DEMystifying Debt Relief: What Contributions has HIPC made to Governments’ Social Sector Expenditure in Sub-Saharan Africa?

A Research Paper presented by:

ELITA MWENDA
(ZAMBIA)

In partial fulfilment of the requirements for obtaining the degree of MASTERS OF ARTS IN DEVELOPMENT STUDIES

Specialisation:
Economics of Development
(ECD)

Members of the examining committee:

Prof. Michael Grimm (supervisor)
Prof. Karel Jasen (reader)

The Hague, The Netherlands
November, 2008
Disclaimer:

This document represents part of the author’s study programme while at the Institute of Social Studies. The views stated therein are those of the author and not necessarily those of the Institute.

Research papers are not made available for circulation outside of the Institute.

Inquiries:

Postal address: Institute of Social Studies
P.O. Box 29776
2502 LT The Hague
The Netherlands

Location: Kortenaerkade 12
2518 AX The Hague
The Netherlands

Telephone: +31 70 426 0460
Fax: +31 70 426 0799
To my late father, Develias Musa Mwenda, my mother Rosemary Abadon Mwenda, my husband Fwambo George Mwambazi and my children Taizya Wizawane and Chisomo Matthew Mwambazi
Acknowledgements

I would like to first thank all those who in their own way contributed to me successfully completing my Master degree programme and in particular this Research Paper. I would like to express me deepest gratitude to my supervisor Professor Michael Grimm, Department of Economics of Development at the Institute of Social Studies, for his constant corrections, guidance and encouragement. I would also like to extend my special thanks to the ECD Convenor, Professor Jan Van Heemst for his encouraging words and constant support through out my programme of study and research. I am especially thankful to my family, my mother who provided moral and material support through some trying times during my studies and my loving husband who encouraged and believed in me with his never failing positive attitude and encouragement. Lastly, but definitely not the least I would like to thank my friends who became my family during my period of study, for brightening up my days as well as for sharing with me the knowledge that they possessed.
Table of Contents

List of Tables and Figures 6
List of Acronyms 7
Abstract 8

Chapter 1: Introduction 9
1.1 Background 9
1.2 Statement of Research Problem/Hypothesis 10
1.3 Outline 12

Chapter 2: Debt Relief Initiates 13
2.1 Modalities of HIPC Debt Relief 13
2.2 Multilateral Debt Relief Initiative (MDRI) 15

Chapter 3: Linking Debt Relief to Government Health Expenditure 17
3.1 Trends in Government Health Expenditure 17
3.2 Determinants of Government Health expenditure 18
  3.2.1 Economic Growth 19
  3.2.2 ODA conditionality 19
  3.2.3 External Debt 20

Chapter 4: Literature Review and Theoretical Background 23
4.1 Literature review 23
  4.1.1 Debt Relief and Social Sector Expenditure 23
4.2 Theoretical Framework 25
  4.2.1 Government Expenditure Model 26
  4.2.2 Debt Overhang Hypothesis 28

Chapter 5: Debt Relief and Government Social Sector Expenditure 31
5.1 Empirical Strategy and Data Issues 31
  5.1.1 Empirical Strategy 31
  5.1.2 Data Issues 32
5.2 Debt Relief 32
5.3 Debt Service Payments 35
5.4 Debt Relief and Aid Additionality 39
5.4 Health Sector Expenditure 40
List of Tables and Figures

Table 1: Trends in Health Per capita Expenditure for Sub Saharan HIPCS  
Figure 1: Debt Overhang Laffer curve  
Table 2: SSA Countries Debt to Export Ratio and Total Debt Relief actual and projected  
Figure 2: Debt Stock and Debt to Export Ratios SSA  
Table 3: Actual Debt Service paid through HIPC Cycle Post HIPC  
Figure 3: Comparison of Debt Service Paid and Debt Service unpaid  
Table 4: Debt Service Defaults and Actual payments  
Figure 4: Debt Stock Vs ODA  
Figure 5: Debt Service as Percentage of Total Government Expenditure (Averages for SSA)  
Figure 6: Debt Service and Public Health Expenditure  
Figure 7: Government Health Expenditure in response to Government External Debt Service  
Table 5: Changes in Debt Service payment and Government Health Expenditures as Percentage of Government National Expenditure  
Figure 8: Government Health Expenditure in response to Government External Debt Stock  
Figure 9: Debt Relief as Percentage of Debt Stock  
Figure 10: Panel Actual Debt service (US $ millions)  
Figure 11: Panel Debt Service as Percentage of Government Expenditure  
Figure 12: Panel Government Health Expenditure as Percentage of Government Expenditure
# List of Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADI</td>
<td>Africa Development Indicators</td>
</tr>
<tr>
<td>BWIs</td>
<td>Brentton Woods Institutions</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>GDF</td>
<td>Global Development Finance</td>
</tr>
<tr>
<td>HIPC</td>
<td>Highly Indebted Poor Countries Initiative</td>
</tr>
<tr>
<td>IMF</td>
<td>International Monetary Fund</td>
</tr>
<tr>
<td>MDGs</td>
<td>Millennium Development Goals</td>
</tr>
<tr>
<td>MDRI</td>
<td>Multilateral Debt Relief Initiate</td>
</tr>
<tr>
<td>NPV</td>
<td>Net Present Value</td>
</tr>
<tr>
<td>ODA</td>
<td>Overseas Development Aid</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation for Economic Cooperation and Development</td>
</tr>
<tr>
<td>PRSPs</td>
<td>Poverty Reduction and Strategy Papers</td>
</tr>
<tr>
<td>PV</td>
<td>Present Value</td>
</tr>
<tr>
<td>SSA</td>
<td>Sub Saharan Africa</td>
</tr>
<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
</tr>
<tr>
<td>WDI</td>
<td>World Development Indicators</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organisation</td>
</tr>
</tbody>
</table>
Abstract

In 1996, the developed countries as well as the multilateral institutions agreed to a programme of debt cancellation for poor countries that had unsustainable debt levels. This facility was named the Highly Indebted Poor Countries Initiative (HIPC) and had the initial aim of helping countries reach sustainable levels of external debt at which they would be able to make debt service payments. This facility was further enhanced in 1999 making several changes and most importantly it established the link between debt relief and poverty reduction. It was assumed that debt relief would free resources needed for poverty reduction expenditure with particular emphasis on social sector expenditures in recipient countries.

This paper empirically assesses the extent to which debt relief has freed up financial resources and whether these freed up resources have translated into increased social sector expenditure taking Government health expenditure as an indicator. It uses a panel of 22 Sub-Saharan African countries. The paper finds that debt relief was not as substantial as reported in the IMF and World Bank reports simply because debt relief is calculated on expected debt service payments but the investigation reveals that many of the countries in the sample had high default rates. We however find that government health expenditure increased but not as considerably as would be expected with the reported amounts of debt relief.

We however cannot rule out the several important aspects that would affect health care expenditure as well as the differences in government spending priorities that would undermine the overall effect of debt relief on Government health expenditure.

Relevance to Development Studies

This paper aims to demystify the assumptions made about how much relief the HIPC Initiative recipient countries benefited from. It also motivates an investigation into just how effective debt relief really is especially with the current spotlight on the Millennium Development Goals and their funding requirements.

Keywords
Debt Relief, MDGs, HIPC, ODA, Health and government Expenditure
Chapter 1: Introduction

1.1 Background

In the 1960s, Sub Saharan African was one of the resource rich regions of the world. It was also the time at which most of the countries in the region were gaining independence. The region however started to experience decline after the oil crisis of the 1970's and the fall in commodity prices which eventually lead to most countries becoming highly indebted and facing alarming levels of poverty by the late 1980s. The Brentton Woods Institutions regarded the causes of these failures as weak macroeconomic fundamentals and instituted reforms to correct these, among which were the reduction in scope and curtailing social expenditure of the state. Before these reforms, most of these countries’ functional sectors were dominated by the state particularly in the provision of public goods such as health, education and water and sanitation. Therefore, the reforms which reduced the role of the state also lead to a drastic increase in poverty and in some cases negative economic growth.

After it was evident in the 1990’s that these structural reforms had not worked, there was a further effort by developed countries to foster growth and poverty reduction in these indebted countries. World leaders met and acknowledged that poor countries were struggling to make debt service payments at the expense of poverty reduction expenditure. This led to the adoption of a global commitment to achieve the Millennium Development Goals (MDGS). It was realised that in order for poor countries to adopt pro poor polices to target poverty reduction, governments need to invest much more in social sectors especially education and health which have the largest externalities.

The Heavily Indebted Poor Countries Initiative (HIPC) Initiative was launched by the World Bank and the International Monetary Fund (IMF) in 1996, amid growing concerns that excessive debt was crippling efforts to reduce poverty in some of the poorest countries. It was based on agreement by multilateral organizations and governments to offer a fresh start to countries that were making efforts to reduce poverty by reducing their external debt burdens to sustainable levels. (World Bank, 2006, IBRDa, 2006) To start the drive towards poverty reduction, debt relief efforts were given priority. HIPC was a response to the central structural dilemma of the 1990’s, the group of weak states and economies that had not been able to benefit from economic reform and globalisation. Despite the evident high indebtedness of poor countries, the problem of the structural dilemma according to the OECD states were many, complex and deep rooted – development country polices, external trade patterns and other external shocks, heavy reliance on primary commodities, weak formal economies, flagging economic reform efforts, poor investment climates, corrupt and

---

1 The Millennium Development Goals, to be realised in 2015, include eight goals formulated by the international community, 18 targets and 48 indicators that were approved by the UN General Assembly in 2000. The most important goal (1) is that the number of people living in poverty (i.e. on less than USD 1 per day), should be halved between 1990 and 2015. The other goals are: (2) universal access to basic education, (3) the promotion of equality between men and women, (4) the reduction of child mortality and of maternal mortality rates, (6) the combating of AIDS, malaria and other diseases, (7) ensuring a sustainable environment, and (8) the encouragement of a world-wide partnership for development, to be expressed, for example, in increasing development aid to 0.7% of GDP.
oppressive governments. (World Bank, 2003) HIPC came with the initial aim to ensure that poor countries reach sustainable levels of external debt.

Under pressure from global campaign by non governmental organisations, the enhanced HIPC initiate was born at the G7 summit in Cologne in 1999. The HIPC Initiative was enhanced to provide deeper and faster debt relief to a larger group of countries and to increase the links with poverty reduction efforts in those countries. The aim was to channel government resources, available as a consequence of debt relief, into poverty-reduction activities. Under the programmes being negotiated between countries eligible for debt relief and the World Bank and the IMF, government spending on public services that directly affect the poor, such as preventive health care and primary education, should increase. (World Bank, 2006, IBRDa, 2006)

In summary the modifications to the Initiative were of three principal types: entry conditions were relaxed and debt forgiveness deepened; the calendar for the initiative was shortened and simplified; and the PRSP became the framework for the strategic partnership of the HIPC initiative. The importance of fighting poverty was placed at the centre of debt reduction plan only after the launch of the enhanced initiative. (Gupta et al., 2006)

In 2005, the enhanced HIPC Initiative was further supplemented by the Multilateral Debt Relief Initiative (MDRI). The MDRI allows for 100 percent relief on eligible debts by three multilateral institutions—the IMF, the International Development Association (IDA) of the World Bank, and the African Development Fund (AfDF)—for countries completing the HIPC Initiative process. (IMFB, 2008)

This paper therefore aims to investigate how government public health sector expenditure patterns have changed in the advent of the HIPC initiative. If indeed as perceived at the adoption and inception of HIPC, that reduced external debt would lead to increased social sector expenditure related to poverty reduction by governments and taking Government health sector expenditure as an indicator.

1.2 Statement of Research Problem/Hypothesis

In the last two decades a large number of countries in sub-Saharan Africa have been plagued by low levels of human development. This has mainly been blamed on governments’ lack of resources and their inability to invest in the social sector. These low investments in social sectors have led to situations where countries have been caught up in poverty traps, with limited resources within their scope to do anything about it. The underlying cause of limited financial resources is quite often been traced back to the high debt burden experienced by a majority of poor countries.

Debt reduction was promoted because it would generate resources for high-priority social programmes and would enhance Africa's prospects for more self-reliant development. The case for urgent action is reinforced by the recognition of Northern governments, the World Bank, and the IMF that, in contrast to other developing regions that previous measures and proposals for debt reduction were totally inadequate for sub-Saharan Africa. (Watkins, 1994)
Relief being provided to these countries was projected to reduce their debts by around two-thirds on average, and freeing up resources for spending on poverty reduction. Poverty-reducing expenditures in countries that receive HIPC assistance were projected to have increased from 6.4% of GDP in 1999 to 8.4% of GDP in 2007. Where governments are committed to eradicating poverty, debt relief can free up resources for investment in key programmes, and play an important part in efforts to meet the MDGs. (DFID, 2008)

One may wonder why the emphasis on health. The Health sector is of outmost importance in a developing economy as is essential for building up human capital which is required to drive economic development and growth. This belief is further strengthened when realising that three out of the eight MDGs are related to health. Human Development Report (UNDP, 2003),acknowledges this fact when it states that “Good education and health have intrinsic value for people’s well-being. And the two are closely linked: education helps improve health, and good health contributes to better education. Moreover, education contributes to economic growth and raises poor people’s incomes. Improvements in health also generate significant economic returns.”

It should be understood that Africa’s development crisis is unique. Not only is Africa the poorest region in the world, but it was also the only major developing region with negative growth in income per capita during 1980-2000. Some African countries grew during the 1990s, but for the most part this growth recovered ground lost during the 1980s. Moreover, Africa's health conditions are by far the worst on the planet. The AIDS pandemic is wreaking havoc, as is the resurgence of malaria due to rising drug resistance and the lack of effective public health systems. (Teunisen and Akkerman, 2004)

The research paper will restrict it analysis to 22 HIPCs in Sub Saharan Africa and the period on analysis will be 1992 to 2004. The analysis will be restricted to expenditure on Public health sector as a measure of social sector expenditure. This sector which relates to human capital development is considered vital in tackling the root cause of poverty especially in developing countries.

The policy relevance of this research is two fold. Firstly to establish empirical evidence as to the whether the debt relief initiative with the specific reference to the HIPC initiative has been effective in releasing additional resources and secondly, whether these resources have translated into increased expenditure by governments on Public health expenditure. Due to the constraint of consistent data over the period of study, the paper only looks at Government expenditure on public health.

It is almost always taken as fact that, with high levels of poverty in Africa, freed up resources from debt relief will be used to increase social services and thus fight poverty. Given that African countries will continue to benefit from debt relief it is of interest to ask if past debt relief translated to increased social expenditure. (Dessy and Vencatachellum, 2007). This is the hypothesis that this paper aims to investigate.
1.3 Outline

The rest of the paper is structured as follows; chapter two gives an introduction into the debt relief initiative with particular emphasis on the HIPC Initiative. Chapter three links debt relief to government health expenditure as well as giving an analysis of several factors that may affect government health expenditure patterns. Chapter four presents the literature review and the theoretical framework on which the paper’s analysis is based. Chapter five is an analysis of the data collected in line with the theories presented in chapter four. Chapter six, which is the last chapter, is the summary, conclusions and main recommendations of the paper.
Chapter 2: Debt Relief Initiatives

2.1 Modalities of HIPC Debt Relief

The HIPC Initiative was first launched in 1996 by the IMF and World Bank, with the aim of ensuring that no poor country faces a debt burden it cannot manage. The Initiative entails coordinated action by the international financial community, including multilateral organizations and governments, to reduce to sustainable levels the external debt burdens of the most heavily indebted poor countries. Following a comprehensive review in 1999, a number of modifications were approved to provide faster, deeper and broader debt relief and to strengthen the links between debt relief, poverty reduction, and social policies. In 2005, to help accelerate progress toward the MDGs, the HIPC Initiative was supplemented by the Multilateral Debt Relief Initiative (MDRI). The MDRI allows for 100 percent relief on eligible debts by three multilateral institutions—the IMF, the International Development Association (IDA) of the World Bank, and the African Development Fund (AfDF)—for countries completing the HIPC Initiative process. (IMFb, 2008)

To be considered for HIPC Initiative assistance, a country must:

(1) Be IDA2-only and PRGF-eligible;
(2) Face an unsustainable debt burden, beyond traditionally available debt-relief mechanisms;
(2) Establish a track record of reform and sound policies through IMF- and IDA-supported programs; and
(3) Have developed a Poverty Reduction Strategy Paper (PRSP) through a broad-based participatory process.

Once a country has met or made sufficient progress in meeting these criteria, the Executive Boards of the IMF and IDA formally decide on its eligibility for debt relief, and the international community commits to reducing debt to the agreed sustainability threshold. This is called the decision point. Once a country reaches its decision point, it may immediately begin receiving interim relief on its debt service falling due.

In order to receive the full and irrevocable reduction in debt available under the HIPC Initiative, however, the country must: (i) establish a further track record of good performance under IMF- and IDA-supported programs; (ii) implement satisfactorily key reforms agreed at the decision point, and (iii) adopt and implement the PRSP for at least one year. Once a country has met these criteria, it can reach its completion point, at which time lenders are expected to provide the full debt relief committed at decision point. (IMFb, 2008)

---

2 which is defined as a country that relies on highly concessional financing from the World Bank's concessional lending arm, the International Development Association (IDA)
It is important to take note that in the original HIPC, no explicit link was made between debt relief and poverty reduction. Its highly complex mechanism was sought to promote good utilisation of resources released by debt relief. The Initiative was a direct descent of the structural adjustment. It was destined to be a supplementary facility granted to poor countries to poor countries that best succeed in their IMF baked macroeconomic reform programmes. (Cling et al., 2003)

The HIPC initiative came about with heavy and diversified portfolio of conditionality, including not only broad macroeconomic and structural reform conditionality through the IMF programmes, but also with a broad poverty focus through PRSPs, and in country tracking mechanism to monitor the use of HIPC resources. (Cassimon and Campenhout, 2007)

Making resources available through this relief was not a guaranteed way to ensure poverty reduction. Therefore, while granting debt relief, donors put in measures to ensure that the money released through debt relief was used responsibly. The conditionality of the Poverty Reduction Strategy Paper (PRSP) was created as a direct thrust towards empowering poor citizens and ensuring aid efficiency. It was conceived primarily as a tool that would be used in the service of the population, and particular the poor. The core of the fight against poverty was initially considered as a reinforcement of social sectors essentially health and education.

In the enhanced HIPC Initiative the BWIs stressed the wish that the amounts released (public resources) are not wasted. As such, it is required that they are allocated to priority social sectors, comprising basic health care and primary education, and also some variable secondary sectors according to specific needs. PRSPs therefore present sector strategies to which HIPC resources are channelled, and the goals to be met in terms of poverty reduction. It remains for the country to define the projects to be funded within these strategies and which will reach the intended goals. For the BWI institutions, PRSPS must also present the macroeconomic, sectoral and social programmes that the government intends to adopt to stimulate growth and contribute to absorbing poverty. The institutions also insist on the importance of good management of public affairs with a view to poverty reduction and debt relief. (Cling et al., 2003)

Furthermore, the PRSP and its related strategies adopted by recipient countries determined the basis for access to concessionary loans from the IMF and the World Bank. Therefore, countries formulate their poverty-reduction strategies in collaboration with these institutions and with civil society and development partners. The formulation of the PRSP is however not the end, updated annually, a PRSP outlines a country’s plan for three-year adjustment programmes that are designed to foster growth and reduce poverty. Strategies are results-oriented in order to encourage countries to adopt policies that will lead to tangible and measurable improvements in the well-being of the poor. The focuses of the PRSPs are poverty reducing oriented but their priority sectors differ across countries. Apart from increasing the access of poor people to primary and preventive health care and to primary education, some PRSPs also call for increased spending on water and sanitation, roads and road maintenance, and rural development, and some include programmes that provide housing for the poor and measures to strengthen social safety nets. By tilting the
composition of public spending in favour of poverty-reduction programmes, the poverty-
reduction strategy paper could increase the budgetary allocations for them. (Gupta et al.,
2006)

Before the HIPC Initiative, eligible countries were, on average, spending slightly more
on debt service than on health and education combined. With debt relief they are expected
to increased markedly their expenditures on health, education and other social services to an
average of about five times the amount of debt-service payments. (IMFb, 2008) In order to
achieve the objective of poverty reduction, the heavily indebted poor countries are
committed to increasing public outlays on health programmes. In line with the above
considerations, however, resources freed by debt relief have to be allocated to a wide
spectrum of poverty-reducing programmes, and health sector outlays are expected to
increase by an average of 0.4% of GDP. (Gupta et al., 2006)

Therefore we do see that the link to increased health expenditure was mainly made
through the perceived resources that would be freed through debt service reduction and thus
be channelled to poverty reduction social sectors such as health as guided by each country’s
PRSP. In this assumption what is key, is that countries are assumed to have substantial
resources freed up from debt relief.

2.2 Multilateral Debt Relief Initiative (MDRI)

The Multilateral Debt Relief Initiative (MDRI) was proposed in June 2005 by the G-8
Finance Ministers as a way to free up additional resources to help poor countries with high
debt levels make progress toward the MDGs. Under the MDRI, three multilateral
institutions—the International Development Association (IDA), the International Monetary
Fund (IMF), and the African Development Fund (AfDF)—will cancel all claims on
countries that reach the completion point under the HIPC initiative. The IMF and IDA have
approved debt relief under the MDRI for 17 of the 18 HIPCs that have already reached the
completion point. (IBRDa, 2006)

The MDRI can be interpreted as an extension and a deepening of the HIPC Initiative.
Eligibility will require meeting the HIPC completion-point criteria, which include (i)
satisfactory macroeconomic performance under an IMF poverty reduction and growth
facility program (PRGF) or equivalent; (ii) satisfactory performance in implementing a
poverty reduction strategy; and (iii) the existence of a public expenditure management
system that meets minimum standards for governance and transparency in the use of public
resources. The objective of the MDRI is to provide additional support to HIPCs to reach
the MDGs, while ensuring that the financing capacity of the international financial
institutions is preserved. (IBRDa, 2006)

Although this initiative has a broader mandate and builds upon the HIPC initiative, its
analysis is beyond the scope of the paper due to the unavailability of timely data.

One may ask what the expectations where of this debt relief. Debt relief provided under
the HIPC Initiative and the Multilateral Debt Reduction Initiative (MDRI) is expected to
significantly reduce the debt burdens of poor countries that qualify. The debt of 17 countries
that have already reached the completion point under the HIPC Initiative will fall from 55 percent of GDP (before HIPC debt relief) to 13 percent (after MDRI debt relief). (IBRDa, 2006)
Chapter 3: Linking Debt Relief to Government Health Expenditure

The first chapter outlines the importance of health in human development and why governments need to invest in health. However we also need to establish what determines how much government will spend on health and how it competes with other key sectors in the government budget or expenditure framework.

3.1 Trends in Government Health Expenditure

Health, a fundamental human right, is also a key input to economic development because it raises the productivity of the work force and increases the attractiveness of the economy for investors, domestic and foreign. Pandemic diseases such as malaria, TB, and AIDS not only increase suffering but deter investments in infrastructure, tourism, agriculture, mining, and industry. But developing countries continue to endure enormous rates of avoidable illness and premature death. Moreover, inequalities in health status and in access to healthcare are pervasive and growing, both among and within countries. (United Nations Millennium Project, 2005, United Nations Millennium Project, 2005)

To achieve good levels of health capital, investments are required in nutrition, health, access to reproductive health services, education, water and sanitation and energy services in order to foster a productive labour force that can participate effectively in the global economy. In the poorest countries, where GDP per capita is in the range of $200-$300, the necessary investments in health are simply too large at an absolute scale to be supported through domestic resources alone. For instance, the World Health Organization’s Commission on Macroeconomics and Health estimated that $35-40 per person is the minimum level of expenditures required to sustain a public health system. (Sachs, 2004) Currently the health per capita expenditure in Sub-Saharan Africa was an average 13 percent in 1998 and increased only to an average of 15 percent in 2004. This however does not necessarily entail a general increase across countries. Some countries such as Ghana, the Gambia and Guinea Bissau actually experience a decline in health per capita expenditure from 1998 to 2003. Regardless of even the improvement in the remaining countries, none of them have reached the $30-40 minimum set by the WHO. (See Table 1)

Scholars in the field of study of debt relief most often make the initial link from debt relief to economic growth which eventually has spillover effects which include governments increasing poverty reduction expenditure. However, the impact of debt relief on the share of national income allocated to social sectors such as public education and health appears to be a rather blurred picture. In the case of the health sector, it has been found that debt relief, coupled with improved institutions, translates into a higher share of the country’s resources being allocated to public health. (Dessy and Vencatachellum, 2007)
Table 1: Trends in Health Per capita Expenditure for Sub Saharan HIPCS

<table>
<thead>
<tr>
<th>HEALTH PERCAPITA EXPENDITURE</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benin</td>
<td>17</td>
<td>16</td>
<td>15</td>
<td>16</td>
<td>16</td>
<td>20</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>15</td>
<td>15</td>
<td>12</td>
<td>12</td>
<td>15</td>
<td>19</td>
</tr>
<tr>
<td>Burundi</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Cameroon</td>
<td>29</td>
<td>31</td>
<td>29</td>
<td>29</td>
<td>32</td>
<td>37</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Gambia, The</td>
<td>23</td>
<td>24</td>
<td>25</td>
<td>23</td>
<td>20</td>
<td>21</td>
</tr>
<tr>
<td>Ghana</td>
<td>20</td>
<td>22</td>
<td>13</td>
<td>12</td>
<td>14</td>
<td>16</td>
</tr>
<tr>
<td>Guinea</td>
<td>21</td>
<td>20</td>
<td>18</td>
<td>17</td>
<td>19</td>
<td>22</td>
</tr>
<tr>
<td>Guinea-Bissau</td>
<td>10</td>
<td>8</td>
<td>6</td>
<td>6</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Chad</td>
<td>12</td>
<td>11</td>
<td>11</td>
<td>12</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>Madagascar</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Malawi</td>
<td>14</td>
<td>16</td>
<td>13</td>
<td>15</td>
<td>15</td>
<td>13</td>
</tr>
<tr>
<td>Mali</td>
<td>11</td>
<td>11</td>
<td>11</td>
<td>11</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>Mauritania</td>
<td>11</td>
<td>10</td>
<td>9</td>
<td>10</td>
<td>14</td>
<td>17</td>
</tr>
<tr>
<td>Mozambique</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>10</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>Niger</td>
<td>7</td>
<td>8</td>
<td>6</td>
<td>6</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Rwanda</td>
<td>13</td>
<td>11</td>
<td>10</td>
<td>8</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>Sierra Leone</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Tanzania</td>
<td>9</td>
<td>11</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Uganda</td>
<td>15</td>
<td>16</td>
<td>16</td>
<td>17</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>Zambia</td>
<td>21</td>
<td>17</td>
<td>17</td>
<td>19</td>
<td>20</td>
<td>21</td>
</tr>
<tr>
<td>Senegal</td>
<td>20</td>
<td>21</td>
<td>18</td>
<td>20</td>
<td>23</td>
<td>29</td>
</tr>
</tbody>
</table>

Averages for Sample per year: 13.45 13.55 12.32 12.45 13.64 15.32

Source: WDI 2006

### 3.2 Determinants of Government Health expenditure

The determinants of governments’ expenditure differ across countries and it is rather difficult to specify a model with weights for key economic sectors with regards to government expenditure especially one that can be applied to a panel of countries. This is because of variation between countries in terms of population, geographical characteristics, institutions and general differences in size and source of government revenue. Expenditure is not only an economic matter but also political. A most common theory used to try and explain this is the theory of public choice.

This theory explains why increases in public spending are not always proportional to the reduction in future debt service as governments in some cases might choose to leave non-
debts service public spending unchanged and instead use the resources freed by debt relief to finance reductions in taxes and/or reductions in the rate of public debt accumulation. (Chauvin, 2005)

However, there are general aspects that play a major role in determining how much is spent on social sector expenditure and the paper will touch on a few. These are mainly; economic growth, aid and the level of external debt.

3.2.1 Economic Growth

Growth has picked up over the past few years in most HIPC’s, helping reduce their debt service burden, measured relative to GDP. Real GDP growth in the 27 HIPC’s that reached the decision point before 2005 averaged 4.6 percent over the period 2000–5, up considerably from an average rate of 2.6 percent in the 1990s and just 1.8 percent in the 1980s. The pickup in growth has been broadly based across countries—real GDP growth exceeded 4 percent in 16 of 27 decision point HIPC’s in 2000–5. It is important to recognize, however, that the range of outcomes was broad—annual per capita real GDP growth declined in 9 of the 27 countries. Moreover, the average increase in real GDP growth in 27 decision-point HIPC’s over the sub-periods 1990–9 versus 2000–5 (1.9 percentage points) was the same as in “other low-income countries” (countries that currently are not eligible for the HIPC Initiative) and in middle-income countries. Furthermore, the increase in growth also reflects the fact that HIPC’s are required to establish a track record of macroeconomic stability in order to reach the decision point. Real GDP growth increased by only half of a percentage point during this period in the 11 countries that are eligible for the HIPC Initiative but had not yet reached the decision point by the end of 2004. (IBRDa, 2006)

Countries generally spend more on social services as a share of GDP as their income goes up and more resources become available, so the target minimum level of $35-40 per capita is simply too great for the poorest countries to afford on their own. Typically the poorest countries in Africa spend $5-10 per capita on public health systems, so even if those expenditures are doubled, those amounts will not be adequate to maintain minimal health systems, particularly in countries being ravaged by the HIV/AIDS pandemic. (Sachs, 2004)

3.2.2 ODA conditionality

ODA is an important aspect in providing resources for social sector expenditure. However aid to Africa is also political and comes with an array of conditionality tied to it. Conditionality is usually imposed due to imperfect information and the donor not being able to monitor the behaviour of the recipient governments. This relationship between the donor and recipient country that perpetuates conditionality also affects the expenditure choices of governments.

Even with full information about government preferences (i.e. no adverse selection), there is a role for conditionality. The donor (the principle), who cares only about the poor, relies on the government (the agent), who cares about both the poor and the non poor, to allocate social expenditures. If the government places a relatively high (but sub-unitary) value on the wellbeing of the poor, then the donor will force it to spend more on the social sectors than it (the government) wants, knowing that social sector spending will favor the poor.
However, if the government is relatively anti-poor, the donor will force it to spend less on the social sectors that it (the government) wants, as social sector spending favors the non-poor. In both cases, those countries that value the wellbeing of the poor more receive larger aid transfers than those countries that care less about the poor. (Jack, 2008)

Good governments are therefore rewarded with higher transfer of aid. Social sector spending in countries with bad governments is lower than that in countries with good governments. Government welfare clearly monotonically increases with time and the optimal conditional aid allocation policy is implementable only if the donor has full information about governments’ types, and can use it explicitly in making the allocation. Under conditions of asymmetric information both good and bad governments will claim the same amount of aid transfer. (Ibid)

### 3.2.3 External Debt

The most direct channel through which debt relief can affect development outcomes is through its effects on public spending. (Chauvin, 2005). For debt relief to achieve this outcome, it has very close links to both economic growth and aid, which then in turn also trickle down to increase public spending by providing the much need government revenue to finance these activities.

To develop the necessary public systems, these countries require external resources that can only be provided by donor countries. Therefore what is required is an assessment of what resources can be mobilized domestically to finance the public needs and what resources must be mobilized from external sources to finance the needs. (Sachs, 2004)

Then the question maybe, how to make the link from external debt to growth and the eventual link from growth to social expenditure. The theoretical literature suggests that external borrowing may foster growth up to some threshold level, beyond which adverse incentives begin to dominate. But empirical research on this issue has been inconclusive, on the whole. There is a high degree of uncertainty surrounding estimates of threshold levels and the effect of debt relief on growth. Recent empirical studies by Clements and others (2003) and Pattillo and others (2004) suggest that the amount of debt relief provided by the HIPC Initiative should raise countries’ annual per capita real GDP growth rates by about 1 percentage point. That estimate is broadly consistent with recent trends—annual per capita real GDP growth increased by about 2 percentage points on average for the HIPCs over the periods just before and just after reaching their respective decision points.

During the period of high indebtedness in the early 1990s investment in the HICs declined at an annual average rate of 5.5%. In the 22 debt-distressed sub-Saharan African nations, investment dropped by 2.6% per year between 1986 and 1995. This decline was instrumental in converting the debt crisis into a growth crisis for the HICs. The annual percentage change in the growth rate of real GDP per capita has plummeted from 3.1% in 1971-1980 to -1.6% in 1981-1990 in the HICs. Per capita investment fell drastically by about 40 percent between 1980 and 1987. Ultimately, what is crucial for expansion of industrial capacity and hence growth is an increase in net investments, which using simple arithmetic showed that it had declined proportionately much more than gross investment for the HICs.
This certainly diminished future growth prospects, but also curtailed the ability to generate resources for repayment. (Deshpande, 1995)

This reduction in resources was mainly through reduction in tax revenue as the government tax base is narrowed due to a fall in investment activity. Underinvestment occurs because the stock of debt acts as an implicit tax on new investment. A country’s government raises the resources it needs to service its debt by taxing firms and households. An increase in the government’s debt increases the private sector’s expected future tax burden. Because higher taxes divert the benefits of new investment from the private sector to the existing debt holders, they also reduce the private sector’s incentive to invest. In summary, the country is unable to service its debt to obtain new loans and to invest as much as it should. (Arslanalp and Henry, 2006) Therefore it follows that if the government revenue declines, even essential social expenditure such as government health expenditure will suffer in the process.

Debt relief and ODA have a complimentary relationship. Debt relief is wildly acclaimed for its effectiveness in providing additional funds enabling countries to increase poverty reduction expenditure. Creditors providing debt relief to poor countries have thus always been concerned about additionality.

In the context of the debate on debt relief, Robert Powell (2003) takes “Additionality” as the key theme of a paper and gives three most common definitions of additionality which he states as follows:

Definition 1: Debt relief is additional if it does not lead to lower levels of other non-debt relief aid flows (that is crowding out) for the donor concerned. This definition makes no claim, however, about whether debt relief brings additional new resources for the debtor or poor countries generally. It emphasizes the lack of any negative impact on non-debt relief related aid-disbursement decisions. This is the narrowest definition of additionality.

Definition 2: Debt Relief is additional if it leads to greater aggregate resources being made available to individual debtor receiving the debt relief. This definition makes no claim as to whether additional resources are available for poor countries as a group, but seeks to observe real additional resources going to the individual debtor countries as a result of debt relief activities. These resources can be used for additional spending that would not otherwise have taken place.

Definition 3: Debt relief is additional if it leads to greater aggregate resources being available to all poor countries as a group. This definition says nothing about whether additional resources are available for the debtor concerned, but seeks to observe additional resources going to poor countries generally as a result of debt relief operations. Although additional resources are made available it is more difficult to track them compared to with definition 2, since they may go to countries other than that those directly receiving the debt relief. (Powell, 2003)
Several predictions on the effect of debt relief have been made by experts on the subject. It is expected that debt relief would have intersectoral consequences in particular; the fiscal response of the social sector to debt relief would be positive and substantial. Furthermore, from a policy perspective, the response would be considerably higher than that attributable to external aid. One study which preceded the HIPC debt-relief initiatives beginning in the latter 1990s, suggested that the current results are unlikely to be influenced by the prescriptions of those initiatives. Instead, the countries’ own budget allocation preferences appear to be ex-ante consistent with the tendency of donors to favour the channelling of debt relief into social spending, a finding that should facilitate the attainment of the HIPC objectives. (Fosu, 2007)
Chapter 4: Literature Review and Theoretical Background

4.1 Literature review

Taking the time to go through a number of research papers and reports that monitor the progress of HIPC, one finds a gap in the research on government expenditure and how it responds to debt relief initiatives. Most of the emphasis of research is placed on studying debt relief and growth or Poverty Reduction and Strategy Papers (PRSPs) which is conditionality for a country to be accepted into the HIPC process rather than a deliberated and self driven process by recipient countries. This observation is also acknowledged in the paper by Lora and Olivera (2006), where it is mentioned that, “Considering the attention that HIPC debt relief attracts in the public debate, it is striking how little empirical research has been devoted to assessing whether countries burdened with heavier debt commitments do indeed spend less in the social sectors. A few studies have been concerned with the factors that may influence social expenditure levels, and more specifically, the possible impact of fiscal adjustment measures on social expenditure.”

Furthermore most of the papers written on the subject do not investigate or calculate the actual amount of debt relief that the HIPC and benefitted from but instead just quote the IMF figures. This unquestionable faith in the IMF statistics may be indeed misplaced.

4.1.1 Debt Relief and Social Sector Expenditure

There are several papers that have been written which try and analyse the problem of poverty in Africa and the role of debt relief efforts. A good number of them have common ground in that they do emphasise that countries need to invest in human capital development especially in areas such as education and health which have high externalities which help generate economic growth.

The emphasis then should be on creating models that would analyse how government’s expenditure responds to debt relief. Mahdavi (2004) was the first author who attempted to assess how the external debt burden may influence the composition of government spending by economic categories. His paper found that, as the stock of debt rises, the allocation of budget shifts in favor of the relative share of interest payments. Since this shift has to necessarily take place at the expense of the shares of some (or all) of the remaining spending categories, the “indirect crowding-out effect” of the debt is negative. The extent of this indirect effect on a particular category, however, is not easy to predict, for it depends on the economic and political priorities that fiscal authorities attach to it. Using a sample of 47 countries for 1972-2001, Mahdavi finds support for the adverse effect of the debt burden on capital expenditure, and on current expenditures other than wages and salaries. Since a large part of social expenditure takes place in the form of wages and salaries paid to public servants in the education and health public sectors, this finding may suggest that social expenditures are shielded from the adverse effects of the debt burden.

We also find that in paper by Chauvin and Kraay (2005), which assessed the effects of debt relief on several economic and social variables, including public social expenditures. Using their own database measuring the present value of debt relief for 62 low-income
countries between 1989 and 2003, they “find little evidence that debt relief has affected the level and composition of public spending in recipient countries.”

In the paper by Lora and Olivera (2006), the most recent on the subject, they address the effects of external debt of countries on social expenditures for a panel of countries. The findings are firstly that higher debt ratios do reduce social expenditures, as popular opinion holds. The largest and most robust part of this effect takes place directly from the stock of debt to social expenditures, which are more affected than other expenditures when debt increases. Increases in debt service payments (which may be the result of higher debt ratios) produce only a minor and non-significant effect on social expenditures. This clearly suggests that debt displaces social expenditures not so much because it raises the debt burden, but because it reduces the room (or the appetite) for further indebtedness. Worldwide, both education and health expenditures are hit when debt increases but, proportional to the size of the expenditures, the impact is larger on health. In accordance with popular wisdom, the results indicate that defaulting on debt obligations does help increase social expenditures.

Lora and Olivera (2006) also highlight findings from a paper which tested whether public debt crowds out social services and found out that, higher debt ratios reduce social expenditures. They also find that this effect comes from the stock but not from debt service payments. The argue that debt displaces social expenditure not so much that it raises the debt burden but it reduces room for further indebtedness, Interestingly, they find that loans from multilateral organisations do not ameliorate the adverse consequences of debt relief on social expenditure. Hence if these results hold for Africa, beneficiaries of debt relief should have increased their expenditure in the social sector.

There are also similar findings that a debt-servicing constraint would shift public expenditure away from the social sectors of health and education, and possibly from public investment. The delirious debt impact on the social sector is particularly strong and represents the largest fiscal response among all the variables in the set of equations that also include other explanatory variables measuring external aid, per capita GNP, agrarian concentration, constraint on the executive of the government, and inter-temporal factors. The partial elasticity of the expenditure share with respect to binding debt servicing for the social sector (education and health) is estimated at 1.5, with statistically indistinguishable estimates for education and health. This value translates to a reduction by nearly one-third of the share allocation to the sector in response to a one-standard deviation increase in the debt burden.(Fosu, 2007a)

However not all studies do out rightly agree with assumptions that debt relief translating into increased social sector expenditure. Some estimates indicate that debt relief provided to Africa for the periods 1989–93 and 1994–98 had a positive impact on the share of a country’s resources allocated either to public education or to public health expenditure, only for those whose institutions have improved. The hypothesis that debt relief by itself translates into a higher share of public resources being allocated to either public education or health is consistently rejected that. Institutional reforms when interacted with debt relief are the only determinant of the share of resources allocated to public health. The results are different in the case of public education. In this the results indicate that both official development assistance (ODA) and institutional reforms positively complement debt relief
resources. Consequently, complementary measures are required if beneficiaries of debt relief initiatives are to channel the freed up resources under HIPC and MDRI to the social sector and thus achieve the Millennium Development Goals (MDGs). (Dessy and Vencatachellum, 2007)

In a paper by (Dessy and Vencatachellum, 2007), it was found that debt relief obtained causes a negative effect on the explanatory variable which was social sector expenditure. This result is surprising because one of the objectives of debt relief programs is to increase social service expenditure. However, it may provide some evidence in favor of moral hazard behavior. Prior to obtaining debt relief, countries may have strived to show, as required by donors, that they are keen on allocating resources to social services. However, these governments may not have been committed to these reforms in the first place. In this case, they would default on their commitments once debt relief is granted, a classical moral hazard issue. This negative impact of debt relief on the share of resources allocated to health is in line with Cooper and Sachs (1985). These authors argue that if a government has a high discount factor, it will rather consume than invest once debt relief is obtained.

These results about the importance of institutions for debt relief to translate into more social service expenditure are consistent with Arslanalp and Henry (2004) who argue that the main problem faced by countries which benefit from debt relief is their lack of good institutions. It follows that we can assert that conditioning debt relief to institutional reforms is required for countries to allocate proportionately more resources to the public health sector.

The paper by Cassimon and Campenhout (2007) make an interesting observation that for debt relief, the first year following the shock in debt relief leads to a reduction in government investment but from the next year onward, there is a positive effect, and the effects are fairly large. The effect of debt relief is delayed, hinting at the existence of a j-curve effect. It also confirms what is witnessed in a number of HIPC country cases, that most of the HIPC debt savings, especially early in the process, were spent on recurrent items, and less so on investment outlays.

Further more, Cassimon and Campenhout (2007) on aid effectiveness, debt relief and public responses, findings show that, for their panel of HIPCs, of the three different aid variables namely external borrowing, external grants and debt relief, only debt relief significantly affects domestic fiscal revenue (i.e., tax and non-tax revenue) and that this effect only appears after two years. An increase in debt relief appears to increase government revenue collection. The effect proves quite robust, as it shows up in both the fixed-effects and the system GMM results.

4.2 Theoretical Framework

Papers that have tested models that relate social sector expenditure and external debt most often look at the effects as well as transmission mechanisms of external debt effects. This paper refers to the effects of external debt expressed in two models one which relates to government expenditure and the other that relates to the debt over hang hypothesis.
4.2.1 Government Expenditure Model

According to the public choice theory, how Government’s allocate resources to provide goods and services to its citizens is a collective decision making process. The shaping of this collective decision making process differs across countries. The theory also puts emphasis on political participation of members of a society and states that social choices are decided via voter referendum. Charles Tiebot hypothesised that, areas with higher political jurisdiction and where people voted according to performance of candidates and not merely on subjective basis resulted in a larger provision of public goods and services provision by the government. (Pennslyvania State University, 2003) As much as the theory of public choice helps to understand the political considerations in economic decisions such as the provision of public goods, it is difficult to put this theory into practice. This is why it is difficult to create a model that describes government expenditure patterns.

Simply put, in the public choice literature, government officials would seek to maximize the probability of being maintained in office, and would make choices consistent with the preferences of the median voter. (Fosu, 2007)

Fosu (2007:2-3) in his paper presents a theoretical model in assessing the debt-expenditures relationship to explain governments expenditure. The government is assumed to choose the level of expenditures for each functional sector \( j \), \( G_j \), in order to maximize a social welfare function, \( U \). The underlying assumption, then, is that public spending provides consumable services to the citizenry and thus utility to society. In the analysis, a more generic social welfare function is presumed, with the government maximizing, for \( J \) sectors:

\[
U (G_1, G_2, \ldots, G_J), \quad (1)
\]

subject to the budget constraint

\[
\sum G_j = R, \quad (2)
\]

where \( R \) denotes government revenue, which may be expressed as

\[
R = T + N + A - D, \quad (3)
\]

where \( T \) is tax revenue, \( N \) is domestic non-tax revenue, \( A \) is external aid, and \( D \) is debt service. With \( U \) the marginal ‘utility’ (marginal change in the social welfare function) of expenditure on sector \( j \), the first-order conditions are:

\[
U_1 = U_2 = \ldots = U_J \quad (4)
\]

\[
\sum U_j = R = T + N + A - D \quad (5)
\]

the demand functions:
\[ G_j = G_j(R^X) \]  
(6)

Where \( R^X \) is the exogenous component of \( R \).

Explored is the response of expenditure in sector \( j \) to changes in revenue, \( R \), and particularly the change in \( G_j \) following a marginal change in debt service, \( D \). Assuming that a given sector commodity \( j \) is a normal good then \( G' R > 0 \), where \( G' R \) is the partial effect of \( R^X \) on \( G_j \). Furthermore, from equation (5), the partial effect of \( D \) on \( R \), \( RD < 0 \). Using the chain rule, then, the partial effect of debt on the \( j \) sector expenditure, \( G_j D < 0 \) (that is, \( G_j D = G_j'R_0 R^D \)). Hence, for all sectors considered as ‘normal’ it would be expected that an increase in debt servicing, via its reduction of revenue, would reduce their respective expenditures. (Fosu, 2007a)

For a given path of future tax and non-tax revenues such as foreign aid, debt relief permits an expansion in public spending by easing the government’s inter-temporal budget constraint. To the extent that public spending promotes development, this creates a channel from debt relief to development outcomes. (Chauvin, 2005) This logic is expressed in the IMF motivation for HIPC, which states that for debt reduction to have a tangible impact on poverty, the additional resources need to be targeted at the poor. It is expected that the countries should increase markedly their expenditures on health, education and other social services and, on average; such spending is expected to be about six times the amount of pre-HIPC debt-service payments. (IMFb, 2008)

Since government action can determine revenue levels, \( R \) is generally endogenous. In particular, and more importantly, debt servicing is likely to be endogenous, especially with respect to the political process. On the one hand, should servicing reflect past borrowing decisions, and borrowers honour previously established contracts, then \( D \) would be exogenous. On the other hand, if governments are able to decide how much of the debt obligations to honour, then \( D \) becomes endogenous. The degree of endogeneity would depend on the size of the penalty governing default, relative to the shadow price of debt servicing. Where such a penalty is sufficiently high, this potential problem is minimized. However, in reality, governments have some latitude in rescheduling debts in order to reduce their current debt obligations. (Fosu, 2007b)

External debt service (in contrast to the total debt stock) can also potentially affect growth by crowding out private investment or altering the composition of public spending. Other things being equal, higher debt service can raise the government’s interest bill and the budget deficit, reducing public savings; this, in turn, may either raise interest rates or crowd out credit available for private investment. Higher debt service payments can also squeeze the amount of resources available for infrastructure and human capital formation, with further negative effects on growth. (Bhattacharya and Clements, 2004)

There is also a further emphasis on the importance of public choice, the extent of civil liberties and political rights of members of the public, or simply that the level of democratization, may influence public spending priorities. It is generally agreed that certain
Civil liberties increase the degree of public participation in and scrutiny of resource allocation process within the public sector. But, the extent to which various socioeconomic groups are able to translate their perceived interests and priorities into actual changes in the budget allocation crucially depends on their relative position in the political power structure. A high level of political institutionalization facilitated by political rights makes the political power structure more representative. Civil liberties when combined with political rights can also more effectively limit the influence of corruption and rent-seeking behavior on budget allocation and raise the political cost of ignoring public interests to fiscal authorities. (Mahdavi, 2004)

Therefore, when it comes to external debt effect on social sector spending by governments, it is not only availability of revenue that dictates allocation to various sectors but as well as power that different interest groups hold with regards to these spending decisions made by Governments.

From the previous paragraphs, it is evident that debt relief and aid resources are fungible and as such donors are concerned that such debt relief be verifiably used to benefit the poor in the recipient country. In effect, donors ask that HIPC governments, through the development of Poverty Reduction Strategies Papers (PRSPs), identify programs that would benefit the poor and to report that HIPC resources were in fact used to finance such programs, as they felt this would ensure greatest impact on the poor. (Canagarajah, 2004)

### 4.2.2 Debt Overhang Hypothesis

One of the oldest and most referred to theories when analyzing the effects of external debt on countries’ economies is the Debt Overhang Hypothesis. According to the “debt overhang” hypothesis, excessive debt can seriously impede countries’ growth potential. Much of the theoretical literature has focused on the adverse incentive effects of excessive debt. Excessive debt raises concerns that the government may resort to inflationary finance or large tax increases to meet its debt-service obligations or that it may default on its obligations at some point in the future. These concerns deter private investment, which curtails growth. Moreover, in countries that are unable to meet their debt-service obligations, governments can be discouraged from carrying out structural reforms if most of the benefits were used to augment debt service payments. (IBRDa, 2006)

Therefore, debt overhang occurs when creditors anticipate that the debt will not be repaid in full. This means that expected debt payments will be lower than the value of the debt, i.e. the anticipated value is lower than the nominal present value. While initially the expected value of payments equals the nominal value of the debt (between O and A in Figure 2), if the debt further increases, the expected payments will be less than the nominal value (between A and B). If the debt grows even further, the expected value of repayments may even decline. The country then finds itself in the downward section of the Debt Laffer curve (to the right of B in Figure 2). In such a situation, debt forgiveness is in the interests of both debtor and creditor. After forgiveness the debtor will be better able to pay remaining debt service on debts that are still outstanding, and thus the actual value of remaining debt will increase. (Policy and Operations Evaluation Department, 2003)
It is generally agreed that a large debt stock can impair a country’s development. Therefore, the theory of debt overhang hypothesis is also often used in the arguments for debt relief. This is because it creates a situation where outstanding debt is so large that investment will be inefficiently low without debt or debt service reduction. Consolidating what has been already mentioned, debt overhang can be said to have two effects namely the Liquidity and the Incentive effects. The former refers to the condition in which, given the burden of large external debt with extreme scarce liquidity, both capital formation and consumption reach a minimum level after years of austerity and low income growth. The latter refers to the depressed level of both public and private investment for future growth, as a larger share of future income stream is expected to be directed for resource transfer abroad. Thus, it is admitted that the two effects combined could push highly indebted countries into a downward spiral, which could further diminish creditor’s willingness/commitment and capacity for debt payment. This is not the best outcome for creditors either, since both creditors and debtors lose. (Addison et al., 2004) Creditors are also less willing to provide future loans even though profitable new projects may be available. The debtor country will also have no incentive to invest because proceeds from new investments will go to old creditors.

![Figure 1: Debt Overhang Laffer curve](source: IOB (2003))

Explaining further about the incentive effect, a heavy debt burden in other words acts like marginal tax on economic adjustment. If the economy successfully imposes austerity, much of the benefit accrues to foreign creditors. The normal problems of carrying out a reform programme are generally exacerbated by the overhang of foreign debt. Not only is the economic adjustment process made more difficult, but political difficulties in reform are deepened as well. To the extent that the reforms serve mainly to raise the amount of foreign debt servicing, and so act as a tax on the domestic economy, the will find little political support domestically. Adding debt relief as part of the package of reform and adjustment could greatly enhance the likelihood that the economic programme will in fact be carried out and sustained. (World Bank, 2003)
As mentioned in the previous chapter unsustainable debt levels lead to a drop in investment or creates a disincentive to invest. This is because investors are weary that governments may impose high taxes on investors in order for them to generate revenue to make their debt service payments. When investments reduce in a country this in turn leads to a reduction in tax revenue and reduced resources for government expenditure. Therefore debt relief does not merely release resources through reduced debt service payments but it also creates an atmosphere that will attract investment, create more revenue sources for government and finally leads to increased expenditure by government.
Chapter 5: Debt Relief and Government Social Sector Expenditure

5.1 Empirical Strategy and Data Issues

5.1.1 Empirical Strategy

This paper aims to study governments’ health expenditure in response to HIPC debt relief efforts. The study collects panel data for 22 HIPCs in Sub-Saharan Africa. The analysis is conducted to uncover trends in government expenditure and debt relief for the panel of Sub-Saharan African countries as well as highlighting exceptions in some of the cases. Panel data was chosen over simply just a time series analysis of one country to allow for variation and also helps overcome the general problem of missing data in some years for most time series data of African countries.

The main dependent variable is Government Health Expenditure which is taken as a percentage of General Government Expenditure as well as US dollar per capita terms. The paper aims first at analysing the amount of debt relief that the Sub-Saharan HIPCs have benefited from over the period of analysis. This is mainly to verify the figures that are most often quoted in IMF reports and which also gives an indication of calculation methods of debt relief. This relief is assessed in terms of debt stock as well as debt service relief. This is also important as it helps to establish the amount of money made available to countries through the relief of debt service payments. It is also to establish how much debt stock relief has been granted to them as well as how; if at all this has changed their debt stock to export ratios which is a key measure of debt sustainability or if it has lead to a reduction in debt service payments. Lastly the paper investigates the Government health expenditure pattern over time to see what relationship it has is any to the debt service payments and the amount of external debt stock over the same period. This will help analyse the link between debt relief and poverty reduction using government health expenditure as an indicator of social sector expenditure. The paper also measures the response to these expenditures to key variables such as ODA.

The analysis is not without prospective problems, the paper does not make a comparison of country’s expenditure across different sector so as to see if their any tradeoffs and whether countries do make the decision to spend money made available through debt relief on other sectors other than the social sectors. However the assumption is made that the PRSP spending conditionality is binding for each country and they are reluctant to deviate from this as it will negatively affect their completion point date within the programme.

The research paper employs the use of exploratory data analysis to achieve the objectives of this paper.
5.1.2 Data Issues

The sample consists of 22 Sub-Saharan countries\(^3\) that have all reached decision point status and are receiving relief either in an interim basis or at completion point, irrevocable HIPC relief. In order to make an exhaustive analysis and ensure that trends are not cyclical the sample period covers thirteen years from 1992 to 2004. The period covers the time before the HIPC initiative which started in 1996 and during implementation of enhanced HIPC Initiative which began in 1999, and ends in 2004 when a majority of the countries reached completion point. There were efforts to extend the analysis to 2006 to have a better insight into the post completion point, however this proved to difficult, due to the unavailability of comparable data for that period.

The majority of the data is expressed in percentages of Government Gross National Expenditure or GDP rather than using absolute amounts so as to control for the size of the economies. In instances where absolute or nominal figures are used, they are expressed as the aggregate total for the whole of Sub-Saharan Africa. The source of information is indicated next to each that is variable described.

The following variables are of importance in the data set and are used for analysis:
- GDP growth: GDP Growth rate (Source: GDF 2006)
- Exports: Country exports in millions of US$ (Source: GDF 2006)
- DStock: External Debt stocks end of year US$ mill (Source: WDI 2006)
- DService: Debt service paid in millions of US Dollars (Source: GDF 2006)
- DServiceunpaid: Total amount of end of year Debt Service due unpaid (ADI 2005)
- Debt2Exports: Nominal Debt Stock debt as percentage of Exports (Source: GDF 2006)
- DService2Govtexp: Debt Service as a percentage of Government Expenditure (Source: derived b author from data collected from GDF 2006)
- Hexp2GDP: Health expenditure as a Percentage of current GDP (Source: WHO 2008)
- Hexppercapita: Health expenditure per capita in US$(Source: WHO 2008)
- aidpercapita: Aid per capita in US$(Source: GDF 2006)
- ODA: Official Development Assistance and Official Aid (Source: WDI 2006)

5.2 Debt Relief

As at end 2007, it was reported that, the overall cost of HIPC Initiative debt relief for the 41 HIPCs is estimated at US$67.7 billion in end-2006 NPV terms. Nearly one half of this total

\(^3\) Benin, Burkina Faso, Burundi, Cameroon, Chad, Ethiopia, the Gambia, Ghana, Guinea, Guinea Bissau, Madagascar, Malawi, Mali, Mauritania, Mozambique, Niger, Rwanda, Senegal, Sierra Leone, Tanzania, Uganda and Zambia. The sample omits the HIPCs that were in conflict due to unavailability of data over the period of study.
cost (US$32.8 billion) represents irrevocable debt relief to the 22 post completion-point countries. The cost of HIPC Initiative debt relief committed to the nine interim countries amounts to US$12.1 billion. The estimated cost of HIPC Initiative debt. (IDA and IMF, 2007)

The first question this paper tackles is how much of this relief did the Sub-Saharan Countries benefit from and to what extent it fulfilled the goal of making countries debt levels more sustainable. Table 1 gives and indication of the amount of debt at decision and completion point as well as the respect Present Value Debt to Export Ratio.

**Table 2:**

SSA Countries Debt to Export Ratio and Total Debt Relief actual and projected

<table>
<thead>
<tr>
<th></th>
<th>Decision Point</th>
<th>Completion Point</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Date</td>
<td>Total Debt</td>
</tr>
<tr>
<td>Benin</td>
<td>Jul-2000</td>
<td>940</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>Jul-2000</td>
<td>744</td>
</tr>
<tr>
<td>Burundi</td>
<td>Aug-2006</td>
<td>902</td>
</tr>
<tr>
<td>Cameroon</td>
<td>Oct-2000</td>
<td>7,800</td>
</tr>
<tr>
<td>Chad</td>
<td>May-2006</td>
<td>566</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>Nov-2001</td>
<td>5,600</td>
</tr>
<tr>
<td>Ghana</td>
<td>Feb-2002</td>
<td>5,000</td>
</tr>
<tr>
<td>Guinea</td>
<td>Dec-2000</td>
<td>2,400</td>
</tr>
<tr>
<td>Guinea-Bissau</td>
<td>Dec-2000</td>
<td>944</td>
</tr>
<tr>
<td>Malawi</td>
<td>Dec-2000</td>
<td>1,460</td>
</tr>
<tr>
<td>Mali</td>
<td>Sep-2000</td>
<td>987</td>
</tr>
<tr>
<td>Mauritania</td>
<td>Feb-2000</td>
<td>1,400</td>
</tr>
<tr>
<td>Mozambique</td>
<td>Apr-2000</td>
<td>3,400</td>
</tr>
<tr>
<td>Rwanda</td>
<td>Dec-2000</td>
<td>1,300</td>
</tr>
<tr>
<td>Senegal</td>
<td>Jun-2000</td>
<td>1,400</td>
</tr>
<tr>
<td>Sierra Leone</td>
<td>Mar-2000</td>
<td>1,282</td>
</tr>
<tr>
<td>Tanzania</td>
<td>Apr-2000</td>
<td>4,000</td>
</tr>
<tr>
<td>Uganda</td>
<td>Feb-2000</td>
<td>1,780</td>
</tr>
<tr>
<td>Zambia</td>
<td>Dec-2000</td>
<td>7,000</td>
</tr>
</tbody>
</table>

**TOTAL RELIEF** 19,608

* These are projected debt relief figures as the countries have not yet reached completion point

** Uganda had two completion points. One under the original HIPC and the second one under the Enhanced HIPC.

Source: IMF Website and Decision and Completion Point documents

Source: GDF 2006(IBRDa, 2006) Ratios used are nominal debt to export unlike the conventional PV debt to export ratio
An analysis of the data collected indicates that the 22 Sub Saharan countries in the sample will benefit from approximately US $ 20 billion worth of debt relief from the HIPC Initiative. The figure is only an estimate as some of the countries have only received interim relief and not yet reached completion point.

As mentioned earlier in the paper the main motivation behind the inception of the initiative was to make countries reach a more sustainable levels of debt at which they would be able to make interest and principle payments on the their loans. Therefore amount of debt relief is decided after each country undertakes a debt sustainability analysis (DSA) which helps estimate how much debt relief a country need in order to enable then reach the target Present Value Debt to Exports ratio of 150. The countries in the sample are expected to benefit from debt relief which is on average 44 percent of their debt stock at the HIPC decision point.4 (Annex 2)

Interestingly enough though, it can be noted that 11 of these countries in the sample, despite having benefited from significant levels of debt relief (as shown in Table 2), they still had PV debt to export ratios above the 150 target. Figure 2 also gives an indication of the decline but still puts the average Nominal debt to Exports ratios at slightly above 400 which is still not a pleasant situation. This means that even though these countries received this debt relief which it still falls short of being able to reduce the debt ratios to sustainable levels. This may have been noticed and which is why the multilateral debt relief initiative was adopted. Unfortunately that initiative is beyond the scope of this paper due to the unavailability of comparable data.

Figure 2: Debt Stock and Debt to Export Ratios SSA

4 This includes the countries that have just received interim debt relief and not yet reached HIPC completion point
These observations bring in the question as to whether the initiative was successful in tackling the issue of debt sustainability. Using the data available on 13 out of the 18 countries shows that debt ratios have deteriorated in 11 of them since completion point. Out of these 11 countries, 8 have seen a rise in their debt ratios which breaches the HIPC thresholds, while 6 of these countries are not expected to be able to maintain their HIPC threshold ratios throughout the nine year period following completion point. Moreover, debt ratios have deteriorated more in those countries which reached their completion point earlier, with Uganda, the first country to qualify for HIPC, seeing the worst deterioration in its ratio. Uganda had an NPV debt to exports ratio of 229 percent as at end June 2005, fully 79 percentage points above the HIPC threshold of 150 percent, and 131 percentage points above the NPV debt to exports ratio of 98 percent projected for June 2005 at the time of Uganda’s HIPC Completion Point in 2000. (Kitabire and Kabanda, 2006)

Research has also shown that Uganda’s experience underscores HIPC’s limitations; Uganda successfully reached the completion point under the original HIPC criteria and again under the modified criteria when the IMF expanded its definition of unsustainable debts. Although HIPC relief is designed to reduce a nation's debt burden below the 150% debt-to-export ratio, Uganda's ratio has ballooned to over 300% within three years of its HIPC completion point 50% higher than its pre-HIPC ratio. (Carrasco et al., 2007)

5.3 Debt Service Payments

The debt literature outlines that the high external indebtedness of countries has negative effects mainly through a liquidity constraint as countries are constrained between debt service payments and social sector investments. HIPC is a way of empowering countries to make these investments without defaulting on debt payments.

The PRSPs prepared by countries have the underlying condition that countries that are benefiting from debt relief will channel these savings towards poverty reduction expenditure. Firstly the assumption is made that countries were actually making these debt payments and secondly that these debt payments were significant enough so that if these savings are channelled towards poverty reduction it will make a significant difference in increasing poverty reducing expenditure.

An analysis of the data collected and used to generate table 3 shows that only nine out of the 22 countries in the sample actually achieved debt service levels in 2004 that were lower than those that the had in the pre HIPC period in 1992. However what is interesting to note is that for all the countries in the sample the amount of debt service that was paid actually increased in the period after decision point but before completion point. (See Annex3) What could be the plausible explanation for this phenomenon is that, as countries apply to be considered for HIPC or for them to reach decision point they undertook some reforms and had to fulfil certain conditionalities set out by their creditors, one which is that they make considerable debt service payments towards some of their outstanding loans.

This is arguably in contrast to the aim of debt relief which was to enable countries have additional resources for poverty reduction through reducing their debt service obligations.
Countries were in this case put under increasing pressure especially on their financial resources so as to make these payments in order to benefit from debt relief. This action gives the impression that the creditors were almost making one attempt to collect debt service payments due despite the countries inability to pay.

In table 3, we see that even more surprising is that for some of the countries such as Benin, Burkina Faso, Burundi, Cameroon, Chad, Guinea, Guinea Bissau and Mali, debt service payments in 2004 actually doubled those of 1992.

Table 3: Actual Debt Service paid through HIPC Cycle Post HIPC5

| Debt Service paid (in millions of US Dollars and as percentage of Gross Government Expenditure) |
|----------------------------------|------------------|------------------|------------------|------------------|
|                                  | 1992             | 1999             | 2004             |
| Actual amount (mil US$)         | % Govt Expend    | Actual amount (mil US$) | % Govt Expend    | Actual amount (mil US$) | % Govt Expend |
| Benin                           | 28               | 1.5              | 70               | 2.6              | 64             | 1.4           |
| Burkina Faso                    | 33               | 1.3              | 64               | 2.0              | 59             | -- *          |
| Burundi                         | 40               | 3.0              | 29               | 3.7              | 88             | -- *          |
| Cameroon                        | 392              | 3.5              | 546              | 5.9              | 645            | 4.5           |
| Chad                            | 11               | 0.5              | 31               | 1.8              | 46             | 1.3           |
| Ethiopia                        | 109              | 1.0              | 155              | 2.1              | 97             | 1.0           |
| Gambia, The                     | 30               | 7.6              | 21               | 4.6              | 34             | 7.4           |
| Ghana                           | 307              | 4.3              | 425              | 4.7              | 240            | 2.3           |
| Guinea                          | 87               | 2.8              | 128              | 3.5              | 172            | 4.4           |
| Guinea-Bissau                   | 7                | 2.0              | 159              | 4.0              | 81             | 1.6           |
| Madagascar                      | 95               | 2.9              | 159              | 4.0              | 81             | 1.6           |
| Malawi                          | 108              | 5.0              | 73               | 3.6              | 60             | 2.6           |
| Mali                            | 59               | 1.8              | 106              | 3.7              | 103            | 2.0           |
| Mozambique                      | 83               | 3.2              | 108              | 2.2              | 83             | 1.3           |
| Niger                           | 53               | 2.2              | 31               | 1.5              | 51             | 1.5           |
| Rwanda                          | 21               | 0.9              | 31               | 1.4              | 24             | 1.1           |
| Senegal                         | 210              | 3.3              | 240              | 4.7              | 335            | 3.8           |
| Sierra Leone                    | 35               | 5.1              | 27               | 3.5              | 27             | 2.1           |
| Uganda                          | 113              | 3.4              | 131              | 1.9              | 103            | 1.3           |
| Zambia                          | 350              | 9.8              | 149              | 4.0              | 424            | 7.3           |
| Tanzania                        | 235              | 4.0              | 227              | 2.3              | 119            | 1.0           |
| Mauritania                      | 87               | 6.4              | 105              | 8.4              | 57             | 2.7           |

* Data missing

Source: World Development Indicators 2006

5 The years 1992, 1999 and 2004 try to capture pre-HIPC, during HIPC (Enhanced HIPC) and completion point respectively for most of the countries in the sample.
A further analysis is done taking into consideration the increase in government expenditures over time in order to make not just comparisons in nominal terms but as well as relative comparisons over time. Taking a look at the debt service paid as percentage of government expenditure in table 3, it can be seen that the trend is most similar to that of actually debt service payments in US dollars. Generally, debt service as percentage of government expenditure tends to rise during the HIPC period and specifically, in 11 countries it drops as the near completion point, while it increases in 6 countries and remains relatively unchanged in 3 countries as compared to the pre HIPC levels. This is where we can say that in terms of debt service relief for countries such as Zambia which paid 350 million US dollars in debt service just before qualifying for HIPC and then were paying 450 million in 2004 just before HIPC completion point, it could justifiably be said that HIPC failed to facilitate the release of resources. On the other hand a country like Tanzania who paid 116 million US dollars less debt service in 2004 than they did in 1992, HIPC is most definitely a success for them.

Figure 3: Comparison of Debt Service Paid and Debt Service unpaid

Despite these findings on the debt service payments during the HIPC period a further analysis of the data set reveals that there is a substantial amount of debt service that went unpaid during the period 1992–2004. Figure 4, shows that unpaid debt service rose with

---

6 Ghana, Madagascar, Malawi, Mali, Mozambique, Niger, Uganda, Zambia, Sierra Leone, Tanzania and Mauritania
7 Cameroon, Chad, Guinea, Guinea Bissau, Senegal, Rwanda
8 Benin, Ethiopia and The Gambia
each year with a peak in 1999. The significant peaks in debt service could be attributed to the HIPC conditionality that countries had to make certain outstanding debt service payments before they could successfully be qualify for HIPC and reach their decision point. It could therefore be argued that since the amounts of debt that went unpaid were so large, HIPC debt forgiveness was simply forgiving countries of debt that they were never going to be able to repay in full.

Table 4: Debt Service Defaults and Actual payments

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Benin</td>
<td>300</td>
<td>690</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>151</td>
<td>619</td>
</tr>
<tr>
<td>Burundi</td>
<td>79</td>
<td>460</td>
</tr>
<tr>
<td>Cameroon</td>
<td>8,309</td>
<td>6,080</td>
</tr>
<tr>
<td>Chad</td>
<td>163</td>
<td>361</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>2,855</td>
<td>1,785</td>
</tr>
<tr>
<td>Gambia The</td>
<td>0*</td>
<td>324</td>
</tr>
<tr>
<td>Ghana</td>
<td>764</td>
<td>4,724</td>
</tr>
<tr>
<td>Guinea</td>
<td>1,391</td>
<td>1,690</td>
</tr>
<tr>
<td>Guinea-Bissau</td>
<td>528</td>
<td>190</td>
</tr>
<tr>
<td>Madagascar</td>
<td>3,120</td>
<td>1,271</td>
</tr>
<tr>
<td>Malawi</td>
<td>106</td>
<td>964</td>
</tr>
<tr>
<td>Mali</td>
<td>694</td>
<td>1,137</td>
</tr>
<tr>
<td>Mauritania</td>
<td>825</td>
<td>1,206</td>
</tr>
<tr>
<td>Mozambique</td>
<td>8,031</td>
<td>1,385</td>
</tr>
<tr>
<td>Niger</td>
<td>974</td>
<td>643</td>
</tr>
<tr>
<td>Rwanda</td>
<td>107</td>
<td>275</td>
</tr>
<tr>
<td>Senegal</td>
<td>318</td>
<td>3,195</td>
</tr>
<tr>
<td>Sierra Leone</td>
<td>1,012</td>
<td>662</td>
</tr>
<tr>
<td>Tanzania</td>
<td>2,404</td>
<td>2,406</td>
</tr>
<tr>
<td>Uganda</td>
<td>1,352</td>
<td>1,526</td>
</tr>
<tr>
<td>Zambia</td>
<td>4,013</td>
<td>6,130</td>
</tr>
<tr>
<td>TOTAL</td>
<td>37,497</td>
<td>37,721</td>
</tr>
</tbody>
</table>

Source: African Development Indicators Database 2004
World Development Indicators 2006
* Data missing for The Gambia

---

9 This hike was mainly caused by a substantial amount of debt service unpaid up Mozambique. This was attributed mainly due to the fact that Mozambique had reached the HIPC decision point in 1998 and completion point in 1999 and did not pay a large amount of debt service because they qualified some for substantial debt relief.
The debt literature expresses this by saying that, from a resource viewpoint, operations on debt relief are supposed to be very much equivalent in nature to new (aid) money inflow, when the new aid is delivered in grant form through some budget support modality. The general principle that debt relief mobilizes resources for other uses is only valid to the extent that debt would have been serviced. Otherwise the fiscal space effect of debt reduction is virtual and refers mainly to an accounting clean-up of historical and future arrears accumulation. Real fiscal space equals the share of debt service actually transferred in the absence of debt relief. (Cassimon and Campenhout, 2007)

This is the case that we see in the data of the 22 Sub-Saharan African. Tabulating the actual debt service payments and the debt service payments unpaid, as shown in table 4, shows that countries were defaulting on substantial debt service payments. This resulted in an accumulation of arrears due to these defaults. In this case, the amount of unpaid debt service was higher than the actual debt service payment. The countries paid US$ 37,497 million over the period of study while US$ 37,721 million went unpaid. This means that debt relief calculated on expected debt service payments actually over estimates the amount of money that is actually available for poverty reduction expenditures from debt service payments.

Debt relief from the multilateral institutions is calculated on expected debt service payments. Taking into consideration the calculations and preceding analysis, realistically in terms of actual freed resources, the amount of debt service relief that was actually granted to these HIPC countries was over stated but the multilateral institutions.

5.4 Debt Relief and Aid Additionality

Another essential element closely related to debt relief as well as social sector expenditure is ODA. It was assumed at the inception of HIPC that in order to ensure effective poverty reduction, debt relief will act like additional resources to ODA in financing poverty reduction expenditures. The OECD countries pledged that they would not compromise debt relief by cutting down on ODA to poor countries. Doing so would compromise the amount of additional funds that would actually be released for poverty reduction expenditure.

Figure 4 illustrates how ODA declined drastically from the inception of HIPC in 1996 by 20 percent and continued to decline until 1999 where it began to increase gradually until reaching almost levels similar to pre-HIPC in 2004. The HIPC implementation was mainly between the years 1996 to 2004 which are also the years that showed a decline in ODA. This means that the HIPC debt relief was not additional in poverty reduction as it was undermined by reduced ODA. In the majority of cases it appears that debt relief obtained under the HIPC initiative was far from compensating for the reduction in ODA in same years.

Although the amount of debt relief provided under the HIPC Initiative has been small relative to the total amount of foreign aid received by all developing countries, it is substantial for many of the individual countries that qualify. In 2004, HIPC debt-service reductions provided to the 27 countries that reached the completion point prior to 2005 totaled $2.3 billion, an amount equal to just 3 percent of total ODA ($79.6 billion), but 12 percent of ODA received by the 27 countries ($18.6 billion). Moreover, HIPC debt-service
reductions exceeded 20 percent of ODA received by 8 of the 27 countries. Additional debt service reductions provided by the MDRI are expected to keep pace with the scaling up of aid to the HIPCs. In 2007, debt-service reductions provided by the HIPC Initiative and MDRI combined are projected to remain at about 12 percent of the amount of ODA received by countries that reach the completion point. (IBRDa, 2006)

Figure 4: Debt Stock Vs ODA

![Graph showing Debt Stock Vs ODA](image)

Source: World Development Indicators (IBRDb, 2006)

One problem that arises is that donors do not make clear the breakdown of what constitutes ODA provided to the HIPCs. Some donors may also include debt relief as a component of ODA reducing even further the amount of aid resources available to poor countries. At the UN Conference on Financing for Development in Monterrey in 2002 (IBRDa, 2006), donors pledged that debt relief would not displace other components of ODA. It is difficult to assess whether donors have honored their pledge in the absence of an explicit counterfactual demonstration of the amount of ODA that would have been provided in the absence of debt relief. The share of debt relief in ODA has risen from an average of 3.7 percent in the 1990s to 6.6 percent in 2002–4, followed by a sharp increase to 22 percent in 2005. ODA, net of debt relief, has risen relative to GNI in donor countries, but at a more modest pace than overall ODA. Thus, some, but not all, of the scaling-up in aid can be attributed to debt relief.

### 5.4 Health Sector Expenditure

The essence of the enhanced HIPC debt relief initiative was to link debt relief to poverty reduction. It was to enable countries increased public sector investments and social sector expenditure so as to improve poor citizens well being through the money saved by reduced debt service payments. The countries that benefited from HIPC were not only considered to have large external debt stock but that the debt service payments were a considerable amount of their debt service payments.
From the data collected from the 22 HIPC in this study, it shows that debt service payments in the 22 HIPCS averaged about 3 to 4 percent of government expenditure, as shown in figure 6. They seem to only have fallen a percentage from the level they were in 1996 to what that in 2004.

**Figure 5: Debt Service as Percentage of Total Government Expenditure (Averages for SSA)**

Taking a look at the trend of expenditure in terms of health and debt service in figure 6, it is observed that a drop in 1.35 percent external debt service payments as a percentage of government expenditure between the period 1998 and 2002 is accompanied by 0.62 percent rise in governments’ general health expenditure. At the end of 2004 it is actually observed that government health expenditure increased by only by 0.78% from its 1999 level.

**Figure 6: Debt Service and Public Health Expenditure**
Taking the analysis even further, debt service as percentage of national expenditure is plotted against government public health expenditure as a percentage of national expenditure on a scatter plot to establish the nature of their relationship in Figure 7. It is observed that the two variables have an inverse relationship. As debt service payments increased government expenditure on health reduced along with it. This explanation can also be complimented by figure 6 which shows that government health expenditure is constant at from the beginning of the HIPC and only increased substantially between 2001 and 2004 when a majority of the countries reached completion point.

---

**Figure 7: Government Health Expenditure in response to Government External Debt Service**

The scatter graph shows that this relationship between the two variables not as strong as would have been assumed under debt relief given the amount of emphasis and clamour surrounding the perceived success of the initiative by creditors. Table 5 allows for a further scrutiny in a country by country case show that, some countries like Zambia whose debt service payments in 2004 compared the level in 1992 had increased by 0.2 percent still managed to increase their health expenditure by 11 percent in the same years. Similarly there are countries such as Mauritania whose change in debt service was rather significant, a reduction of almost 7 percent but increased their health expenditure by 2 percent when comparing 1992 levels to those in 2004, which was lower than that of Zambia with a less reduction in debt service. This only speculation that despite a relationship being in existence between debt service and health expenditure, there are possibly other more important factors that compliment the increased in health expenditure.

Countries have also chosen different strategies in increasing health expenditure. For instance, Zambia has used some of its savings from debt relief under the Multilateral Debt Relief Initiative to abolish health fees in rural areas – thousands of people are now receiving free healthcare. The Tanzania Demographic and Health Survey shows several positive changes relating to child health in Tanzania, including a fall in infant mortality rates by a
third in between 2000 and 2005. This has been attributed to pro poor expenditures put forward through HIPC debt relief and their related PRSP spending priorities. (DFID, 2008)

<table>
<thead>
<tr>
<th>Table 5: Changes in Debt Service payment and Government Health Expenditures as Percentage of Government National Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>-----------</td>
</tr>
<tr>
<td>Benin</td>
</tr>
<tr>
<td>Burkina Faso</td>
</tr>
<tr>
<td>Burundi</td>
</tr>
<tr>
<td>Cameroon</td>
</tr>
<tr>
<td>Chad</td>
</tr>
<tr>
<td>Ethiopia</td>
</tr>
<tr>
<td>Gambia, The</td>
</tr>
<tr>
<td>Ghana</td>
</tr>
<tr>
<td>Guinea</td>
</tr>
<tr>
<td>Guinea-Bissau</td>
</tr>
<tr>
<td>Madagascar</td>
</tr>
<tr>
<td>Malawi</td>
</tr>
<tr>
<td>Mali</td>
</tr>
<tr>
<td>Mauritania</td>
</tr>
<tr>
<td>Mozambique</td>
</tr>
<tr>
<td>Niger</td>
</tr>
<tr>
<td>Rwanda</td>
</tr>
<tr>
<td>Senegal</td>
</tr>
<tr>
<td>Sierra Leone</td>
</tr>
<tr>
<td>Tanzania</td>
</tr>
<tr>
<td>Uganda</td>
</tr>
<tr>
<td>Zambia</td>
</tr>
</tbody>
</table>

Figures represent change in percentages generated by author from data collected from WHO 2008 and WDI 2006

A similar analysis is adopted on debt stock. Debt stock is plotted against government public health expenditure as a percentage of national expenditure on a scatter plot in figure 8. From the graph it can be seen that the relationship between debt stock and government health expenditure is unidirectional. Increases in debt stock are accompanied by increases in government expenditure. When the lowess line is plotted, it shows that actually this relationship between the two variables is not linear, but a quadratic one. This means that increases in debt stock are associated with increased government public health expenditure up to a certain point or threshold where this relationship changes after which increased debt stock levels are associated with decreased government public health expenditure.

It is however noted that following from the graph, this relationship is not as strong as that of debt service payments owing to the steepness of the slope of the line as well as that of the quadratic curve.
This observation is close to the conclusion of some literature which postulates that increases in debt stocks up to a certain extent are actually associated with increased social sector expenditure.
Chapter 6: Summary, Conclusions and Policy Recommendations

Summary
This paper aims to examine the HIPC debt relief initiative and to what extent it helped change recipient countries’ governments’ public health expenditure in Sub-Saharan Africa. It makes the analysis on 22 HIPCs in Sub-Saharan, all of whom have reached decision point with a considerable number having reached completion point and a few that are still in the interim. The panel data set was created to analyze the main variables of interest which in this case were debt stock, debt service payments and government public health expenditure. The empirical strategy employed was mainly exploratory data analysis. The author’s original aim was to cover a much larger period preferably 1992 to 2006 but unfortunately due to the unavailability of comparable data the analysis was only done for the period 1992 to 2004.

The data indicated that there was considerable amount of debt relief that the countries in the sample benefited from. HIPC debt relief reduced their debt stock levels to about half of the amount at decision point. The average reduction in debt stock for the countries was 44 percent. Similarly there was also a considerable reduction in the PV debt stock to export ratio of the countries in the sample. Even though the target is that the ratio is 155 at decision point, it is noticed that 11 countries out of the 22 despite having experienced large debt stock reduction and a significant drop in the PV debt stock ratios still had ratios above the target sustainable ratio of 150.

Debt service as reviewed from the literature is considered to put a financial strain on Government resources by diverting much needed funds from poverty reduction expenditure such as government health expenditure in this case. We observe from the data that debt service payments were only about 3 to 4 percent of government expenditure. Compounding this matter it was also found that a considerable amount of countries has a substantial amount of unpaid debt service payments. The analysis of these payment figures data indicates that the countries made only half of the debt service payments due 1992 to 2004. This would lead us to conclude that HIPC debt relief which was calculated on expected future debt service payments was overstated as the recipient countries already showed signs of begin unable to make most debt payments on time. Therefore debt relief did not release as much financial resources as anticipated at the inception of HIPC.

Government health expenditure has also experienced some changes during the HIPC period. Public health expenditure did increase to a considerable amount making it plausible that reduction in debt service did to a certain extent make room for increase public health expenditure by governments. The paper goes further analyzes separately the effects of debt service payments on public health expenditure and that of debt stock. As perpetuated by the expenditure models debt service payments do divert resources from poverty reduction expenditure and therefore the two do have a negative relationship. However, the effect of debt stock on health expenditure to a larger extent can be said to be positive, but exhibits not a linear but a quadratic relationship. This means that debt stock increases government public health expenditure up to a certain threshold after which the relation becomes negative. This can be interpreted to mean that up until countries reach a debt
overhang, increases in external debt stock result will result in governments increasing their allocation to health expenditures.

As outlined in the literature review, ODA plays a very important role in increasing poverty reduction expenditure in poor countries which include the HIPCs in the paper. When we look at the trend in ODA over the period of analysis we notice that ODA declined as debt relief increased in the sample countries. This means that despite the significant amount of debt relief that the countries in the sample received this was not additional as it was not complimented by increased or constant amounts of ODA. Countries were still facing the same resource constraints due falling aid amounts.

Lastly, it can also be argued using the data that even though HIPC was implemented to provide relief, there were conditions that were imposed on participating countries which resulted in the increasing their debt service payments to their credits just so that they could reach decision point. These types of conditionalities still put a strain on Governments in order for them to raise the revenue to make those payments. This is reiterated in the paper by Cling, Razafindrako et al (2003), that despite impressive HIPC relief figures the reductions is perhaps less generous than it really appears. For states that have not been able to honour their obligations, the HIPC Initiative merely represents a means of formalising their de facto situation. This does not generate resources, however it may, in fact reduce them in some extreme cases if countries that previously paid practically nothing resume due reimbursements after relief. In every case, it imposes a constraint on these countries, which are required to devote supplementary funding to poverty reduction.

It can be ignored that debt relief is complimented by other aspects that make it more effective and of which we need to shed light on too. Debt sustainability in many of the HIPCs has been enhanced by other factors, including stronger economic growth, foreign reserve accumulation, improved external balances, and higher inflows of foreign direct investment (FDI) and remittances. Going forward, low income countries, HIPCs and non-HIPCs alike, face the challenge of financing their development plans without compromising debt sustainability over the long term. Countries can enhance debt sustainability by pursuing macroeconomic policies that maintain economic and financial stability and by making progress on structural reforms to improve their policy and institutional frameworks. (IBRDa, 2006)

There are some papers however that do not align themselves to the school that believes that increased social sector spending will lead to improved outcomes. They believe that an exclusive focus on raising public health outlays in heavily indebted poor countries as a means of improving health indicators is not justified. The focus should not only be on amounts of funds available but as the systems in place as well as choice of intervention methods. While health indicators have, on average, improved from low levels in such countries since the mid-1980s, higher public outlays on health have not always been associated with better performance on social indicators. A comprehensive strategy to improve health outcomes should therefore focus not only on securing additional resources for public health but also on eliminating the inefficiencies in spending and on reallocating funds to programmes that are most beneficial to the poor, e.g. those that provide women with antenatal care and vaccinate children against preventable diseases. Mindful of these
considerations, many PRSPs focus on steps to improve the efficiency of social spending, including health, and reallocate expenditures to pro-poor activities within each sector. (Gupta et al., 2006)

It can thus be said that, even poor countries have made considerable progress in reducing their debt burdens from very high levels, but much more needs to be done, particularly in Sub-Saharan Africa in order to increased social sector expenditure.

Policy Recommendations and Conclusions
This paper aims at bridging three main gaps in the research work done on the HIPC process. Firstly, it tries to make the connection between what the theories that supported the advocating for the HIPC debt relief initiative postulate and what the actual scenarios on the ground are. Secondly, it goes beyond just relying on debt relief figures reported by the IMF and invests actual payment and sustainability issues in the Sub-Saharan HIPCS. Lastly, it analyzes using exploratory data analysis whether HIPC debt relief made a major contribution to increasing health sector expenditure by recipient countries.

What we find in the paper is that the amount of actual debt relief in terms of how much financial resources are made available for poverty reducing expenditure was over stated by the creditor agencies mainly due to a history of inability to pay by debtor countries as well as the compromised additionally due to reduction of ODA while the HIPC debt relief effort was running.

There however is a slight increased in health expenditure by recipient countries but not as large as would have been expected under the HIPC debt relief as put forward by the multilaterals. The inconsistencies in the trend among countries makes it difficult to even attribute the minimal increased of health expenditure to debt relief alone during that period of study. However the data did show that, an external debt burden exerts two different effects on government health expenditure; one due to the debt services payments and the other from the debt stock. The debt service payment effects has a negative linear effect on health expenditure while the debt stock has a non linear effect which shows that an increase in debt stock has a positive effect on health expenditure up to a certain threshold after which the effect becomes negative.

Motivated by the preceding observations, the following policy recommendations are put forward in this paper. Firstly, the main failure in the HIPC debt relief is that of additionality. There is a need to make the ODA calculations independent of those of debt service relief. In other words when the OECD countries make pledges or projects of aid that they will give to countries, they should out rightly outline what is debt relief so that it is clear how much actual financial resource in form of grants would be made available. Most importantly the OECD countries should not make a compromise between having to give aid or debt relief but the two should remain separate as aid is an essential source of financial resources for poverty reduction social sector expenditure. Therefore debt relief should compliment and not compromise each other.
Secondly, conditionalities that are structured into the debt relief initiatives should take into consideration each country’s capabilities and should not impose further financial strain on national treasuries. This relates to the expectation that countries make substantial debt service payments before completion point even despite the fact that they are HIPC by definition and are unable to make these payments. As well, the amount of money that each country is expected to channel to these poverty related expenditures should not be calculated on expected debt service payments but based on a countries payment history which will indicate their ability to pay from available resources.

Lastly, rather than the single focus on increasing expenditure and investment on poverty reducing social sector it would also be beneficial if the PRSPs to also look at stimulating private investments by creating an enabling environment by investing in things such as infrastructure and technology. This would help solve the financial resource problem faced by governments by increasing their tax income and thereby creating a sustainable source of financial resources that countries can use to increase social sector investment rather than solely depending on external assistance.

In conclusion, the HIPC initiative as it was structured was compromised in its ability to help increased social sector expenditure due to overestimate of debt relief, failure of additionality through inconsistent ODA levels and failure to address the root cause of countries debt sustainability issues, which is evident by countries returning back to pre-HIPC debt to exports ratios. The conditionalities imposed of the PRSP, stipulate an increase in social sector expenditure and this is the main driving factor behind the increases in health expenditures. However these conditionalities fail to address the structural problems requiring attention in order to guarantee sustained increases in social sector expenditure.
REFERENCES


IDA & IMF (2007) Heavily Indebted Poor Countries (HIPC) Initiative and Multilateral Debt Relief Initiative (MDRI) - Status of Implementation. IN LEIPZIGER, D. & ALLAN, M. (Eds.), IDA IMF.


KITABIRE, D. & KABANDA, M. (2006) MDG achievement and debt sustainability in HIPC and other critically indebted developing countries: thoughts on an assessment framework UNDP.


ANNEXES
## ANNEX 1: Summary Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number of Observations</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country (Code)</td>
<td>286</td>
<td>11.5</td>
<td>6.355409</td>
<td>1</td>
<td>22</td>
</tr>
<tr>
<td>GDP Growth</td>
<td>286</td>
<td>3.464615</td>
<td>6.386781</td>
<td>-50.25</td>
<td>35.22</td>
</tr>
<tr>
<td>Population (Millions)</td>
<td>286</td>
<td>13.31493</td>
<td>12.8604</td>
<td>1.01</td>
<td>69.96</td>
</tr>
<tr>
<td>Exports</td>
<td>214</td>
<td>395.557</td>
<td>260.0825</td>
<td>11.1</td>
<td>984.2</td>
</tr>
<tr>
<td>ODA</td>
<td>286</td>
<td>494.7168</td>
<td>364.3919</td>
<td>34</td>
<td>2203</td>
</tr>
<tr>
<td>Total Debt Stock (mil US$)</td>
<td>286</td>
<td>3494.57</td>
<td>2601.633</td>
<td>403.4</td>
<td>10346.9</td>
</tr>
<tr>
<td>Debt Service Paid (mil US$)</td>
<td>286</td>
<td>131.892</td>
<td>193.5197</td>
<td>3.6</td>
<td>2612.6</td>
</tr>
<tr>
<td>Debt Service unpaid (mil US$)</td>
<td>238</td>
<td>157.5798</td>
<td>345.0029</td>
<td>-3</td>
<td>4174</td>
</tr>
<tr>
<td>Debt Forgiven (mil US $)</td>
<td>286</td>
<td>-86.68077</td>
<td>327.8529</td>
<td>-4320.6</td>
<td>0</td>
</tr>
<tr>
<td>Change in Debt Stock</td>
<td>286</td>
<td>52.57447</td>
<td>445.9282</td>
<td>-4802.8</td>
<td>2060.1</td>
</tr>
<tr>
<td>Present Value Debt to Export (%)</td>
<td>110</td>
<td>319.7273</td>
<td>333.2246</td>
<td>17</td>
<td>2303</td>
</tr>
<tr>
<td>Debt Service (as a % of Exports)</td>
<td>223</td>
<td>19.19238</td>
<td>13.69705</td>
<td>4.2</td>
<td>104.6</td>
</tr>
<tr>
<td>Gross National Expenditure (mil US$)</td>
<td>283</td>
<td>3777.12</td>
<td>2840.984</td>
<td>247</td>
<td>14396</td>
</tr>
<tr>
<td>Health Expenditure (as % of GDP)</td>
<td>220</td>
<td>5.007727</td>
<td>1.578128</td>
<td>1.7</td>
<td>12.8</td>
</tr>
<tr>
<td>Health Expenditure (as Percentage of</td>
<td>220</td>
<td>9.263091</td>
<td>3.42912</td>
<td>1.8</td>
<td>20.5</td>
</tr>
<tr>
<td>Government Expenditure)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Expenditure Per capita (US$)</td>
<td>220</td>
<td>14.47136</td>
<td>7.667624</td>
<td>2.7</td>
<td>45.9</td>
</tr>
<tr>
<td>Debt Service (as % of Government Expenditure)</td>
<td>283</td>
<td>3.829577</td>
<td>4.791803</td>
<td>0.3517588</td>
<td>72.41131</td>
</tr>
<tr>
<td>Nominal Debt to Export Ratio</td>
<td>225</td>
<td>711.3244</td>
<td>629.6308</td>
<td>173</td>
<td>4223</td>
</tr>
<tr>
<td>Aid Per capita (US $)</td>
<td>286</td>
<td>46.61245</td>
<td>27.19718</td>
<td>8.99</td>
<td>212.75</td>
</tr>
<tr>
<td>log Debt Stock</td>
<td>286</td>
<td>7.857719</td>
<td>0.8141316</td>
<td>5.999928</td>
<td>9.244442</td>
</tr>
<tr>
<td>Log Debt Service paid</td>
<td>286</td>
<td>4.355737</td>
<td>1.028585</td>
<td>1.280934</td>
<td>7.868101</td>
</tr>
</tbody>
</table>


ANNEX 2: Comparisons of Magnitude of Debt Relief

Figure 9: Debt Relief as Percentage of Debt Stock

Country

Percentage

Benin
Burkina Faso
Burundi
Cameroon
Chad
Ethiopia
Gambia, The
Guinea
Guinea-Bissau
Madagascar
Malawi
Mali
Mauritania
Mozambique
Niger
Rwanda
Sierra Leone
Tanzania
Uganda
Zambia

Source: HIPC Completion and Decision Point Documents, IMF Website: www.imf.org
ANNEX 3: Debt service paid

Figure 10: Panel Actual Debt service (US $ millions)

Source: World Development Indicators 2006
ANNEX 4: Debt Service as a component of Government Expenditure

Figure 11: Panel Debt Service as Percentage of Government Expenditure

Graphs by Country
ANNEX 5: Health Expenditure Component of Government Expenditure

Figure 12: Panel Government Health Expenditure as Percentage of Government Expenditure

Graphs by Country

Year


BENIN BURFAS BURUN CAM CHAD
ETHOP GAMB GHAN GUINBIS GUINEA
MADA MALAW MALI MAURI MOZAM
NIGER RWAN SENE SIERA TANZA
UGAN ZAMB

H2GovtExp

0.5 10E5
0.5 10E5
0.5 10E5
0.5 10E5
0.5 10E5
0.5 10E5
0.5 10E5
0.5 10E5
0.5 10E5
0.5 10E5

0.5 10E5
0.5 10E5
0.5 10E5
0.5 10E5
0.5 10E5
0.5 10E5
0.5 10E5
0.5 10E5
0.5 10E5
0.5 10E5

0.5 10E5
0.5 10E5
0.5 10E5
0.5 10E5
0.5 10E5
0.5 10E5
0.5 10E5
0.5 10E5
0.5 10E5
0.5 10E5
