Salto and Turrini, (2010).

Concerning the indicative thresholds, symmetric thresholds are considered for the REER indicator. The focus is put on detecting harmful imbalances, which may be captured by an unsustainable appreciation meaning a loss of competitiveness, or depreciation signaling potential problems related to domestic demand or the potential of harmful future price convergence. Overall, with a REER indicator calculated as a three-year percentage change, the transformation looks at medium-term developments in relative prices. To also cater for exchange rate flexibility, one standard deviation is added to the value of the thresholds derived from the distribution. The standard deviation is larger than the value on the Balassa-Samuelson effect estimated in the literature, i.e. 1 percent change per year. The standard deviation of the distribution is subtracted from the lower quartile and added to the upper quartile.

Economic Interpretation

The REER indicator captures persistent price changes in a common reference unit (CPI) relative to major trading partners and thus illustrates the magnitude of developments in price and cost competitiveness. Significant deviations of the REER based on CPI from the benchmark indicate that prices have grown out of line with productivity for some time without compensation via the nominal exchange rate. The results show that the exchange rate developments have been volatile swinging on either side of the pendulum over the years. Worth to note it the average depreciation of 55.3 percent between 2012 and 2014.

Export Market Shares

The scoreboard indicator is the percentage change of export market shares over five years, based on Balance of Payments data, with a lower indicative threshold of -6.0 percent.

Economic Rationale

The current economic crisis has exposed the importance of non-price factors for export developments. To this end, the scoreboard on macroeconomic imbalances includes an indicator on export market shares. This indicator aims at capturing structural losses in competitiveness.

A country might lose shares of export market not only if exports decline but most importantly if its exports do not grow at the same rate of world exports and its relative position at the global level deteriorates. Hence, the reasons why countries might not have exploited new market opportunities or sharpened comparative advantages in newly traded products warrant investigation. Export market shares can be driven by the increase/decrease of a country's export volume (numerator effect) but also by the growth of total world exports in goods and services (denominator effect). World exports have almost doubled in the period 1994-2007 (+83.0 percent), due to factors such as multilateral trade liberalization and unilateral trade liberalization of some emerging countries (e.g. China, India and Brazil among some) but also to the increased trade in services favored by the development of ICT. Hence, it can also be the case that some countries apparently lose market shares because their exports grow more slowly than total world exports. Although this 'denominator effect' needs to be considered differently from the loss in market shares due to a 'numerator effect', the scoreboard should capture the overall position in terms of market shares of each country.

The causes of this divergence in export market shares can be related to both differences in trade openness and in product composition of exports. Small open economies that concentrate on few closely related trade partners tend to be more exposed to external demand shock risks than countries with a variety of export destinations or less trade openness. Similar arguments extend to the concentration in the sect oral composition of exports. In addition, technology-intensive products and services are found to be much less sensitive to changes in relative costs than low-technology sectors. Overall, relative prices only partly explain export performance, while other factors such as product quality and market structure can play an important role (Carlin et al., 2001).

Data Transformation, Data Sources and Indicator Threshold

There are a number of options available as regards the definition of the indicator. Firstly, one aspect to take into account is the time variation to apply: changes over one, three or five years. Given the high volatility of year-on-year changes in view of idiosyncratic trade shocks, this option was excluded in favor of a longer assessment period which would better reflect structural losses/gains in export performance. The percentage change over five years of the value of goods and services exports for each country as share of the world exports of goods and services appears to be the most opportune data transformation to measure long-term competitiveness development. The indicative threshold of the export market share indicator has been obtained from the lower

Table 6 Export Market Share

Variable	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
World Exports MK, billions	729,016.5	989,906.2	1,226,211.4	1,647,358.1	1,930,654.6	2,245,815.4	1,747,743.9	2,273,020.7	2,822,623.2	5,645,328.6	8,607,932.9
MW Exports MK billions	60.4	62.3	72.1	106.8	122.8	144.0	190.2	183.7	252.5	344.59	514.76
Market share MW/World(exports)	0.0083	0.0063	0.0059	0.0065	0.0067	0.0064	0.0109	0.0081	0.0090	0.00006	0.00006

Source: IMF and Reserve Bank of Malawi

Quartile of the data series distribution. This threshold corresponds to cumulative losses of 6.0 percent over a period of five years.

Economic Interpretation

The economic interpretation of the export market shares indicator is performed in conjunction with other long-run scoreboard indicators. In fact, most of the fluctuations in current accounts are driven by developments in the balance of goods and services, which is usually the largest component of the current account. Losses in competitiveness, the built-up of large current account deficits and the deterioration of the net international position in Malawi can be related to a range of underlying domestic macroeconomic imbalances. The current prices data series for goods and services has therefore been chosen as indicator in the scoreboard for coverage reasons, while export market shares (for goods) in volumes will complement its reading among the additional indicators. The table above indicates that export market share has remained weak underlining the narrow and undiversified export base.

Private Sector Credit Flow (Transactions)

The scoreboard indicator is private sector credit flows (transactions) expressed in percent of GDP, and it includes loans and securities other than shares. The indicative threshold of private sector credit is 15.0 percent.

Economic Rationale

Empirically, high credit growth is found to be associated with higher crisis incidence (Frankel and Saravelos, 2010). A wide body of economic literature identifies financial or banking crises, both in emerging and quickly expanding credit as one of the best predictors of advanced economies. Among the first contributions, Sachs et al. (1996) argue that credit growth is a good proxy of banking system vulnerability, as rapid credit expansion is likely associated with a decline in lending standards. Similarly, Jordá et al. (2011) and Gourinchas and Obstfeld (2011) find a significant and economically large impact of credit booms on the probability of banking crises, currency crises and sovereign defaults. There is also consensus in the literature that boom and bust cycles in asset markets have been historically associated with large movements in monetary and credit aggregates (Adalid and Detken, 2007). The link between money and credit growth, on the one hand, and asset prices, on the other hand, goes in both directions (Setzer et al. 2010). Gerdesmeier et al. (2009) find that credit growth is a good early warning indicator for house price booms. They compute an excess credit indicator which predicts 80 percent of the crises over a three-year horizon. The study also finds that excess credit of 4.0 percent in combination with a similarly defined excess equity price of 60 percent predicts almost 75.0 percent of the crises over a four or five-year horizon. Alessi and Detken (2010) argue that the excess of global private credit is the best crisis indicator for a policy maker who is only slightly more averse to false alarms than missed crises. In terms of absolute performance, the threshold derived from the optimal 70.0 percent percentile across countries predicted on average 95 percent of high-cost booms by issuing a signal in at least one of the six preceding quarters.

Moreover, there is a potentially important link between credit growth and external imbalances. Stronger relative demand pressures in some countries fuelled import demand, triggered capital inflows and contributed to the widening of current accounts deficits. Looking at catching up economies, Coricelli et al. (2006) find that a credit boom seems to be associated with the deterioration of the trade balance via the import channel. Furthermore,

Table 7 Private Sector Credit as Percentage of GDP

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Private Sector Credit	5.19	5.96	7.40	8.77	9.26	11.34	13.38	17.83	19.79	15.4	13.0	11.9

Duenwald et al. (2005) argue that credit booms have contributed to the widening of macroeconomic imbalances and heightened external vulnerability.

Data Transformation, Data Sources And Indicative Threshold

The indicator private sector credit flows (transactions) is expressed in percent of GDP, and it includes loans and securities other than shares. The scoreboard indicator chosen is currently based on nonconsolidated data. We have chosen non-consolidated data for the scoreboard indicator i.e. including intra-sector liabilities such as intra-enterprise loans. The indicative threshold of private sector credit is 15.0 percent of GDP, as derived from the upper quartile of its historical distribution.

Economic Interpretation

First consideration was to come up with an indicator that measures the year-on-year percentage change in credit flow. The rationale behind this choice of data transformation was that it can detect rapid increases in credit flows that could be associated with credit bubbles, which in turn may contribute to crisis situations. However, interpretation difficulties arise since credit flows typically evolve in a cycle. This induces a risk that by using this indicator the gradual built up of a credit bubble is concealed when credit flows remain high but steady and thus its early-warning properties are jeopardized. Secondly, the year-on-year change in private sector debt as percent of GDP was considered, as it represents the most straightforward flow counterpart of the indicator on private sector debt. From the analysis, private sector credit seems to have remained with the threshold of 15.0 percent.

Government Sector Debt

The scoreboard indicator is general government debt in percent of GDP, defined under the Excessive Deficit Procedure (EDP) as the total gross debt at nominal value outstanding at the end of the year and consolidated between and within the sectors of general government.

The threshold is 60.0 percent.

Economic Rationale

Beyond private sector developments, recent market tensions have shown that the overall indebtedness of a Member State is very important and that there are important linkages between private sector and general government debt. Perceived sovereign and financial sector risks are closely tight together. In the course of the financial crisis, governments have taken on large contingent liabilities that, even if do not immediately impact on debt levels, affect their perceived creditworthiness. There are also feedback effects from banks to the government as banks are large creditors to sovereigns, making them vulnerable to fiscal woes. Moreover, a high level of general government debt increases the vulnerability of a county and weakens its room of man oeuvre to deal with crisis situations. An indicator for general government debt is therefore included in the scoreboard not to monitor risks of unsustainable public finances, but to be considered together with the indicator on private debt and thereby to offer a broader picture of indebtedness.

During the selection process of the indicators, consideration was given to dropping the public debt altogether and instead having an indicator on the total level of indebtedness, with a cumulated threshold of 160.0 percent plus 60.0 percent. However, this could be wrongly interpreted in that a high level of government sector debt can be in some way compensated by a low level of the non-financial private sector debt (and vice versa). Moreover, for technical reasons related to differences in consolidation practices, private and general government sector debt cannot be directly summed up. In light of these considerations, it has been decided to include two separate indicators for private and general government debt in the scoreboard.

Data Transformation, Data Sources And Indicative Threshold

As regards the threshold for the general government's indebtedness, the Treaty reference value of 60.0 percent of GDP will be used.

Table 8 Government Debt as Percentage of GDP

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Total	204.6	125.4	135.5	162.4	142.0	135.1	32.3	34.9	40.3	38.5	34.8	39.7	37.7	41.7	-
Domestic	10.3	9.2	17.6	22.9	21.1	22.5	17.4	17.8	24.3	22.8	19.0	21.5	15.9	15.2	-
External	194.3	116.3	117.9	139.5	120.9	112.6	14.9	17.1	16.0	15.8	15.8	18.1	21.8	34.1	34.8

Source Reserve Bank of Malawi

Economic Interpretation

General government debt is assessed for its contribution to the general indebtedness of a Member State, being thus looked at together with private sector debt. A high level of general government debt is more worrying when it accompanies large private sector debt. Nevertheless, high general government debt.

Assessment of Sources of Macroeconomic Imbalances

In order to derive economic sense of the indicators, we summarise all the indicators in table 9 below and discuss each indicator.

Sustainability of External Position

Macroeconomic indicators of interest under the external side of the economy include current account, REER, export market share and Net International Investment Position.

Current Account

This indicator is calculated as a three year backward moving average of the current account balance as a percent of Gross Domestic Product. The scoreboard assumes a threshold of 4.0 percent for the deficit and 6.0 percent for the surplus. The scoreboard results show that high and persistent current account deficits were observed over the years 2005-2014. The deficits over the years have been above 12.5 percent of GDP, whereby the highest record registered was 19.2 percent in 2014 and lowest record was 12.5 percent in 2008. The deficit can be explained from different perspectives; from the growth model perspective, the economy has a rain fed agricultural growth model. The sector is supported mainly by the Farm Input Subsidy Program (FISP) which is mainly supported by development partners through grants. These grants constitute a huge part of current transfers which are nevertheless drained away by the purchase of fertilisers hence contributing to the persistent current account deficits. The worsening current account deficit over the years has been a result of a number of factors including increases in prices of fertilisers and fuel on the world market following the global financial crisis.

From the trade perspective, the persistent current account deficit is also explained by the narrow export basket of traditional crops in Malawi. The exports crops are also less competitive on the international market partly due to low quality and high prices owing to high production costs.

From the macroeconomic management perspective, imbalances in the external sector are traced from the imbalances in the fiscal and monetary sectors. The imbalances in these sectors are noted in the high public sector debt and high levels of private sector credit which piled pressure on foreign reserves. The pressure on foreign reserves was also reinforced by the overvalued exchange rate.

Net International Investment Position (NIIP)

The indicator for measuring external sustainability of an economy is the NIIP. The NIIP measures the net financial position (assets minus liabilities) of the domestic sectors of the economy versus the rest of the world. Using data available, the NIIP to GDP ratio was calculated from 2003 to 2014. The threshold ratio for NIIP according to the MIP scoreboard is -35.0. During the first three years (2003 to 2005) the value of GDP was smaller averaging K263.2 billion compared to the average of K700.0 billion over the years 2006 to 2014. Meanwhile, the average NIIP position was minus 137.0 percent of GDP for the years 2003 to 2005 compared to minus 39.1 percent of GDP over the years 2006 to 2014. During the first four years the high levels of NIIP deficit vis-a-vis low levels of GDP

Table 9 Consolidated MIP Scoreboard Indicators for Malawi

Period Indicator	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Indicative thresholds (percentage)
Three-year backward moving average of the Current Account Balance (CAB) in percent of GDP.	-14.4	-14.2	-13.2	-12.5	-12.9	-14.7	-13.8	-14.1	-17.1	-19.2	+6 and - 4
Net International Investment Position (NIIP) in percent of GDP	-128.6	-34.6	-32.3	-36.1	-35.7	-33.9	-34.5	-47.5	-47.3	-	-35.0
Five-year percentage change of export market shares measured in values	-	-	-	-	-	-	0.38	-1.0	-1.0	-	-6.0
Three-year percentage change of the real effective exchange rates based on inflation rate	-24.6	0.9	-1.8	18.9	6.9	9.45	-9.6	-30.5	-76.4	-58.9	-11 and +11
Private sector debt in percent of GDP	-	-	-	-	-	-	-	-	-	-	160.0
Private sector credit flow in percent of GDP	3.8	2.89	2.4	2.0	1.7	1.5	1.4	15.4	13.0	11.9	15.0
General Government sector debt in percent of GDP	135.1	32.3	34.9	40.3	38.5	34.8	39.7	37.7	41.7	-	60.0

implied that the country could not manage to produce enough resources to meet its domestic needs, invest abroad and also pay external debts to sustainable levels. The high NIIP deficit to GDP ratio was also on account of government external debt accumulated over that period to cover up for the budget deficits during the period. Over the years 2002 to 2005 NIIP deficit to GDP ratios were over the thresholds level of minus 35.0 percent implying that there was heavy vulnerability building in the external sector which could paralyses the functioning of the economy as the economy was operating in an imbalance state.

However, there was a turnaround in NIIP deficit to GDP ratio during the period 2006 to 2014 due to a drop in external debt and prudence in fiscal management. The drop in external debt was due to debt forgiveness under the HIPC programmed in 2006. Furthermore, the drop in NIIP deficit to GDP ratio was partly attributed to growth in GDP over the period under review which availed resources to the domestic sector to meet its needs. During the years 2006 to 2014 the NIIP deficit to GDP ratios were slightly above the threshold levels of minus 35.0 percent as the authorities managed to correct the external imbalances following the success of HIPC debt relief programmed.

Real Effective Exchange Rate (REER)

From 2003 to 2005 the REER fluctuated beyond threshold levels of minus 11.0 percent and 11.0 percent. In 2003 REER depreciated by 16.2 percent on account of both inflation differentials and a devaluation which was effected in 2003 following the adoption of a managed exchange rate system. In 2004 and 2005 there was also a depreciation of 48.7 percent and 24.6 percent, respectively. The depreciation in 2004 was on account of inflation differentials whereas that of 2005 was due to both inflation differentials and devaluation. In 2006 and 2007 the REER was fairly stable. However, in 2008 REER appreciated by 18.7 percent which is above the threshold level of 11.0 percent mainly due to the increase in gross external reserves during the month of December 2008. However, the Malawi kwacha came under strong speculative pressure in 2009 following the global financial crisis and unprecedented economic growth registered in the previous years. Consequently, in November 2009 the kwacha was devalued by 8.0 percent to K150.800/US$. To the contrary, the REER to appreciated by 6.9 percent during this period. Furthermore, in 2010 the REER registered an appreciation of 9.4 percent. Meanwhile, in 2011 the REER registered a depreciation of 9.6 percent. This development could be explained by the devaluation of kwacha by 10.0 percent to K165.000/US$ dollar following pressures from the developing partners and the private sector. Between 2012 and 2014, the REER has depreciated by 55.3 percent. These results point to the fact that the Kwacha has been volatile and so has been domestic inflation developments in relation to the world inflation.

Export Market Share

This indicator shows that Malawi exports are insignificant in relation to world exports. This development was partly explained by the reliance on tobacco which accounts for almost 70.0 percent of total exports in Malawi. The overvaluation of the Kwacha in the period before 2012 also could partly explain the loss in competitiveness.

Internal Sector Sustainability

Private Sector Credit

The private sector credit to GDP ratio has been growing at a decreasing rate from 5.2 percent in 2003 to1.4 percent in 2014. This shows that financial deepening process has been evolving at a gradual rate as compared to the growth of GDP. Over the period under review private sector credit to GDP ratio has remained below the threshold level of 15.0 percent except in 2010 and 2011. It can be noted that the private sector demand particularly for consumables which has been partly fuelled by private sector credit could also be the driver for external imbalances particularly the current account deficits.

Government Sector Debt

From 2000 to 2005 general government debt was very high averaging 150.0 percent to GDP. The bulk of the debt was external. A record high of 204.0 percent was registered in 2000. After debt relief, debt levels dropped substantially from 135.0 percent in 2005 to 32.3 percent in 2006. Since debt relief, the structure of debt has been dominated by domestic debt. However, from 2006 to 2014 debt levels have been below the threshold levels of 60.0 percent. This outturn portrays a picture of low perceived sovereign and financial sector risks in the economy. Developments in government debt are similar to NIIP developments. As such we need another measure, say public domestic debt to draw implications for fiscal sector imbalances and monetary sector imbalances.

CONCLUSION

This chapter concludes the study by summarizing developments in the external and internal sectors of the economy.

External Sector Position

Current account deficits have been noted to be one of the major sources of imbalances in the Malawi economy. The high and persistent current account deficits observed over the period under study emanated from high domestic demand which resulted in high import bills compared to export bills. The appetite for imports was also enhanced by the overvalued exchange rate before reforms. Furthermore, the development is also attributed to narrow export base of the economy. The deficit is likely to persist as the country seems not to move in diversifying the economy and resources are not channeled to productive sectors to solve the structural bottlenecks of the economy. In addition, the current account imbalance is unsustainable as the current account deficit is not covered up by foreign direct investments.

Meanwhile, the position of NIIP shows that the net external position of the economy has weak sustainability and is exposed to external shocks as the NIIP deficit falls just slightly above the threshold level of minus 35.0 percent of GDP as of 2014. With this weak sustainable position, the country risks losing external loans due to credit unworthiness.

In terms of competiveness, during the period under study, the REER depreciated five times to boost the competitiveness of the economy. However, it has been observed that although the REER depreciated, total export levels did not pick up due to factors such as droughts and narrow export basket. As such the developments imply that depreciations alone cannot boost competitiveness levels of export and hence correct the current account imbalance. The results also partly confirm the findings of Nkuna (2009) in her study of determinants of current account deficits of Malawi where she found that REER has no significant impact on current account position in the short run.

Internal Sector Position

Private Sector Credit

Private sector credit though expanded overtime did not hit the threshold level of 15.0 percent of GDP. This threshold level seems to be too high for developing countries like Malawi where the private sector is not vibrant and high degree of consumption in the economy is done by government. Nevertheless, private sector credit is mostly used for consumption of non-durables most of which are imported. This development also poses a challenge of debt repayment under prevailing circumstances of macroeconomic instability hence posing a risk of financial system instability due to loan defaults. Furthermore, private sector credit spurs private sector demand for imports which contribute to worsening the current account imbalance.

Gross Government Debt

General government debt position seems to be sustainable since as at end-2014, the debt to GDP ratio was below the threshold level of 60.0 percent. This development implies that there are low sovereign and financial risks in the economy thereby boosting the credit worthiness of the state. Nevertheless, the threshold also seem to be too high for Malawi as the current account deficit and weak NIIP sustainable position imply that there is also an imbalance in the fiscal sector.

CONCLUSION

Generally, the economy is in an imbalance state due to both internal and external sector imbalances. The economy is deemed to be consuming beyond its levels of production. The savings levels are also down hence there are no resources for investment to stimulate for long run economic growth and to cushion the citizens in times of crisis. The over expenditure in the economy partly lead to build up of inflationary pressures and cause persistent depreciation of kwacha thereby destabilizing the economy. High levels of public debt may also hinder the government to engage in fiscal expansion during a crisis especially under the IMF programme. Furthermore, high levels of demand in the economy spill over to demand for imports consequently worsening the current account deficits. Having identified aforementioned imbalances in the economy there is need to undertake and in-depth analysis of the sources of these imbalances and their potential risks on the economy. This analysis will assist authorities to devise economic strategies holistically to solve the ailment of the economy

POLICY RECOMMENDATIONS

The following policy recommendations can be drawn from the analysis.

Fiscal Policies

To control over expenditure, the government must stick to the IMF programme.
Government must invest in growth generating sectors which will generate resources for the development.

Monetary Policy

Monetary Authorities must restrict from monetization of fiscal deficits.
Monetary Authorities must engage in developmental role by financing jobs and forex creating projects.

External Sector Policies

Authorities must correct supply side bottlenecks such as embarking on irrigated agriculture, intensifying Diversification programmers and investment in infrastructure.
Authorities must establish financing mechanisms for development projects at both large and small scale levels.
Authorities must control private sector demand through mechanisms such as automatic fuel pricing mechanisms and liberalization of the exchange rate.
Authorities must subsidies export oriented productions which can generate foreign exchange.
There is need to attract foreign direct investment to boost domestic supply capacity.

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