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Multilateral Debt Relief: A Promising Instrument to Increase Pro-Poor Public Expenditure?

Assessing the impact of the HIPC Initiatives on public spending on healthcare and education
between 1996-2005

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Abstract

This paper seeks to examine the extent to which the debt cancellations under the HIPC Initiatives have met their objective of reducing poverty by increasing public sector expenditure on healthcare and education (so called pro-poor spending) over the period of 1996-2005. There are mainly two reasons to believe that the debt relief efforts will enable increased social spending (i) the debt cancellations will reduce debt servicing, thus freeing up resources which can be used for social improvements, and (ii) the pro-poor expenditure condition that follows from the design of the Enhanced HIPC, will enable donors to influence the allocation of government resources.

Based on a cross-country analysis over the period of 1996-2005, I find that the recent debt relief efforts are positively correlated with the share of public resources directed to the health and education sectors, particular with expenditures on health. However, rather than being an outcome of increased budgetary space; my results indicate that the factor that seems to determining the increase of public spending in the HIPCs are the conditions arising from the Poverty Reduction Strategy Paper, attached to the Enhanced HIPC Initiative (E-HIPC). Since the underlying explanation behind the positive correlation seems to be found in the incentive structure embedded in the E-HIPC initiative, it seems to be very unlikely that the complete cancellation of debt stocks under the MDRI and the resulting loss of conditionality, will lead to the long term goal of increased social expenditures.

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Abbreviations and Acronyms

AfDF	African Development Fund
CP	Completion Point
DP	Decision Point
EdStats	Education Statistics
E-HIPC	Enhanced Heavily Indebted Poor Countries Initiative
GDP	Gross Domestic Product
GNI	Gross National Income
HIPC	Heavily Indebted Poor Countries
IDA	International Development Association
IMF	International Monetary Fund
LDC	Least Developed Countries
MDGs	Millennium Development Goals
MDRI	Multilateral Debt Reduction Initiative
PC	Per Capita
PRSP	Poverty Reducing Strategy Paper
UN	United Nations
WB	World Bank
WDI	World Development Indicators

1.0 Introduction

1.1 Background

Pushing for economic growth and fighting poverty in developing countries is amongst the biggest global challenges of today. Multi- and bilateral aid is a recognized tool used to improve economic performance in countries of low income and to reduce the number of people living below the poverty threshold. However, representatives from academia and international institutions are far from unanimous on whether aid can make a positive long term difference. In the past decade debt relief, which intends to contribute to debt sustainability, economic growth and poverty reduction, has become an increasingly significant vehicle for delivering development assistance. In 1996 the International Development Association (IDA), the World Bank's lending arm for poor countries, together with the International Monetary Fund (IMF) launched the Heavily Indebted Poor Countries (HIPC) Initiative. The Initiative calls for the voluntary provision of debt relief by all creditors and aims to provide a new start to countries struggling to cope with foreign debt that places too great a burden on export earnings and/or fiscal revenues.¹

An evaluation of the HIPC Initiative by the World Bank's Independent Evaluation Group confirms that the latest design of the HIPC Initiative; the so called *Enhanced HIPC Initiative (E-HIPC)* has committed around US\$50 billion in nominal debt relief. This has reduced as much as US\$19 billion of debt in 18 countries, thereby halving their debt ratios. According to the report, the HIPCs have also experienced doubling amounts of net transfers (an increase of \$8.7 billion from 1999-2004) showing that the debt reductions have been notably supplementary to other net resource transfers. Furthermore, six post-completion-point countries have shown no more than a moderate risk of debt distress, meaning that they no longer suffer the same risk of having repayment difficulties. The results have however not purely been favourable. Eleven out of thirteen post-completion-point countries' debt sustainability has worsened since completion point and in eight of these countries; the debt-to-exports ratio has once again exceeded the HIPC threshold of 150 percent. The most critical result is,

¹ The World Bank, website (071118)

<http://web.worldbank.org/WBSITE/EXTERNAL/NEWS/0,,contentMDK:20040942~menuPK:34480~pagePK:34370~theSitePK:4607,00.html>

nevertheless, the modest improvements of the initiatives' goal of reducing poverty by channelling resources to social expenditures such as education and healthcare.²

Supporting a positive outcome of debt relief, a group of IMF-economists argue that debt relief can be proven to impact growth and development positively. In a study examining the channels through which external debt affects growth in low income countries, they have shown that a significant decrease in the stock of the HIPC's external debt would, everything else constant, diminish debt overhang and thereby directly increase per capita Gross Domestic Product (GDP) growth rates by approximately one percent annually.³ These results have, however, been heavily criticized by other studies showing that HIPCs, rather than suffering from debt overhang, lack strong economic institutions and should be objectives for direct aid rather than debt relief.⁴

Moreover, highlighting the fact that the HIPCs became heavily indebted first after two periods of debt relief and that new borrowing has been correlated with debt relief so that debt ratios have worsened, William Easterly has shown that the debt relief efforts have brought little of the benefits have been promised and that it has been an unsuccessful attempt in fighting poverty in the heavily indebted and poor countries.⁵

Despite the lack of clear evidence that debt relief has been a successful tool to fighting poverty, the World Bank joined the IMF and the African Development Fund (AfDF) in implementing the Multilateral Debt Relief Initiative (MDRI), introduced in 2006 following the G8 summit of 2005 in Gleneagles . The program will forgive 100 percent of eligible outstanding debt owed to these three institutions by all heavily indebted countries reaching the completion point of the Enhanced HIPC Initiative. According to the donors, this will help accelerate the progress toward the United Nation (UN) Millennium Development Goals (MDGs),⁶ a blueprint agreed to by all the world's nations and the entire world's leading development institutions aiming to reduce poverty by 50 percent by the target date of 2015.⁷

2 The World Bank, Independent Evaluation Group (2006).

3 Clements,. Bhattacharya and Nguyen (2005).

4 Arslanalp and Henry (2004).

5 Easterly (2002).

6 The IMF, website (071118)

<http://web.worldbank.org/WBSITE/EXTERNAL/NEWS/0,,contentMDK:20040942~menuPK:34480~pagePK:34370~theSitePK:4607,00.html>.

7 The UN website (071118) <http://www.un.org/millenniumgoals/>.

On the basis of the last decade's intensification of the debt relief commitments, one cannot help but wonder whether the debt relief efforts are a powerful policy-instrument in the fight against world poverty or a mere waste of resources and time. According to UN estimates, 2.7 billion people world-wide struggle to survive on less than two dollars a day and every year six million children die before reaching their fifth birthdays.⁸ In order to help these people, it is of great importance to ensure that the resources set aside for development finance actually reach the poor.

Existing research within this field tends to focus on the growth aspect.⁹ There exists, admittedly, studies motivating why economic growth would translate into increased public spending.¹⁰ Nevertheless, the reasons to believe that these resources will trickle down to the poor in form of increased social services, such as healthcare and education are few. To isolate the pure effect of debt relief on poverty reduction, the poverty headcount ratio, measuring the number of people living under US\$1 or US\$2 a day would seem to be the most natural and significant indicator to use. Yet, despite the attention given to the debt situation for the most indebted countries, data on poverty is, surprisingly enough, very limited. Instead, I have chosen to focus exclusively on the link between debt forgiveness and the share of public resources allocated to the health and education sectors (so called pro-poor sectors). This focus is of interest since, in recent time, access to publicly provided social services has received increased attention from the international institutions when discussing strategies for alleviating poverty.¹¹ Indeed, one of the main arguments in favour of debt relief is that freed-up resources will be used to increase social services and thus fight poverty.¹² Unlike the Original HIPC, the Enhanced Initiative is furthermore conditioned on pro-poor expenditure, meaning that in order to benefit from the debt reductions granted by the bank group the debtor countries have to construct and implement a strategy which clarifies exactly how the additional resources will be allocated to a number of public sectors (including healthcare and education), in order to fight poverty in the long run.¹³ Although there are some studies examining the link between debt relief and public

8 The UN website (071118) <http://mirror.undp.org/unmillenniumproject/facts/index.htm>.

9 Clements, Bhattacharya and Nguyen (2003), Rodrik (2000) and Hepp (2005).

10 See Wagner (1958) suggesting a positive correlation between economic growth and government activity.

11 Van de Walle (1995) p.226.

12 The IMF website (071203) <http://www.imf.org/external/np/hipc/proposal.htm>.

13 The IMF website (071118) <http://www.imf.org/external/pubs/ft/fandd/2001/09/gupta.htm>.

spending,¹⁴ there is a gap in the existing literature when it comes to the individual effectiveness of the two mechanisms through which the recent debt relief initiative is thought to channel resources to social spending - i.e. freed-up resources and pro-poor expenditure conditions. This focus is of importance since an understanding of the debt relief dynamics may be useful when estimating the future development within this field, especially considering the prospect of the launch of the MDRI promising 100% cancellation of official debts.

1.2 Aim

The aim of this paper is to analyze if the multilateral debt reduction initiatives have met their objective of increasing public sector social spending over the period from 1996 to 2005. I therefore ask if (i) there exists a positive relationship between multilateral debt relief and the share of public resources directed to healthcare and education and if so; (ii) to what extent the relationship can be explained by a reduction of debt service burdens respectively the pro-poor expenditure conditions attached to the E-HIPC Initiative?

1.3 Hypothesis

The two following hypotheses have been formulated;

- 1) There exist a correlation between multilateral debt relief and pro-poor public sector spending such that the share of the public resources directed to health and education sectors increases when a country qualifies for the E-HIPC Initiative.
- 2) The relationship between multilateral debt relief and pro-poor public spending is primarily a result of the pro-poor expenditure conditions that follows from the PRSPs that arise from the scheme of the E-HIPC Initiative.

¹⁴ See for instance Dessy and Vencatachellum (2006) who find that debt relief, coupled with improved institutions, has a positive impact on healthcare spending and Cooper and Sachs (1985) who find that that debt relief has a negative impact on the share of resources allocated to education.

1.4 Method

To test my hypotheses empirically I examine the 40 HIPCs as so classified by the IMF and the World Bank in the year of 2005. Backed on previous empirical research I develop a model which is based on a linear relationship between public sector spending on healthcare/education and seven explanatory variables. This model considers the role of external debt burdens and estimates to what extent social spending relies on the recent debt relief efforts. I employ a cross country regression analysis which uses a time series data set over the period 1996-2005 from the World Development Indicators (WDI) and the Educations Statistics (EdStats), supplied by the World Bank.

1.5 Limitations

1.5.1 Empirical model

I have limited my empirical model to seven explanatory variables, which includes two variables for debt relief. The number of determinants for public sector spending on healthcare and education is in all probability of a greater number than what has been included in the model, meaning that the results would presumably have been more precise if I would have used a more extensive model. However, due to limitations on time and data, this has not been possible. It is also important to note that the aim of this paper has never been to locate the full range of determinants for decisions on public spending but to investigate whether debt relief granted under the HIPC initiatives is one of them. Of greatest importance is, therefore, the correlation between the dependent variables and the two variables representing debt forgiveness.

1.5.2 Missing data

The World Bank databases WDI and EdStats lack data on public health and education expenditure for up to eleven of the 40 countries defined as heavily indebted in 2005, reducing the sample size available for the regressions, thus making the estimators less precise. The analyses on public sector healthcare spending has been limited to the period 1998-2004 and excludes seven countries; Comoros, Eritrea, Guinea, Liberia, Sao Tome and Principe and Somalia. The regression on public sector spending on education excludes eleven countries;

Comoros, Eritrea, Guinea, Liberia, Sao Tome and Principe, Somalia, Democratic Republic of Congo, Republic of Congo, Honduras and Madagascar.

1.6 Outline

The remainder of this paper is structured as follows; section two gives a brief background of the living conditions and the economic situation in the HIPC in comparison to other low income countries and countries of high income. Chapter three provides a historical background of debt relief as a tool for financing development assistance and a presentation of the objective and formation of the original HIPC- and the Enhanced HIPC Initiative. Section four provides the theoretical framework for the links between debt relief, public spending and poverty reduction while chapter five presents the empirical model and the countries examined. A presentation and discussion of the empirical results follows in section six and section seven concludes.

2.0 The HIPCs at a glance

To give an idea of the situation in the most heavily indebted countries, this section provides comparative statistics on the living standards and on the economic situation in the HIPCs and in other high and low income countries, as so classified by the World Bank.

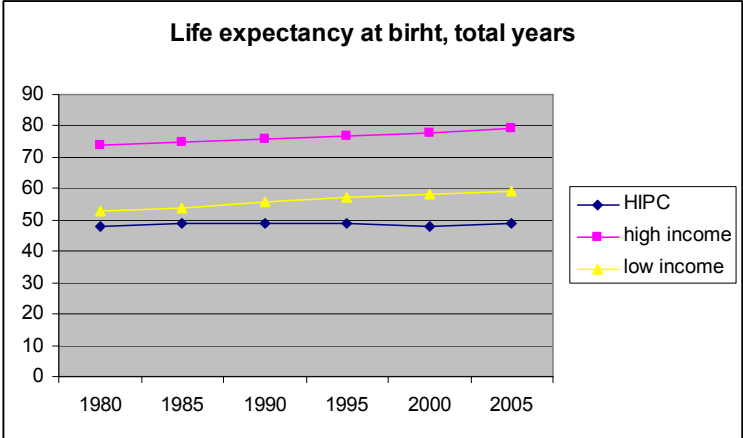
2.1 Living conditions

In the world's heavily indebted countries, one out of ten infants die before the age of one and only eight out of these ten children make it to their fifth birthday. The scale of the AIDS epidemic in Africa could approach the scale of the Bubonic Plague of 14th century Europe. In parts of Africa where 32 of the 41 HIPCs are located¹⁵, HIV infection rates are now over 20 percent of the total population; including a third or more of the sexually active adult population. In Germany, to take one comparison, the infection rate is estimated to be 0.08

¹⁵ In April 2007 Afghanistan qualified for the Enhanced HIPC Initiative, increasing the number of HIPCs from 40 to 41.

percent of the population, less than 1/200^{ths} of the incidence in the hard-hit parts of Africa.¹⁶ Knowing that, the 2005 World Bank estimates for life expectancy, showing an average of 49 years for the HIPCs, does not come as a surprise. The equivalent number in high and other low income countries is 79 respectively 59 years. Hence, at a time when people in the western world enter their middle age and reach their income peak; HIPC citizens have already reached their deathbeds. Evidence of the worrisome development within the heavily indebted and poor countries compared to the progress of other developing countries can be seen in graph 2.1.1. As displayed, both the HIPCs and the group of low income countries started off with life expectancies of approximately 50 years in 1980. However, unlike the HIPCs which have remained stagnant, the other group of low income countries have increased their expected life length by six years over the last two decades.

Graph 2.1.1



Source: WDI

2.2 Economic situation

Of the 41 heavily indebted countries, 32 fall into the group of less developed countries (LDCs)¹⁷, a group of countries that according to the UN exhibit the lowest indicators of socioeconomic development. These economies are characterised by large agriculture sectors based on subsistence farming, high illiteracy and unemployment rates as well as poorly developed trade and transportations.¹⁸ At this stage of economic development the build up of foreign debt is a common phenomenon. Although the accumulation of foreign debt can be

¹⁶ Sachs (1999) p.5.
¹⁷ HIPCs classified as LDCs; Afghanistan, Benin, Burkina Faso, Burundi, Central African Republic, Chad, Comoros, Democratic Republic of Congo, Eritrea, Ethiopia, Guinea, Guinea-Bissau, Haiti, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Nepal, Niger, Rwanda, Sao Tome and Principe, Senegal, Sierra Leone, Somalia, Sudan, Tanzania, The Gambia, Togo, Uganda and Zambia.
¹⁸ The UN website (071201) <http://www.un.org/special-rep/ohrlls/lcd/ECOSOC2004/Highligh-ECOSOC%20HLS%202004.htm>

highly beneficial and sometimes necessary to provide the resources required to promote economic growth and development, it has its costs. The main cost associated with foreign borrowing, the debt service payments, representing a fixed charge on a country's income, savings and foreign exchange reserves is argued to be a particular problem for the severely indebted HIPCs whose debt stocks measure to nearly three times higher in relation to GDP than other low income countries.¹⁹ Based on statistics showing that debt services paid by the 29 post-decision point HIPCs has declined from four percent of GDP in 1999 to two percent in 2005, the World Bank believes that the development within this field goes in the right direction.²⁰

As for poverty reducing expenditure such as that for health, rural infrastructure and education the World Bank and the IMF have indicated that, as of 2005, the 29 post-decision point countries increased their levels from seven percent of their GDPs in 1999 to over nine percent in 2005. This nine percent measuring to US\$15 billion, in absolute terms, exceeded debt-service payments by more than five times.²¹ Focusing on healthcare spending however, the HIPCs did not allocate more than an average of 2.0 percent of their 2005 years GDP to their health sectors; one percentage point lower than other developing countries and four percentage points below countries of high income. The figures for public expenditure on education are a bit more optimistic; in 2005 the HIPCs averaged on 3.9 percent of GDP, equivalent with other low income countries and only one percentage point below developed countries.²² Adding, however, that per capita income in the HIPCs only amounts to one fourth of the GDP other developing countries' and no more than one percent of that in developed economies, it is obvious that the amount of resources allocated for social activities are immense. With low levels of social spending and average per capita growth rates the HIPC economies do not offer much hope of lifting these people out of poverty. As seen from table 2.2.1 the heavily indebted countries experienced a decreasing GDP growth rate over the whole period 1996-2006, while during the same period, other low income countries close to doubled their growth rates.

19 Mwaba (2001) p.2, Bird and Milne (2003) p.46.

20 The World Bank Website

<http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTDEBTDEPT/0,,contentMDK:21254881~menuPK:528655~pagePK:64166689~piPK:64166646~theSitePK:469043,00.html>.

21 The World Bank Website

<http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTDEBTDEPT/0,,contentMDK:21254881~menuPK:528655~pagePK:64166689~piPK:64166646~theSitePK:469043,00.html>.

22 The WDI.

Table 2.2.1 Economic Development measured in per capita GDP

Year/ countries	HIPC		High income: OECD		Low income	
	pc GDP Constant 2000 US\$	pc GDP Growht	pc GDP Constant 2000 US\$	pc GDP Growht	pc GDP Constant 2000 US\$	PC GDP Growht
1996	270	3%	24552	2%	354	4%
1997	275	2%	25190	3%	361	2%
1998	278	1%	25626	2%	371	3%
1999	280	1%	26277	3%	384	3%
2000	282	1%	27058	3%	392	2%
2001	287	2%	27225	1%	402	3%
2002	289	1%	27417	1%	408	2%
2003	292	1%	27780	1%	429	5%
2004	300	3%	28470	2%	452	5%
2005	308	3%	29205	2%	480	6%
2006	318	3%	29748	3%	509	6%

Source: WDI

3.0 History of Debt Relief

3.1 The Heavily Indebted Poor Countries (HIPC) Initiatives

The debt relief policy was already in use in the 1970s to help poor countries escape their unsustainable debt burdens, which existed as a result of low growth, falling commodity prices amongst other economic shocks. At that point, bilateral creditors started to write off debts to low income countries and the Paris Club, the club of official creditors, reached agreements with a number of African countries. However, the debt reductions did not seem to achieve its aim of “debt sustainability” and by the mid-1990s calls for broader relief increased. Consequently, the World Bank and the IMF, which due to legal and practical reason had resisted debt relief in the past, agreed on assistance and the original HIPC Initiative was created. This initiative was pioneering in the sense that, for the first time, partial forgiveness of multilateral debt was offered.²³

The original HIPC Initiative, launched in 1996, aimed to provide a fresh start to countries which struggled to cope with foreign debt that placed too great a burden on export earnings

²³ The World Bank website (071118)

<http://web.worldbank.org/WBSITE/EXTERNAL/NEWS/0,,contentMDK:20040942~menuPK:34480~pagePK:34370~theSitePK:4607,00.html>

and/or fiscal revenues.²⁴ The idea was to reduce the debt burden faced by highly indebted and poor countries if their policy orientation over six years reflected the implementation of promising macroeconomic and social reforms. Poor developing countries with a debt-to-export ratio exceeding 200–250% were considered eligible for the program.²⁵ Of the ten countries that became eligible for debt assistance under the original framework, only seven benefited from the debt cancellation provided by the bank group.²⁶

To speed up the process, the original initiative was enhanced in 1999, resulting in a reduction of the debt burden threshold to a debt-to-export ratio of 150%. There was also an introduction of a so called *interim debt relief* the moment a country reached the first of the two stages of the program. In order to strengthen the connection between the Initiative and its main goal of reducing poverty, the Enhanced HIPC (E-HIPC) scheme, was designed to link debt relief to policies for poverty reduction. Thus, unlike the initial initiative the E-HIPC requires debtor countries to prepare and implement a strategy that clarifies how they will eliminate poverty in the long run. While only few developing countries had shown interest in the original program, the E-HIPC-Initiative was widely accepted. As of today, the World Bank and the IMF defines 41 countries as heavily indebted of which 31 have at least reached the “decision point” and have prepared an Interim-PRSP accepted by the two multilateral agencies.²⁷

The E-HIPC is divided in two stages, the *decision point* and the *completion point*. For a country to be considered for HIPC assistance, it must face an unsustainable debt burden, meaning that its external public debt must exceed 150 percent of its exports or in certain cases 250 percent of fiscal revenues. To reach decision point, it has to establish reforms and sound policies through IMF and IDA supported programs, including, liberalisation, privatisation and macroeconomic stability. Furthermore, it has to develop a Poverty Reduction Strategy Paper (PRSP), which clarifies exactly how resources will be allocated to a number of public sectors (including the health and education sector) in order to eliminate poverty in the long run. Once a country reaches the decision point, it begins receiving interim relief immediately. In order to reach the completion point and thereby receive full debt reduction available under the HIPC, the country must continue to show good performances under IMF and IDA supported

24 The World Bank website (071118)

<http://web.worldbank.org/WBSITE/EXTERNAL/NEWS/0,,contentMDK:20040942~menuPK:34480~pagePK:34370~theSitePK:4607,00.html>

25 Michaelowa (2003) pp. 462-463.

26 Countries which benefited from debt relief under the original framework; Bolivia, Burkina Faso, Mali, Mozambique, Uganda, Guyana and Cote d'Ivoire.

27 The IMF website (071118) <http://www.imf.org/external/np/exr/facts/hipc.htm>.

programs, implement key reforms agreed at the decision point and adopt and implement the PRSP for at least one year.²⁸

The World Bank and the IMF have estimated the total cost of debt assistance under the Enhanced HIPC Initiative to about US\$69 billion in 2006 net present value terms. About half of these will be financed by bilateral creditors, and the rest will come from multilateral lenders.²⁹

3.2 The Multilateral Debt Reduction Initiative (MDRI)

The MDRI, which was initiated in July 2006, is the latest attempt to help poor countries escape poverty and to reach the UN's MDGs. It promises a 100 percent cancellation of the debt claims by the IMF, the IDA and the AfDF, for countries that have reached or will eventually reach the completion point under the E-HIPC Initiative and those with per capita income below US\$ 380 and an outstanding debt at end-2004 it. Like former initiatives, the creditors requires that the countries demonstrate satisfactory performance in; macroeconomic policies, implementation of a poverty reduction strategy and public expenditure management. The estimated total cost for the MDRI stand at around US\$50 billion. The initiative states that no provision for relief of debt disbursed after January 1, 2005 will be given.³⁰

28 The IMF website (071118) <http://www.imf.org/external/np/exr/facts/hipc.htm>.

29 The IMF website (071118) <http://www.imf.org/external/np/exr/facts/hipc.htm>.

HIPCs that as of 2007 have reached the completion point; Benin, Bolivia, Burkina Faso, Cameroon, Ethiopia, Ghana, Guyana, Honduras, Madagascar, Malawi, Mali, Mauritania, Mozambique, Nicaragua, Niger, Rwanda, São Tomé and Príncipe, Senegal, Sierra Leone, Tanzania, Uganda, and Zambia.

HIPCs that as of 2007 have reached decision point: Afghanistan, Burundi, Chad, the Democratic Republic of Congo, the Republic of Congo, The Gambia, Guinea, Guinea-Bissau and Haiti.

HIPCs that as of today remains potentially eligible: Central African Republic, Comoros, Côte d'Ivoire, Eritrea, the Kyrgyz Republic, Liberia, Nepal, Somalia, Sudan, and Togo.

30 The World Bank website (071118) <http://www.imf.org/external/np/exr/facts/mdri.htm>.

4.0 Theoretical Framework

4.1 Justifications for debt relief

The main justifications for granting a country debt relief stems (1) from the presumed adverse impact of a heavy debt burden on per capita income growth, a concept known as *debt overhang*, and (2) the belief that debt reductions will free-up resources which will be used to increase social services and thus fight poverty³¹ Although the former justification is directed more towards the growth perspective and the focus in this paper lies on the direct effects of debt relief on public spending rather than on growth; I will give some attention to the fundamental ideas behind the debt overhang theory. This is of interest, not only since the relationship between external debt and growth continues to attract considerable interest from policymakers and academics alike, but also because theoretical literature suggests a positive correlation between growth and public spending. As observed by Wagner, for almost all modern states, public expenditure increases more than proportionately with total income, e.g. GNP.³²

4.1.1 Debt overhang

By definition, a country suffers from debt overhang if it owes more money to its creditors than it is able to pay.³³ According to economic literature there are at least two reasons why this situation is harmful for economic development. First, a rapid accumulation of external debts may signal that the government will have to increase taxes to service their debt. As a consequence, expectations on future rate of returns will diminish, thus resulting in rapid capital flight.³⁴ Due to the risk of insolvency, financial inflows risk drying out, and domestic and foreign investments, which by delivering technical know how, increasing availability to foreign markets and creating new employment opportunities are crucial to stimulate economic growth, become jeopardized.³⁵ Second, a high level of external debt may reduce the HIPC's government's incentive to implement the structural and fiscal reforms needed to sustain higher

31 Benedict Clements, Rina Bhattacharya (2003) p.4.

32 Wagner (1958).

33 Arsanalp and Henry (2006) p.208.

34 Krugman (1988).

35 Stiglitz (2003) p. 79.

growth and to meet the MDGs. According to the donors this risk is independent since any strengthening of the fiscal position will in all probability intensify pressures to repay foreign creditors.³⁶

The use of the debt overhang concept to small, low-income economies, which characterise a majority of the HIPCs, has, however, been heavily criticized. Based on empirical research, Arslanalp and Henry (2004) and Killick (2004) show that the HIPCs tend to be net recipients of capital, meaning that they do not suffer from debt overhang. The main deterrents to investments can instead be found in the lack of fundamental social and physical infrastructure, such as; property rights, human capital, hospitals, roads and strong economic institutions that protect the legal rights of foreign investors/shareholders. Since the debt reductions cannot be anticipated to impact any of these, they imply that the significant impact on economic development in the heavily indebted countries will be left out.³⁷

4.2.2 Debt sustainability and freed up resources

The second justification for debt relief; that debt cancellation will return the beneficiary countries to debt sustainability and afford their governments the fiscal space to invest in basic infrastructure and social services have received more attention in the Enhanced HIPC, which tries to intensify the link between debt relief and poverty reduction.³⁸ Indeed, the World Bank states that poverty reducing expenditures are to rise from less than twice that of debt-service payments to more than four times, financed in part from resources freed by HIPC debt relief.³⁹ That this will be possible rests primarily on two assumptions; (1) that debt cancellations will reduce debt service burdens, thus freeing up resources which can be used for social improvements,⁴⁰ (2) that the pro-poor expenditure conditions that follows from the design of the Enhanced HIPC, will enable donors to influence the allocation of government resources and make sure that the freed up resources are used efficiently.⁴¹

36 Clements, Bhattacharya and Nguyen (2005)

37 Arslanalp and Henry (2004) and Killick (2004).

38 The IMF website (071212), <http://www.imf.org/external/np/exr/facts/hipc.htm>.

39 The World Bank website (071118)

<http://web.worldbank.org/WBSITE/EXTERNAL/NEWS/0,,contentMDK:20040942~menuPK:34480~pagePK:34370~theSitePK:4607,00.html>.

40 Sachs (1999) p.9 .

41 The IMF website (071210) <http://www.imf.org/external/np/exr/facts/conditio.htm>

(1) Budget flexibility

The suggestion that resources freed up by debt relief will be reallocated for social improvements rest on the theory of opportunity costs – i.e. given that the resources which prior to debt relief are occupied by debt service payments will be used for other purposes they could yield a much higher social return, thus be utilised to fight poverty.⁴² Since the debt service burden tends to fall directly on a country's budget, Sachs (1999) argues that one of the strongest arguments in favour of debt relief is indeed that the outstanding debt burdens result in a so called *crowding out* of means accessible for social improvements. He highlights that the current arrangements, which allow debt burdens to be offset via new loans, grants and rescheduling, cannot guarantee that the fiscal void left behind by the high levels of debt servicing will be filled. A cancellation of debts to decrease this instability and unpredictability, which contributes to the incapacity of HIPC governments and the international community to formulate long-term solutions to the pressing social crises in the HIPC countries, is therefore necessary.⁴³ This view is also supported by several Non Governmental Organizations (NGOs), which stress debt service as the key obstacles to meeting basic human needs in developing countries.⁴⁴

That greater inflow of foreign capital can help social development, both in identifying projects with a large social payoff and in financing those projects is generally accepted in the economic literature.⁴⁵ That it will be achieved through multilateral debt reductions has, however, been challenged by several scholars.⁴⁶ The main argument is that the average HIPC debt service payments (measuring to three percent of GDP) are so small in relation to the capital inflow (measuring to roughly 15 percent of GDP) that they have not caused a net drain of resource from the group of HIPCs. Moreover, based on empirical research Bird and Milne (2003) show that the net resource transfers that the developed nations have allocated to the HIPCs over the past 30 years have decreased. They agree that debt relief has the potential to decrease debt service payments, but instead of a rise in net resource transfer when this occurs, they show that grants or new loans tend to fall. The link between debt cancellation and strengthened budgetary

42 Bird and Milne (2003) p.54.

43 Sachs (1999) pp.2-.

44 The website of Eurodad (071212) <http://www.eurodad.org/whatsnew/articles.aspx?id=1294>.

45 Arslanalp (2006) p. 218.

46 Milne and Bird (2003) and Arslanalp and Henry (2006).

positions is therefore, far from clear and one cannot expect debt relief to make a difference in terms of resources accessible for social spending.⁴⁷

A further concern regards the lack of supervision and the budgetary allocation of the potentially freed up resources. Scholars have found that development assistance tends to be *fungible* – i.e. that donor financed projects can be undertaken also in the absence of the external financing.⁴⁸ Accordingly, there is no guarantee that the extra budgetary flexibility, facilitated by debt cancellation will pave the way for increased investment in the healthcare and education sector.

(2) Pro-poor expenditure conditions

The second instrument through which the recent debt relief initiatives will guarantee higher social spending is the use of donor conditionality. By attaching conditions to development assistance, donors wish to impact its policy leverage. As for the E-HIPC, conditionality is being used as an enforcement mechanism, enabling donors to influence the orientation of public expenditure directly towards poverty reduction. The conditionality linked to debt relief under the HIPC is intended to assist economic and social development in two ways. First, the requirement of a record of sound economic policies will ensure that the beneficiaries have primed the pro-growth policies that the multilateral institutions find necessary for social and economic development. Second, the requirement of preparing and implementing a PRSP will guarantee that the needs of the poor are recognized and that the pro-poor policies, including pro-poor expenditure are adopted by the government.⁴⁹ Both types of conditions are thought to encourage development, but in the case of pro-poor public expenditure, the impact of the PRSP is more direct. Nevertheless, since the first requirement has to be fulfilled in order to benefit from debt write-down it functions as a sort of a gate-keeper and needs to be taken under consideration. The requirement for a record of macroeconomic stability is also the prerequisite that has drawn the most attention from critical voices.⁵⁰

Qualification for assistance under HIPC is founded on so called *selective conditionality* – i.e. only countries that fulfill the predetermined requirements will benefit from debt forgiveness.⁵¹

47 Milne and Bird (2003) and Arslanalp and Henry (2006).

48 Swaroop and Deverajan (1998) p. 3.

49 Morrissey (2001) p.17.

50 Morrissey (2001) and Bird and Milne (2003).

51 Morrissey (2001) p.2.

This design has a clear link to the outcome of a study by Burnside and Dollar (2000) showing that aid has a positive impact on growth only in countries pursuing good fiscal, monetary and trade policies. In distorted economies however, aid is used for unproductive government consumption.⁵² Morrissey (2001) has studied the effects of the conditionality attached to the debt reductions and concludes that their design involve some major weaknesses. He finds that the main problem is the non transparent nature of the system, which occurs as the financial institutions are both stipulating the conditions and judging the degree of compliance.⁵³ In line with Morrissey, Bird and Milne (2003) argue that the demanding pre-selection conditions have resulted in situations where countries which could implement pro-poor policies, especially pro-poor expenditures, being restrained and sometimes prevented from doing so by being denied eligibility.⁵⁴ As mentioned by Morrissey it should however, be noticed that it is problematic to set the intensity of the criteria as too weak conditions may discourage reforms.⁵⁵

As for the pro-poor policy conditionality, Morrissey states that the formulation and implementation process of the PRSPs, requiring consulting with civil society and other interested actors, can be an extremely difficult task for the world's poorest nations, which often suffers from weak policy making and implementation capacity. Furthermore, since there is no consensus on what actually constitutes a pro-poor growth strategy, and since the impact of economic policies on poverty is not well understood he argues that the creation process of the strategies involves a great risk of turning out in inappropriately designed PRSPs. Finally he concludes that although the potential for implementing poverty reduction is conditioned on the policy environment in developing countries, the international institutions tend to discuss the countries as a group rather than individually.⁵⁶

Although conditionality based debt relief has been an accepted tool to enforce debtor countries to be more active in poverty reducing activities, Bird and Milne (2003) highlights that a conditionality based system may also involve a great deal of inconsistency. For instance, if it is true that governments cannot be trusted to set their own policies for development, debt relief may get an undesirable outcome as it risks turning out in a weakening of donor conditionality. According to the scholars this is not likely to be the outcome of the E-HIPC since the debt

52 Burnside and Dollar (2000) p.2.

53 Morrissey (2001) p. 13.

54 Bird and Milne (2003).

55 Morrissey (2001) p.29.

56 Morrissey (2001) pp.15-20.

reductions provided are not comprehensive enough to make the beneficiaries credit worthy for private market loans. For the MDRI, however, the 100 percent debt cancellation may indeed allow HIPC's access to private sector borrowing, which let them escape from the conditionality attached to current official lending. On the other hand, if as suggested by Morrissey, the policy conditions are inappropriately designed and discourage development in the long run, full debt relief will be a desirable outcome as it will give the debtor countries more autonomy. As concluded by Bird and Milne, the profit from escaping conditionality will all depend on its costs and benefit.⁵⁷

4.3 Public spending and poverty reduction

During the last decade, a major shift in the ambition of development assistance can be noticed. At the level of goals, the basic objective of development, usually interpreted as GDP growth has been replaced by the objective of poverty reduction.⁵⁸ Although growth is still a recognized prerequisite for development, the link between access to publicly provided social services and poverty reduction has, over the past years, gained tremendous attention.⁵⁹ Why is then an increase in pro-poor public expenditure associated with an increase in the welfare of the poor? Below follows a detailed discussion on the link between public expenditure policies and economic development and poverty reduction.

Economic literature suggests that public investments have the potential to contribute to development and poverty reduction in a least two ways. By financing infrastructure and R&D, public spending can raise the overall growth performance of the economy,⁶⁰ and by directly financing pro-poor activities public spending can provide access to necessary healthcare and primary education. Both types of expenditures may reduce poverty, but in the case of more growth oriented expenditures, the poverty impact has been argued to be more indirect.⁶¹

As discussed by Van de Walle and Nead (1996) public spending is a particularly good policy instrument to fight poverty since it has the potential to reach many individuals at the same time, thereby impacting the livelihood of the majority of a population. Compared to other

57 Bird and Milne (2003) p. 14.

58 Mosley, Hudson and Vershoor (2004) p. 217.

59 Van de Walle (1995) p.226.

60 Vera and Fiestas (2005).

61 Vera and Fiestas (2005).

policies, it can also be changed and adjusted relatively quickly to the requirements of particular potential beneficiary groups, such as the poor.⁶²

4.3.1 Public sector spending on health care and education

The idea that public expenditure policy plays an essential role for developing human resources and improving accessibility of public services to the poor, thus contributing to development and poverty reduction, finds strong support in the academic literature, among several NGOs and within international institutions.⁶³ The education and health- sectors are also suggested to be the sectors generating the highest social returns.⁶⁴

Education

Human capital has been given crucial importance in the new growth theory, where basic findings show that improvements in education cause direct economic improvements.⁶⁵ It is claimed that a well educated labour force has a positive spin-off effect on society since it is better at adapting and implementing new technologies necessary to increase productivity and growth.⁶⁶ The relationship between the level of human capital and economic development has been tested repeatedly in empirical studies where some of the most important evidence was found in a study on farming in Asia. This study shows that the level of education of the farmer is positively correlated with agricultural productivity,⁶⁷ a discovery which is of particular importance for the heavily indebted countries, where the value added from the agriculture sector constitute 30 percent of GDP.⁶⁸

As mentioned by Benhab and Spiegel (1994), human capital is furthermore supposed to contribute positively to development as it may work as vehicle for attracting physical capital.⁶⁹ This line of reasoning is also recognised by Lucas (1990) who suggests that one of the reasons

62 Van de Walle and Nead (1995).

63 Killick (2004), Van de Walle (1995) , the website of Oxfam (071201)

http://www.oxfam.org/en/programs/campaigns/health_and_education/, the WHO website (071219) <http://www.who.int/hdp/en/index.html>.

64 Dessy and Vencatachellum (2006) p.6.

65 Romer (1990).

66 Benhab and Spiegel (1994) p.2.

67 Jamison D. and Lau L. (1984) p.3.

68 The World Bank website (071218)

<http://devdata.worldbank.org/external/CPPProfile.asp?SelectedCountry=HPC&CCODE=HPC&CNAME=Heavily+indebted+poor+countries&P>
TYPE=CP.

69 Benhab and Spiegel (1994) p.3.

to why physical capital fails to flow to poor countries may be found in their lack of complementary human capital.⁷⁰

Spending on primary education is finally argued to increase the probability of rural youth obtaining lucrative non-farming jobs in cities and/or abroad. In a recent paper, Takahashi and Otsuka, show that the implementation of policies to facilitate improvements in human capital of children have, indeed, been among the most effective ways for achieving the main goals of the MDGs.⁷¹

Healthcare

As stated at a WHO conference in 2004, disease is one of the main reasons that stand in the way of the efforts of the people of developing countries trying to overcome poverty. As for HIPC's, where the major income derives from family based farming, diseases not only constitute a threat to a loss of labour force at the national level but also pose a threat to the very survival of the individual household. A loss of one or more family members may therefore force children into the labour force at an early age and thereby deprive them an opportunity for education.⁷² That primary healthcare is regarded as an important tool to prevent this vicious cycle is well recognised in existing literature and in the international community.⁷³

As many academics have pointed out there are many reasons to believe that increased public spending will help lift people out of poverty. In line with several scholars it is however important to notice that far more than money is needed to make a difference.⁷⁴ In many countries there is a growing recognition that the effectiveness of public expenditures directed to the poor has been undermined by weak targeting, elite capture, and an overall poor quality of the public service delivery mechanisms.⁷⁵ The observed shift to social sector expenditures has been argued to have being implemented without a careful economic analysis of their projected impact on poverty and growth.⁷⁶ According to IMF-economists an exclusive focus on raising public health outlays in heavily indebted countries as a way of improving welfare is not justified. Their reasoning builds on empirical research showing that higher public spending has

70 Lucas (1990).

71 Takahashi and Otsuka (2007) p.26.

72 The WHO website (071115), <http://www.who.int/mediacentre/events/2004/wha57/kimdaejung/en/index.html>.

73 See the UN website (071221) <http://www.et.undp.org/poverty/social.htm>,

The UN website (071203) http://www.un-ngls.org/MDG/Goal_5.htm#2 and Ravallion (2004) p.22.

74 Gupta, Clements Guin-Siu and Leruth (2001).

75 Vera and Fiestas (2005).

76 Paternostro, Rajaram and Tiongson (2004).

not always been associated with better performances in social indicators. They therefore argue that a comprehensive strategy, aiming to improve health outcomes, must focus not only on securing additional resources for public health but also ensuring that the resources are reallocated to programmes that are most beneficial to the poor.⁷⁷

4.0 Method

4.1 Empirical Model

To test my hypotheses empirically, I develop an econometric model of the determinants for public spending on healthcare respectively education. The model, which is based on a linear relationship between the depending and explanatory variables, uses macroeconomic data collected from the World Development Indicators (WDI) and Education Statistics (Edstats), supplied by the World Bank. The data set covers the period from 1996 to 2005.

The model is specified as follows, where it represents year respectively country.

$$y_{it} = \alpha + \beta_1 x_{it1} + \beta_2 x_{it2} + \beta_3 x_{it3} + \beta_4 x_{it4} + \beta_5 x_{it5} + \beta_6 x_{it6} + \beta_7 x_{it7} + \varepsilon_{it}$$

- y_{it} = public health expenditure respectively public expenditure on education, both as a percentage of GNI
- x_1 = annual urbanization rate
- x_2 = annual per capita GDP growth
- x_3 = annual inflation rate
- x_4 = actual debt service, as a percentage of GNI
- x_5 = aid, as a percentage of GNI
- x_6 = dummy variable for countries that has qualified for E-HIPC debt relief
- x_7 = per capita GDP

⁷⁷ Gupta, Clements, Guin-Siu and Leruth (2001).

4.1.2 Dependent variables

The choice of using **public spending on healthcare and education** as dependent variables when assessing the effect of the multilateral debt relief efforts poverty reduction is quite straight forward. In recent times increased attention has been directed to the link between access to publicly provided services and poverty reduction, and the composition of public expenditure has become the key instrument by which development agencies seek to promote economic development.⁷⁸ This is observable not only through the design of the Enhanced Initiative, which has a special focus on pro-poor public policies,⁷⁹ but also since improved health status and increased opportunities for education is among the main elements in the United Nation's Millennium Development Goals.⁸⁰ The effect of debt relief on public spending is, furthermore, thought to be of short term,⁸¹ and since the time period for which the initiatives have been implemented and for which data is available is fairly limited, I consider it reasonable to assess whether the recent debt relief efforts have been successful in meeting the objective of increasing social spending.

4.1.3 Explanatory variables

To explain the variance of the depending variables; the share of public resources directed to the health and education sectors, the two regressions involve five explanatory variables which involvement are based on previous empirical studies investigating determinants for public spending, and two variables representing debt relief. **Per capita GDP growth** is included due to the observation that government activity increases more than proportionately with total income, e.g. GNP.⁸² **Foreign aid** which use is often restricted to certain pro-poor activities is used to catch the impact of the resource inflow, thought to be needed in order to enabling governments to increase public investment.⁸³ **Inflation** is used to reflect potential cyclical factors. As argued by Sturm (2001), a counter cyclical policy may be expected to decrease public spending when inflation is accelerating and vice versa. The inclusion of **urbanization** can be expected to have two effects. The transformation from a family based society into an

78 Paternestro (2005).

79 The IMF website (071212) <http://www.imf.org/external/np/exr/facts/hipc.htm>.

80 The UN website (071212) <http://www.un.org/millenniumgoals/index.html>.

81 Mosley, Hudson and Verschoor (2004).

82 Wagner (1958).

83 Sturm (2001) p. 5.

industrialized society based on public services might lead us to expect a positive coefficient. However, since most public spending comprise infrastructure, and rural areas are in relatively more need of those, urbanization might lead to decreasing demand for infrastructure and hence, reduced levels of public spending.⁸⁴ **Per capita GDP** is included as a control variable for the level of economic development. Previous empirical studies show that per capita income is an important variable in terms of significance and since it has been proven that social expenditure increases with per capita income.⁸⁵

In order to separate the two potential channels through which debt relief is assumed to impact the degree of public spending, the model includes two variables representing debt relief; one variable for debt service payments as a percentage of GNI and one dummy for debt relief. The dummy variable is coded such that it distinguishes between the countries that have qualified for debt relief under the E-HIPC (both interim and full debt relief) from the ones that are under consideration for the E-HIPC. Since the estimated correlation coefficients will only show if the dummy variable is statistically related to the share of resources allocated to social spending, it will not enable an analyses on whether a potentially correlation is a result of reduced budgetary pressure, an outcome of the pro-poor policy conditions that follows from the PRSPs or a combination of the two. By including a variable for total debt service⁸⁶; I aim to isolate the impact of one of the channels in order to identify to what extent both the debt service burden and the pro-poor policies impacts the share on public sector spending on health and education.

There are various studies reporting evidence supporting that institutional quality and government partisanship influence the level of public spending.⁸⁷ However, due to a lack of available data I have excluded institutional variables from my empirical analyses. This is also the case for the unemployment ratio, which would have been interesting to include in combination with inflation in order to reflect cyclical policies.

84 Sturm (2001) p. 5.

85 Hepp (2005) p.12.

86 Total debt service is the sum of principal repayments and interest actually paid in foreign currency, goods, or services on long-term debt, interest paid on short-term debt, and repayments (repurchases and charges) to the IMF. See Definitions from World Development Indicators CD-ROM

87 De Haan and Sturm (1994), Roubini and Sachs (1989).

4.2 Regression Method

To regress my model which includes both a cross country and a time series dimension I use an Unbalanced Panel Least Squares Method. The unbalanced panel indicates that the regression has been corrected for missing years, which is necessary since some of the observed countries miss data for at least one cross sectional unit in the data set. More specific, as it can be expected that the individual countries are affected by country specific circumstances, meaning that there exists differences in the intercepts across the countries a fixed effect transformation for countries has been used. This method allow for specific country differences by removing cross-section means from the dependent variable and exogenous regressors and then performing the specified regression on the new values. Finally, with increasingly cross boarder trade and businesses, actions or courses of events in one country tend to affect other economies. In order to account for these cross-boarder links I have chosen to regress the model using a Cross-section SUR application which allows for correlation between the error terms of the examined countries.⁸⁸

The dependent variables can not be expected to react fully or immediately to changes in the explanatory variables, therefore lagged values of per capita GDP growth, the dummy for debt relief, aid, and total debt service need to appear in the estimating model. The motivation for using lagged values for these variables is simply based on the assumption that the channelling of resources available through aid, released by a reduction of total debt service or achieved by economic growth to social services is a time demanding process. To take one example, one cannot expect new hospitals to be build in year one as a result of foreign aid transferred in year one. The values for the urbanization and inflation rate have not been lagged. One could apply the same reasoning here, but since both of the variables have been quite stable over the entire time period I see no use in using lagged values.⁸⁹ Finally, per capita GDP has not been lagged since it is intended to estimate how the current stage of development affects the level of public spending.

To catch the impact of future expectations the model has, furthermore, being regressed without any delayed effects. I.e. if as suggested by Easterly (2002); the HIPC's are characterised by high discount factors, it may be the case that a notification of debt reduction in year one may result in a higher propensity for public spending already in year one. Furthermore, since the

⁸⁸ See E-views 5 User guide for a more detailed explanation.

⁸⁹ The inflation ratio decreased admittedly substantially between 1996 and 1998. However, over the greater part of the examined period (1998-2005) the inflation rate stabilized around eight percent.

debtor countries are required to prepare and implement a poverty reducing strategy before receiving full debt relief available under the E-HIPC – i.e. reaching completion point,⁹⁰ I assume a positive relationship between social spending and debt relief the same year debt relief is granted.

Finally, in order to downsize the effect of per capita GDP which appears in absolute numbers, I have used its logarithmic value.

4.3 Country selection

I examine the HIPCs as so classified by the IMF and the World Bank.⁹¹ As a result of missing data for some of the indicators included in my empirical analyses Comoros, Eritrea, Guinea, Liberia, Sao Tome and Principe and Somalia have been excluded from the analyses on public spending on healthcare. The same seven countries together with; Democratic Republic of Congo, Republic of Congo, Honduras and Madagascar are due to the same problem also excluded from the analyses on the effects on public educational spending. Finally, since Afghanistan qualified for debt relief first in 2007 and the time period I have chosen to examine ends in 2005, it has also been excluded.

5.0 Empirical Analyses

5.1 Descriptive data

To get a better sense of the data, descriptive statistics for the variables included in the regression are reported in the graphs and tables below. To give a better overview I have chosen to demonstrate the average values together with the extreme observations.

⁹⁰ The IMF website (071212) <http://www.imf.org/external/np/exr/facts/hipc.htm>

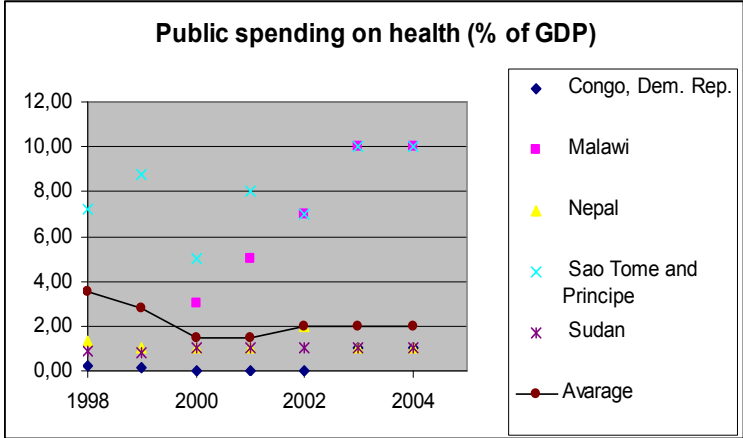
⁹¹ Countries that as of 2007 are classified as HIPCs; Afghanistan, Benin, Bolivia, Burkina Faso, Cameroon, Ethiopia, Ghana, Guyana, Honduras, Madagascar, Malawi, Mali, Mauritania, Mozambique, Nicaragua, Niger, Rwanda, São Tomé Príncipe, Senegal, Sierra Leone, Tanzania, Uganda, Burundi, Chad, Democratic Republic of Congo, Republic of Congo, The Gambia, Guinea, Guinea-Bissau, Haiti, Central African Republic, Comoros, Côte d'Ivoire, Eritrea, Kyrgyz Republic, Liberia, Nepal, Somalia, Sudan and Togo.

5.1.1 Dependent variables

Starting with the dependent variables, graph 5.1.1a and 5.1.1b presents an overview of the heavily indebted countries’ performances in public sector spending on health and education since the launching of the original HIPC in 1996. However, due to missing data on public healthcare spending, graph 5.1.1a includes only data for the period 1998-2004.

As shown by the average trend line in graph 5.1.1a, the average HIPC increased its public sector health expenditure from 1.7 percent in 1998 to 2.3 percent in 2004. Except for Sao Tome and Principe and Malawi, which both demonstrate a sharp increase of their shares of resources directed to public healthcare after 2000 (the year they reached DP) the majority of the HIPCs tended to keep a stable level of health care expenditure over the whole period, ranging from 0.5 to 4.0 percent of GDP.

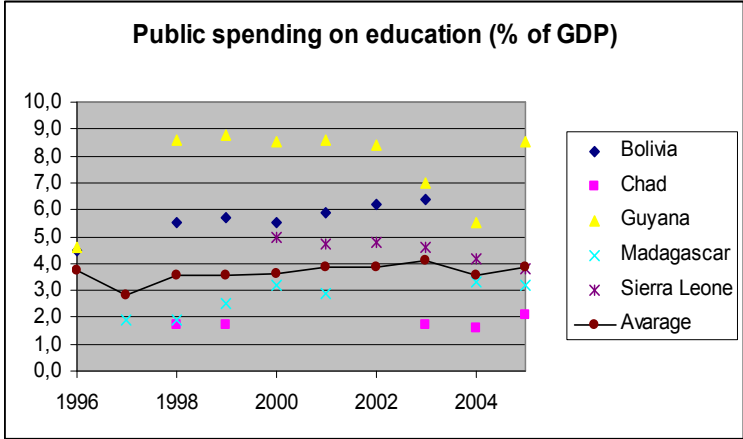
Graph 5.1.1a



Source: WDI

As for public spending on education, graph 5.1.1b shows that the average HIPC remained a constant share, just beneath four percent of GDP over the whole period 1996-2005.

Graph 5.1.1b



Source: WDI

As noted from the two graphs above, the HIPCs differ quite substantially in the amount of resources allocated to health and education. To get a better idea of the differences in public spending within the group of HIPCs, table 5.1.3 and 5.1.4 therefore display the level of expenditure on health respectively education for all the 40 examined countries.

Having a closer look at the 31 HIPCs which qualified for the E-HIPC before 2004 and for which data is available, only five increased their share of GDP allocated to the health sector after reaching decision point whilst 12 remained a constant level and two decreased their shares.⁹² Comparing the group of HIPC which have reached the decision point in 2003 with those which either reached it later or have not yet reached it, the average public health expenditure for the group of post-decision point countries measured to 1.7 percent in 1998 and 2.7 percent in 2004, whilst the countries that were still under consideration for debt relief averaged on 2.1 percent in 1998 respective 1.7 percent in 2005. Despite the fact the magnitude of resources directed to healthcare measures to approximately two percent for both countries benefiting from debt relief and the ones still under consideration, there is an important difference in terms of trends. Unlike the latter group of countries, the group of post-decision point countries displays a positive development, which could be interpreted as in favour of the debt relief program.

⁹² Countries increasing their shares: Democratic Republic of Congo, Madagascar, Malawi, Rwanda and Sao Tome and Principe. Countries remaining a constant level; Honduras, Mauritania, Mozambique, Nicaragua, Niger, Senegal, Tanzania, Uganda and Zambia. Countries decreasing their shares; Guinea Bissau and Guyana.

Table 5.1.3: Public spending on healthcare for all individual HIPCs

Country	1998	1999	2000	2001	2002	2003	2004
Benin			*2,2	2,6	2,2	**2,2	2,5
Bolivia(NA)			3,7*	**3,7	4,1	4,3	4,1
Burkina Faso (NA)			*2,1	1,9	**2,3	2,6	3,3
Burundi	0,5	0,6	0,6	0,7	0,7	0,8	0,8
Cameroon			*1,3	1,2	1,2	1,4	1,5
Central African Republic	1,2	1,3	1,7	1,5	1,7	1,6	1,5
Chad	1,7	2,1	2,6	*2,4	2,0	2,2	1,5
Comoros	2,2	1,9	1,5	1,1	1,7	1,8	1,6
Democratic Republic of Congo	0,2	0,2	0,1	0,2	0,3	*1,1	1,1
Republic of Congo	2,4	1,8	1,2	1,3	1,3	1,3	1,2
Cote d'Ivoire	1,6	1,4	0,9	0,7	1,2	1,0	0,9
Eritrea	3,1	2,5	3,2	2,7	2,3	2,0	1,8
Ethiopia			2,9	*2,9	3,2	3,1	**2,7
Gambia, The	1,7	2,3	*2,9	2,9	3,2	3,1	2,7
Ghana			*2,6	2,8	2,4	2,8	**2,8
Guinea	0,8	0,9	*0,7	1,1	1,0	0,9	0,8
Guinea-Bissau	1,8	2,1	*1,0	1,0	1,4	1,0	1,3
Guyana (NA)			*4,6	4,5	4,7	4,4	4,4
Haiti	2,5	2,5	2,4	2,7	3,0	2,9	2,9
Honduras			*3,6	3,6	3,8	4,0	4,0
Kyrgyz Republic	2,9	2,5	2,4	2,3	2,4	2,3	2,3
Liberia	4,3	4,2	1,2	1,6	0,9	2,0	3,6
Madagascar			*1,2	2,5	2,7	2,2	**1,8
Malawi			*2,7	4,8	7,3	9,5	9,6
Mali (NA)			*2,1	2,9	2,5	**2,8	3,2
Mauritania	1,7	1,7	*2,0	1,4	**2,4	2,2	2,0
Mozambique (NA)	2,4	2,8	*3,8	**3,2	3,4	2,9	2,7
Nepal	1,3	1,0	1,2	1,2	1,7	1,3	1,5
Nicaragua	3,6	3,2	*3,7	3,7	3,9	3,7	3,9
Niger	1,6	2,3	*1,9	2,1	2,1	2,0	**2,2
Rwanda	2,6	3,0	*1,6	1,7	2,1	3,7	4,3
Sao Tome and Principe	7,2	8,7	*5,1	7,6	7,3	10,0	9,9
Senegal	1,5	1,7	*1,7	1,8	2,1	2,1	**2,4
Sierra Leone	1,3	2,0	2,1	1,8	2,2	2,0	1,9
Somalia	1,2	1,2	1,2	1,2			
Sudan	0,9	0,8	0,8	1,1	1,1	1,3	1,5
Tanzania	2,3	2,2	*1,8	**1,8	1,7	1,6	1,7
Togo	4,5	4,4	1,2	1,1	0,9	1,0	1,1
Uganda (A-1998)	1,6	1,9	*,**1,8	2,0	2,4	2,2	2,5
Zambia	3,5	2,8	*2,9	3,1	4,0	3,7	**3,4

Notes, * Year of which Decision Point under the E-HIPC is reached, ** Year of which Completion Point under the E-HIPC is reached

As for public spending on education, the picture is not very different. Table 5.1.4 shows that four of the HIPCs that qualified for the E-HIPC Initiative before 2005 increased their share of GDP directed to public education after reaching DP, eight remained a constant level whilst

three countries decreased their shares.⁹³ One indication that the commitment to increase social spending has been effective can however be found when looking at the development of educational spending within the group of countries that have benefited from debt relief both under the original and the enhanced framework; all of the six countries⁹⁴ demonstrate higher shares of educational expenditure after having qualified for the E-HIPC Initiative compared than under the original framework. Unfortunately, a similar comparison for healthcare expenditures is not possible since three of the six countries lack data for the time prior to the E-HIPC. As for the three countries where data is available we can see that Uganda and Senegal increased their shares of health expenditure. The figures for Mozambique are indeed higher during the E-HIPC period than under the original framework, but the trend is negative and in 2004 the share of GDP directed to the health sector was nearly down at 1998 years level.

Table 5.1.4: Public spending on education for all individual HIPC's

Countries	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Benin			2,5	2,5	*3,1	3,3	3,1	**	4,4	3,5
Bolivia 2000	4,5		5,5	5,7	*5,5	**5,9	6,2	6,4		
Burkina Faso 2000	1,5				*		**			4,7
Burundi	3,9		3,9	3,4	3,3	3,8	4,0	4,7	5,2	5,1
Cameroon				2,3	*	2,8	3,2	3,5	3,5	1,8
Central African Republic			1,9							
Chad			1,7	1,7		*		1,7	1,6	2,1
Comoros			3,8			3,8	3,9			
Democratic Republic of Congo								*		
Republic of Congo			4,1	4,2	2,5	3,2	3,2	2,8	2,5	2,2
Cote d'Ivoire 1998	4,1	4,0	3,7	5,3	4,6	4,6				
Eritrea	2,1		4,6	5,3	3,2	4,5	4,1	4,1	3,8	5,4
Ethiopia	4,0			3,6	4,0	*3,9	3,8		**	
Gambia, The	4,9			3,0	*2,7		2,8	2,2	2,0	
Ghana	4,1			4,1	*				**	5,5
Guinea	1,9	1,9	1,8	2,1	*1,9				2,2	2,0
Guinea-Bissau				5,3	*					
Guyana 1999	4,6		8,6	8,8	*8,5	8,6	8,4	7,0	5,5	8,5
Haiti										
Honduras					*					
Kyrgyz Republic	5,2		4,9	3,4	32,9	3,1	4,5	4,5		
Liberia										
Madagascar		1,9	1,9	2,5	*3,2	2,9			**3,3	3,2
Malawi				4,6	*4,1			5,8		
Mali 2000	2,2		3,0	3,0	*		3,4	**4,1	4,3	4,3
Mauritania			3,4	3,0	*	3,4	**3,6	3,6	3,0	2,3
Mozambique (1999)			2,5	2,4	*	**			3,7	
Nepal	3,1	3,2		2,9	3,0	3,7	3,4	3,4		
Nicaragua	3,2	3,7	2,9	3,8	3,9*	3,8	3,1	3,1	**	

93 Countries increasing their shares; Malawi, Senegal, Bolivia and Rwanda, Countries remaining a constant level; Benin, Cameroon, Chad, Ethiopia, Guinea, Madagascar and Zambia, Countries decreasing their shares; The Gambia, Nicaragua and Mauritania.

94 Bolivia, Burkina Faso, Mali, Senegal, Mozambique and Uganda.

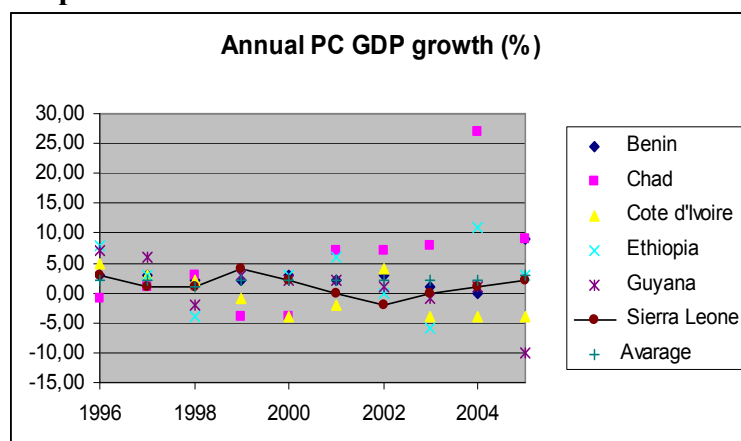
Niger	2,6	2,3		2,1	*2,8	2,3	2,3		**2,3	
Rwanda			2,6		*2,8					3,8
Sao Tome and Principe					*					
Senegal	3,8		3,5	3,4	*3,4	3,5	3,6		**4,1	5,4
Sierra Leone					5,0	4,7	4,8	4,6	4,2	3,8
Somalia										
Sudan	7,6									
Tanzania				2,2	*	**				
Togo	4,4		4,0	4,2	4,4		2,6			
Uganda 1998					*,**2,5				5,2	
Zambia			2,3	1,9	*2,0	2,0			**2,8	2,0

Notes, * Year of which Decision Point under the E-HIPC is reached, ** Year of which Completion Point under the E-HIPC is reached

5.1.2 Explanatory variables

Moving to the explanatory variables, graph 5.1.2a shows the distribution of annual per capita growth for 39 of the 40 HIPC⁹⁵. Besides a few notable exceptions, the observations displayed in the scatter plot show that per capita growth in the great majority of the HIPC⁹⁵ ranged from +/- 10 percent. The time trend representing average per capita growth demonstrates a stable level of 2-3 percent annual growth over the period 1996 to 2005. Recalling the argument in favour of debt relief stating that a reduction of debt would lead to increased investments thus growth⁹⁶, this development may seem somewhat surprising. However, one must remember that initiatives impact on growth may be of long term. Therefore, interpreting the data as an indication that the multilateral debt relief efforts have failed to enhance economic growth may be somewhat premature.

Graph 5.1.2a



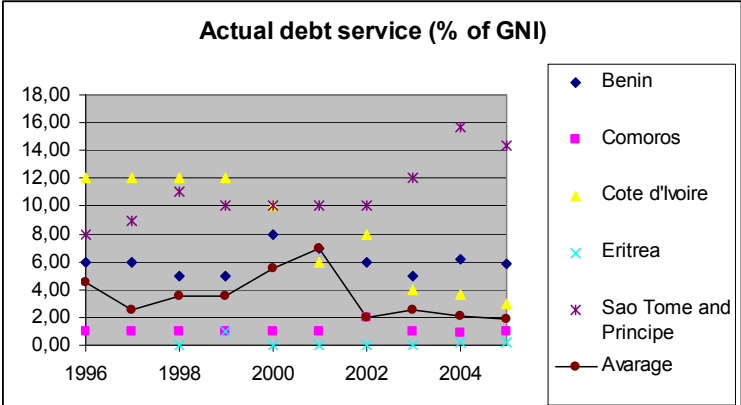
Source: WDI

⁹⁵ Countries excluded; Somalia and Afghanistan

⁹⁶ Benedict Clements, Rina Bhattacharya (2003) p.4.

As can be read from graph 5.1.2b the share of GNI set aside for debt service payments differs significantly between the 40 countries. At the extreme case we find Sao Tome and Principe which in 2004 experienced an actual debt service level measuring to 15.7 percent of GNI, whilst in countries such as Eritrea and Comoros which debt service to GNI ratio was close to zero (0.2 and 0.8 respectively) The average development demonstrates a decrease from 4.5 percent in 1996 to 1.9 percent in 2005. Knowing that the principal objective of the initiative is to reduce the debt burden of poor countries to sustainable levels⁹⁷ any other development would be unexpected.

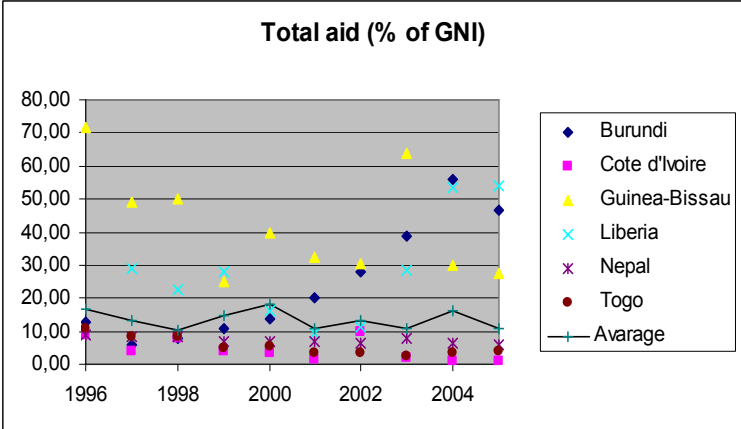
Graph 5.1.2b



Source: WDI

As can be read from graph 5.1.2c the average figures for total aid as a share of GDP has decreased from 16.6 to 11.0 percent over the period 1996 to 2005; a development which seems to contradict the principle of the HIPC debt relief efforts; to be additional to other forms of development finance.⁹⁸

Graph 5.1.2c



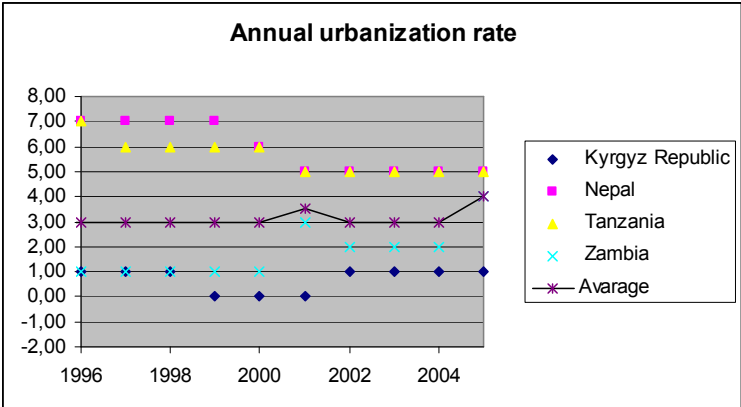
Source: WDI

97 The IMF website (071212) <http://www.imf.org/external/np/exr/facts/hipc.htm>

98 According to the multilateral agencies; debt relief should be additional to other forms of development assistance, See the IMF website (071212) <http://www.imf.org/external/pubs/ft/sd/index.asp?decision=EBM/02/40>

As indicated by the trend line, the average urbanization rate increased slightly from three percent in 1996 to four percent in 2005. In what direction this increase has affected public spending is difficult to say without further analyses. As suggested by Sturm, an increasing amount of people moving to the cities may turn out in both decreased and increased demand for public sector spending.⁹⁹ However, since the average urbanization rate has increased by only one percentage point over the whole period, one can not expect the extent to which urbanization may have affected the magnitude of social spending to be extensive.

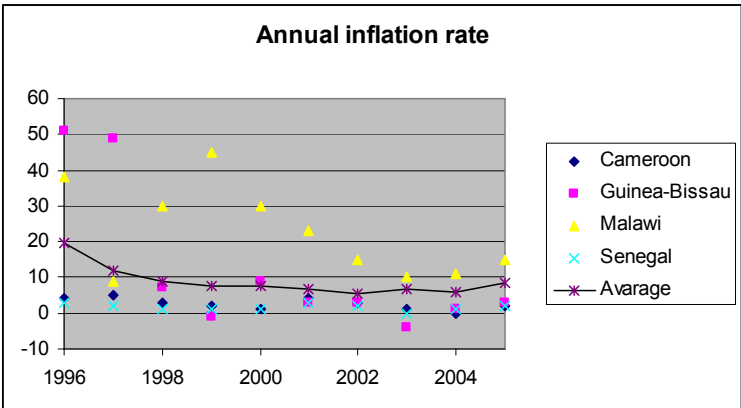
Graph 5.1.2d



Source: WDI

The observations displayed in graph 5.1.2d show that the average inflation rate has declined from 19.5 to 8.3 percent over the period 1996-2005, a development which is not surprising since both the original and the enhanced initiative is conditioned on macroeconomic stability, including keeping inflation rates low and stable.¹⁰⁰

Graph 5.1.2d



Source: WDI

99 Sturm (2001) pp. 5-.

100 The World Bank Independent Evaluation Group (2006) p.25.

5.2 Regression results

This section presents the estimated results generated by the empirical model. The hypotheses tested are; (i) that there exist a correlation between recent debt relief efforts and pro-poor public spending such that the share of public resources directed to the health- and education sector increases when a country qualifies for debt forgiveness under the E-HIPC Initiative, and (ii) that rather than being a direct outcome of the actual debt cancellations, the positive relationship is a result of the pro-poor conditionality that follows from the PRSP included in the scheme of the E-HIPC framework. I consider two measures of social expenditure: (i) the share of GDP allocated to the education sector and (ii) the share of GDP allocated to the health sector. The results obtained from the estimations of the two equations are summarized in table 5.2.1 and 5.2.2.¹⁰¹

Table 5.2.1. Debt relief and public sector spending on healthcare

Dependent variable: Total public expenditure on healthcare (% of GDP)								
Time period: 1998-2004								
Explanatory variables	t	Std Er.	t-1	Std Er.	t-2	Std Er.	t-3	Std Er.
Per capita GDP growth	-0.002	0.010	-0.002	0.006	0.006	0.007	0.012***	0.007897
Debt Service (% of GNI)	-0.007	0.020	0.000	0.022	-0.006	0.017	-0.007	0.009003
Debt relief	0.053	0.208	0.232*	0.178	0.312***	0.180	0.382***	0.210583
Aid (% of GNI)	0.006	0.000	0.005	0.007	0.007	0.011	0.019**	0.011950
	T		T		t		t	
Inflation	-0.002*	0.001	-0.002*	0.001	-0.002**	0.001	-0.002*	0.000811
Urbanization	-0.104	0.091	-0.106	0.091	-0.069	0.093	-0.065	0.079175
Per capita GDP	0.063	0.600	-0.352	0.505	-0.425	0.549	-0.442	0.581382
Countries included	34		34		34		34	
Observations	234		170		136		102	
R-squared	0.79		0.80		0.80		0.81	

Notes, * significant at 10%, ** significant at 5%, *** significant at 1%

Table 5.2.1 presents the results generated by the regressions estimating to what extent debt relief impacted public sector spending on healthcare over the period 1998 to 2004. I have employed a Panel Least Squares method controlling for country specific effects.¹⁰² To grasp potential spill over effects from actions taken previous years on present budget positions, the regression includes values that have been lagged thrice. The regression is based on 34 of the 40 countries which as of 2005 were defined as heavily indebted. Of the seven countries excluded from the regression, four belong to the group of nine pre-decision point countries - i.e.

101 The estimated results do not show any sign of multicollinearity and/or heteroskedasticity, controlled for by a correlation test and the Durbin Watson test respectively.

102 A country specific effect is preferred to a random sample effect since the regressing uses a data set based on a fixed set of countries rather than random values that are drawn from a larger population.

countries that are still under consideration for debt forgiveness.¹⁰³ Except for reducing the sample size available for the regression, thus making the estimators less precise, the exclusion of these countries may risk introducing a bias on my overall results. I.e. since nearly half of the countries not benefiting from debt relief under the Enhanced Initiative have been ignored, the variance of healthcare spending in the countries that have qualified for the E-HIPC has been given more than proportionate weight in the analyses. Considering however that the regression includes observations for the post-decision and post-completion point countries both before and after they started to benefit from debt relief, the regression will account for possible differences in healthcare spending before and after qualification for the E-HIPC Initiative.

The result shown in table 5.2.1 demonstrates a significant and positive correlation (0.23, 0.31, 0.38), when lagged values have been used. Hence, the possibility that there exist a positive correlation between the countries receiving E-HIPC debt relief and the magnitude of public sector healthcare spending cannot be discarded. At the same time the coefficients estimated for debt service payments are very small and lacks significance at reasonable p-values for all of the four regressions. This outcome supports my complete hypothesis; that the existence of a positive correlation between public healthcare spending and countries benefiting from debt relief under the E-HIPC can be explained by the conditions that follow from the PRSPs rather than from reduced budgetary pressure. The fact that my results show no sign of correlation between debt relief and health care spending when no lagged values are included indicates that the means undertaken to impact the HIPC's budgets under the E-HIPC Initiative include at least a one year time lag. Given that the donors require the recipient countries to implement a PRSP one year in advance before qualifying for CP – i.e. receiving full debt relief, this may seem somewhat unexpected. However, one must remember that the dummy is coded such that countries that have qualified for both CP and DP, are given the same code.¹⁰⁴ Since a majority of the countries included in the regression had only qualified for DP in 2004 the group of post-decision point countries has therefore gotten more weight in the regression, which may explain the lack of significance. As for per capita GDP growth and per capita GDP the estimated outcome show that the extent to which economic growth and the level of income is impacting public spending is very limited. The coefficient for per capita GDP is not significant for any of the regressions and its negative signs imply that an increase of the level of per capita income would turn out in a decrease rather an increase in public sector healthcare spending. As for pc

103 Comoros, Eritrea, Guinea, Liberia, Sao Tome and Principe and Somalia,

104 Note that the implementation requirement is only conditioned for qualification for Decision Point.

GDP growth there is a sign of significance for the regression using values that have been lagged thrice. Its limited size (0.012395) indicates, however, that economic growth cannot be expected to explain more than approximately one percent of the variance of public sector healthcare spending. Recalling the theoretical literature stating that public expenditure increases more than proportionately with per capita income,¹⁰⁵ these results are somewhat surprising. On the other hand, it may be the case that economic growth and the level of development –i.e. per capita GDP have more long term effects on public spending. That the estimates on inflation are significantly and negatively correlated with public spending corresponds well to the theory stating that public spending can be expected to decrease when inflation is accelerating and vice versa.¹⁰⁶ The estimated coefficients for the urbanization rate are preceded by a negative sign which indicates that urbanization may lead to decreasing demand for infrastructure and hence, reduced levels of public spending. Since the coefficients are not significant for any of the four regression computed, fluctuations in the urbanization rate can, however, not be used to explain variances in public sector healthcare spending. The final explanatory variable aid does only show a modest significant and positive correlation with healthcare spending (0.019423) when the values have been lagged thrice. The fact that aid does not seem to impact budgetary decisions until some years after the actual transfer corresponds to previous assumptions. Given however, that aid is often earmarked to health and education the weak impact is somewhat striking.

Tabell 5.2.2 The impact of debt relief on public sector spending on education

Dependent variable: Total public expenditure on education as a share of GDP								
Time period: 1996-2005								
Explanatory Variables	t	Std Er.	t-1	Std Er.	t-2	Std Er.	t-3	Std Er.
Per capita GDP growth	-0.011	0.008	0.007	0.006	0.008	0.005	0.021*	0.011
Debt Service (% of GNI)	0.003	0.009	0.026	0.021	0.059*	0.035	0.002	0.008
Debt relief	0.203	0.150	0.280**	0.133	0.267	0.164	0.125	0.122
Aid (% of GNI)	0.009	0.007	0.007	0.007	0.002	0.006	0.000	0.007
	t		T		T		T	
Urbanization	0.024	0.034	-0.002	0.032	-0.017	0.031	-0.014	0.034
Per capita GDP	1.007*	0.694	0.805	0.665	0.614	0.548	0.713	0.494
Inflation	-0.013	0.009	-0.016	0.011	-0.001	0.010	-0.016*	0.009
Countries included	29		29		29		28	
Observations	185		175		160		145	
R-squared	0.76		0.80		0.81		0.87	

Notes, * significant at 10%, ** significant at 5%, *** significant at 1%

105 Hepp (2005) p.12.

106 Sturm (2001).

Table 5.2.2 presents the results generated by the regression estimating to what extent debt relief impacted public sector spending on education over the period 1996 to 2005. Again, I have employed a Panel Least Squares method controlling for country specific effects and similar to the regression on health expenditure, I hope to grasp potential spill over effects from actions taken previous years on present budget positions by including values that have been lagged thrice. The regression includes 29 of the 40 countries which as of 2005 were defined as heavily indebted.¹⁰⁷ Of the eleven countries excluded from the regression, four belong to the group of nine pre-decision point countries. Even in this case the exclusion of the countries reduces the sample size available for the regression and makes the estimators less precise. Similar to the regression on healthcare spending a concern for sample bias therefore exists.

As seen from table 5.2.2 the picture on the impact of debt relief on the share of GDP allocated to public education appears to be more blurred. The results demonstrate a positive and significant correlation between public spending on education and the countries that have qualified for E-HIPC debt relief. The size of the correlation coefficient is fairly big (0.28) but is only significant for one of the four regressions (when the values have been lagged once). Since one of the generated coefficients for the dummy variable is significant, the hypothesis; assuming a relationship between public spending on education and the recent debt relief program cannot be rejected. The estimated coefficient for debt service payments is significant for one of the four regression outcomes, when the values have being lagged twice. However, the fact that coefficient is very small and that it is preceded by a positive sign indicates that a reduction of debt service payments would result in a slight decrease in public sector spending on education. This outcome stands in opposite direction to the main justifications for debt relief – i.e. which reduced debt services would result in increased social spending. Although the inflation rate is only significantly correlated with educational spending for one of the four regressions, the coefficient for inflation is preceded by a negative sign for all four regressions which is in line with the assumption that accelerating inflations rates are generally followed by a cut back in public spending. In contradiction to former studies my results show that the income level does not seem to be a major determinant for the level of public spending. In the case of education, pc GDP is only significant on a ten percent level for one of the four regressions. Per capita GDP growth is significant first when the variable has been lagged thrice which corresponds well with the assumption that it takes time to channel resources. Finally,

¹⁰⁷ Countries excluded due to missing data; Comoros, Democratic Republic of Congo, Republic of Congo, Kyrgyz Republic, Honduras, Madagascar, Rwanda, Somalia, Sudan, Tanzania

neither aid nor the urbanization rate is significant for any of the four regressions. Hence, neither; pc GDP, pc GDP growth, aid nor urbanization can be used to explain more than a fraction of the variance in public sector education spending.

As hypothesized, the results as shown in table 5.2.1 and 5.2.2 respectively demonstrate a significant and positive relationship between countries that are receiving E-HIPC debt relief and the magnitude of public spending allocated to social services. In line with the complete hypothesis, the lack of significance for total debt service indicates that the explanation for the positive correlation can be found in the pro-poor conditions that follow from the scheme of the E-HIPC. Even though it is argued by donors that reduced debt service payments is the key to increase pro-poor spending, academics have come up with several suggestions for why the burden of debt (in terms of debt service payments) does not seem to play a major role when the governments' determine the level of public spending. As mentioned by Milne and Bird (2003) and Arslanalp and Henry (2006) the debt service payments may not be sufficiently offset – i.e. under a still back-breaking debt burden it may be very hard, both politically and economically, to increase social expenditures. In that case, further debt relief would be required to enable these countries to substantially increase their social expenditures. However, knowing that the overall debt service for the HIPC has fallen from five to three percent since the original initiative was initiated¹⁰⁸ it does not seem as a reasonable explanation. Given stable growth rates and that the debtors serviced their debt prior to benefiting from debt relief, it is clear that the share of the public resources committed to debt service payments must have been reduced. What rather seems to be a possible explanation is the argument presented by Bird and Milne; that the proportion of GDP directed to debt service payments in relation to the inflow of resources is so small that a reduction does not make a major difference for the country's budgetary strength.¹⁰⁹ It could, however, be true that the resources released are sufficient to relax the budgets. In that case the exclusion of increased social spending may be explained by fungibility of funds, meaning that instead of financing increased social services the additional resources have been used to finance something else, such as military enlargements or government consumption.¹¹⁰

Although I have left out institutional variables from the regression equation, the explanatory power (R-squared) is extremely high for both the regression on healthcare spending and

108 The WDI.

109 Bird and Milne (2003).

110 Deverajan and Swaroop (1998).

educational spending (approximately 0.80). This indicates that approximately 80 percent of the variance in the dependents can be explained jointly by the independents.

6.0 Concluding remarks

This paper has investigated the impact of debt relief granted under the HIPC-Initiatives on the share of the national income directed to social services (healthcare and education) in the most heavily indebted countries, over the period from 1996 to 2005. As hypothesized, I find a statistical and positive relationship between debt relief granted between 2000 and 2005 and the share of public resources directed to healthcare and education.

In line with hypothesis 2, the estimated result indicates that the level of debt service payments does not impact the share of resources allocated to public healthcare and education. Given that there are only two channels through which the E-HIPC program is thought to impact public spending I suggest that the underlying explanation behind the positive correlation may be found in the incentive structure embedded in the design of the E-HIPC Initiative. More explicitly, while further debt relief acts as the carrot, the requirement to prepare and implement the PRSPs makes sure that the recipients put poverty reducing policies aiming to increase public spending into action. That having been said, I do not conclude that the recent debt relief initiative have been an efficient instrument to fight poverty or that the contents of the PRSPs are optimal, rather I suggest that there seems to be a real potential in the use of pro-poor conditionality that follows from the PRSPs. In fact, if it holds that public spending directed to healthcare and education is only a product of the attached conditionality, it would perhaps be more efficient to substitute debt forgiveness with conditionality based aid. Unlike a reduction in debt service payments, the inflow of foreign aid can at least, according to this study, be shown to have a small impact on healthcare expenditure. It is however important to note that conditionality based finance is a very problematic instrument since a loss of control over resource allocation – i.e. loss of sovereignty may not be appreciated by the recipient countries.

The estimations generated by the empirical model indicate that the correlation between E-HIPC debt relief and government expenditure on social services is stronger in the case of healthcare

spending than it is with expenditure on education. In other words the poverty reducing strategies seems to have a primary focus on improving the overall health status. To arrive at more specific conclusions, one would need to examine each and every PRSPs in great detail. Since that has not been the objective of this paper, I will be content with observing that the expenditure reforms conditioned on debt relief seems to require countries to allocate proportionately more resources to the public health sector.

In the short run, the essential reason behind the positive correlation between debt relief and public spending may seem to be of less importance as long as developments follow the aims of the program, in this case; to link debt relief to poverty reduction by assuring increased pro-poor public spending. In the long run, however, I will illustrate that the underlying incentives will be of great importance. If, as my analysis suggests, public spending is positively correlated with debt relief due to the desire of benefiting from future debt cancellations, one ought to wonder what will happen when there are no more debts to forgive or rather after the multilateral agencies have decided not to forgive any more debts. What strategies and measures will ensure that countries meet their development resource needs while avoiding the accumulation of excessive debts and maintaining debt sustainability? As demonstrated by Easterly (2002) there is no guarantee that debt relief beneficiaries will not accumulate new loans and find themselves in the same situation in a few years after receiving debt relief packages. This is particularly worrisome as the implementation of the MDRI may allow the debtor countries renewed access to private sector loans. If that is to happen, debtor countries will escape the conditions attached to current official lending which would result in the loss of the only instrument that appears to ensure that countries meet their development resource needs may weaken. I.e. the international institutions will loose some of their ability to influence policy reforms in the debtor countries. Based on my results, I therefore suggest that if the rules of the game remain the same, there are few reasons to believe that new debt relief initiative will achieve its objective of increasing social expenditure.

Since neither my study nor previous research has been able to give a clear answer to whether development assistance in the form of debt relief contributes to long run poverty reduction, the critical question remains; why the leading international institutions decided to allocate an additional 50 billion US dollars to cancel all outstanding debts? One reason may be that the international community wants to make a joint effort to show that something can and is being done to help the 2.7 billion people living in extreme poverty. However, what also needs to be

considered are the donors' incentives. In contrast to aid transfers, the cancellation of claims is a relatively costless contribution; in particular if the claims already have been regarded as sunken costs, i.e. there is no expectation that the loans are actually being repaid. Promising a cancellation of all debts would in that case be a simple and inexpensive way of showing generosity in order to gain political support.

Assuming, however, that the donor's aim is to formulate policies, whose primary goal is to support development and fight poverty, one could demand more convincing evidence before engaging in a program such as the MDRI.

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