

THESIS / THÈSE

ADVANCED MASTER IN INTERNATIONAL AND DEVELOPMENT ECONOMICS

Recent debt increases and long term macroeconomic sustainability

Thi, Tinh Cao

Award date:
2016

Awarding institution:
University of Namur

[Link to publication](#)

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal ?

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Advanced Master in International and Development Economics

Jointly Organized By



**RECENT DEBT INCREASES AND
LONG TERM MACROECONOMIC SUSTAINABILITY**

Tinh Cao Thi

Promoter: Professor Mary Van Overbeke
Tutor: Jeremie Gross

Project presented as part of the requirements for the award of the
Advanced Master in International and Development Economics

Academic year 2015-2016

TABLE OF CONTENTS

1. Introduction	1
2. Theoretical background: Concepts, measurements and roles of debt sustainability	3
2.1. Definitions and measurements of debt sustainability	3
2.2. The roles of debt sustainability in economic development	8
2.3. Necessary conditions to maintain debt sustainability	8
3. Debt sustainability revolution after the Initiative	10
3.1. Methodology and data	10
3.2. Post HIPC's debt sustainability revolution	11
3.2.1. TREND OF KEY DEBT INDICATORS OF POST-HIPCS	11
3.2.2. The composition of new borrowings	16
3.2.3. Analysis of debt sustainability for individual countries based on the DSF thresholds	18
4. High risk of debt distress and macro-economic instability, case of Ghana	21
4.1. Ghana's recent development of economic instability and its debt revolution	22
4.2. Key drivers of the budget deficit and fiscal challenges	29
4.3. Accommodative monetary policy and its structural drawbacks	33
4.4. Structural issues and challenges of aggregate economy	36
4.5. Policy implications	38
5. Conclusion	39
6. References	40
7. Appendix	43

1. Introduction

The external debt crisis of developing world started since the early 1970s with Latin America and then grew enormously into Africa. Starting from just over \$11 billion, Africa had accumulated their external debt to over \$120 billion during the midst of external shocks of the early 1980s¹. A number of efforts from bilateral debt reliefs were made among the Paris Club during that time such as Toronto terms, Trinidad terms, and Naples terms, but none managed to retrieve low-income countries from debt crisis permanently. Until 1996, the first multilateral debt relief program was introduced, namely the Heavily Indebted Poor Countries (HIPC) Initiative and then its "Enhanced" version in 1999. Different from traditional debt relief mechanism, the new one of HIPC Initiative creates a comprehensive framework for poverty reduction that requires the involvement of all types of debt providers, from multilateral, Paris Club, to other official bilateral and commercial creditors, in order to reduce the external debt of these poorest countries to a sustainable level. The debtor countries also need to implement some key structural and social reforms and adjustments in macro-economic framework to promote growth. The Enhanced Initiative was introduced in 1999 to speed up the debt relief's pace in the deeper manners, which cover a wide range of cohesive social and economic development and in a larger scale, which allows more indebted poor countries eligible for debt relief mechanism. In 2006, Multilateral Debt Relief Initiative (MDRI) was introduced with larger financial capacity thanks to the participation of International Financial Institutions (IFIs). The program is to complement the Enhanced Initiative, emphasizing on poverty alleviation targets and heading for Millennium Development Goals.

To see the difference between the traditional and new debt relief mechanisms, we start with progress of how HIPC Initiative works. There are two distinct stages for every candidate country, including Decision Point and Completion Point. In order to be eligible for the Decision Point stage, the country has to meet several criteria as followed:

- ✓ Must be a low-income country (per capital income is below \$895) and eligible to receive International Development Association (IDA) credits.
- ✓ Face an unsustainable level of debt burden that cannot be addressed through traditional debt reliefs.
- ✓ Have established a three-year track record of reform and sound policies recommended by the IMF and the World Bank.
- ✓ Have developed a Poverty Reduction Strategy Paper (PRSP).

¹. UN, 2004:5

The duration to consider the eligibility is three years. Once these conditions are met, a candidate could reach Decision Point stage and may immediately begin receiving the interim debt relief on its debt services from multilateral creditors and flow scheduling from Paris Club debt providers.

During the second stage, the country has to establish a second record of accomplishment on the performance when adopting the policies recommended by the IMF and the World Bank. In addition, each candidate must implement satisfactorily key reforms agreed upon at the first stage. Finally, it has to adopt and implement its PRSP for at least one year. The duration of Completion Point stage is flexible for each country, depending on the successful implementation of these recommended reforms and adjustments.

By now, HIPC Initiative is about to be completed, when 36² candidates of total 39 eligible countries have received full debt relief after reaching their completion points. It is appropriate to look at these countries, assessing that whether or not HIPC Initiative reaches its objective of debt sustainability over two decades of implementation. This paper will reevaluate the debt sustainability levels of all the Completion Point HIPCs (CP HIPC) at the aggregate levels and figure out the specific factors that could hinder these countries from obtaining the sustainable position of external debt by examining a typical country.

The paper is organized as followed: Part II introduces the theoretical background of debt sustainability and its role to national economic development. Part III focuses on the debt burden evolution of CP HIPCs and reassesses their debt sustainability levels as well as potential risks facing them. Part IV continues to go into details of the risks and structural problems facing a typical country-Ghana that was well-known for its outstanding performances after receiving debt relief and now has been under high pressure of debt distress. Finally, we wrap up the debt sustainability analysis in the conclusion in Part V.

². UN 2004:5 IMF Fact sheet on HIPC Initiative

2. Theoretical background: Concepts, measurements and roles of debt sustainability

2.1. Definitions and measurements of debt sustainability

There is no concrete agreement on definition of debt sustainability, however, the set of three concepts (liquidity, solvency and growth) should be always considered.

Two distinct concepts have been introduced and considered characteristics associated with debt sustainability, including debt solvency and liquidity³.

Debt solvency is defined as the situation that current debt plus the present discounted value (PDV) of all expenditures do not exceed the present value of all generated revenues. One country is considered to have debt insolvency problems when it is incapable of raising enough revenues for the long run to meet its debt obligation.

Therefore, to estimate the solvency level, it is necessary to project the growth level of revenue. Growth represents an increase (in short, medium or long term) in economic capacity to produce goods and services.

Debt liquidity is related to the debtor's ability to meet its obligations when they come due. Regardless of whether the solvency condition is satisfied or not, the country could experience debt illiquidity when its liquid assets and available financing are not enough to meet its debt services.

IMF, 2002:5 defines sustainability, which is broad and applicable to either public debt or external debt; however, this definition is only limited on solvency problems. "An entity is liability position is sustainable if it satisfies the present value budget constraint without a major correction in the balance of income and expenditure given the costs of financing it faces in the market."

Meanwhile, HIPC Initiative mainly deals with external debt and use the measurement of external debt burden to assess the eligibility of debt relief. IMF (2001) gives the concept of external debt sustainability: "A country can be considered to achieve external debt sustainability if it can meet its current and future external debt service obligations in full, without recourse to debt rescheduling or the accumulation of arrears and without compromising growth". Even if it relates to liquidity problems, this definition is quite narrow from "an overall development perspective"; it does not include domestic debt that also has a significant impact on fiscal debt sustainability⁴.

Although the HIPC Initiative excludes the domestic debt in assessment to avoid any potential moral hazard issues and unwieldiness for the heterogeneity in domestic creditors and the main objective of the Initiative is to help the countries reach sustainable

³. See <http://vi.unctad.org/debt/debt/m1/definition.html>

⁴. IMF (2001), p.4

levels of external debts, effective management of domestic debt can be a prerequisite for the success of the HIPC Initiative. Thus, the Initiative allows the flexibility to deal with domestic debt servicing and Ghana is one typical example⁵.

From this definition, the debt sustainability is linked to three distinct other concepts, including liquidity, solvency and growth; in fact, these concepts are closely related to each other. Growth, for example, is highly important in debt sustainability analysis for the projections of the debtor's future incomes, which measures the expected revenue generation capacity of the debtors to pay the current debt outstanding. If a country has its expected present value of potential future resource transfers less than its debt, this country will suffer from a debt overhang problem⁶. Additionally, it is not easy to distinguish between the liquidity and solvency problems and they are interwoven with each other. If the country is expected to pay full present value of its debt, it could attract funds with a sufficiently high interest premium⁷. In fact, the debt crisis of LICs in the 1980's were first perceived as a liquidity problem or the ones during the 1990s for many emerging countries were diagnosed as liquidity problem as debt ratios were reasonably low⁸.

Moreover, IMF (2004) distinguishes the concept of debt sustainability in low income countries (LICs) from that in middle income countries (MICs). While the latter rely primarily on the private financing, the former, despite the heterogeneity in economic levels within the low-income group, still depend heavily on official financing which is de-linked to the sentiments of the market.

In the scope of this paper that is focused on the effectiveness of HIPC Initiative on external debt relief, we use the second definition that is applicable to all CP-HIPCs and that mainly focuses on external debt sustainability and consider both solvency and liquidity measurements. We also adopt but in critical manners the criteria of Debt Sustainability Analysis Framework (DSF) that was designed by the World Bank and the IMF for LICs.

Debt indicators and debt sustainability analysis (DSA) frameworks:

a) Debt indicators

There are two main groups of debt measurements: flow and stock ratios. The first group includes the debt service over exports or fiscal revenues; the latter is composed of debt relative to GDP, exports or fiscal revenues. Debt level could be expressed in current values or net present value (NPV) to reflect the high share of concessional financing⁹.

⁵. Gautam, M. (2003), p. 50

⁶. Krugman, P (1988): 255

⁷. Krugman, P. (1988), p. 258

⁸. See <http://vi.unctad.org/debt/debt/m1/issues.html>

⁹. IMF, 2001, p.5

b) Debt sustainability analysis frameworks

DSA is variable under different frameworks but the approaching method is homogenous. DSA is a forward-looking analysis of the evolution of debt ratios under baseline and stress test scenarios¹⁰ and generally, there are three elements under DSA frameworks.

Baseline scenario: Assessment of debt dynamics under the projections of key macro-economic variables.

Sensitive tests: By assessing the debt revolution in different scenarios to measure the robustness of the baseline and the resilience of the baseline to shock.

Interpretation of results: This step incorporates the country-specific circumstances and the evolutions of debt burden ratios made in the two previous steps to come up with the main risks facing the country and policy implications.

DSA in general is applicable to any countries; however, it is modified into different sub-types that are designed for specific objectives (such as HIPC Initiative versus normal DSA) or for specific country groups (LICs versus MICs). In this paper, we mainly focus on analyzing the DSA framework of HIPC Initiative and LICs.

Despite some shared characteristics in methodology, the DSA frameworks for HIPCs and for LICs have some variations:

Table 1.1. Some variations between HIPC and DSA framework

DSA issues	HIPC	DSA framework
Debt coverage	External public debt	External private and public debt, domestic debt
PV discount rates	CIRRs ¹¹	5%
Currency of analysis	Loan currency, converted to US \$ at historical rates	US \$, converted at forecast rates
Export denominators	3 year average exports of goods and non-factor services	Annual projections of exports of goods and services
Risk assessment	Country specific analysis	Baseline + standard stress tests
Timing	Preliminary pre-HIPC, decision point and completion point	Annually

Source: IMF (2009).

In addition, the debt indicators used and debt thresholds are set differently.

➤ Debt indicators and thresholds under HIPC framework

¹⁰ . IMF, 2014, p.169

¹¹ . Currency-specific Commercial Interest Reference Rates

To assess a country's eligibility for HIPC debt relief and determine the amount of debt relief to these countries, the initiative created HIPC debt thresholds¹². The debt service indicator is not used to assess sustainability for HIPC purposes, but it serves as a guidance to ensure annual service costs fall below 15-20% range.

Table 1.2. HIPC debt sustainability Indicators

HIPC indicators	Thresholds
PV debt/exports	150%
PV debt/budget revenue	250%
Debt service/exports	<15%-20% by completion point

Source: IMF (2009).

These thresholds are still being used to evaluate the debt sustainability of countries who yet to be declared eligible for the HIPC process.

➤ *Debt indicators and thresholds under LIC framework*

Due to heterogeneity in debt structures and lending conditions, DSA framework stereotyped for LICs (DSF) were created in 2005. Unlike normal DSA that forecasts within a 5 year period, DSF uses 20 year projections to reflect longer maturity of LICs debt. In addition, debt stock ratios in terms of PV are more preferred to capture the concessionality of debt¹³.

Table 1.3. Debt sustainability indicators and thresholds under DSF

Indicators	Policy and institutional performances		
	Weak	Medium	Strong
PV debt/GDP	30%	40%	50%
PV debt/ exports	100%	150%	200%
PV debt/revenue	200%	250%	300%
Debt service/exports	15%	20%	25%
Debt service/revenue	25%	30%	35%

Source: IMF (2009).

The debt sustainability thresholds were also introduced in DSF. However, these thresholds are linked with the quality of a country's policies and institution with the premise that

¹². IMF, 2009, p.1 –note that these thresholds are applicable since 1999 for Enhanced HIPC Initiative. Before, they were 200-250% for PV/exports and 280% for PV/budget revenue.

¹³. IMF, 2014:170

"countries with strong or good policies and institutions are more likely to be able to shoulder higher debt burdens" ¹⁴. The World Bank's IDA Resource Allocation Index (IRAI) is based on the Country Policy and Institutional Assessment (CPIA) rates that are composed of 16 indicators of policy and institutional quality. This index ranges from 1 to 6 and classify countries into three performance categories: strong, medium, and weak. To determine the level of debt sustainability under DSF, there are four levels respectively to the level of debt distress as followed:

Table 1.4. Debt sustainability indicators and thresholds under DSF

Risk	Baseline	Stress tests	Debt servicing
Low	All indicators below thresholds	All indicators below thresholds	No arrears ¹⁵
Moderate	All indicators below thresholds	Breach of service &/or stock ratios over time	Sporadic arrears
High	Breach of service &/or stock ratios over time	Worse breaches over time	Sporadic arrears &/or history of default
Debt distress	Significant or sustained breach of service &/or stock ratios		Significant arrears and risk of default unless restructuring

Source: IMF (2009).

Drawbacks of DSF

IMF (2012) mentions some of the issues of DSF such as readjustment of thresholds along with the changing of circumstances (i.e. rising remittances and country specific information), an enlargement of the coverage of external debt (focusing on external private debt), or taking into account the impact of public investment on growth¹⁶.

The innate drawbacks of analysis mechanism that originate from uncertainty of the projection should be also taken into account. Because of the forward-looking nature of the analysis, DSF is based on a number of the most feasible assumptions, but it is not ensured for these assumptions to happen in the future, especially for a projection of 20 years. Additionally, the blurred border between liquidity and solvency could hinder the reliability of debt distress diagnoses as DSF focuses more on solvency criteria.

¹⁴ . IMF, 2009:3

¹⁵ . Arrear occurs when principal and/or interest payments are not made when due.

¹⁶ . IMF, 2012: 11

2.2. The roles of debt sustainability in economic development

Article 16 in Part III - Development and Poverty Eradication, United Nations Millennium Declaration 2000 states: "We are also determined to deal comprehensively and effectively with the debt problems of low and middle-income developing countries, through various national and international measures designed to make their debt sustainable in the long term". This shows the critical importance of debt sustainability as a prerequisite condition for the development of the developing countries.

The link between external debt and growth is established through the investment channel. Therefore, the returns and effectiveness of the investment financed by external debt determine the growth level of the debtor. IMF (2003b) states that debt-growth relationship follows a bell-shaped curve, when the debt level exceeds a certain threshold; the impact of debt on growth turns negative. Krugman (1988) states that debt service burden will divert the budgetary resources from necessary investments for the economic growth. Cohen (1993) adds that debt service payments in high indebted countries have crowding-out effects on investment, thus impeding growth. High debt level may also trigger capital flight, threatening the stability (IMF, 2000).

The link between heavy indebtedness and poverty was empirically explored by IMF (2003a). The social welfare for the poor mainly financed from the government resources will be reduced by an increase in debt service burden. Additionally, indirect effect of high external debt on poverty is established through the negative impact on the growth.

2.3. Necessary conditions to maintain debt sustainability

Long-term growth prospects coupled with strong macro-economic stability are the necessary conditions to restore and maintain debt sustainability.

The role of long-term growth rate in maintaining debt sustainability has critically emphasized in literature; by using saving-gap models, some authors such as Avramovic (1964), Feder (1980), and Ohlin (1966) argue that "to pay back accumulated debt, a country must be able to reach a self-sustainable rate of growth rather than rely on foreign funds to finance it"¹⁷. Additionally, Solomon (1977) develops that to attain the debt sustainability, the country must have target growth rate higher than the interest rate charged on the loans.

Meanwhile, the economic stability is one of the key determinants to maintain the long-run growth prospect. Historically, the literature has shown profound evidence of causal

¹⁷. Hentschel, J. 1988 :22

negative correlation between the volatility and the long-term growth (Loayza et al, 2007 and Hnatkosva & Loayza, 2005). Hnatkosva & Loayza (2005) finds that the negative link is especially exacerbated in those poor countries with low development of the institution and the financial market or those that are unable to conduct countercyclical fiscal policies. Besides negatively affecting growth in LICs, macro-economic volatility is also linked to poverty. Laursen and Mahajan (2005) are convinced that macro-economic volatility can affect poverty via its negative impact on growth and its impact on income distribution. Meanwhile, the reverse direction is also established when "the changes in poverty may be decomposed into a growth effect and income distribute effect". Both the two effects are dependent on the initial levels of development and income distribution; and the negative effects of volatility on poverty could be doubled if there are a deterioration of income distribution and a reduction of economic output happening simultaneously.

3. Debt sustainability revolution after the Initiative

3.1. Methodology and data

Data includes a variety of debt and macro-economic variables in terms of absolute (discounted or normal) and relative values (e.g. ratios) for the period from 1998 to 2014. They are all obtained from the World Bank's World Development Indicators (WDI). The scope of analysis focuses on 36 completion point HIPC countries, including: Afghanistan, Benin, Bolivia, Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, Comoros, DRC, Republic of Congo, Cote d'Ivoire, Ethiopia, The Gambia, Ghana, Guinea, Guyana, Haiti, Honduras, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Nicaragua, Niger, Sao Tome, Senegal, Sierra Leone, Tanzania, Uganda, and Zambia. However, due to a lack of data, some aggregate indicators cannot cover all of these countries.

Methodology of analysis: Besides the set of debt ratios recommended in DSF, we use several other debt indicators such as debt disbursement and average interest rate to analyze the aggregate debt evolution in all the post completion point HIPC countries (CP HIPCs or post HIPCs) and emphasize the potential risks of solvency and liquidity facing these countries in general. We also use the combination of debt thresholds and specific structural factors of individual countries to position these countries in terms of debt burdens and emphasize the most distress situations. There are several debt accounting definitions that will be used in this analysis as follows.

External debt flows: include disbursements, principal repayments, net flows, interest payments, and net transfers.

Disbursements: include long-term external debt and IMF purchases. These flows are drawings by the borrowers on loan commitments during the year specified.

Principal repayments: are the actual amounts of principal (amortization) paid by the borrower in currency, goods, or services in the year specified. This item includes principal repayments on long-term debt and IMF repurchases.

Net flows: are composed of the difference between disbursements and principal payments, and the change in stock of short-term debt¹⁸:

Net flows = *Disbursements* – *Principal repayments* + *changes in short – term debt*

Interest payments: are actual amounts of interest paid by the borrower in currency, goods, or services in the year specified. This item includes interest paid on long-term debt, IMF charges, and interest paid on short-term debt. Thus, one would have:

$$\text{Net transfers} = \text{Net flows} - \text{Interest payments}$$

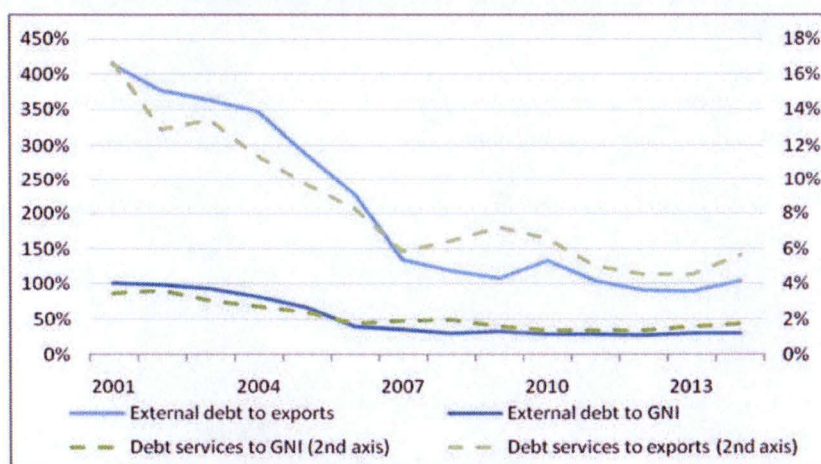
¹⁸. The inclusion of change in stock of short-term debt began in 1985 and was not applied before 1984.

3.2. Post HIPC's debt sustainability revolution

3.2.1. TRENDS OF KEY DEBT INDICATORS OF POST- HIPC'S

Debt ratios in all 36 post HIPC countries declined steadily and substantially from 2000, but then rebounded by 2012. Right after the implementation of the Enhanced Initiative, the member countries were still under heavy debt burdens with external debt stocks exceeding their national gross national income (GNI) and accounting more than 33% of gross domestic production (GDP) in 2001. Within the next 10 years, the Initiative has helped those countries delete a majority of debt burdens in terms of present value as soon as they reached their completion points. Consequently, the debt indicators have been successfully improved with debt stocks reduced to 28% of GNI in 2012. However, the debt burdens have risen recently; the average outstanding external debt and debt services to GNI reached 31% (or 10% of GDP) and 1.79%, markedly increasing from 28% and 1.41% recorded respectively in 2012. The debt service-to-export ratio averaged 5.7% compared to 4.5% in 2011, yet, more importantly; these recent debt levels are still below the half of more than a decade ago, and far lower than the thresholds under HIPC and DSF frameworks.

Figure 3.1. Key debt indicators trends in post CP HIPC's, 2000-14



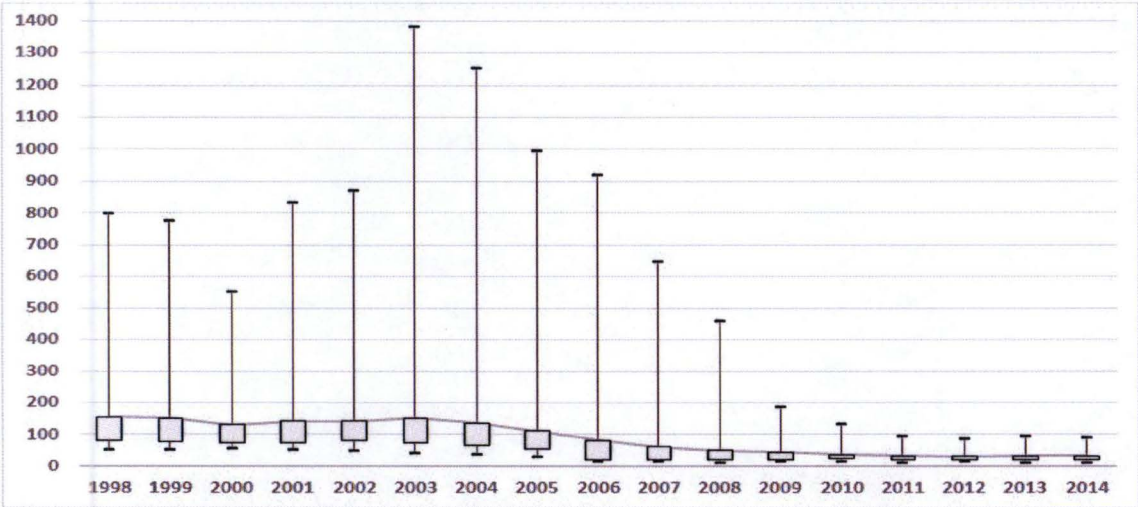
Source: Author's calculation based on WDI

Note: Debt-to-exports ratios are from 2000-2013, for debt-to-GNI ratios are from 2001-2014.

External debt burdens are alleviated not just in aggregate levels but also in individual levels. These 36 countries have the range of external debt to GNI that has

been shrinking and declining, especially since 2003. The contraction and decline were dramatic and at the fastest pace during the 7 year period from 2003 to 2009, when a majority of CP HIPC countries reached their completion points. The mean value was also on a steady downward trend. This fact proves that each post HIPC individually has relieved its own debt burdens significantly thanks to the Initiative. This contraction, however, has halted since 2013 onwards when the range started extending while the mean value was on the small rebound. Whilst magnitude of the sub-trend was relatively negligible compared to that of the main declining trend, the potential risk that it implies should be taken into worthwhile considerations.

Figure 3.2. Box-plot external debt-to-GNI ratios (%) among CP HIPCs, 1998-2014



Source: WDI

Note: The whiskers represent the maximum and minimum values of the ratio among CP HIPCs, the trend lines connecting the mean values of these countries over time.

The landscape of healthy debt revolution is a real reflection or just an illusion of debt sustainability.

We should notice that the positive debt revolution did not well reflect the real debt situation of post HIPCs because it was distorted by a continuity of debt reliefs when some of the member countries reached their completion points. Thus, even there is a big magnitude of enhancement in debt burden alleviation for a certain period of time, this main trend is temporary; meanwhile, the unsubstantial sub-trend mention above may burgeon and replace that current main trend in the future. To assess the potential risks it may impose, we scrutinize the dynamics of debt flows of these countries during the research period. Whilst the increments of the debt stocks have been rationed by these continuous debt grants and reduction, these countries have kept receiving the net debt

inflows (means that the disbursements exceed the principal repayments) over the whole period (figure 3.3).

The discrepancy between these two variables could be explained by two opposing movements of disbursements and forgiveness grants and debt reduction. There is a steady and dramatic rise in debt disbursements; especially, the pace has sped up progressively during 2007-2014 with the compound annual growth rate (CARG) of 67%. Consequently, the magnitude of disbursements by 2013 was overwhelmingly extensive, reaching about \$26 billion, a level that exceeds three-fold figure recorded in 2006 and almost doubles from the 2009's level. Conversely, debt forgiveness grants and debt reduction abruptly reached its peak of \$77 billion in 2006, and then kept falling from then on. This reduction variable, however, were still sustained at the significant levels for the following period of 6 years.

Figure 3.3. Total change in debt stocks vs. net flows of post-HIPCs, 1998-2014

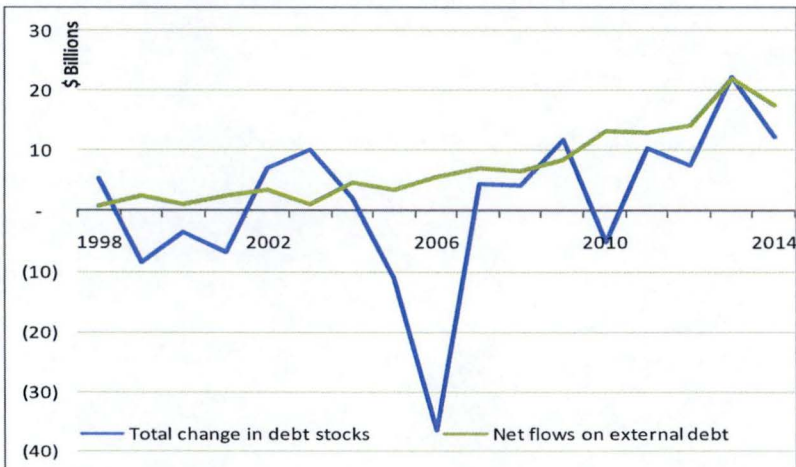
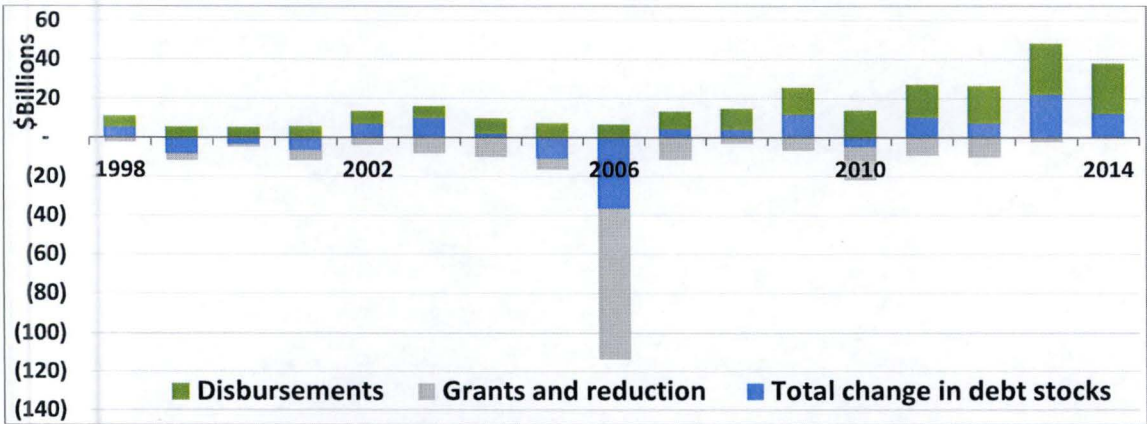


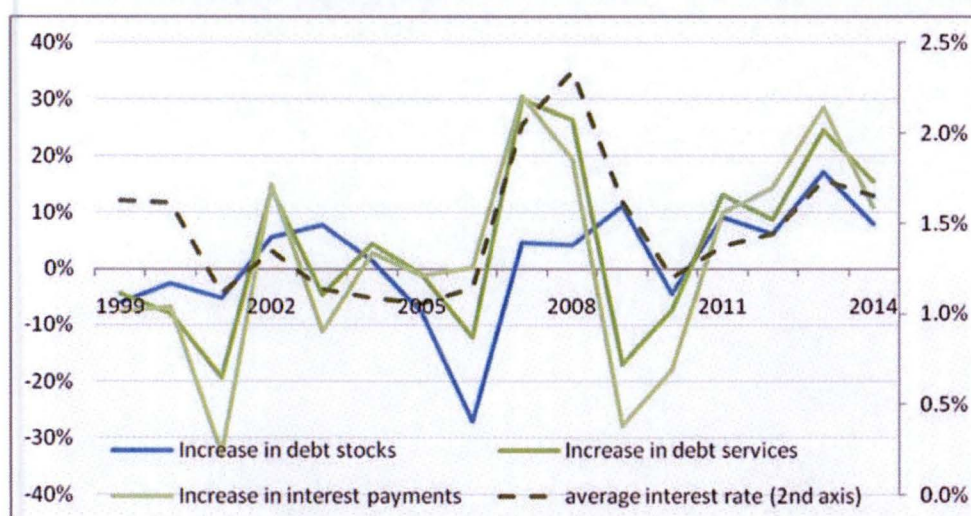
Figure 3.4. Post-HIPCs’ total change in debt stocks decomposed, 1998-2014



Source: Author’s calculation based on WDI.

High potential of solvency risk: It should be noted that the debt forgiveness grants stayed utmost trivial in 2014 when all of CP HIPC members already reached their completion points. There is also no room for further increments in forgiveness of debt under the HIPC Initiative framework for these countries. Paradoxically, the disbursements have been overwhelmingly burgeoning in recent years. If the pace of this upward trend is sustained, the debt stocks will build up much faster, threatening the debt sustainable state in these countries that HIPC Initiative had managed to create.

Figure 3.5. Changes in debt stocks and services of post-HIPCs, 1999-2014



Source: Author's calculation based on WDI.

Liquidity risk should also be taken into account: Besides the imminent solvency deterioration, these countries have been exposed to high risk of illiquidity recently. The problem stems from the increase in average interest rate of new debt commitments. Figure 3.5 shows that the interest payments fluctuated at a larger extent than the debt stocks from 2008 onwards, implying the non-linear relationship between interest payments and debt stocks. The fact that interest payments increase or decrease faster than debt stocks shows the increasing movement of the average interest rates. This is further confirmed by the reduction in the proportion of concessional debt and increase in the average interest rates of new commitments among CP HIPCs. The concessional debt is defined as loans with an original grant element of 25 percent or more, based on a 10% discount rate¹⁹. The proportion of non-concessional debt stayed below 36% from 2002-2005, and then has risen again, exceeding 40% since 2006. The highest peak was

¹⁹ . The concessional terms associated with debt were defined by the Development Assistance Committee (DAC) of the OECD.

reached in 2013 - 2014 with 45%. To examine the future trend of debt stock composition, we will analyze the components of debt disbursements in the next part.

Furthermore, the range of average interest rates was enlarged while the mean value was raised since 2011. The situation is marked by 7% average interest rate in Cote d'Ivoire's new commitments in 2011 and the 2014 registered the highest level of interest rate of 7.2% from Zambia. Such high rates alone already reflect the nature of high risks of these new debts and somehow imply the illiquidity problem of the countries that are willing to accept such levels.

Figure 3.6. CP HIPC's debt stocks decomposed, 1998-2014

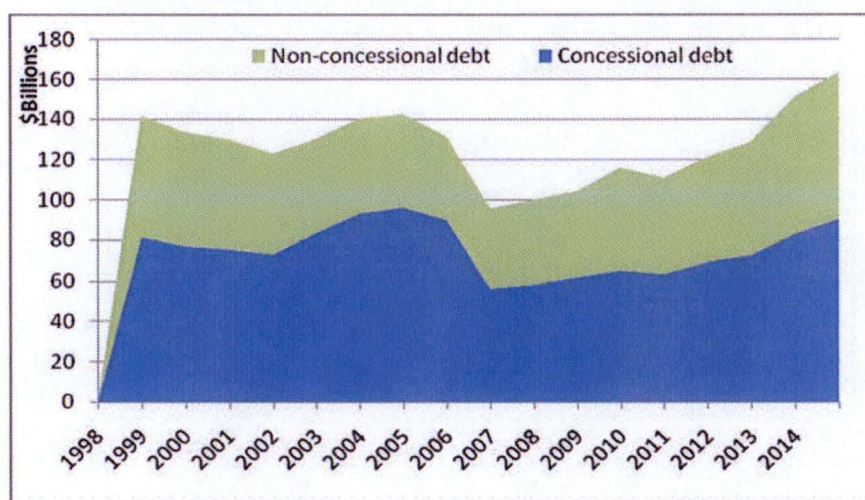
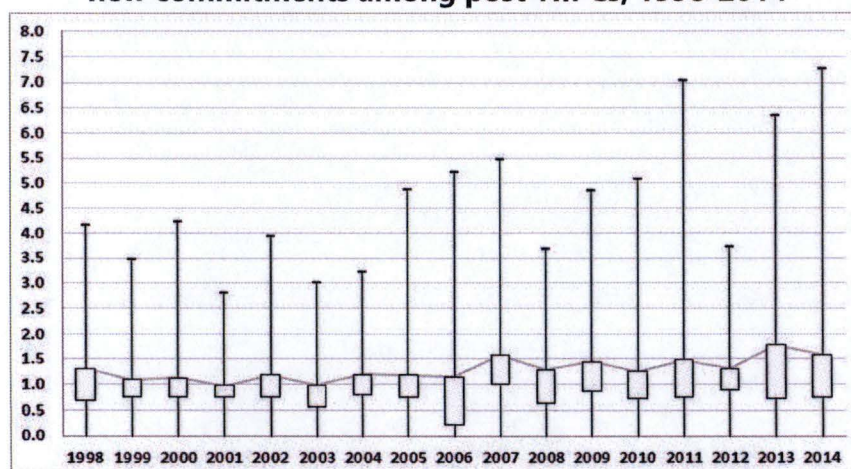


Figure 3.7. Ranges of average interest rates (%) of new commitments among post-HIPCs, 1998-2014



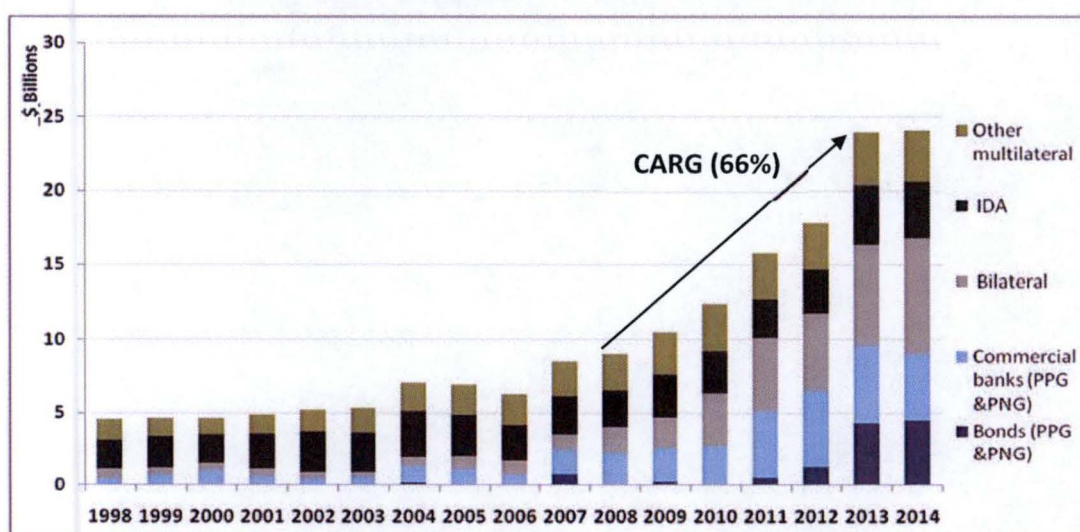
Source: Author's calculation and WDI.

3.2.2. The composition of new borrowings

As mentioned above, the debt disbursements have increased significantly over the past 7 years; however, its components did not rise proportionally. Loans from commercial banks, bilateral and bonds are the main key drivers behind this skyrocketing.

The disbursements from the International Development Association (IDA)²⁰ and other multinational agencies increased moderately at about 6% CARG from 2007-2014 with the value fluctuated within the range from \$6-7.5 billion. The relative stable evolution of these disbursements has made them resign the dominating position as the main creditors to CP HIPC. Their proportion in total disbursements ranged from over 70% to 83% during 1998-2006, lowering to from 50% to 60% during 2007-2010 and then steadily decreasing to around 30% in 2013-2014.

Figure 3.8. CP HIPC's disbursements decomposed, 1998-2014



Source: Author's calculation based on WDI

Both disbursements from commercial banks and bilateral mushroomed especially from 2007. The steep and steady rises have raised the disbursements from bilateral over seven-fold in 2014 and about 2.6 times for commercial banks. Eventually, bilateral over-past the multilateral disbursements to account the highest proportion of 32% in 2014 while commercial banks fluctuated within a range from 20% to 30% for seven consecutive years. It should be noted that bilateral loans are guaranteed publicly and the WDI data show

²⁰. The loans disbursed by IDA are concessional.

that more or less 90% are associated with concessional terms. Conversely, commercial banks are non-concessional with a majority are non-guaranteed with higher interest rates. **The most noticeable trend, however, was recorded in the boom of bonds.** Bonds were not common among HIPC's with quite low issuance frequency, partly because of low levels of financial development market coupled with the debt distress that haunted those countries for decades. Historically, bonds were not issued as a channel of fund raising in CP HIPC's until 2004 with the first issuance of \$0.18 billion in Guinea, followed by the 2007 first debut sovereign issues in Ghana (\$0.75 billion) and Bolivia (\$9.8 million). Surprisingly, bonds have risen rapidly among HIPC's since 2011 as some of CP HIPC's who are eligible to issue the bonds and whose slates were relatively clean could take advantage of this new debt tool. From 2011 onwards, bonds have been issued continuously with much higher values, which accounted for 13% and about 19% of total disbursements in 2013 and 2014 respectively.

Table 3.1. Details of some recent bond issuances in post-HIPC's

Country	Issue date	Maturity	Outstanding, in millions	Yield/Coupon	Current Yield	GDP Growth	Total debt/GDP	Interest service/Govt. revenue
Ethiopia	12/4/14	11/12/24	\$1000	6.63%	6.654%	8.5%	23.4%	3%
Ghana	9/11/14	1/18/26	\$1000	8.00%	No data	4.7%	71.5%	32.8%
Ghana	7/1/13	8/7/13	\$1000	7.88%	9.1265 ²¹	4.7%	71.5%	32.8%
Cote d'Ivoire	7/16/14	11/15/24	\$750	5.63%	5.709%	7.9%	21.7%	5%
Zambia	4/7/14	4/14/24	\$1000	8.63%	7.148%	7.2%	31.5%	12.5%

Source: The Wall Street Journal (2015).

In 2013, there were \$4.3 billion bonds issued by Bolivia (\$0.5 billion), Ghana (\$1 billion), Honduras (\$1 billion), and some debut sovereign issues in Mozambique (\$0.85 billion), Rwanda (\$0.4 billion) and Tanzania (\$0.6 billion). In 2014, Ghana again issued sovereign bonds (both guaranteed and non-guaranteed) with the total value of \$1.25 billion, about one third of total disbursements. The other issuances are all debut, from Zambia (\$1 billion), Senegal (\$0.5 billion), Cameroon (\$17 million), Cote d'Ivoire (\$750 million), and Ethiopia (\$1 billion).

It is stated, "The primary purpose of governments' international sovereign bonds is infrastructure spending, benchmarking for other government and corporate bond markets, and public debt management"²². While it may be the case for some countries, the

²¹. Coupon percent rather than current yield.

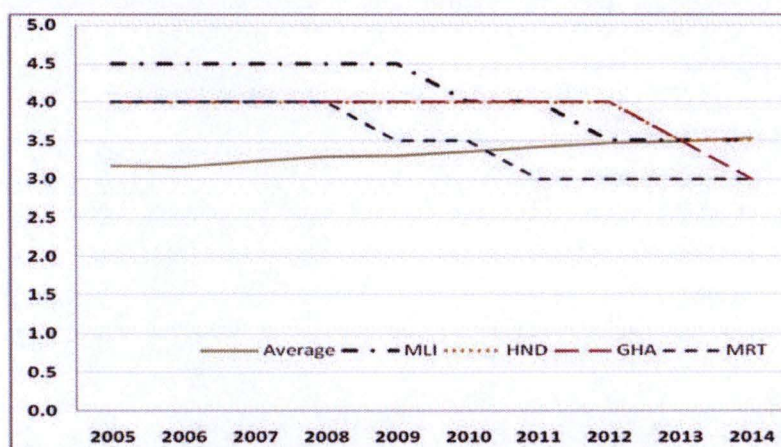
²². The World Bank, 2015. International debt Statistics, p. 13.

statement remains skeptical. Ghana, for example, has continuous large issuances within two years with total amount of 5% of its GDP with such a high interest rates (see the Table 3.1), telling some potential liquidity squeezes facing this country.

3.2.3. Analysis of debt sustainability for individual countries based on the DSF thresholds

The CPIA index of individual country is obtained from the World Bank's World Development Indicators, ranging from 2005 to 2014. In general, average CPIA index of 36 CP-HIPCs has steadily improved over the period. The average indicator increased consistently from 3.2 to 3.5; therefore, if consider the whole group of these 36 countries as a one single country, we could see that the quality of debt management policy of this nation has been enhanced, moving from weak levels since 2005 to medium from 2007 onwards. However, there is a discrepancy among the revolution of individual countries, while a majority has shown their consistent improvement; four countries have been on the considerable downward trend. Mali and Honduras moved from strong quality policy category into medium one, while Ghana and Mauritania dropped steadily from strong levels into weak levels.

Figure 3.9. Evolution of CPIA index in average and of several countries, 2006-14

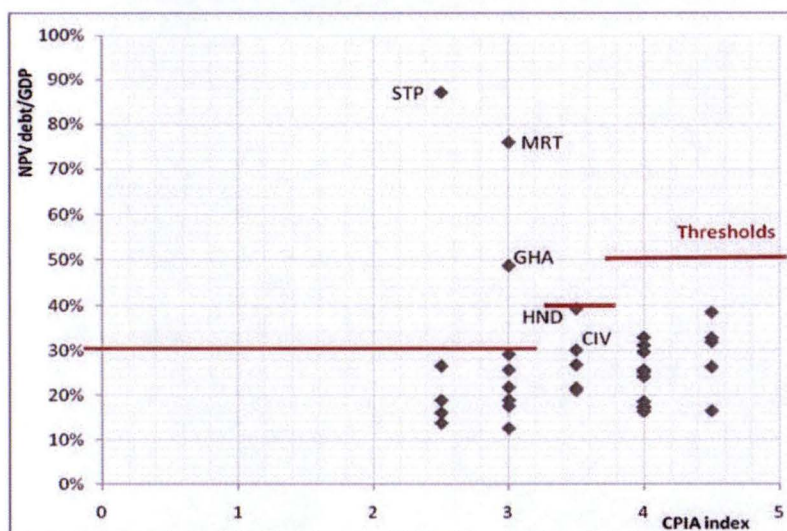


Source: WDI.

Under DSF, we divide the CP HIPCs into 3 distinct groups on policy quality basis, including: weak, medium and strong. As mentioned above, there are three debt ratios could be considered to measure the debt burden. Based on the data available in WDI, most data of the government revenue are missed. The situation is similar to data of exports but in lesser extent; by observing the evolution of debt service/ exports and PV debt/exports, we found that most of ratios are under thresholds, except some countries with quite high

PV debt/GDP. Thus, it is appropriate to use PV debt/GDP as the benchmark to measure debt burden under DSF.

Figure 3.10. DSA among post HIPC countries based on 2014 thresholds



Source: WDI.

The figure 3.10 shows that all of the countries belonging to medium and strong categories had levels of debt burden under the thresholds. The countries could potentially be to potential risk of unsustainable debt are Honduras and Cote d'Ivoire, when their ratios exceed the thresholds of the weak policy quality group and their CPIA indexes are about to move them back to the weak policy category.

For the weak policy group, a majority of countries still stay in the sustainable levels except Sao Tome and Principe (PV debt/GDP of 87.2%), Mauritania (76%), and Ghana (48.7%). Therefore, these three countries are considered in **high risk** of debt distress. In order to know that whether these countries are currently under debt distress, we scrutinize historical data on these countries in the Table 3.2.

According to DSF's ratings, Ghana has breached the threshold in PV debt/GDP in 2014, making this country return to the situation of high risk of debt distress. Sao Tome and Principe and Mauritania have been under debt distress when they significantly breached the thresholds of both PV debt/exports and PV debt/GDP over years.

However, it should be noted that DSF has been criticized for being over optimistic for the regional economic outlooks²³. While this favorable prognosis makes the thresholds more conservative, there are a number of the countries could be "off the radar" from DSF for its conservativeness.

²³. See IMF, 2013

**Table 3.2. Evolution of debt ratios of Ghana,
Mauritania, and Sao Tome & Principe, 2009-14**

Year	Quality Performance			PV debt/exports			PV debt/exports (%)			PV debt/GDP			PV debt/GDP (%)		
				Thresholds (%)			Thresholds (%)			Thresholds (%)			Thresholds (%)		
	GHA	STP	MRT	GHA	STP	MRT	GHA	STP	MRT	GHA	STP	MRT	GHA	STP	MRT
2009	Strong	Weak	Medium	200	100	150	60.1	89.4	152.78	50	30	40	31.1	11.5	97.4
2010	Strong	Weak	Medium	200	100	150	60.1	89.4	152.78	50	30	40	28.8	11.0	93.0
2011	Strong	Weak	Weak	200	100	100	60.1	89.4	152.78	50	30	30	25.2	10.5	89.1
2012	Strong	Weak	Weak	200	100	100	17.6	528.7	29.68	50	30	30	16.1	88.8	27.9
2013	Medium	Weak	Weak	150	100	100	37.0	386.6	52.64	40	30	30	31.0	109.6	47.6
2014	Weak	Weak	Weak	100	100	100	64.8	193.0	n/a	30	30	30	48.7	87.2	76.0

Source: WDI & Historical data of IFM obtained by Macrobond

4. High risk of debt distress and macro-economic instability, case of Ghana

Ghana reached the Decision Point under Enhanced HIPC Initiative in February 2002 and became the 11th country reaching the Completion on 13 July 2004. Then, Ghana was also eligible for Multilateral Debt Relief Initiative (MDRI) in 2006. The total amount of debt relief was \$4.5 billion (\$1.5 billion from HIPC, and \$3 billion from MDRI). Among the 19 members who received debt relief from both HIPC and MDRI, Ghana was the one receiving the largest amount²⁴. After the debt relief, Ghana's economy - one of African top ten largest economies - has thrived, being considered one of African lions that lead the continent's growth. This striking performance allowed Ghana to become a good example of HIPCs that successfully developed after debt reliefs and somehow strengthens the positive views of the debt relief effects on growth, a topic whose literature has long been theoretically and empirically controversial²⁵. Nevertheless, its recent catastrophic economic crisis and coincident deterioration in its external debt position have challenged Ghana's medium and long-term growth prospects and raised the question about its economic stability and debt sustainability.

In fact, sustained fiscal indiscipline coupled with long-lasting fiscal deficit have amplified the imbalances and deteriorated the stability of Ghana's macro-economy. In addition, the structural problems such as a narrow base of exports and infrastructure deficit allow Ghana to be exposed more to the global external shocks as well as internal supply shocks. When these factors are coincident, economic crisis is unavoidable.

An increase in economic instability could jeopardize Ghana's debt sustainability through two channels: (1) it reduces the debt solvency by hampering the ability to pay the future services because of lowered the long-term growth and rising macro-economic uncertainty²⁶; (2) it threatens the liquidity during the economic crisis, raising the cost of lending for its high risk associated.

The following analysis will dig deeper into deterioration of debt position and diagnose the main sources of economic growth as well as macro instability in Ghana.

²⁴. Multilateral Debt Relief Initiative MDRI Fact Sheet, p.3

²⁵. IMF, 2014, pp:4-6 & 31.

²⁶. Macro-economic uncertainty is the situation that generates a misallocation of resources, thus reducing the capital efficiency and productivity.

4.1. Ghana's recent development of economic instability and its debt revolution

As we can see from the two figures below, Ghana had enjoyed a steady economic development for about a decade (1998-2007) with an average growth rate of 4.9% in GDP and 2.2% in GDP per capita. Meanwhile, there was a steady downward trend in inflation which dropped sharply from its peak of 32% in 2001 to just over 10% in 2007; unemployment also consistently declined from more than 10% to 2.8%²⁷. This signifies a positive movement of the aggregate supply towards the potential output. From the demand side, a marked improvement in investment level of over 20% of GDP was witnessed notwithstanding constantly expanding fiscal expenditure from 18% in 2001 to about 23% of GDP in 2007. The household consumption was relatively stable, helping maintain the overall upwards trend of the aggregate demand, despite the noticeable worsening effect of current account since 2004.

Recent higher growth compromised stability

Since 2007 onwards, Ghana has accelerated economic growth without reinforcing its resilience to shocks. GDP grew at an average rate of 8%, doubling the level in the previous decade; nonetheless, this high growth rate over recent years "has been accompanied by the build-up of macro-economic imbalances"²⁸. The inflation fluctuated more widely, it up-surged again from 10% to 19% in 2009 within two years. The Ghana Shared Growth Development Agenda (GSGDA II) acknowledges, "Ghana's accelerated economic growth has not resulted in the expected levels of job creation and that poverty at the sub-national level remains high, especially in the three northern regions"²⁹.

Ghana's economic crisis was signaled by the slow-down of economy coupled with sharp currency depreciation (figure 4.3), inflated prices and augmented fiscal deficit. During 2013-2014, the government ran a huge public deficit, which reached its climax of over 12% of GDP; inflation soared to 15% while the growth rate of 2014 hit bottom at less than 4%, registering the lowest level for the period of over ten years.

Negative aggregate supply shocks and positive aggregate demand movements

The abrupt drop in GDP growth could be partly attributable to the negative impacts of energy crisis that started from 2013 to 2014 on the output. According to Ghana's Central Bank, "Ghana is in the midst of a severe energy crisis, which is paralyzing the economy and causing outrage among the population. Load-shedding power outages began in 2013

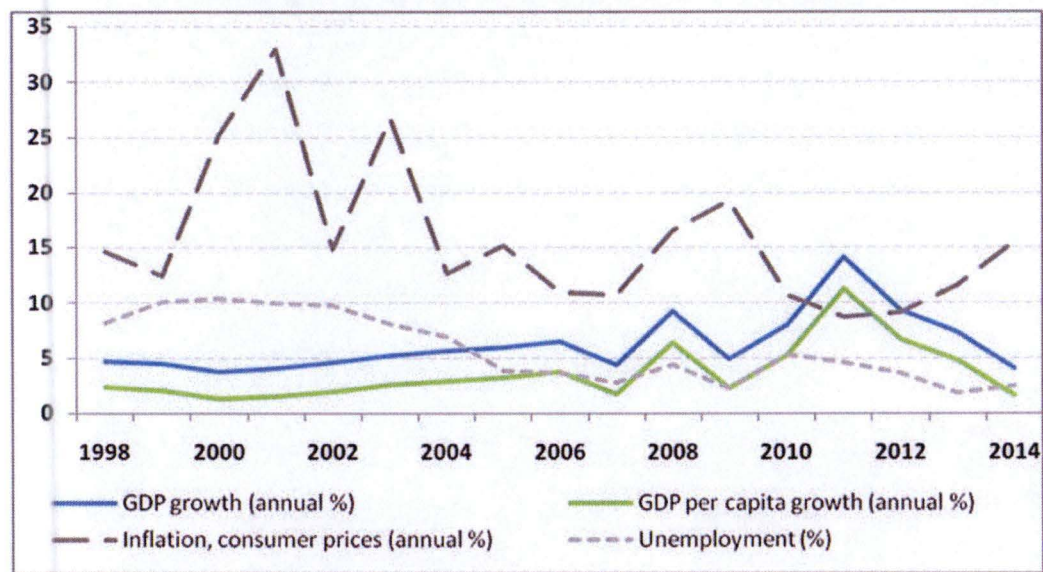
²⁷. The data were obtained from WDI, and the data show Ghana's extremely low levels of unemployment since 2007 compared to a majority of CP HICs and the average levels of LICs. I have a doubt about the quality of these data on unemployment.

²⁸. African Development Bank, OECD, & UNDP, 2015: 257 – [Link](#)

²⁹. African Development Bank, OECD, & UNDP, 2015, Thematic Edition, p.152

and have worsened since December 2014 to 24 hours off followed by 12 hours on"³⁰. The evaluated approximation of output loss from Ghana's energy crisis was dramatic. Ghana Social Development Outlook (GSDO) 2014 estimates that Ghana has lost between \$320 million and \$924 million per year in terms of decline in productivity due to the current energy crisis³¹.

Figure 4.1. Evolution of main macro-economic variables, Ghana, 1998-2014



Source: Author's calculation, WDI & WEO.

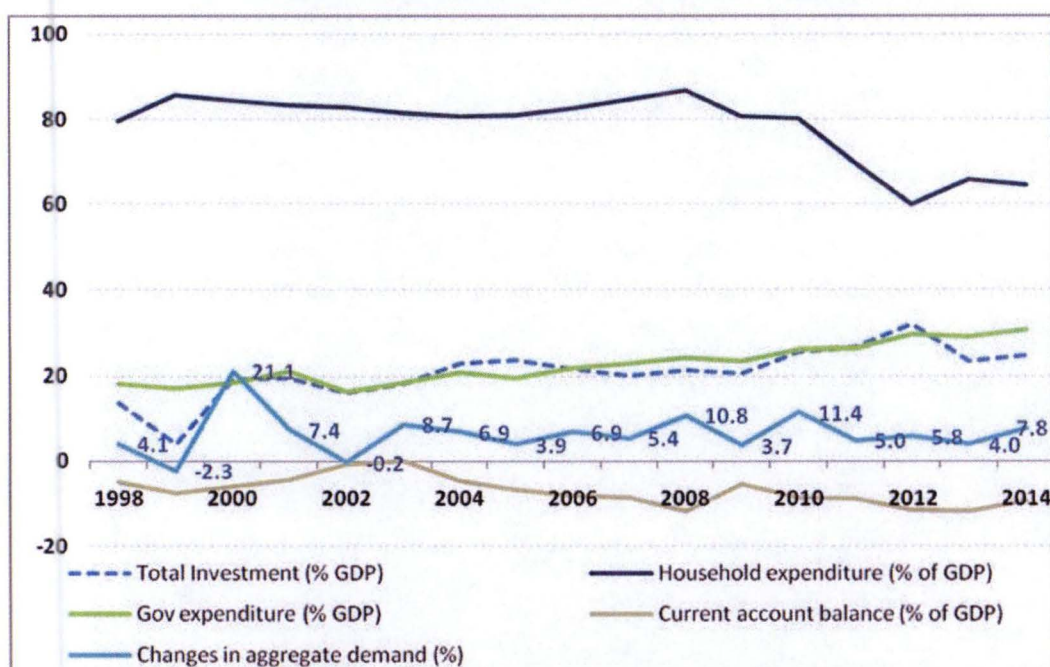
Moreover, the recurrence of energy crisis could impede long-term growth in Ghana. The World Bank (2013) reported, "at the time when the Ghanaian economy is achieving sustained growth in excess of 6% annually, with the ambitions to raise this further, there is risk that misguided and inappropriate policies will lead to the power sector becoming **a drag** on the economy"³². Historically, the power shortages in 2006-2007 had damaged Ghana's economy by around 1.9% of GDP, one of the highest levels in Africa³³. Five years later, Ghana again was plunged into the similar situation.

Regarding the aggregate demand, the government continued to pursue expansionary fiscal policy but at a larger extent, with its expenditure of about 31% of GDP, the highest figure ever recorded since 1980. This loosening fiscal policy has led to the crowding-out effects on private consumption which experienced a steep decline from 84% to 64% of GDP and on investment with a recent reduction from 31% in 2012 to 24% by 2014. The

³⁰. See [here](#)
³¹. See The Ghanaian Times - [Link](#)
³². World Bank, 2013: viii.
³³. World Bank, 2011: 21

crowding-out effects on private sector spending could be explained by ballooning public debt with a substantial impact on real interest rates³⁴, raising the lending cost and thus discouraging both consumption and investment. Still, with this large amount of government expenditure, the aggregate demand rose by 7.8% in 2014, doubling the previous year's level, despite a persistence of large current account deficit.

Figure 4.2. Components of aggregate demand, Ghana, 1998-2014



Source: Author's calculation, WDI & WEO.

Overall, it is likely that external factors have created negative supply shocks, adversely affecting economic growth recently; and as a consequence, inflation was raised further from both cost push and demand pull situation.

However, these shocks are ju

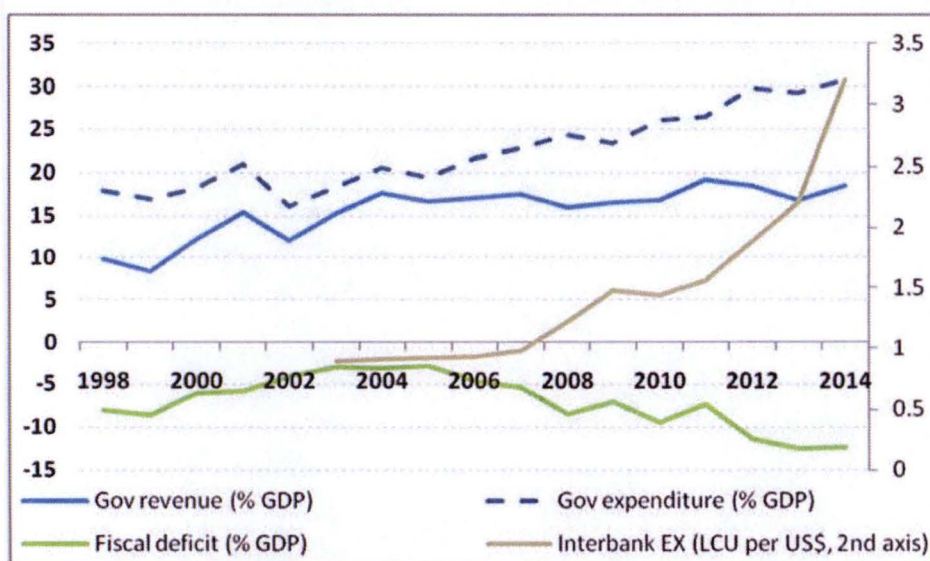
the iceberg originated from chronic structural problems (discussed later) and the persistence of reckless government expenditure.

The persistence of loosening fiscal policy also implies the pro-cyclical policies during the economic expansion period, which hampered the primary balance and amplified the business cycle. This is utmost dangerous to Ghana when it already ran a large budget deficit and the excessive fiscal loosening strategy would steal the chance for Ghana to enhance its financial position during the economic expansion, threatening not only

³⁴. See more on the monetary policy analysis

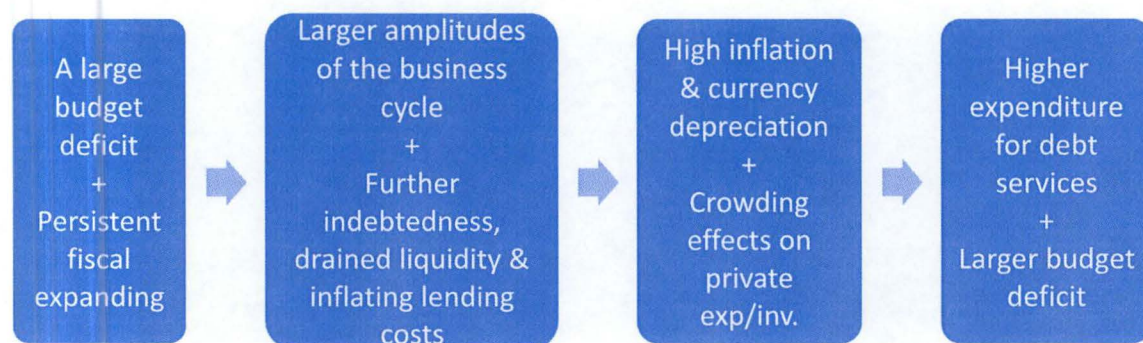
economic stability but also debt sustainability. When experiencing the economic recession, the government would be unable to generate enough income for counter-cyclical policies; meanwhile, the need to recover the government budget by boosting the aggregate demand has drawn it into further indebtedness. An increasing drain of liquidity has prompted the government to issue both sovereign bonds and domestic bonds with much higher interest rates. Under the uncovered interest rate parity, the local currency of Ghana (GHC) would be depreciated proportionately to the interest spreads. This eventually inflates the book values of both debt outstanding and debt services which are nominated in foreign currencies (mostly in US\$ and SDR), reducing the relative value of domestic income which is recorded in local currency (GHC). For instance, when GHC depreciated 45.5% against US\$ in 2014 from 2.2 GHC/\$ to 3.2 GHC/\$, the sovereign bond value of \$1billion in 2013 with coupon yield 8% would be realized at GHC 2.2 billion, with debt service payment of GHC176 million. However, the debt outstanding would be recognized at GHC 3.2billion in 2014 fiscal year with the debt service payment of GHC 256 million. Therefore, the sustained expansionary policy has pushed Ghana deeper into debt trap, proliferating debt burden ratios through raising the debt outstanding associated with higher interest rates and reducing the purchasing power of the domestic currency.

Figure 4.3. Public deficit and the inter-bank exchange rate, Ghana, 1998-2014



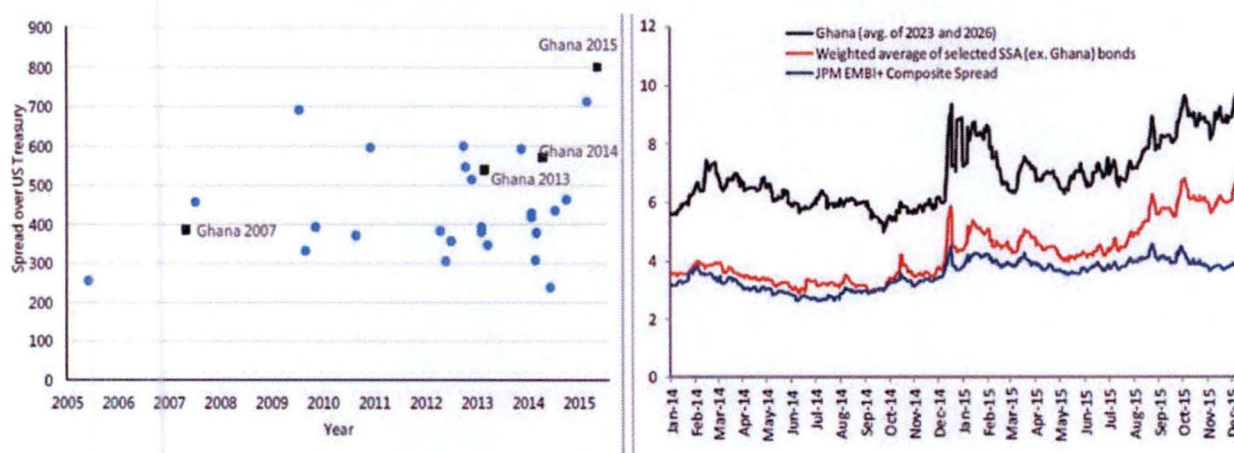
Source: WEO, Bank of Ghana (BOG) & WDI.

Figure 4.4. The cycle of debt & economic instability & fiscal expansion in Ghana



As mentioned in the Part III, Ghana issued 10 year-sovereign bonds for 2 continuous years 2013 and 2014 with the value of \$1billion for each, with the coupon yield of 7.88% and 8% respectively. Within the CP-HIPC group, Ghana accounted the largest share of bond issuance, thanks to its past outstanding performance. However, Ghana's debts were also charged by one of the highest interest rates. In 2015, Ghana made a surprise when it succeeded to continue issuing another 15 year-Eurobonds of \$1 billion at 10.75%, much higher rate than peer issues despite the partial guarantee from World Bank³⁵.

Figure 4.5. Eurobond spreads against the US Benchmark 10 year index (%).



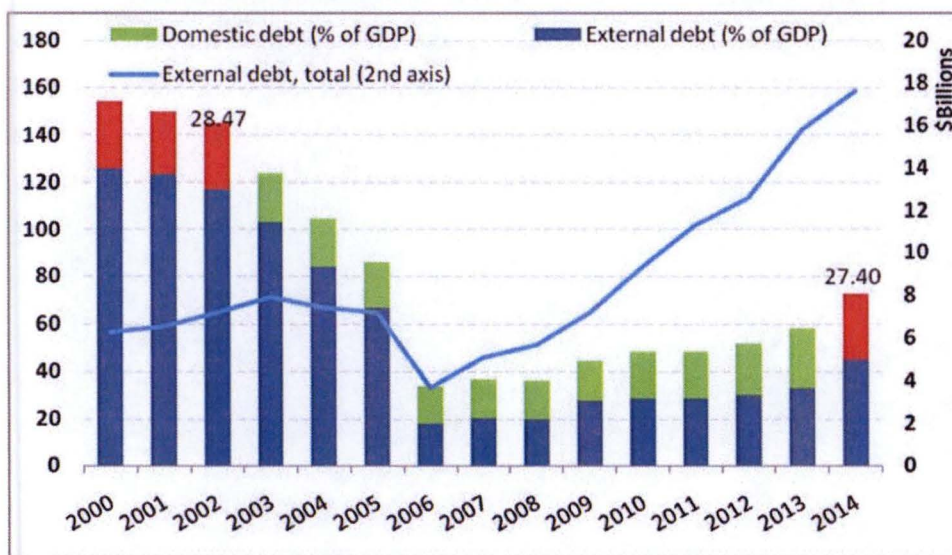
Source: IMF (2016).

³⁵. See IMF, 2016:6

By the end 2014, Ghana has registered \$17.6 billion total external debt outstanding, 4.8 times as much as the level in 2006 (right after debt relief of MDRI), and about 2.8 times as great as the figure for 2001 (before the debt relief of HIPC Initiative). However, unlike in the pre-debt relief period, Ghana has been enjoying doubling growth rates of 8% CARG in average from 2006-2014, which could compensate for the rapid expansion of 21% CARG in external debt value. This fact shows that Ghana's high growth has depended excessively on the external savings; this generates a shakier ground for the self-sustainable growth when directing the scarce financial resources for increasing debt service burden. Therefore, even though the ratio of debt ratio over GDP was lower than that before debt relief (45% compared to 123% in 2001), this does not mean that Ghana was under less debt distress pressure now than the pre-debt relief period.

The debt sustainability of Ghana has been threatened in recent years because of the two main reasons. Firstly, besides external debt, the domestic debt also climbed immensely, accounting for 27.4% of GDP in 2014 as high as the pre-debt relief level, making the 2014 total public debt accumulated up to over 72%. The fast pace of growth in total debt burden since 2008 implies that the total public debt ratio would reach the level of pre-debt relief for just few years if such this trend is still maintained.

Figure 4.6. The debt levels in Ghana (% GDP), 2000-2014



Source: BOG & WDI.

Note: Due to different sources of data, there is a mismatch between the total debt over GDP ratio with the levels of the same ratio obtained from WEO. However, because we are using the details of external debt and domestic debt ratios, I prefer these two sources.

Figure 4.7. Rising levels of non-concessional debt in external debt, Ghana, 1998-2014³⁶

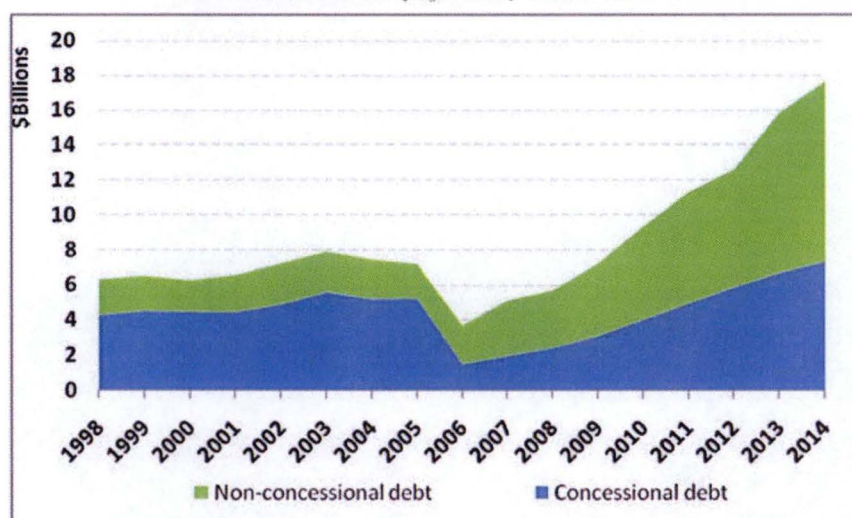
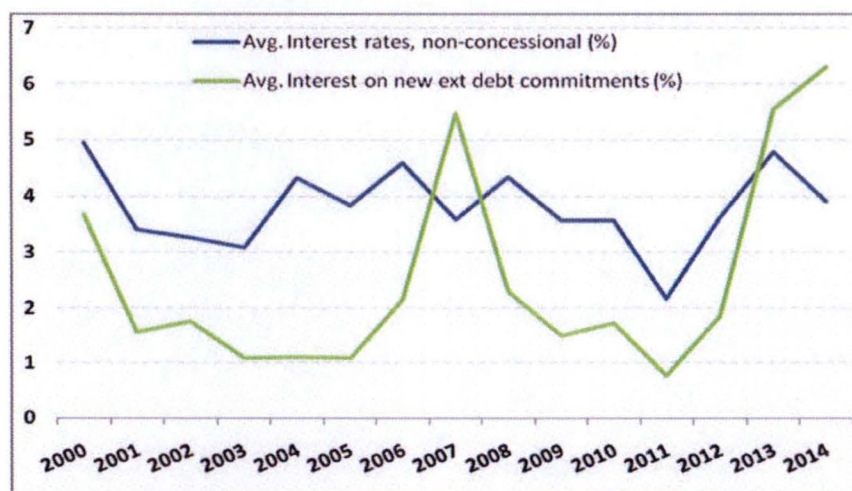


Figure 4.8. Average interest rates of new commitments and non-concessional debt, Ghana, 2000-14



Source: Author's calculation & WDI.

Secondly, the absolute value of external debt outstanding is exceptionally high compared to pre-debt relief level, while the outcome of these credits is more uncertain (higher growth but associated with higher macro unstableness). The debt over GDP ratio does not capture the real risk of Ghana's debt distress, as it does not take into account the

³⁶ The average interest rates of non-concessional debts are calculated by the ratio between the sum of interest payment and interest arrears minus the interest payments for the concessional debts and the 2 year-average value of non-concessional debts.

quality of GDP growth and changes in debt characteristics. The growth quality has deteriorated recently for the increasing instability and enlarged imbalances. In addition, the debt composition has changed dramatically, with a marked increase in the non-concessional debt level and much higher interest rates.

Non-concessional proportion has boosted immensely to over 60% of total debt in 2007 from only 31% of pre-debt relief levels, and then maintained this high level throughout the remaining period. Meanwhile, the average interest rates of those non-concessional debts since 2012 already reached the similar levels of pre-debt relief period. Also, the average interest rates of new debt commitments since 2013 soared upward to the highest level ever recorded, foreshadowing the future increases in average interest rates on external debt for the next few years.

4.2. Key drivers of the budget deficit and fiscal challenges

Discretionary expenditure driven budget spending

During 2006-2013, the government expenditure increased at an average rate of 31% CARG, exceeding the figure for revenue of 28%³⁷, leading to an acceleration in fiscal imbalances. Among the components of government spending, the wages and interest payments persistently made up from about 39% -46% of the total for the last 8 years. In particular, the wage bills seemed to keep pace with such high growth rates of total government expenditure, maintaining its percentage at more or less 30% of the total spending. This raises a concern over the fiscal disciplines. In fact, this spending should have been considered for social welfare as Ghana has been experiencing increasing social polarization and for investment projects with higher social returns, which could enhance the economic growth sustainably, thus restoring the fiscal and debt sustainability.

As analyzed in the previous part, the ineffectiveness of public expenditure further augmented the indebtedness, which is currently about at an alarming level. From 2011 to 2013, interest payments exploded to GHC 4.4 billion in 2013, an increase of 2.7 times, raising its proportion of total expenditure to more than 16% which nearly approached the pre-debt relief level in 2003.

Younger (2016) explained that the commensurate increase of the wage bills to total expenditure was due to the Single Spine Salary structure which came into effect since 2010. This framework ensures the homogenous pay scale within the public sector with an equal payment regardless of different departments, aiming at enhancing the transparency in public sector. However, this progress has created a burden for the fiscal budget when it failed to set up the medium level of wages within different sectors whose wages were

³⁷. Data were obtained from IMF IFS Macrobond

ranked quite differently. This ended up with the significant increases in most of public departments; particularly, the police department was raised doubly.

Figure 4.9. Proportion of wages and interest payments in expenditure, Ghana, 2001-13

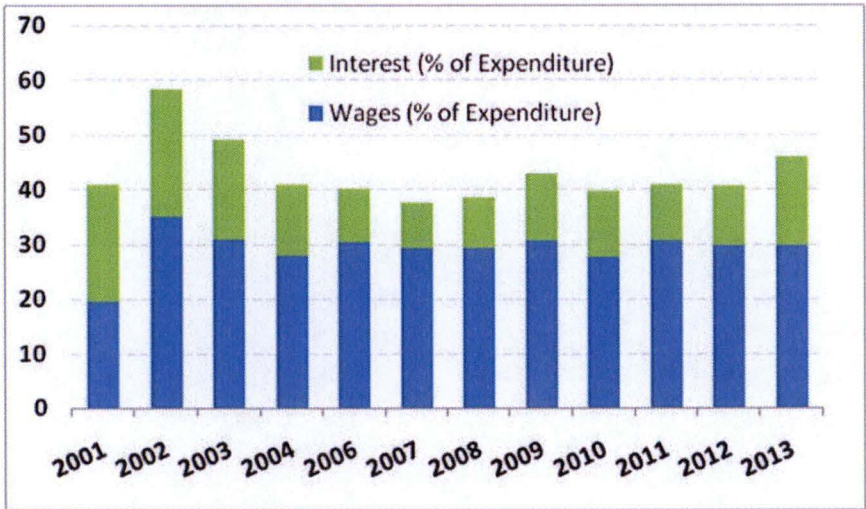
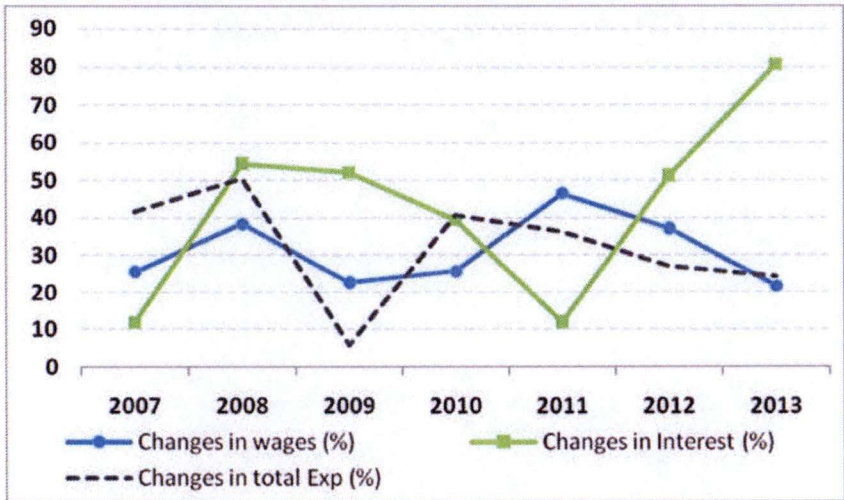


Figure 4.10. Changes in total expenditure and some components (%), 2007-13



Source: IMF IFS-Macrobond.

Moreover, the commencement of oil revenue in 2011 opened up an optimistic prospect of government revenue that encouraged the unions to bargain harder for a share of the oil wealth. The concession the government made in the following years to share the oil revenue for the wage bills already showed its discretionary use of common resources that puts priority on the interests of some elite groups over the public goods.

Younger also added that increases in both wage bills and then interest payments have created crowding-effects on other expenditures as they have declined marginally³⁸.

Fiscal challenges

The fiscal challenges remain on the potential risks that could either sustain the ineffectiveness of fiscal spending or reduce revenue mobilization prospects.

a) Ineffectiveness and rigidity of Public Finance Management (PFM) system

According to Toujas-Bernate, the IMF mission chief of Ghana, the institutional rigidities in the PFM system is an enormous hindrance for subsequent adjustments and tightening expenditure: "Widespread earmarking of revenues within the budget and large spending conducted by agencies have constrained the expenditure reduction"³⁹. Corruption is another negative aspect of PFM system in Ghana. Its Corruption Perceptions Index is of less than 50 out of 100, ranking 56th out of 175 countries. Kwadwo Kusi mentions, "a large majority of Ghanaians are also of the view that corruption has increased in recent years and that the government has performed poorly in fighting this destructive canker in the country". Besides the numerous recent scandals on public institutions and authorities, there are a number of huge funds supposed to finance programs or projects have been allegedly been misappropriated.

This ineffectiveness of PFM system could be explained by the political institution. World Bank, 2009 states that Ghana is a young democracy of multiple parties but still remains some "remnants of past autocracy". World Bank, 2007 argues that the advent of multi-party system has worsened some elements of institutional quality when the political incentives changed. This eliminates the need to serve the public interest in the same way as before. In addition, the political incentives, as the remnants of previous autocracy in Ghana, have built up a great extent of clientelism and patronage politics, highly favoring narrow interest groups. Therefore, even though some quantifiable governance indicators such as CPIA (which are positively influenced by the explicit performance of the young democracy) have performed well, the governance picture has not really improved.

Furthermore, the supervision process within the PFM system has not been enhanced; Ghana's formal checks and balances remained quite weak (World Bank, 2009). Under the 1992 Constitution of the Republic of Ghana, the Parliament is in charge of checking and supervising the Executive; however, the Parliament fails to stand an independent position. The Article 78 requires the Presidents to appoint "a majority of cabinet ministers of

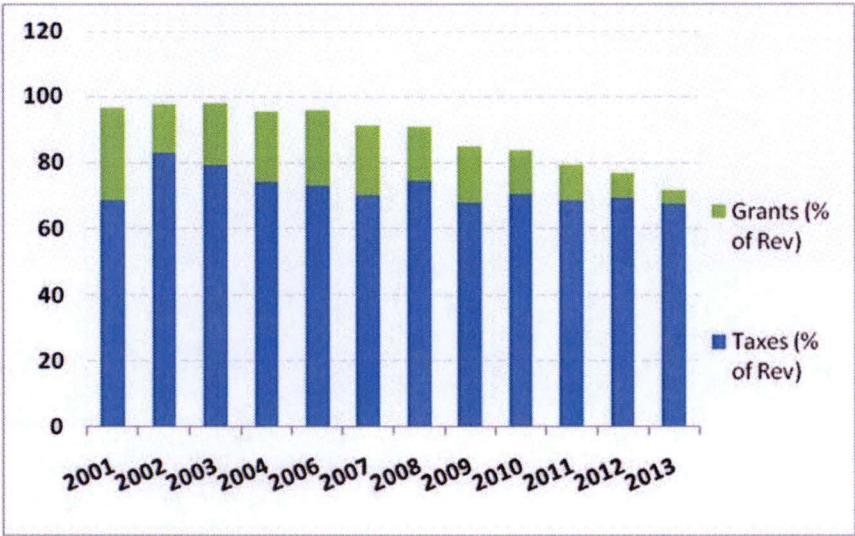
³⁸. It excluded the expenditures on health facilities and schools, which were funded automatically from internally generated funds, having no effect on public deficit.

³⁹. IMF survey, 2016.

Parliament, making more than 50 percent of ministers responsible for implementing policy as well as providing the check and balance on this implementation”.

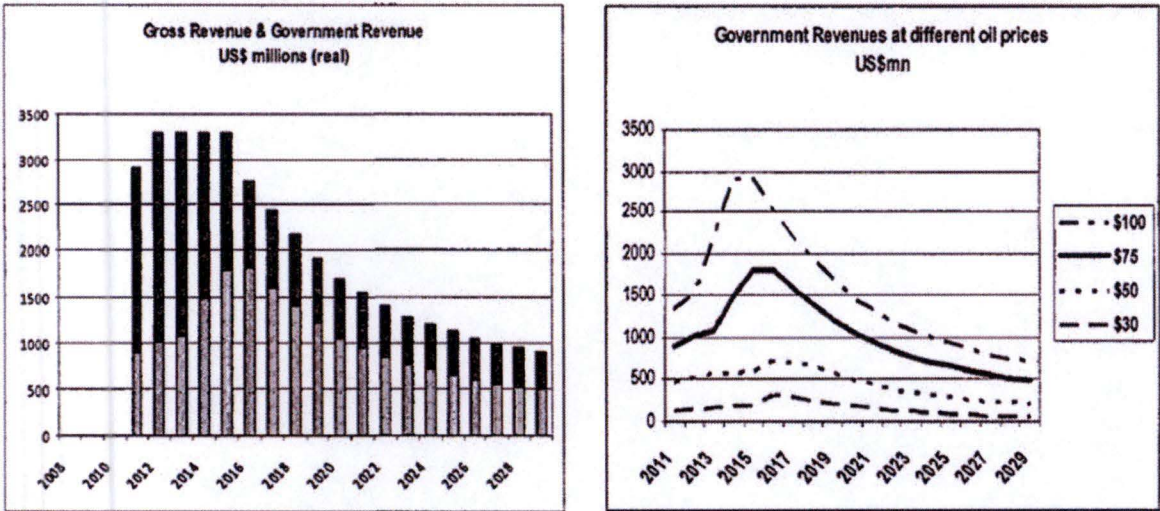
b) *Gloomy prospects of revenue mobilization*

Figure 4.11. Main resources of government revenue, Ghana, 2001-14



Source: IMF IFS-Macrobond.

Figure 4.12. Projections of oil revenue and Government revenue, Ghana, 2011-29



Source: World Bank, 2009.

There was a substantial decline in grants, which used to account for more than 20% of revenue until 2007 and then steadily shrank to 3% by 2013, leaving 97% dependent on the domestic revenue. According to Kwadwo Kusi, the disbursement of grants by

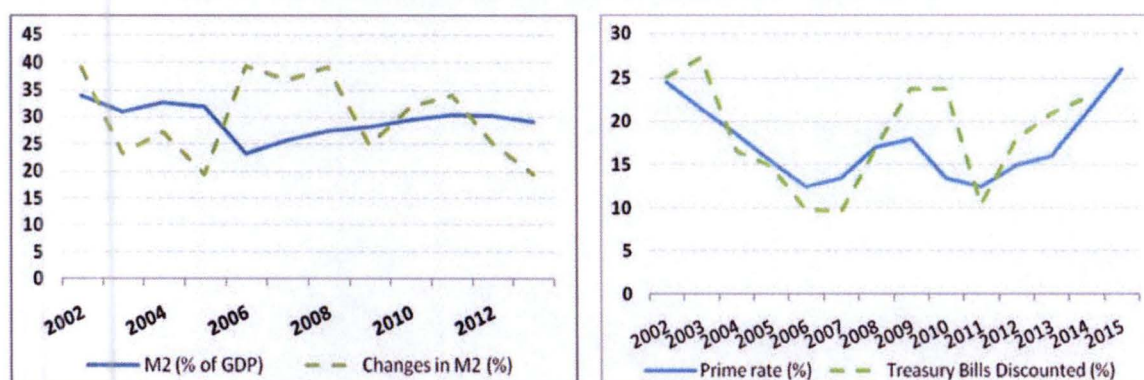
development partners has been reduced to a quite low level since 2009 when the IMF-support program has been implemented. This implies that due to the implementation of an IMF program, the development funds do not release funds, as the disbursement still requires some other conditions.

Meanwhile, the domestic revenue - the major source of the government's revenue - is mainly composed of tax collection, but does not reach its optimum level of effective tax rates due negative effects from the large tax exemption. Additionally, the oil profit has become the primary source of government revenue since the commencement of commercial production in 2011. However, the oil revenue is projected to reach its peak to about 120,000 barrels of oil extracted per day in the period from mid-2011-mid 2016 and then decline steadily until 2029 with the overall period of activity of over two decades (World Bank, 2009: 1).

4.3. Accommodative monetary policy and its structural drawbacks

Bank of Ghana (BOG) has stated its monetary policy objective is to ensure price stability with low inflation, in order to provide the right conditions for sustainable growth in output and employment. Under the Bank of Ghana Act 612 (2002), the bank has an independent position to set interest rates⁴⁰. Therefore, along with the fiscal policy, the monetary policy has played an important role in Ghana's economic growth and debt sustainability. However, due to fundamental structural problems, BOG has failed to achieve its mission, playing a passive role in dealing with the economy crisis that resulted from high fiscal indiscipline.

Figure 4.13. Evolution of monetary policies, Ghana, 2002-14



Source: WDI & IMF IFS- Macrobond.

⁴⁰. See Bank of Ghana website, [Link](#)

Since 2013, the high risks associated with sovereign and domestic government bonds have raised the bond yields, and accelerated inflation and domestic currency depreciation. This has put a negative impact on interest rates and bank credibility, further dampening economic stability. A raise in prime lending rates in order to curb inflation has made this nation the highest in terms of interest rate in the world in 2015⁴¹. This impedes the production growth, discouraging the domestic investment and raising more non-performing loans (NPLs). Meanwhile, its continuous efforts in reducing the amount of circulated money further restrict the credit access to private sector, which was already at the low levels, especially in manufacturing and agriculture with high NPLs.

Table 4.1. Allocation of credit towards sectors (%), 2004-2012

Sector	2004	2008	2012	NPLs (2008)	Credit 2008 (GHC mn)	NPLs 2008 (GHC mn)
Agriculture	7.7	4.3	5.11	23.1	195.1	45.1
Mining	2.2	2.9	1.29	22.6	156.1	35.3
Manufacturing	21.5	11.9	10.47	12.8	597.1	76.4
Construction	6	6.8	4.31	13.5	367.5	49.6
Utility	2.8	4	2.4	2.3	160.9	3.7
Commerce & finance	30.1	32.8	33.5	5.2	1506.2	78.3
Transport, storage & communications	2.1	2.9	9.5	8.7	142.1	12.4
Services	11.3	23.9	24.94	9.8	1177	115.3
Others	16.3	10.5	8.48	7.9	406.2	32.1

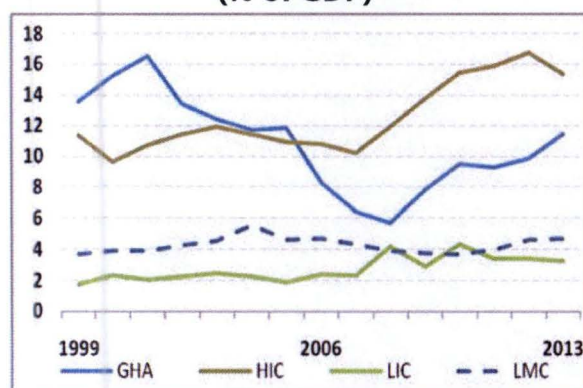
Source: Worldbank (2009) & Quartey, P. & Afful-Mensah, G. (2014)

Besides the temporary crisis pressure, BOG has been struggling to chronic structural issues of the financial sector that hinder sustainable growth of output. Similar to LICs and LMCs, banks dominated in Ghana's financial system, thus becoming the key agents in allocating the capital. Despite the great efforts in structural reforms, especially in deepening the financial industry with a numerous new banks established (mostly foreign banks), the levels of financial deepening have still stayed relatively low. Ghana's credit to private sectors has been left far behind by its LMC peers, and recently surpassed by LICs (due to tightening monetary policies). Yet, the bank system still put priority over the government securities and state-owned enterprises.

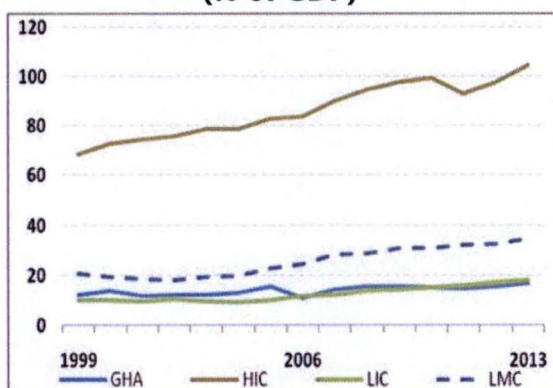
⁴¹. See Ghana's interest rate highest in the world. [Link](#)

Besides possessing an ultimate power in the financial market, the banking system in Ghana has a quite weak competition environment, discouraging the banks from bettering their services. Undoubtedly, due to a lack of interference from BOG, these banks have made a consensus to keep quite high lending rates while maintaining the negative saving rates for decades⁴².

**Figure 4.14a. Credit to public sector
(% of GDP)**



**Figure 4.14b. Credit to private sector
(% of GDP)**



Source: Global Financial Development Database (GFDD)

The long-lasting situation of negative saving and deposit rates could discourage the saving motivation, hindering capital accumulation and thus medium term growth. In addition, this reduces the effectiveness of capital allocation when confining the bank's ability to raise more capital from deposit accounts to channel credit for more efficient projects. Meanwhile, the constantly quite high interest rates are the main reason for the huge amount of NPLs while limit the credit access to only a small group of large corporations, leaving small and medium –scale enterprises underserved. Therefore, they are one of the main obstacles for long-term economic growth in Ghana by eliminating the thriving opportunities of some potential business or sectors. Besides, such a high cost of capital not just increases the overall production cost (and thus further inflates the price levels) but also restraints the domestic investment in the capital-intensive sectors. These sectors are associated with higher returns and demand higher skilled workers. In other word, they help enhance education and technology innovation – key drivers of long-term economic growth.

⁴². BOG control the interest rates via the tool of prime (or policy) rate, which is set by Monetary Policy Committee who meet bi-monthly for consensus of prime rate.

Table 4.2. Ghana's interest rate structure (%), 1999-2014

Year	Prime rate	Treasury Bills Discounted	Saving rates	3M- deposit rates	Lending rates	Real saving rates	Real deposit rates	Real lending rates
1999	27	26.4	14.8	23.6	36.5	2.3	11.2	24.1
2000	27	36.3	15.8	28.6	47.0	-9.4	3.4	21.8
2001	27	41.0	17.2	30.9	43.8	-15.7	-2.1	10.8
2002	24.5	25.1	11.1	16.2	36.4	-3.7	1.4	21.5
2003	21.5	27.2	11.1	14.3	32.8	-15.6	-12.4	6.1
2004	18.5	16.6	9.5	13.6	28.8	-3.1	1.0	16.1
2005	15.5	14.9	8.4	10.2	26.0	-6.8	-5.0	10.9
2006	12.5	9.9	6.1	8.9	24.3	-4.8	-2.0	13.3
2007	13.5	9.7	4.7	8.9	24.2	-6.1	-1.8	13.4
2008	17	17.0	5.8	11.3	27.3	-10.7	-5.2	10.7
2009	18	23.8	9.2	17.1	32.8	-10.1	-2.2	13.5
2010	13.5	23.8	9.2	17.1	27.6	-1.5	6.4	16.9
2011	12.5	10.4	5.2	8.9	25.9	-3.5	0.2	17.2
2012	15	17.8	4.9	10.1	25.7	-4.3	0.9	16.6
2013	16	20.8	5.4	12.4	24.4	-6.3	0.7	12.8
2014	21	22.7	5.4	12.9	27.5	-10.1	-2.6	12.0

Source: BOG's statistical Bulletins & IMF FS Macrobond⁴³.

Overall, there is a mixed picture of actions of BOG. While it has been trying to curb inflation and stimulate sustainable growth, the reverse effects have been created for decades by its interest policy. If this interest paradox continues to persist in Ghana, it is unlikely that this nation could attain such sustainable growth and external debt sustainability.

4.4. Structural issues and challenges of aggregate economy

Key drivers of output and foreign exchange are a quite narrow base of primary export goods, which are highly unstable for global demand shocks and domestic supply shocks.

The economy of Ghana has long been based on the agriculture with its dominant product is cocoa (22% of total exports) that enables Ghana to become the world second largest exporter of this product. Other agricultural crops stay at minimum quantity of total exports and some could not compete with same products from other developing countries and developed world with high subsidies (See Appendix). More recently,

⁴³. Lending rates before 2004 are not available in BOG's statistical Bulletins, we take it from Quartey, P. & Afful-Mensah, G. (2014)

Ghana's economy has depended more on its natural resources, being driven by the mining and oil sectors. Mining sector developed because of Structural Adjustment Program (SAP) that Ghana adopted under the suggestion of the World Bank and IMF since 1983⁴⁴ with export-led growth strategy. The leading mining exports are gold (now accounts for 23% of total exports) and manganese (2%). However, this main source of revenue mostly is repatriated to the foreign accounts, when 70-85% of large-scale mining industry is owned by foreign corporations who focus on exploitation of Ghana's natural resources than social welfare and technology transferring. It is not to mention about the negative consequence on the surrounding environment (soil and water), and thus on agriculture and fishing, combined with high unemployment of farmers who lost cultivating land. Therefore, mining actually has been GDP's key driver (about 8% of GDP), but it has a marginal influence on GNI when increasing social polarization and poverty. Oil revenue, which is under the state's administration, emerged to boost Ghana's economy since 2011, empowering Ghana to become a net oil exporter with 26% of total exports and bringing a great hope to cover the large fiscal imbalance and increase the public investment on infrastructure and social welfare. However, it has been a "natural curse" rather than bless with the worsened economic imbalances (see part of Dutch disease).

With quite a narrow base of exports, Ghana is more likely dependent on a small number of primary commodities whilst it imports more processed and industrialized commodities. Kose (2002) states that those export earnings that depend heavily on primary commodities are "highly unstable due to recurrent and sharp fluctuation in the relative prices of primary commodities". Thus, the fluctuations in world prices could put an important impact "on business cycle fluctuations in small open developing countries." It should also take into consideration of domestic productivity shocks, especially for agriculture product (here is cocoa) due to unfavorable weather conditions. Furthermore, as mentioned above, oil revenue is expected to reach its peak during mid 2011-mid 2016, and then gradually slows down, putting further negative pressure on both aggregate output and fiscal revenue in the coming years.

Low industrialization, infrastructure deficit and rising symptoms of Dutch disease

Ghana has failed to make progress on industrialization for long and the situation has been worsened in recent years. Manufacturing which already stayed at the low levels has been further damaged by recent macro-economic crisis and instability. The average growth of this sector was 2% per year from 2006-2010 and diminished since 2012 with negative growth rates. The symptoms of Dutch disease has risen as the causal link between the

⁴⁴. Ismi, 2004:16. SAP is the program designed for heavily indebted countries as a condition to receive financial supports from IDA.

booms in the oil and mining revenues and the diminishment of manufacturing sector was explained by the limited credit access and high cost of lending which results from heavily expanded fiscal expenditure.

Infrastructure deficit, a common characteristic of most African countries, also is another drag for long-term economic growth because it discourages both domestic and foreign investment. This deficit also reduces the labor productivity, when the production sectors are relatively labor-intensive. The most noticeable problem of infrastructure is the unstable power generation; Ghana has long relied on the hydropower whose current generation accounts for 68% of total generation capacity. Thus, it is likely that Ghana is exposed to a high risk of hydrological shocks. Historically, there were two continuous power crises in 2006-2007 and more recently 2013-2014, making a serious negative supply shocks.

4.5. Policy implications

The HIPC Initiative has gained a temporary success on Ghana, but failed to restore the debt sustainability for this nation due to its innate institutional characteristics and chronic structural features. Particularly, Ghana's debt sustainability has been not just damaged by the recent economic slowdown and macro instability, but also limited by the structural features of output production and unfavorable monetary policy landscape.

Therefore, Ghana should put priority on reconstructing the economic stability, especially alleviating the fiscal indiscipline. As explained before, the recent crisis in Ghana could be attributable the most to the excessive expansionary expenditure. In order to achieve the target, it is critical for the government to make greater fiscal adjustment efforts. In particular, the ineffectiveness of supervision process coupled with the rigidity feature of PFM system should be reduced. In addition, it is necessary to strengthen domestic revenue mobilization by raising the effective tax rates while maintaining favorable conditions for the priority sectors. Besides, debt rationing should be taken into account with the priority to finance projects of high social returns and public goods meanwhile making an effort to tackle corruption and improve transparency. Nevertheless, the deep-rooted political institution remained from the past autocracy has accumulated a great level of the patronage politics and politic incentives that could make the adjustment progress more difficult. Toujas-Bernate stated that even though the Ghanaian authorities have engaged in an ambitious program of fiscal consolidation, there is still a relatively long way to go before the situation back to a sustainable level.

Moreover, to stabilize the economy, the prerequisite is to curb inflation and currency depreciation; thus, the efforts from BOG are crucially important. It is critical for BOG to

apply stronger indirect monetary tools to reinforce its active role in tackling the instability and regain its credibility, which determines the expected inflation. In addition, the operational and structural transformation is needed to increase the effectiveness of financial intermediaries, which have created unfavorable environment for medium and long run growth for decades. There are three main key drivers of economic growth in medium term, including the capital stock, technology and the size of labor (Blanchard and Johnson, 2013). However, the first two factors have been limited by the long-lasting interest paradox without any intervention from BOG.

Lastly, the bottle-neck situation due to low technology and infrastructure deficit should be tackled for the long-run stability and the enhancement of resilience to external shocks; it is especially for a small open economy like Ghana. Nevertheless, this in turns depend on the level of government spending that could put priority on infrastructure while rationing the other discretionary expenditure. Once again, the fiscal discipline is critically emphasized for Ghana case.

5. Conclusion

Under the United Nations' Declaration, debt sustainability is an important indicator to help LICs obtain sustainable development and eradicate poverty. Efforts of debt relief have been made for over thirty years, including bilateral and multilateral mechanisms. While some are positive about the effects of the brand new multilateral Initiatives on the debt sustainability and development of the third world, the paper strengthens evidence that the effects of Debt Relief Initiatives on debt sustainability of HIPC's still remain limited and stand for a certain temporary period. The HIPC Initiative has managed to move a number of LICs away from the debt trap but failed to eradicate the deep-rooted structural problems and institutional issues as well as macroeconomic management weaknesses such as PFM issues facing these countries. Once these issues continue to prevail, the debtor cannot get out of their own debt trap; the stability of macro-economy and of debt level is also threatened. Empirically, despite the relatively low levels of debt burdens of all CP-HIPC compared to the pre-debt relief period, the risk of debt distress has risen when these countries witnessed a great deal of disbursement into these countries, with a more variety of debt types (especially sovereign bonds), lessened proportion of concessional debt, and rising interest rates. Some countries after reaching their completion points are likely to return towards their debt trap, such as Sao Tome & Principe, and Mauritania.

Ghana is one typical example that used to be an African lion driving the whole continent's growth and that has become a star within HIPC's with its exceptionally outstanding performance after the Initiative. However, the recent crisis has put Ghana into the edge

of debt distress. The persistent budget deficit, combined with fiscal indiscipline, is the major concern facing this country, preventing this nation from restoring the stability and debt sustainable position. Political institution impedes Ghana's efforts to strengthen its PFM system and slows down the fiscal adjustment progress. Nevertheless, its long and medium term growth prospects are compromised by the structural characteristics and unfavorable monetary policy. The solutions for these structural issues in turn depend heavily on strong fiscal discipline.

To conclude, in order to regain the debt sustainability, the external efforts from HIPC Initiative as well as other multilateral or bilateral debt relief mechanisms not enough. The target also requires tremendous efforts and strong motivations from the debtor itself. Besides the structural problems, each country has huge specific challenges to enhance its long-term growth prospects, such as political institution and ineffective PFM system that demand debtor countries to make painstaking progress to lift them out of their vicious circle of debt trap.

6. References

- African Development Bank, OECD, & UNDP. 2015. African Economic Outlook. Regional Development and Spatial Inclusion.
- Avramovic, D. 1964. Economic Growth and External Debt, Baltimore, John Hopkins Press.
- Berensmann, K. (2004). New ways of achieving debt sustainability beyond the Enhanced HIPC Initiative. *Intereconomics*, November/December 2004.
- Blanchard, O. & Johnson, D. 2013. *Macroeconomics*. Pearson. Sixth edition.
- Cohen, D. 1993. Low Investment and Large LDC Debt in the 1980's. *The American Economic Review* Vol. 83, No. 3, p. 437-449.
- Feder, G. 1980. Economic Growth, Foreign Loans and Debt Servicing Capacity of Developing Countries, *Journal of Development Studies*, Vol. 16, pp. 352-368.
- Gautam, M. (2003). Debt relief for the poorest: an OED review of the HIPC Initiative. The World Bank, Washington, D.C.
- Hentschel, J. 1988. Non-optimizing growth-cum-debt models and sustainability of indebtedness. Department of Economics, University of Konstanz. Series II, No. 44.
- Hnatkosva & Loayza, 2005. Volatility and Growth, in J. Aizenmann & B. Pinto, eds., *Managing Economic Volatility and Crises*. Cambridge, United Kingdom. Cambridge University Press.
- IMF, 2000. External Debt and Capital Flight in Sub-Saharan Africa. Washington D.C.

- IMF, 2001. The Challenge of Maintaining Long-Term External Debt Sustainability. Washington, D.C.
- IMF, 2003a. The Impact of External Indebtedness on Poverty in Low-Income Countries. Working Paper WP/03/61. Washington, D.C.
- IMF, 2003b. External Debt, Public Investment, and Growth in Low-Income Countries. Working Paper No. 03/249. Washington, D.C.
- IMF & the World Bank, 2004. Debt sustainability in Low-income countries –Proposal for an Operational Framework and Policy Implications. Washington, D.C.
- IMF, 2012. Revisiting the Debt Sustainability Framework for low-income countries. Washington, D.C.
- IMF, 2009. Debt sustainability indicators. Heavily Indebted poor countries capacity building programme. Washington, D.C.
- IMF, 2002. Assessing sustainability. Washington, D.C.
- IFM, 2013. Regional economic outlook: SSA – Building momentum in a multi-speed world. World economic and Financial Surveys. May 2013.
- IMF, 2014. External debt statistics – Guide for compilers and users. Washington, D.C.
- IMF, 2016. Ghana-Second Review Under the Extended Credit Facility Arrangement and Request for Waiver for Nonobservance for Performance Criterion. Country Report No. 16/16.
- IMF survey, 2016. Ghana: The Bumpy Road to Economic Recovery. [Link](#)
- IMF, 2014. Does Lower Debt Buy Higher Growth? The Impact of Debt Relief Initiatives on Growth. WP/14/230.
- Ismi, A.(2004). Impoverishing a continent: A World Bank and the IMF in Africa. *The paper commissioned by the Halifax Initiative Coalition* (www.halifaxinitiative.org) July 2004.
- Kose, M. 2002. Explaining Business Cycles in Small Open Economies: "How Much Do The World Prices Matter?" *Journal of International Economics* 56 (2002) 299-327.
- Krugman, P. (1988). Financing vs. forgiving a debt overhang. *Journal of Development Economics* Vol. 29, p. 253-268.
- Kwado Kusi, N. 2015. Ghana: Recent Fiscal Challenges and Risks. What Should We Expect in 2016? [Link](#)
- Laursen, T. and Mahajan, S. 2005. Volatility, Income Distribution and, Poverty, in J. Aizenman and B. Pinto, "Managing Volatility and Crises: A Practitioner's Guide", Cambridge University Press, pp. 101-136.
- Loayza et al, 2007. Macro-economic Volatility and Welfare in Developing Countries: An Introduction. *World Bank Economic Review*, 21, 3, 343-357.

- Ohlin, G. 1966. Aid and Indebtedness. Development Centre of the OECD, Paris.
- Quartey, P. & Afful-Mensah, G. 2014. Financial and Monetary Policies in Ghana: A review of recent trends. Review of Development Finance 4 (2014) 115-125.
- Solomon, R. 1977. A Perspective on the Debt of Developing Countries. Brooking Papers on Economic Activity 2, pp. 479-501.
- The Wall Street Journal, Feb 2015. [Link](#)
- UN, 2004. Economic Development in Africa. Debt sustainability: Oasis or Mirage? World Bank, 2007. Ghana Country Economic Memorandum: Meeting the Challenges of Accelerated and Shared Growth. Report No. 40934-GH, Washington DC.
- World Bank, 2013. Energizing Economic Growth in Ghana: Making the Power and Petroleum Sectors Rise to the Challenge.
- World Bank, 2011. Ghana's Infrastructure: A continent Perspective, Policy Research Working Paper WPS5600.
- World Bank, 2015. International Debt Statistics. Washington, D.C.
- Younger, D. 2016. Ghana's Macroeconomic Crisis: Causes, Consequences, and Policy Responses. IFPRI Discussion Paper 01497.

7. Appendix

Structure of exports and imports in terms of goods and destinations in 2014.

(Source: MIT.edu. [Link](#))

Figure 7.1.a. Ghana's export commodities

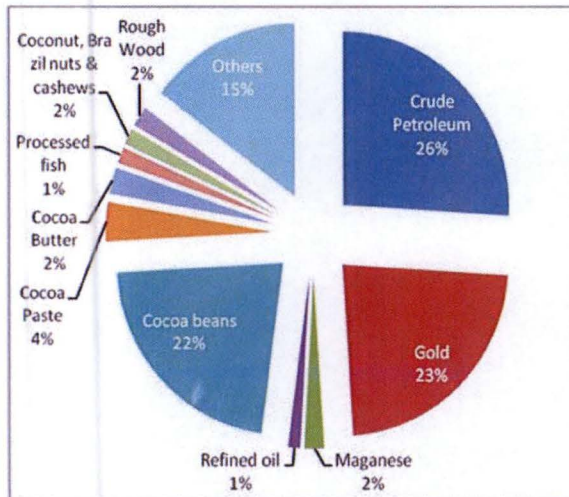


Figure 7.1.a. Ghana's import commodities

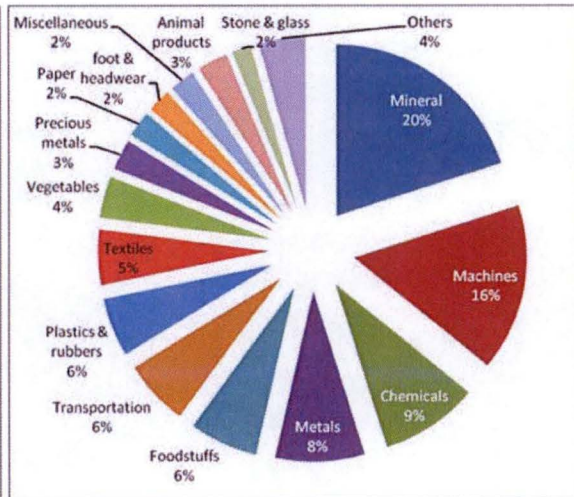


Figure 7.2.a. Ghana's export destinations

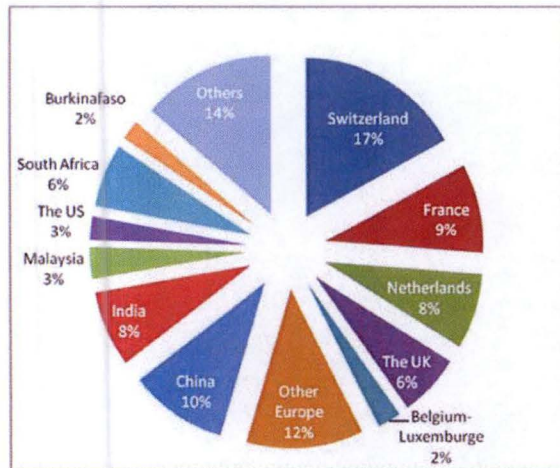
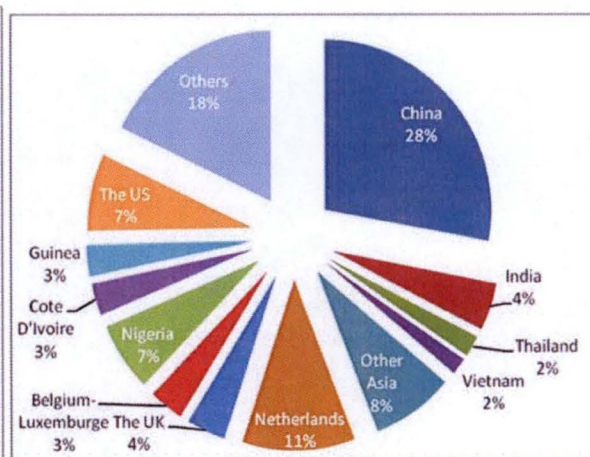


Figure 7.2.b. Ghana's import origins



Export commodities: Ghana's export commodities can be divided into 3 distinct categories (agricultural products, mining and raw metals, and other industries). Agriculture accounts for about 45% total export value (about 28% from cocoa products). Mining (mostly crude oil) and raw metals (gold, manganese and others) make up 53-54%. The other industries range around 1-2%.

Import commodities: Minerals account for 20% of total imports, which is mostly composed of refined petroleum (14.5%) and crude petroleum (3.8%). The Ghanaians also

spend approximately 25% of total import on foodstuffs and consumption commodities. Computers and digital or electric equipment, vehicles and transportation, fertilizers and plastics occupy another 30%. In terms of manufactures goods, they accounted for 76%.

Main export markets: Europe is the main market of Ghana with 55% of its total export value. Switzerland is the largest consumer (17%), followed by three other European partners including France, Netherland and the UK. However, the second greatest market of Ghana is China (10%), accompanied by India (8%). In terms of intra-regional trade, just 12% of its exports are directed to other African countries, and more than half of this value comes to South Africa. Such low levels stem from the scantiness of infrastructure hindering the commodity transportation across these countries as well as from the homogeneity of their economic structures.

Main import origins: 44% Ghanaian consumption from abroad has origins in Asia (44%), where China is the largest provider with 28% Ghana's total imports- equivalent to the extent that the Europe market could provide for Ghana. Therefore, Ghana has long suffered the increasing current account deficits with China.