

# The HIPC Initiative, HIV/AIDS and Growth: A Tri-Country Case Study of Burkina Faso, Ghana, and Uganda

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*The HIPC Initiative, HIV/AIDS and Growth: A Tri-Country Case Study of Burkina Faso, Ghana, and Uganda*

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### **List of Acronyms**

AIDS- Acquired Immunodeficiency Syndrome  
ARVs- Anti-retrovirals  
BCEAO- Banque Centrale des États de l’Afrique de l’ouest (Central Bank of West African States)  
GPRS- Ghana Poverty Reduction Strategy  
HIPC- Heavily Indebted Poor Country  
HIV- Human Immunodeficiency Virus  
IMF- International Monetary Fund  
MDRI- Multilateral Debt Relief Initiative  
PAF- Poverty Action Fund  
NGO- Nongovernmental Organization  
PEAP- Poverty Eradication Action Plan  
PRSP- Poverty Reduction Strategy Paper  
REN-LAC- Réseau National de Lutte Anti Corruption (National Network for the Fight Against Corruption)  
UNAIDS- Joint United Nations Programme on HIV/AIDS  
USAID- United States Agency for International Development  
WHO- World Health Organization  
WAEMU- West African Economic and Monetary Union

## I. Introduction

By now, it is no secret to the global community that the many African countries lag far behind the rest of the world in terms of poverty rates, life expectancy, standard of living, per capita income, health, GDP and economic growth. Table 1 presents some statistical indicators that show the Sub-Saharan African region suffers from amongst other things, a short life expectancy, high infant mortality rate and a low per capita

**Table 1: Selected Health and Economic Indicators for Sub-Saharan Africa, 2003**

|  |               |
|--|---------------|
| Population, Total                          | 704.7 million |
| Life Expectancy (years)                    | 45.6          |
| Infant Mortality Rate (per 1,000 births)   | 101.0         |
| Prevalence of HIV, total (% of pop. 15-49) | 6.7           |
| GNI per capita, (current US \$)            | 510           |
| GDP growth (annual %)                      | 4.3           |

*Source: World Development Indicators*

income relative to the rest of the world. In recent years Africa, a region so often tragically ignored, has been receiving more attention. The Jubilee 2000 campaign as well as many other NGOs including Make Poverty History and the One Campaign, and even the rock singer Bono have drawn more attention to the situation of many African countries by calling for, among other things, the cancellation of third world debt. This question of debt relief also received heavy attention at the G8 summit in July of 2005, where the leaders of the G8 nations pledged to cancel the debt in 18 of the world's highly indebted poor countries (HIPC's). As a result of this pledge, and the willingness of the G8 countries to provide the necessary funds to the IMF and World Bank to grant 100 percent debt relief to eligible countries, in December of 2005 the IMF and World Bank announced the Multilateral Debt Relief Initiative (MDRI). According to the IMF, the MDRI will provide US \$3.3 billion worth of debt relief to 19 of the world's poorest countries (14 of them located in sub-Saharan Africa), allowing them to "increase spending in priority areas to reduce poverty, promote growth, and to make progress towards achieving the Millennium Development Goals" (IMF, 2005a). Clearly, the question of debt relief is one that is very current and has a number of economic as well as geopolitical implications.

The countries of sub-Saharan Africa, however, face not only a large stock of external debt and a difficult economic situation but also a major health crisis in the form of an AIDS epidemic. According to UNAIDS statistics, in 2004, 25.4 million of the world's 39.4 million people living with AIDS were in sub-Saharan African countries. The severity of this health crisis is such that it has potentially devastating economic effects. Sachs (2005) regards the AIDS epidemic in Sub-Saharan Africa as a virtual economic catastrophe with negative implications for businesses, human capital accumulation, worker productivity, foreign investment and soaring health care costs.

Clearly, much like high levels of debt stock and sub-Saharan African poverty, the problem of AIDS in sub-Saharan Africa is one that is of great importance. Both AIDS and high levels of debt are generally perceived to have deleterious effects on a country's overall economic performance. Whereas some perceive HIV/AIDS as a hindrance to economic growth, other groups such as the NGO Oxfam, take the stance that unsustainable levels of debt impede progress in the fight against HIV/AIDS. Thus, many see a strong link between debt relief, HIV/AIDS and a country's economic growth and performance.

Therefore, this paper will undertake an economic analysis of the relationship between HIV/AIDS, debt relief and economic growth in Africa. In essence, the central question to be addressed is: Does debt relief have a significant impact on AIDS reduction and economic growth? The paper will proceed by first analyzing the HIPC Initiative, the framework and process through which highly indebted poor countries receive debt relief. Next, the relevant economic issues surrounding HIV/AIDS will be examined. This section will include the potential negative effects of HIV/AIDS on a nation's economy, as well as a discussion of the policy issues surrounding HIV/AIDS. Finally, case studies of three countries eligible for debt relief under the HIPC and MDRI (Burkina Faso, Ghana and Uganda) will be undertaken. The case studies will examine how each country plans to use resources freed up by debt relief to fight HIV/AIDS, and the economic implications of each strategy. The economic analysis of each country's strategy to fight HIV/AIDS and how it plays in to economic growth will necessarily be quite in depth and will have to address many issues, including the four central issues of: 1) The impact of HIV/AIDS on the size, composition, and productivity of the labor force (i.e. questions of human capital.) 2) The role that HIV/AIDS related medical expenditures play and how

these expenditures are financed. 3) The opportunity costs of fighting HIV/AIDS (e.g. Decreasing levels of savings or capital investment to finance the fight against HIV/AIDS, or choosing to use debt relief to fight HIV/AIDS as opposed to promoting other pro-poor expenditures). 4) How the country's strategy to fight HIV/AIDS harmonizes with their overall strategy for growth. The economic analysis will also follow the logic of a Cobb-Douglas production function and will try to determine the effects that each country's strategy in combating HIV/AIDS will have on labor productivity and capital, and consequently on growth. By doing a careful economic analysis of each country's strategy, conclusions can be reached about how a country can best use debt relief to combat HIV/AIDS and promote economic growth and poverty reduction.

## **II. Debt Relief: The HIPC Initiative**

Before embarking on an analysis of the HIPC Initiative, it is perhaps necessary to discuss the economic theory surrounding debt relief. High levels of debt are generally perceived to be harmful due to the "debt overhang" hypothesis (Krugman, 1988). Following this debt overhang hypothesis, excessive debt stocks deter foreign investment and consequently harm growth. The debt overhang hypothesis may not be much of a factor for the countries eligible for the HIPC initiative mainly because foreign investment was never much of a factor for them in the first place (Gautam, 2003). In their case, high levels of debt payment are seen as crowding out other public, social and capital expenditures that would increase growth and reduce poverty. There is, however, debate as to whether debt relief is an effective and efficient use of aid. Bird and Milne (2003) suggest that debt relief may not be economically efficient or effective, especially if debt relief crowds out other forms of aid. Others also do not view debt relief as the "magic bullet" cure that some NGOs and economists make it out to be. Some suggest that alternatives such as increased aid would be a more effective strategy than debt relief (Arslanalp and Henry, 2004). Past instances of debt relief are also cited as cycles of irresponsible governance on the part of debtor nations and irresponsible lending on the part of creditor nations (Easterly, 2001). While debt relief has achieved popular public support, there is still disagreement as to how effective it actually is. It is generally accepted that debt relief alone is not enough. Because many countries with a high stock of debt suffer from weak governance, corruption, and poor economic policy, reforms are necessary to ensure that resources made available from debt relief are used efficiently.

Starting in the late 1980s, creditor nations as well as the World Bank and the IMF undertook a series of measures to ease the burden on countries struggling with debt. As Gautam (2003) indicates, the primary measure undertaken was the Structural Adjustment Program (SAP), designed to help countries reform policies and cope with short-term problems. However, for a variety of reasons, these measures did not achieve their projected goals, and in the mid 1990s increasing pressure to provide debt relief arose from NGOs, debtor nations, and even The Pope due to the concern that debt had reached levels in many countries where it was handicapping growth and efforts to reduce poverty.

As a result of this pressure, the Highly Indebted Poor Country (HIPC) Initiative was launched in September 1996 as a joint initiative between the IMF and the World Bank. The Initiative is considered a new concept because it represents the first time multilateral debt has become eligible for forgiveness. In 1999, the Enhanced HIPC initiative was launched in response to criticism that the original Initiative was too slow and too limited in providing relief.

In essence, the HIPC Initiative consists of 2 stages. In the first stage, a country must establish a track record of economic reforms in areas such as poverty reduction, stabilization, public sector reforms, health, and education. After these three years of reforms a country has reached the end of the first phase and is at the “decision point.” It is at this point where the decision is made as to whether a country’s debt is sustainable. If the debt is deemed to be unsustainable, the country begins to receive some debt relief, and it begins to undergo even more reforms in areas such as macro-economic policy, that will help reduce poverty. It is also at this point that a country must create its Poverty Reduction Strategy Paper (PRSP.) At the end of the Initiative process, countries are at the “completion point” and receive even more debt relief. Reaching the completion point has become more important with the implementation of the MDRI in December of 2005, as reaching the completion point of the HIPC Initiative is the criteria for a country to receive 100 % debt forgiveness.

Table 2 presents the framework of both the original and Enhanced HIPC Initiatives.

**Table 2: The Original and Enhanced HIPC Initiative**

| Element | Original HIPC | Enhanced HIPC |
|---------|---------------|---------------|
|---------|---------------|---------------|

|                               |  |   |
|-------------------------------|--|---|
| <b>Stated objectives</b>      | To bring the country's debt down to sustainable levels, subject to satisfactory policy performance   | Maintains the original focus to remove the debt overhang and provide a permanent exit from rescheduling, plus free up resources for higher social spending aimed at poverty reduction to the extent that cash debt-service payments are reduced |
| <b>Qualification criteria</b> | IDA-only countries (poverty)<br>Unsustainable level of debt after full use of traditional mechanisms<br>Strong record of policy performance  | Same. Applied retroactively to include countries already past decision or completion points under the original framework  |
| <b>Debt sustainability</b>    | Guiding principle: Target overall debt sustainability to provide a durable exit strategy from the rescheduling process.  | Principle for change: Provide a clear exit from unsustainable debt burden to remove the debt overhang and provide an appropriate cushion against exogenous shocks   |
| Indicators: Targets           | Target range for main indicator:<br>NPV debt-to-exports: 200–250%<br>NPV debt-to-revenue: 280% with export/GDP: 40%;<br>revenue/GDP: 20%   | Uniform application of single target:<br>NPV debt-to-exports: 150%<br>NPV debt-to-revenue: 250% with export/GDP: 30%; revenue/GDP: 15%  |
| Calculation of relief         | Fixed at completion point, based on projections of debt indicator for completion point   | Fixed at decision point, using actual data on NPV debt for year prior to decision point and 3-year average for exports  |
| Time of relief delivery       | Completion point (CP), irrevocable commitment  | Decision point: on an annual basis, interim relief is bulk of anticipated post-CP relief, it is irrevocable   |
| Forward-looking assessments   | Debt sustainability analysis to project profile of key debt indicators   | Same  |
| <b>Performance criteria</b>   | Guiding principle: Action only after the debtor has shown, through a track record, the ability to put to good use whatever relief is provided  | Principle for change: To strengthen the incentives for debtor countries to adopt strong programs of adjustment and reform   |
| For decision point            | 3-year track record of macroeconomic stability and policy reform   | Same plus interim or full PRSP  |
| For completion point          | Further 3-year track record of macroeconomic stability and policy reform   | Maintenance of macroeconomic stability<br>Completion of PRSP, plus one-year PRSP implementation for E-HIPC<br>Performance benchmarks for structural and social reforms  |
| Interim period                | 3 years  | Flexible, with the introduction of floating CP  |
| <b>Creditor participation</b> | Guiding principle: Comprehensive debt relief action: coordinated among all creditors involved with broad and equitable participation<br>New external finance to be on appropriately concessional terms | Principle for change: Same plus debt relief should be additional to reinforce the wider tools of the international community to promote sustainable development and poverty reduction   |

*Source: Gautam, Madhur. Debt Relief for the Poorest: An OED Review of the HIPC Initiative. Washington, D.C.: The World Bank, 2003, 12.*

A few points are worth noting in considering Table 2. First of all, it is clear that the Enhanced HIPC Initiative, while preserving much of the framework of the Original HIPC Initiative, is nevertheless different both in its structure and in its goals. While the



Enhanced HIPC Initiative is a more flexible strategy in terms of eligibility and process requirement, it is also decidedly more ambitious in terms of its goals. Mijumbi (2001) describes the crucial features of the Enhanced HIPC Initiative as reduction in the Net Present Value of Debt to Export ratio from 200-250% to 150%, quicker delivery of debt relief beginning not at completion point but at the decision point, a floating completion point as opposed to a fixed 3 year period between decision and completion point, and the linking of debt relief and poverty reduction. This final point concerning the link between debt relief and poverty reduction represents a major change in the HIPC Initiative. In essence, as Table 2 indicates, in order to reach a decision point under the Enhanced HIPC Initiative, a country must not only maintain a 3 year track record of macroeconomic stability and policy reform, it must formulate a Poverty Reduction Strategy Paper (PRSP) as well. Furthermore, in order to reach the completion point, a country must have put its PRSP to work for at least one year. The addition of the requirement of a PRSP essentially adds a whole new dimension to the HIPC Initiative. Whereas the Original HIPC Initiative had the sole objective of debt sustainability, the Enhanced HIPC Initiative with the introduction of the PRSP added the goal of poverty reduction to the process. The result of this change is that in order for a country to qualify for the Enhanced HIPC Initiative, it is crucial for that country to formulate a PRSP. In essence, the introduction of the PRSP requirement is aimed at making sure resources made available by debt relief go towards “pro poor spending.” In other words, towards programs and social expenditures such as health care, education and infrastructure that will directly benefit the poor in a country. Increased spending to fight HIV/AIDS falls under the category of “pro poor spending” and thus, it is important to understand the nature of the PRSP approach. Furthermore, the case studies of each country will draw on each country’s strategy to use debt relief to combat HIV/AIDS as described in their respective PRSPs.

The genesis of the PRSP is significant and represents a real fundamental shift in the ideology and workings of the IMF and World Bank (Booth, 2003). Furthermore, the PRSP has taken center stage in the arena of debt relief and aid, as even several European countries have based their bilateral aid decisions on a country’s PRSP (Dijkstra, 2005). The aim of the PRSP approach is to “describe a country's macroeconomic, structural and social policies and programs to promote growth and reduce poverty, as well as associated

external financing needs” (World Bank, 2005). The PRSP approach, in essence, recognizes that reducing poverty will require different things for different countries. Thus, it enables a country to tailor a strategy to its own specific needs, following a few guiding principles. The IMF lays out five principles that should guide a country’s PRSP formulation. The five principles are:

- 1) **Country Driven**- A PRSP should be country specific. It should be formulated by a country itself, using broad based participation involving both government and civil society.
- 2) **Results Oriented**- A PRSP should have a firm grasp on the determinants of poverty within a country, and should set medium and long term goals for poverty reduction which can be tracked using specific indicators.
- 3) **Comprehensive**- Poverty is multidimensional. As such, a PRSP should include institutional, structural and sectoral reforms. Furthermore, sustained reductions in poverty require economic growth and thus sound macroeconomic policy that fosters growth is necessary.
- 4) **Partnerships**- Better coordination between governments and donors is necessary.
- 5) **Long Term Perspective**- Poverty reduction is a long-term process that requires institutional change and improved governance and accountability.

While these five principles result in specific strategies that vary a great deal from country to country, there are some common elements shared by virtually each country’s PRSP. First of all, based on these five principles, countries generally formulate PRSPs that rest on four or five pillars, and center their strategies around goals such as broad based or “pro-poor” economic growth which includes macroeconomic policy, good governance, increased investment in social programs such as health and education, and increased social protection (Craig and Porter, 2003). For example, the PRSP of Burkina Faso focuses on: accelerating equity-based growth, guaranteeing that the poor have access to basic social services, expanding opportunities for employment and income-generating activities for the poor, and promoting good governance (Burkina Faso, 2000).

Gottshchalk (2005) identifies some further common elements of all PRSPs; the most important being quick and sustainable “pro poor” economic growth. This type of sustained growth is perceived by all countries to be vital for poverty reduction. Pro-poor

economic growth requires increased human capital and economic and social infrastructure investment, fostering sound macroeconomic policy (mainly low inflation and balanced budgets), and institutional reforms. In line with this goal of “pro poor” economic growth, countries have set target growth rates in their PRSPs, although these targets may be overly optimistic (Gottschalk, 2005). Understandably, the PRSP approach places great importance on economic growth, but it recognizes that sustained growth can only occur if the needs of the poor are met through such things as increased educational and health care expenditures. In essence, this type of approach seems to aim at increasing worker productivity through investment in human capital, as a means to increase growth. More concretely, this could mean that a government’s PRSP could include increased expenditures to help finance medication for those living with HIV/AIDS. Such expenditures could improve worker productivity, as a worker suffering from HIV/AIDS receiving treatment is less likely to miss days of work or suffer from decreased productivity due to ill health.

The PRSP approach has been around for a little over five years. While this has been time enough to allow several countries to formulate second-generation PRSPs, which are essentially updated and revised versions of their original PRSPs, it is too early to make a comprehensive assessment of the overall effectiveness of the approach at reducing poverty (Driscoll and Evans, 2005). Nevertheless, some general evaluations of the process thus far can be made.

First of all, although it may be too early to make a substantial empirical assessment of whether the overall impact of the PRSPs is positive, a few positives have emerged from the PRSP approach. These positives include an increase focus by the government on poverty, a civil society that is more engaged and more mobilized on the issue of poverty, and more attention to donor behavior (Driscoll and Evans, 2005). In terms of increased government focus on poverty, the success has come in the form of poverty reduction plans that are more comprehensive than ever before, improvements in how poverty is monitored, a clear definition of where pro-poor expenditures fit into a government’s budget, and increased pro-poor expenditures. Figure 2, affirms this point as poverty reducing expenditures have been increasing steadily since the implementation of the HIPC Initiative in 1999. Poverty reducing expenditures have increased from US\$5.9 billion in 1999 to US\$10.8 billion in 2004 and are should increase to US\$16.5

billion in 2007 (IMF, 2005b).

**Figure 2: Poverty-Reducing Expenditures and External Debt Service**  
(Weighted average, in percent of GDP)

QuickTime™ and a  
TIFF (LZW) decompressor  
are needed to see this picture.

*Source: International Monetary Fund. "Heavily Indebted Poor Countries (HIPC) Initiative-  
Status of Implementation." Washington, D.C.: IMF, 2005.*

Table 3 presents the poverty reducing expenditures for Burkina Faso, Ghana, and Uganda, the three countries to be considered in case studies.

**Table 3: Poverty Reducing Expenditures in \$US millions**

|   | 1999  | 2000  | 2001  | 2002  | 2003  | 2004<br>est. | 2005<br>proj. | 2006<br>proj. | 2007<br>proj. |
|---|-------|-------|-------|-------|-------|--------------|---------------|---------------|---------------|
| <b>Burkina Faso</b>                                     |       |       |       |       |       |              |               |               |               |
| Poverty Reducing Expenditures                           | 113.8 | 99.1  | 109.4 | 174.1 | 218.5 | 296.3        | 336.7         | 350.4         | 367.9         |
| Poverty Reducing Expenditures/Government Revenue (in %) | 29.6  | 31.8  | 35.3  | 42.0  | 38.7  | 42.0         | 44.5          | 41.1          | 38.8          |
| Poverty Reducing Expenditures/GDP (in %)                | 4.0   | 3.8   | 3.8   | 5.3   | 5.1   | 5.8          | 5.9           | 5.7           | 5.6           |
| <b>Ghana</b>  |       |       |       |       |       |              |               |               |               |
| Poverty Reducing Expenditures                           | 344.8 | 189.2 | 236.3 | 276.1 | 483.3 | 676.2        | 855.2         | 980.5         | 1118.1        |
| Poverty Reducing Expenditures/Government Revenue (in %) | 35.3  | 52.4  | 25.1  | 26.5  | 31.1  | 32.2         | 33.5          | 35.9          | 37.5          |
| Poverty Reducing Expenditures/GDP (in %)                | 4.4   | 7.2   | 4.5   | 4.5   | 6.3   | 7.6          | 8.1           | 8.3           | 8.7           |
| <b>Uganda</b>   |       |       |       |       |       |              |               |               |               |
| Poverty Reducing Expenditures                           | 306.0 | 402.5 | 444.8 | 553.1 | 724.8 | 914.7        | 1000.2        | 1012.7        | 1028.3        |
| Poverty Reducing Expenditures/Government Revenue (in %) | 40.4  | 59.7  | 68.0  | 79.3  | 101.3 | 98.0         | 94.5          | 83.8          | 75.7          |

|  |     |     |     |     |      |      |      |      |      |
|--|-----|-----|-----|-----|------|------|------|------|------|
| Poverty Reducing Expenditures/GDP (in %) | 5.3 | 7.1 | 7.7 | 9.7 | 12.3 | 12.4 | 11.9 | 11.0 | 10.3 |
|--|-----|-----|-----|-----|------|------|------|------|------|

*Source: International Monetary Fund. "Heavily Indebted Poor Countries (HIPC) Initiative- Status of Implementation." Washington, D.C.: IMF, 2005.*

Clearly, the HIPC Initiative has led to increased government focus on poverty, as is evidenced by increased pro-poor spending. The HIPC Initiative has also led to increased civil society involvement, as governments formulate their respective PRSPs with the help of civil society. This has led to a more mainstreamed and broader poverty reduction approach that has created new spaces for poverty policy debate on the domestic level as well as better systems to monitor poverty that may in turn lead to more effective poverty reduction strategies (Booth, 2003). As a result of these positive aspects of the PRSP approach, a country is left with a specific development strategy over which it can claim ownership.

While there are positive aspects to the PRSP approach, the consensus is that it is far from perfect. The PRSP approach is designed to ease conditions placed on debt relief by shifting from "content conditionality" (debt relief contingent on nations undertaking specific policies) to "process conditionality" (debt relief contingent on nations doing certain things). However, while debt relief is conditional only on countries having formulated a PRSP, and not on specific policies contained therein, it appears that donor nations still attempt to influence nations to include certain policies (Driscoll and Evans, 2005). Furthermore, the argument can be made that PRSPs are made less "national" because they are written only because donors want them to be written (Dijkstra, 2005). While this may be true in some cases, the example of Uganda, which formulated its own PEAP (Poverty Eradication Action Plan) in 1997 prior to the institution of the Enhanced HIPC Initiative, contradicts this theory and shows that the desire for strategies to reduce poverty does exist within individual nations. Nevertheless, the World Bank and IMF do monitor and assess the content each country's PRSP, and consequently some of the policies contained within a nation's PRSP will most likely be less "domestic" and more tailored to appease these institutions (Dijkstra, 2005).

Driscoll and Evans (2005) present some further shortcomings of the PRSP approach. First of all, while the PRSP approach to has led to strong government involvement in poverty reduction, this needs to evolve into an institutionalized and lasting effort to reduce poverty. This can be done better by evaluating the costs of policies outlined in the PRSP and factoring these costs into a budget in a more efficient

way. Secondly, although PRSPs are formulated with the help of civil society, this collaboration needs to be expanded to include more sectors of civil society. This expansion of civil society involvement must include more input from the poor and organizations that work with the poor, as these groups are supposed to be the beneficiaries of the PRSP approach, but have in general been underrepresented in the formulation of PRSPs. Getting more civil society involved in the entire process will potentially lead to greater government accountability and transparency when it comes to poverty reduction.

Also, it appears that there are a number of potential macroeconomic problems with the PRSPs. Not only are the financial resources sometimes inadequate to achieve the goals outlined in a PRSP, but also it is often not clearly defined how countries propose to achieve pro-poor growth (Gottschalk, 2005). In other words, there are bound to be questions as to whether to allocate resources to finance capital expenditure and thus growth, or to allocate resources towards social spending and thus poverty reduction. In essence, the PRSPs do not always take into account the opportunity costs of foregoing capital expenditures that would lead to economic growth. Finally, many countries' PRSPs call for balanced budgets and other policies that leave them relatively fiscally inflexible. Consequently, these countries will be handicapped in dealing with economic volatility and exogenous shocks. This is a rather important point as many of the countries are quite susceptible to exogenous shocks, and because poverty has been shown to increase in nations following exogenous shocks (Gottshcalk, 2005).

Finally, there are a number of questions related to the eligibility criteria for the HIPC Initiative. These questions include: what happens to countries that are indebted but do not have a level of debt deemed to be unsustainable? Does the HIPC system create incentives for countries to be irresponsible in controlling their debt, and reward such countries for their irresponsibility? And should the HIPC Initiative provide some relief to countries who have a sustainable level of debt, but are still struggling nonetheless? First of all, in terms of eligibility, one of the motives behind the Enhanced HIPC Initiative was to allow for the inclusion of more countries. Michaelowa (2003) notes that the original HIPC Initiative was not attractive for many developing countries, and the Enhanced HIPC Initiative was more appealing because there was a perception on the part of debtor countries that less political reform was necessary to receive debt relief. Despite this

perceived increase in flexibility of the Enhanced HIPC Initiative, there is still criticism that debt relief schemes provide incentives for poor debt management and policy and reward such behavior with further debt relief.

Easterly (2002) discusses a few of the paradoxical incentives created by the Enhanced HIPC Initiative. Easterly makes a few interesting points. First of all, he suggests that the factors that cause high debt are not easily changed simply by providing debt relief. Furthermore, he implies that past experiences with debt relief have brought no promised benefits and have not reduced debt. Citing the fact that debt relief schemes have become progressively more favorable for debtor nations, Easterly suggests that countries have an incentive to run up high levels of debt in anticipation of debt relief, and that they will delay necessary policy reforms while waiting for the best debt relief “deal.” Furthermore, Easterly suggests that governments have the incentive to zig zag back and forth with their policy decisions. In other words, governments have the incentive to pursue bad policies, run up high levels of debt, improve policies to receive debt relief, and then revert back to poor policies and run up high levels of debt once again. Thus, debt relief is useless for countries that do not change their long run development orientation and policies. In brief Easterly is critical of the incentives created by the HIPC Initiative because he notes that HIPC countries became heavily indebted after 20 years of debt relief. The one flaw with Easterly’s argument lies in the fact that the HIPC Initiative represents the first time multi-lateral debt has become eligible for forgiveness. For example, Kuteesa and Nabbumba (2004) note that although Uganda has received debt relief since the late 1980s, these previous efforts had little impact as Uganda owed over 70 percent its overall debt to multilateral donors.

There are not only questions surrounding the incentives created by the Enhanced HIPC Initiative, but also concerning whether its scope is too narrow. Chowdhury (2004) uses econometric models that compare the impact of indebtedness on the countries eligible for the Enhanced HIPC Initiative to the impact of indebtedness on other severely indebted countries that have not qualified for the Enhanced HIPC Initiative. Chowdhury shows that the long-term economic growth of indebted countries that are not part of the HIPC also suffers due to their indebtedness. Thus he argues that the HIPC Initiative should include all of these countries as well. Similarly Teunissen (2004) criticizes the

Enhanced HIPC Initiative on the grounds that it does not include countries that are equally poor and have similar debt problems as the countries that are included.

As they currently stand, the Enhanced HIPC Initiative and the forthcoming MDRI (Multilateral debt relief Initiative) represent significant changes in the development policy arena. For the first time, multilateral debt has become eligible for forgiveness, and what is more, the policy seems to be heading not just for the goal of sustainable debt, but also for 100 % forgiveness of debt. Also, the Enhanced HIPC Initiative is quite important as it sets a goal of providing a link between debt relief and poverty reduction. Countries wishing to become eligible for debt relief must formulate a PRSP (Poverty Reduction Strategy Paper) that outlines a detailed plan as to how a country plans to link their debt relief to poverty reduction and pro-poor economic growth. The PRSPs contain policies to promote growth by improving factors such as poor educational systems that are seen as having a detrimental effect on a country’s economic growth and performance. The next section examines another factor addressed by the PRSPs that is perceived to be harming the economic growth of a country. The HIV/AIDS epidemic is a major crisis for many African nations not just on a humanitarian level, but on an economic level as well. Consequently, HIPC countries address the HIV/AIDS problem in their PRSPs. The next section will explore the economic ramifications of the HIV/AIDS epidemic.

### III. The Economics of HIV/AIDS

The figures concerning the AIDS epidemic in sub-Saharan Africa are simply staggering. Table 4 presents some figures for Sub-Saharan Africa, while Table 5 presents some of the same figures for the three countries to be considered in case studies. According to World Health Organization estimates, the Sub-Saharan African region is home to more than 60% of the world’s population living with HIV/AIDS, despite the fact that it accounts for slightly over 10% of the world’s entire population. As Table 5 indicates, in Uganda alone there are close to 1 million children who have lost at least one parent to HIV/AIDS. Clearly, the AIDS epidemic in Africa is a humanitarian crisis. The question is however, what are the economic implications of such a health crisis? More specifically, does HIV/AIDS have an effect on economic growth, and if so, how?

**Table 4: Estimated Sub-Saharan Africa HIV/AIDS statistics**

|  | Adults and Children Living with | Number of women living with | Adults and Children Newly | Adult Prevalence (%) | Adults and Child Deaths due to AIDS |
|--|---------------------------------|-----------------------------|---------------------------|----------------------|-------------------------------------|
|--|---------------------------------|-----------------------------|---------------------------|----------------------|-------------------------------------|



|      |              |              |                   |     |             |
|------|--------------|--------------|-------------------|-----|-------------|
|      | HIV          | HIV          | Infected with HIV |     |             |
| 2005 | 25.8 million | 13.2 million | 3.2 million       | 7.2 | 2.4 million |
| 2003 | 24.9 million | 13.1 million | 3.0 million       | 7.3 | 2.1 million |

*Source: World Health Organization (2005)*

**Table 5: Estimated HIV/AIDS Statistics, end of 2003**

| Country      | Adults and children living with HIV (2003) | Adults (15-49), | Children (0-15) | Women (15-49) | Number of deaths due to AIDS in 2003 | Adult prevalence rate | Number of Orphan s due to AIDS |
|--------------|--|-----------------|-----------------|---------------|--------------------------------------|-----------------------|--------------------------------|
| Burkina Faso | 300,000                                    | 270,000         | 31,000          | 150,000       | 29,000                               | 4.2                   | 260,000                        |
| Ghana        | 350,000                                    | 320,000         | 24,000          | 180,000       | 30,000                               | 3.1                   | 170,000                        |
| Uganda       | 530,000                                    | 450,000         | 84,000          | 270,000       | 78,000                               | 4.1                   | 940,000                        |

*Source: UNAIDS (2004)*

In an early study of the issue of the impact of AIDS on growth, Cuddington and Hancock (1994) use a Solow growth model and the case of Malawi to conclude that AIDS does indeed hinder economic growth. They estimate that a prevalence rate rising to 11% by 2010 will lead to a decline in per capita income and a decline in the GDP growth rate. This study however, underestimates the true scale of the epidemic in Malawi, as the prevalence rate had risen to 14.2% by the end of 2003. On the other hand, Bloom and Mahal (1997) use cross country regressions and control for other factors that might influence growth to conclude, “there is more flash than substance to the claim that AIDS impedes national economic growth.” These earlier studies are problematic, however, for a few reasons. First of all, as is evidenced by the predictions made by Cuddington and Hancock (1994) and the actual situation in Malawi, these studies tend to underestimate the scale of the HIV/AIDS epidemic. Also, as Gaffeo (2003) remarks, HIV/AIDS is peculiar in that unlike other diseases such as malaria, HIV/AIDS affects mainly sexually active individuals whose ages for the most part match up with the active work force. The implication is that HIV/AIDS is bound to hurt worker productivity in a way that other diseases will not. Furthermore, HIV/AIDS seems to affect the unskilled sector of the workforce more so than the skilled sector, a fact that needs to be taken into account to understand how HIV/AIDS affects productivity and economic growth. Finally, unlike the Black Death of the Middle Ages or the 1918-1919 influenza epidemic, AIDS has a long incubation period meaning that the true impact of the epidemic in terms

of human capital loss, health care costs, and social costs are not likely to be observed until a number of years after the virus achieves a high rate of prevalence amongst the population (Gaffeo, 2003).

Given these limitations of the earlier models, perhaps the study done by Bonnel (2000) is a more accurate assessment of how HIV/AIDS affects economic growth. Bonnel uses data from 1990-1997 in a cross country regression model to reach the conclusion that in the absence of the HIV/AIDS epidemic the per capita income in Africa would have grown by nearly three times the amount it actually did during the period from 1990-1997. Furthermore, GDP growth is estimated to be 2.6 % lower each year due to HIV/AIDS, meaning that at the end of a 20 year period GDP would be 67 % less than it would have been had the HIV/AIDS epidemic not been a factor. This study seems to refute the more optimistic conclusions reached by the earlier studies concerning the impact of HIV/AIDS on growth.

It is interesting to note that all of the studies view the high rates of mortality associated with the epidemic as something that could potentially increase per capita income. In essence, if the increased mortality due to the epidemic leads to lower population and consequently lower labor force growth, then per capita income should increase. It may seem counterintuitive that an epidemic that kills millions could actually increase per capita income, but it makes perfect economic sense. A decline in the supply of labor would lead to higher wages as the limited labor now available becomes more highly sought after. Furthermore, a decline in the labor force while holding other factors such as land and capital constant is likely to increase per capita income. Indeed, this is exactly what occurred in the wake of the Black Death in Europe. As Stark (2005) notes, although the bubonic plague killed a third of Europe's population between the years 1347-1350, it led to a dramatic increase in the standard of living for those who survived. An initial labor shortage due to the plague led to increased wages for workers and greater opportunities for laborers, particularly for serfs. Furthermore, due to surpluses, food prices declined and this in turn led to increased urbanization and output of goods. Thus, as Stark points out, the net result of the plague was "A substantial increase in the purchasing power of the average European."

Nevertheless, the economic impact of the HIV/AIDS epidemic is likely to be different from the effect of the Black Death on medieval Europe due to the differing

natures of the epidemics themselves. Not only are the methods of transmission different, but the epidemics claim their victims at different rates. HIV/AIDS is a slow killer while those infected with the Black Death succumb only a few days after being infected. Most studies conclude that in the case of HIV/AIDS there is no evidence of this potential per capita income growth and furthermore, the effects on per capita income do not mean that GDP growth will be unaffected.

Despite the discrepancies between the result of the earlier and later studies on the effects of the HIV/AIDS epidemic on growth, there is consensus that if HIV/AIDS affects economic growth it is likely to do so in specific ways. Economic growth models in their simplest form usually view growth as some output function of effective labor and capital. More complex models may include policy variables and even geographic variables to account for various geographic features of a country. Therefore, any fashion in which HIV/AIDS potentially damages effective labor or capital accumulation; it potentially damages economic growth as well. In short, HIV/AIDS is viewed as potentially damaging to growth due to its effects on human capital, social capital, and savings and investment.

The HIV/AIDS epidemic has the potential to affect human capital through a variety of channels. First, as HIV/AIDS disproportionately affects the segment of the population that comprises the active labor force, there will be some destruction of human capital due to the deaths of workers (Gaffeo, 2003). As information was scarce in the early days of the epidemic, HIV/AIDS affected both the skilled and unskilled segments of the population, resulting in the loss of many skilled workers, teachers, professionals and civil servants. As information on the virus as well as prevention methods have become more available, skilled workers now have a greater incentive to invest in information and prevention methods as the cost of becoming infected with the virus increases as education and training increases (Bonnel, 2000). Also, beyond the outright loss of human capital due to the deaths of workers, those suffering from HIV/AIDS are likely to have lower productivity or miss days of work due to poor health, thereby lowering overall labor productivity. Thus, in this fashion, the epidemic has a direct and immediate affect on human capital.

The epidemic however, indirectly damages human capital as well. Due to the epidemic workers have less of an incentive to invest in training and education because

they are less likely to live to see the fruits of such an investment (Bonnell, 2000). For those living with HIV/AIDS there is clearly a decreased incentive to invest in education. However, Bonnell does not acknowledge the fact that those not affected by HIV/AIDS will likely have incentives to invest in greater education and training. If the epidemic results in a labor shortage due to high rates of mortality and wages increase, than those not infected can maximize their potential wages by investing in education and training. Thus, while on the whole the epidemic may lead to decreased incentives for educational investment, the incentives will be increased for certain groups.

HIV/AIDS also affects educational attainment through another channel. If the HIV/AIDS virus affects parents, the responsibilities of running a household may fall on their children. As a result, these children are often forced to withdraw from school, and they obtain a lower level of education than they would have otherwise. The implication is that with a lower level of education, children are likely to earn a lower wage.

Hamoudi and Birdsall (2004) suggest that the HIV/AIDS epidemic is likely to hurt human capital accumulation in four ways. First of all, the epidemic will result in the deaths of many teachers. This will lead to a difficulty of finding and keeping enough qualified teachers, and will increase the financial strain on governments as they must pay to train replacement teachers. Secondly, a decrease in life expectancy due to HIV/AIDS makes education less attractive. In other words, a shorter life span means the returns to education are lower, resulting in decreased incentives to invest in education. Hamoudi and Birdsall estimate that a 10-year decrease in life expectancy will lead to a decrease of investment in education by .8 to 1.3 years. Bonnell (2000) supports this result in finding the HIV prevalence rate to be a significant variable in explaining the decline in secondary school enrollment. Thirdly, the death of skilled workers leads to a reduction in the agglomerative economies of scale associated with interaction between skilled workers. In other words, a group of skilled workers are more productive when working together than they would be were they to work alone. The HIV/AIDS epidemic reduces the increasing returns to scale associated with this type of grouping of skilled workers. Finally, Birdsall and Hamoudi assume that physical and human capital are complements and therefore, a reduction in human capital will lead to a reduction in physical capital which will further impede growth. In brief, the effect of HIV/AIDS on human capital and consequently on growth are quite significant, as an initial reduction of human capital

caused by AIDS is multiplied over time by reduced incentives to invest in human capital (Bonnell, 2000).

Recently, social capital has been found to be significant when it comes to economic growth. Knack and Keefer (1997) use a cross-country regression analysis and find that social capital variables are significant in explaining economic performance and growth. Thus, if HIV/AIDS affects social capital, it is likely to affect a country's overall economic performance and growth.

The effects of HIV/AIDS on social capital appear to be important on two levels. First of all, there is often a stigma associated with HIV/AIDS. This stigma not only weakens family ties, but it weakens social networks. Together with AIDS related deaths, the epidemic weakens communities, civic organizations, communal safety nets and other social ties that help make up social capital (Gaffeo, 2003). On a greater scale, HIV/AIDS impedes a government's ability to provide social services, efficient economic policy organization, and a viable legal framework and regulation. This effect depends largely on the extent to which HIV/AIDS affects civil servants, although there is at least anecdotal evidence that deaths of civil servants do indeed hinder governments' ability to manage economic policy and social services (Sachs, 2005).

Finally, the HIV/AIDS epidemic negatively impacts growth due to its effects on savings and investment. A decrease in savings is associated with HIV/AIDS, as governments must dip into savings in order to finance the rising health care expenditures come along with HIV/AIDS. This decrease in savings is made all the more tangible when one considers that the cost of treating one AIDS patient in Sub-Saharan Africa is on average more than 2.5 times the level of GDP per capita (Gaffeo, 2003). The fiscal deficit is also likely to worsen as governments incur additional expenses by having to pay for the pensions of civil servants who have died from AIDS. In most of the countries hit the hardest by the epidemic, governments are simply unable to offset the increased expenditures associated with HIV/AIDS by increasing taxes or cutting expenditures in other areas, and consequently must dip into savings (Bonnell, 2000). Bonnell (2000) finds the HIV prevalence rate to be a significant variable in explaining the decline in government savings, and notes that as domestic saving is the main way in which developing countries finance capital expenditures, a decrease in savings leads to a decrease in investment, and consequently in growth. The same study also suggests,

however, that if the increased expenditures associated with the HIV/AIDS epidemic were to be financed externally, then the effect of a decrease in savings and investment could be mitigated. Implicit in this statement is the need for external financing sources in helping developing countries deal with the increased expenditures associated with the HIV/AIDS epidemic. Certainly, resources made available through increasing levels of debt relief could be one such source of financing. Thus, if implemented effectively debt relief could potentially help growth prospects by allowing countries to deal with the HIV/AIDS crisis without compromising their levels of savings and investment.

HIV/AIDS can impact economic growth through its impacts on human capital, social capital and savings and investment. The grim reality is however, that HIV/AIDS can create a downward spiral in a country's economic performance and growth, due to feedback effects. Due to reverse causality, wherein several factors that are important to economic growth such as a strong educational and health care system are also important in determining the extent to which HIV/AIDS spreads, the HIV/AIDS epidemic can create a harmful cycle. HIV/AIDS can negatively impact growth, and this poor growth performance leaves a country unable to strengthen its health and educational systems leading to increasing levels of HIV/AIDS, which in turn harm economic growth once again (Bonnel, 2000). This multiplied effect of HIV/AIDS on economic growth makes it even more important for governments to form effective, well directed and goal oriented policies for fighting the epidemic.

The HIV/AIDS epidemic also plays a role in birth rates within a country. The epidemic is likely to inflate birth rates as parents, who to some degree view children as a sort of life insurance policy as well as a source of labor and consequently income, have more children than normal in order to offset the potential of losing some children at a younger age due to AIDS. Therefore, a note on the impact of birth rates on economic growth is in order. The debate surrounding the impact of birth rates on economic growth remains unresolved. Depending on the source, high rates of fertility are viewed as having a negative, positive and neutral effect on growth rates. Looking not only at a population's birth rate, but at the overall age structure of a population, Bloom, Canning and Sevilla (2001) suggest that high rates of fertility hurt sub-Saharan Africa's growth prospects. Consistently high birth rates in sub-Saharan Africa leave the region unable to capitalize on what Bloom, Canning and Sevilla refer to as the "demographic dividend."

In other words, other regions have experienced a temporary population boom at one time or another and were able to allocate their resources accordingly in order to maximize their growth perspectives as the boom generation aged. A consistently high level of fertility in sub-Saharan Africa due to a variety of health, social, cultural and political issues means that sub-Saharan Africa has not had a temporary population boom on which it could potentially capitalize. Bloom, Canning and Sevilla conclude that “as long as fertility remains high and families have large numbers of children, sub-Saharan African countries are unlikely to see rising incomes or healthier and better educated workers.”

Assuming high birth rates to be harmful for growth prospects in the case of sub-Saharan African countries, a few judgments can be made about the three countries to be examined in case studies, Burkina Faso, Ghana, and Uganda. Both Uganda and Burkina Faso have birth rates of 6 births per woman, while Ghana’s rate is 4 per woman. Thus, the high levels of fertility in Uganda and Burkina Faso relative to Ghana imply that birth fertility rates will be more of a hindrance to economic growth in Uganda and Burkina Faso than in Ghana. It must be restated, however, that the debate surrounding the relationship of birth rates and economic growth is not fully resolved, and thus it is difficult to say what the overall importance of differing levels of fertility actually is. Nevertheless, the relationship between fertility, the HIV/AIDS epidemic and economic growth is something that should be addressed by a country’s PRSP. None of the three countries in the case study address this issue, however, and choose to focus more on the reduction of infant mortality. This is perhaps indicative of a belief that a reduction in infant mortality will reduce birth rates.

Based on the high prevalence rates of HIV/AIDS in Sub-Saharan Africa, the question as to how best to formulate policy to help fight HIV/AIDS seems to be a difficult one to answer. Bonnel (2000) suggests that reversing the spread of HIV/AIDS and limiting its impacts on growth will require sound macroeconomic policy, structural policy reforms, and providing individuals with incentives that will make them more likely to engage in behaviors and practices that will help prevent the spread of AIDS. In terms of macroeconomic policies, the implication is that good macroeconomic policy will lead to growth, which will provide governments with the resources they need to fight HIV/AIDS. The structural reforms recommended are ones that address various forms of inequality, such as ethnic, income and gender inequality, all of which have been found to

be highly correlated with high levels of HIV/AIDS prevalence. In terms of providing individuals with incentives, it is suggested that improving access to health care and treatment will provide individuals with more incentive to engage in preventative measures. Interestingly, these recommendations all seem to be addressed by the Enhanced HIPC Initiative. The Enhanced HIPC Initiative requires countries to undertake macroeconomic policy reforms, and to formulate a PRSP that addresses both issues of inequality and health care. The implication is that countries qualifying for the HIPC Initiative may be by default more likely to adopt policies that will lead to lower levels of HIV/AIDS and better growth.

These objectives are more easily stated than met however, as they require significant resources, especially in the case of the last objective. Given the limited resources available to HIPC countries in Sub-Saharan Africa, the policy decisions as to how to cope with the AIDS epidemic create a number of allocation problems. Gaffeo (2003) divides the allocation problem that governments face into three stages: 1) deciding how much government spending should be devoted to health care as opposed to other expenditures, 2) deciding what portion of the health care budget should be devoted to fighting HIV/AIDS, and 3) deciding how much to spend on preventative or curative efforts for HIV/AIDS. Clearly, the key word in this type of analysis is opportunity cost, as there is an opportunity cost associated with each decision. The first stage of the problem deals with the fiscal constraints a government faces. Logically speaking, an HIPC country receiving debt relief should have more money to spend on health care expenditures than they would if they were not receiving debt relief. In other words, if a country is receiving debt relief, it does not have to make the choice between spending money on health care and spending money to pay off its debt. Whether or not a country chooses to use their debt relief to finance increased health care expenditures is a separate question and will be examined more thoroughly in the case studies, however the important fact is that the possibility exists. The second part of the allocation problem is really an assessment of the opportunity cost of fighting HIV/AIDS relative to other diseases such as malaria, which is also a huge problem in Sub-Saharan Africa. In essence, if more deaths can be averted per dollar spent by treating malaria as opposed to treating HIV/AIDS it is more efficient to devote more resources towards fighting malaria. Finally, the third part of the allocation is a question of whether it is more efficient to treat



those with HIV/AIDS or to try and prevent future infections. This poses a number of other questions depending on the goal of a government's HIV/AIDS policy. If the government's goal in treating HIV/AIDS is to simply create robust economic growth, it may make sense for a government to focus most of its resources on preventing new infections. More specifically, prevent new infections in the skilled workers of their population and not devoting resources to those infected with HIV/AIDS as they are likely to die anyway. On the other hand, if the goals of a government are to provide a comprehensive approach to fighting HIV/AIDS, then resources are likely to be more equally divided between curative and preventative measures. This decision is in fact, quite complex. Even in terms of preventing the spread of AIDS there arise a number of similar allocation problems. For example, in terms of preventing the spread of HIV/AIDS, it may be more effective to cut transmission rates of the disease by treating other STDs (Sexually Transmitted Diseases), as presence of other STDs has been shown to increase the transmission rate of HIV/AIDS, than to try and change sexual behavior in the hopes of slowing the epidemic (Oster, 2005). This means that perhaps the best way to prevent future infections is to treat other STDs. Clearly, when faced with an epidemic of HIV/AIDS, the policy decisions are not easy ones.

There are a number of more specific policy issues related to HIV/AIDS and the HIPC Initiative and the PRSP process. Given that a country's PRSP generally has the stated goal of poverty reduction and pro-poor economic growth, the HIV/AIDS strategy contained there within should be in harmony and tailored to how a country plans to execute economic growth. For example, if a country views one sector as relatively more important than another in terms of economic growth, then it would make sense that a country's PRSP stipulate that more resources made available through debt relief go towards fighting HIV/AIDS amongst the workers in the more important sector. In order to create this type of harmonization and ensure that the role of HIV/AIDS as a hindrance to development is recognized and accounted for, a PRSP should include several elements. A PRSP should: 1) earmark resources made available from the HIPC Initiative that will go specifically towards fighting HIV/AIDS, 2) highlight AIDS as a cause of poverty, and illustrate its negative economic impacts, 3) lay out the main strategies of what is ideally a multi-sector and cross cutting national plan to fight HIV/AIDS 4) set medium term goals and specify indicators to monitor these goals 5) specify how a country will respond to the

negative effect that HIV/AIDS has on human capital and economic growth (UNAIDS, 2001). This last point has been particularly difficult for countries to address in their PRSPs, although it is quite important to ensuring that the fight against HIV/AIDS helps contribute to the type of pro-poor growth that is the aim of the PRSP process.

In conclusion, the pandemic has raised a vast number of policy questions that involve a great deal of complexity. What is best for a country in terms of HIV/AIDS policy is not always clear. As an illustration of that complexity, the HIV/AIDS epidemic has reached such a scale in poor countries that are often so constrained in how they can fight the disease that the creation of a vaccine may be the most promising hope for them to control the epidemic (Rauner and Brandeau, 2001). However, while a vaccine may be the best hope for an HIPC country, it is not likely to invest its resources in researching a vaccine. Thus, the incentive exists for an HIPC to potentially use resources made available from debt relief to invest in vaccine research, but they are not likely to do so as the resources available are likely not sufficient to allow for substantial advancements. Furthermore, in terms of keeping the HIV/AIDS epidemic in check, the countries that have been most successful are countries such as Cuba and Thailand. These countries have to some extent ignored human rights by forcing those affected with the virus to live in segregated communities. While human rights have been violated, these strategies have worked. Other measures that may constitute human rights violations such as enforced HIV testing, enforced condom usage, and forced compliance with drug treatment regimens are likely to help stop the spread of HIV/AIDS (Allen, 2004). Thus, the spread of HIV/AIDS may hinge on how willing a government is to adopt policies that infringe on human rights.

As this last point particularly highlights, the policy decisions surrounding HIV/AIDS are never easy or pretty. They are truly life and death decisions that have the potential to have a tremendously positive or a tremendously negative influence on a vast number of people. The complexities of HIV/AIDS policy decisions are compounded when they are placed in the context of the HIPC Initiative. A country should strive to harmonize its HIV/AIDS strategy as presented in its PRSP with its strategy for growth as presented in the same PRSP.

PRSPs play a crucial role in the Enhanced HIPC Initiative as well as in defining how a country designs its policy to combat HIV/AIDS. In the next section, the strategies

formulated by three HIPC countries (Burkina Faso, Ghana and Uganda) all facing an HIV/AIDS epidemic of a similar scale will be examined. Keeping in mind the economic ramifications of an HIV/AIDS epidemic as well as the policy questions discussed in this section, a careful economic analysis of each country's strategy will be undertaken. In essence, we will try and determine how each country has chosen to answer the complex policy challenges created by an HIV/AIDS epidemic in light of the fact that their resources have been expanded due to debt relief. Furthermore, an analysis will be undertaken of how this strategy responds to the negative effects on human capital and economic growth caused by HIV/AIDS, as well as how a country's strategy to fight HIV/AIDS harmonizes with their strategy for growth. Based on this analysis, some conclusions can be reached about how each country's prospects for economic growth have been affected by their HIV/AIDS strategies. Consequently some predictions can be made about how an HIPC can best use additional resources from debt relief to achieve the goal of fighting HIV/AIDS and achieving higher levels of economic growth.

#### **IV. Case studies**

Given that the interaction between debt relief, AIDS and economic growth will not play itself out the same in every country, case studies of three countries, Burkina Faso, Ghana, and Uganda, will be undertaken. These three countries have been selected based on a number of criteria, but generally speaking they appear to be the most similar out of the African countries that have reached the completion point of the HIPC Initiative. First of all, and most importantly, all three countries had to have reached the completion point of the Enhanced HIPC Initiative. This means that they have been involved in the Enhanced HIPC Initiative to its fullest extent, and that they have not only received substantial amounts of debt relief, but are also eligible for 100 percent multilateral debt forgiveness under the MDRI. Secondly, Burkina Faso, Ghana and Uganda share similar levels of AIDS prevalence and relevant economic indicators. Table 6 presents some of these indicators, to demonstrate the similarities between the countries. Obviously, there are differences between the three, as the difference in population indicates. Furthermore, the chart does not show other differences economic, political, geographic and otherwise.

**Table 6: Selected Comparative Statistics**

| Country | Adult AIDS prevalence | Population, In thousands | 2003, GNI per capita | GDP growth 2003, % | Per capita expenditure |
|---------|-----------------------|--------------------------|----------------------|--------------------|------------------------|
|         |                       |                          |                      |                    |                        |

|                 | rate, end<br>2003 |       | in US \$ |   | on<br>healthcare<br>2002, US \$ |
|-----------------|-------------------|-------|----------|---|---------------------------------|
| Burkina<br>Faso | 4.2               | 13393 | 320      | 7 | 11                              |
| Ghana           | 3.1               | 21377 | 200      | 5 | 17                              |
| Uganda          | 4.1               | 26699 | 250      | 5 | 18                              |
|                 |                   |       |          |   |                                 |

Burkina Faso, Ghana, and Uganda, however, share the necessary characteristics that make them good candidates for comparative case studies. Namely, they all have reached the highest level of the HIPC Initiative, and consequently all are receiving debt relief, and they all have a similar level of AIDS prevalence. Thus, the AIDS epidemic is of roughly the same magnitude in each country, and in essence each country will choose a different strategy to address a problem that should be expected to have, all other things equal, a similar economic impact on each individual country.

#### **IV.1 Burkina Faso**

The PRSP prepared by Burkina Faso does indeed recognize the importance of HIV/AIDS. Moreover, the PRSP recognizes the potential negative economic impacts of HIV/AIDS. The PRSP acknowledges that HIV/AIDS adversely affects farms by weakening and depleting the workforce, as well as by depleting resources. It also notes that HIV/AIDS has had a visible impact affecting the workforce, the well-being of households and the production structure of the economy. Furthermore, the PRSP acknowledges that there is potential for a 33 to 43% increase in government health care expenditures due to HIV/AIDS. These observed effects seem to be consistent with the negative effects associated with HIV/AIDS described in the relevant literature, by Bonnel (2000) as well as others. The PRSP recognizes the negative impact of the epidemic on the productivity of the economy, and acknowledges that work needs to be done to deal with the problem. Despite what appears to be a declining or at least a leveling off of prevalence of HIV/AIDS in Burkina Faso, the strategy to combat HIV/AIDS as presented in the PRSP does not seem to fully harmonize with Burkina Faso's strategy for economic growth. In other words, while Burkina Faso recognizes the role that HIV/AIDS potentially plays in economic growth, it does not tailor its HIV/AIDS strategy to help foster that growth in the best possible fashion. Cuddington and Hancock (1994) present a

$$Y = AL_e^\beta K^{1-\beta}$$

model that uses the following aggregate Cobb-Douglas production function to estimate the impact of HIV/AIDS on economic growth:

L and K are effective labor and capital and  $\beta$  is the labor share of national output. Cuddington and Hancock suggest that the HIV/AIDS epidemic will affect growth due to its impact on the quality of the work force, which depends on the workers health and experience. Furthermore, the medical expenditures related to HIV/AIDS are expected to deplete savings, and thus lower investment. The evidence suggests that this latter point is not true for Burkina Faso, at least under the period covered by the HIPC Initiative as capital expenditure as a percentage of GDP increased from 9.2 percent in 1996 to a projected 10.9 percent in 2006. On the other hand, while Burkina Faso recognizes the detrimental effect of the HIV/AIDS crisis on its labor force, it does not do enough to address the problem in key sectors

#### **IV.1.2 Burkina Faso's strategy to fight HIV/AIDS**

According to the PRSP published in 2004, Burkina Faso plans to make HIV/AIDS one of the priority areas of its strategy to reduce poverty and create growth. The PRSP is organized into the four pillars of:

- Accelerating broad-based growth
- Guaranteeing that the poor have access to basic social services
- Expanding opportunities for employment and income-generating activities for the poor
- Promoting good governance.

Burkina Faso outlines its strategy for combating HIV/AIDS under the “guaranteeing that the poor have access to basic social services” pillar of its PRSP. According to the PRSP, Burkina Faso resolves to fight HIV/AIDS by strengthening the multi-sector, decentralized and participatory approach to fighting HIV/AIDS, promoting voluntary and anonymous testing, strengthening the medical care of people living with HIV/AIDS, improving the overall social and economic care of people affected by HIV/AIDS, and incorporating the fight against HIV/AIDS into all development projects. This approach to fighting HIV/AIDS places great importance on improving the affordability and availability of treatment, as well as on increasing patient care capacity. The strategy cites improving behavioral change strategy as the key area of improvement for prevention strategies. It highlights the importance of involving local, tribal and

religious leaders in reducing the social stigma associated with HIV/AIDS and creating important behavioral changes. Such involvement has proven to be effective in creating behavioral change that lowers the prevalence of HIV/AIDS (Allen and Heald, 2004). The strategy however, while not completely ignoring the importance of prevention, places little importance on expanding the role of education and information programs, which is in direct contrast to earlier versions of Burkina Faso's PRSP which placed a much greater emphasis on the role of education and the dissemination of information relating to HIV/AIDS.

This shift in strategy could be a result of what Burkina Faso perceives to be a decline in prevalence rate from 4.1% in 2002 to 1.9% in 2003. This figure is most likely optimistic, since the UNAIDS estimate, obtained using different testing methods, for the end of 2003 was 4.2%. UNAIDS however, suggests that its estimates indicate that the epidemic is at least leveling off in Burkina Faso. While not dropping its multi-sector approach that includes education and information programs, it appears Burkina Faso has decided to focus its expansion in the fight against HIV/AIDS on the treatment of and care for those suffering from the disease. This is most likely because a declining prevalence rate is perceived as an indicator that the prevention strategies in place are adequate, and resources could best be used to expand treatment capacities. In brief, the PRSP of Burkina Faso indicates that Burkina Faso has chosen most recently to dedicate most of its resources towards expanding testing for HIV/AIDS and increasing its capacity to care for those suffering from HIV/AIDS, perhaps in response to what it perceives as a declining prevalence rate.

#### **IV.1.3 Burkina Faso's economic situation and growth strategy**

The economic situation in Burkina Faso poses daunting challenges for development and economic growth, yet there exists potential. By developing currently undeveloped or underdeveloped sectors, Burkina Faso can potentially improve its overall economic performance. Although a landlocked country, Burkina Faso would like to carve a place for itself as an economic crossroads between coastal West African countries and other landlocked nations.

Burkina Faso is a member of the WAEMU (West African Economic and Monetary Union). As such it shares a common currency, the CFA Franc, with eight other West African nations. As a result, Burkina Faso does not determine its own monetary

policy, as that is determined by the BCEAO (Central Bank of West African States). In fact, the BCEAO does not truly determine its own monetary policy as the CFA Franc is pegged to the euro. This leaves Burkina Faso very vulnerable to the euro/dollar exchange rate. Furthermore, as part of the WAEMU, Burkina Faso has agreed to the WAEMU Convergence, Stability, Growth and Solidarity Pact. The criteria of this pact are: a nominal fiscal balance, a maximum wage bill to tax revenue ratio of 35%, a maximum debt to GDP ratio of 70%, and a maximum inflation rate of 3%. These criteria are quite strict, and as a result Burkina Faso is relatively fiscally inflexible (Gottschalk, 2005).

The economy of Burkina Faso is not incredibly diverse, and it offers few comparative advantages and natural resources. Agriculture currently dominates the economy of Burkina Faso, as it accounts for 35% of GDP and 60 % of export earnings. It employs and provides income for 80 % of the population, as most Burkinabé practice subsistence agriculture. In 2003, agriculture expanded by 10.7 %, and served as the main source of economic growth in Burkina Faso (OECD, 2005). Table 7 displays the sectoral growth rates for Burkina Faso’s economy. The primary sector includes agriculture, livestock, fisheries, hunting and forestry; the secondary sector includes mining manufacturing, energy, construction and public works; the tertiary sector includes transport and telecommunications, trade, banks, insurance and other services. With a high level of dependence on agriculture, Burkina Faso is susceptible to exogenous shocks in the form of volatile weather, such as droughts or floods, and insects. The fluctuating primary sector growth rate figures presented in Table 7 are a reflection of this susceptibility.

**Table 7: Trends in Sector Growth, %**

| Year             | 2001 | 2002 | 2003 | 2004 est. | 2005 proj. | 2006 proj. |
|------------------|------|------|------|-----------|------------|------------|
| Primary Sector   | 15.6 | 2.4  | 10.8 | 5.2       | 4.2        | 4.5        |
| Secondary Sector | .4   | 14.1 | 10.4 | 4.1       | 7.0        | 10.1       |
| Tertiary Sector  | 2.4  | 3.7  | 5.5  | 3.8       | 7.7        | 7.5        |

*Source: PRSP of Burkina Faso*

Moreover, Burkina Faso has a weak export base with cotton as the most important product. Cotton accounts for between 60 and 70% of exports. In a liberalizing move, the state owned cotton monopoly has recently turned over some its operation to two foreign

firms. Nevertheless, this type of privatization scheme can do nothing to protect the fragile economy from the volatility of world cotton prices.

It is in recognition of its lack of diversity that Burkina Faso outlines its strategy for growth in its PRSP. The medium term annual growth rate target for per capita GDP growth is set at 4%. Burkina Faso believes that growth will rely on export crops such as cotton, fruits and vegetables, as well as on dynamic manufacturing exports from food processing, leather and cotton spinning industries. Mining is also viewed as particularly important for short-term growth. In order to achieve such growth there needs to be significant expansion in the food processing, leather and cotton spinning industries as well as in the mining industry. These industries are all likely to be more capital intensive than the agricultural sector and thus will require increased capital expenditures. Interestingly, Gottschalk (2005) estimates that Burkina Faso's investment is insufficient to meet its target growth rates. While Burkina Faso would like to improve the role the services play in its economic growth, and sees potential to do so through the tourism industry, it acknowledges, "the government's long-term development strategy will be based on expanding exports of goods."

In order to bolster economic diversity, Burkina Faso plans on expanding its privatization program. By privatizing the mining, manufacturing, and energy sectors, Burkina Faso hopes to include these industries in a framework wherein the private sector will become an important engine for growth.

In brief, Burkina Faso plans to achieve sustained economic growth by strengthening the industries that are already profitable, namely cotton, as well as by diversifying and expanding other industries, such as the livestock and mining industries. Burkina Faso hopes to create a private sector that will become an engine for growth by opening up its industries. Nevertheless, the strategy does seem to rely too heavily on agricultural production, which is highly susceptible to shocks (World Bank, 2003).

#### **IV.1.4 HIV/AIDS strategy in the context of Burkina Faso's growth strategy**

Briefly stated, Burkina Faso's PRSP recognizes the potential impact of HIV/AIDS on economic growth, but it does not tailor HIV/AIDS policy to be consistent with their strategy to achieve economic growth. The PRSP of Burkina Faso recognizes that weak human capital is one of the main obstacles for growth. Weak human capital contributes to low labor productivity and high unemployment level in Burkina Faso.



Furthermore, the PRSP recognizes that HIV/AIDS is not only a health problem but also an impediment to development and human capital formation. The PRSP also states, “for countries that are eligible for debt relief through the enhanced HIPC Initiative, there is a potential for significant increase in the public financing of HIV/AIDS control programs through the earmarking of funds” (Burkina Faso, 2004). As Table 8 indicates, Burkina Faso has seized this opportunity by specifically indicating what portion of their debt relief resources will go towards fighting HIV/AIDS.

**Table 8-Sectoral breakdown of HIPC Resources (in billions of CFA Francs)**

| <b>Priority Sectors</b>   | <b>2004</b>  | <b>2005</b> | <b>2006</b> |
|---|--------------|-------------|-------------|
| Basic Education and Literacy  | 5.68         | 8.53        | 6.88        |
| Health  | 5.34         | 8.02        | 6.47        |
| HIV/AIDS  | .34          | .51         | .41         |
| Rural Development<br><i>(Agriculture, water supply systems, fishery resources, animal resources, Infrastructure, transport, and town planning, Postal service and telecommunications/rural telephone service)</i>                       | 5.79         | 8.7         | 7.02        |
| Physical environment and living conditions<br><i>(Sanitation-Fight against desertification, Mines, quarries, energy, small mining and rural electrification)</i>  | .79          | 1.19        | .96         |
| Public Security   | .34          | .51         | .41         |
| Trade, Business, and handicrafts development  | .23          | .34         | .28         |
| Capacity Building   | .34          | .51         | .41         |
| Other<br><i>(Labor, employment and youth, social development and national solidarity, information, advancement of women, justice, economy and development-monitoring of poverty and regional poverty reduction strategy frameworks)</i> | 3.86         | 5.79        | 4.69        |
| <b>Total</b>  | <b>22.71</b> | <b>34.1</b> | <b>27.5</b> |

*Source: PRSP of Burkina Faso, 2004*

Burkina Faso is helping its growth prospects by earmarking HIPC funds to specifically target HIV/AIDS, something viewed as quite important for helping growth in the context of the Enhanced HIPC Initiative (UNAIDS and the World Bank, 2001). While this is important, two things must be taken into account. First, in each of the three years presented in Table 8, HIV/AIDS receives only 1.5% of the HIPC resources. This places HIV/AIDS on equal footing as public security. Secondly, the PRSP presents evidence that Burkina Faso may not be using the small percentage of dedicated towards HIV/AIDS in the most efficient manner possible.

Burkina Faso's strategy for fighting HIV/AIDS as presented in the PRSP of 2004 is one that focuses primarily on treatment of HIV/AIDS. In this respect, Burkina Faso can be seen as attempting to improve the productivity of workers affected by HIV/AIDS. In essence, Burkina Faso is focusing more on improving human capital by increasing productivity of those afflicted with HIV/AIDS than by protecting its workforce by preventing new infections. Moreover, Burkina Faso's strategy for economic growth relies on the growth of a few specific industries. The expansion of the mining, livestock and fruit and vegetable export industries are all viewed as particularly important. With this in mind, it would perhaps be most efficient for the HIV/AIDS treatment and prevention programs to target workers in these industries. In other words, in terms of economic growth, it might be most efficient for Burkina Faso to improve its human capital and workforce productivity in specific areas. This might indeed be a good short term strategy given the ideas presented by Bonnel (2000), that HIV/AIDS causes decreased economic growth, which in turn leads to higher levels of HIV/AIDS and so on. Targeting workers in key industries could lead to higher growth, which could reverse this cycle. In essence, it may be most efficient for Burkina Faso to utilize its HIPC resources earmarked for HIV/AIDS spending to protect the productivity and viability of the industries that it has designated as keys to economic growth.

On a more general scale, while Burkina Faso acknowledges the human capital effects associated with HIV/AIDS, it seems to underestimate the overall impact that HIV/AIDS has on human capital. For example, the PRSP estimates that there are 350,000 orphans due to HIV/AIDS in Burkina Faso. However, there is no mention of the impact of such a situation on human capital as discussed by Hamoudi and Birdsall (2004). In fact there is not even a mention of the economic consequences of such a high number of orphans. This example is indicative of Burkina Faso's lack of action to outline specific actions targeted at offsetting the negative impact of HIV/AIDS on human capital development.

Perhaps correctly so, Burkina Faso's strategy for developing its weak human capital relies heavily on education and not on reversing the ill effects of HIV/AIDS on human capital. This fact is evidenced by the figures presented in Table 8. Education receives 25% of HIPC resources annually as compared to 1.5% received by HIV/AIDS. With primary enrollment rates around 50% and a literacy rate of only 21.8 percent in

2003, the educational system in Burkina Faso clearly needs to be strengthened in order to improve human capital development. As such, the PRSP prioritizes education and has dedicated nearly a quarter of its HIPC resources towards education.

Placing priority on education as a means to develop human capital is not a bad strategy. Nevertheless, such a strategy should at least acknowledge the notion behind the evidence presented by Hamoudi and Birdsall (2004) that a 10 year decrease in life expectancy will lead to a decrease of investment in education by .8 to 1.3 years and by Bonnel (2000) who finds the HIV prevalence rate to be a significant variable in explaining the decline in secondary school enrollment. The PRSP does not mention at all, however, the negative impacts of HIV/AIDS on education. This omission is even more glaring in light of the fact that Burkina Faso acknowledges that enrollment rates are lower than expected and educational infrastructure is underused, but does not offer HIV/AIDS as a potential explanation. Furthermore, human capital development is listed as one of Burkina Faso's 11 guiding principles for poverty reduction. However, the PRSP indicates that human capital development will be achieved solely through educational attainment, and that mitigating the impacts of HIV/AIDS or ill health in general does not seem to be important. While the increased spending on education may lead to productivity gains that offset the productivity losses associated with HIV/AIDS, such a narrow focus is not the most efficient use of resources.

Cuddington and Hancock (1994) amongst others, recognize that government savings may be depleted by increased health care costs associated with HIV/AIDS, thereby reducing the value of K in the production function:

$$Y = AL_e^\beta K^{1-\beta}$$

As Table 8 indicates, roughly 23.5% of HIPC resources go towards health. This could be an indicator that Burkina Faso has been able to use resources freed up from debt relief instead of savings in order to finance health care expenditures. If this is the case, then capital expenditures should increase, as logically speaking increased saving leads to increased investment.

**Table 9: Government Capital Expenditures (in billions of CFA Francs)**

| <b>Year</b>                 | 2001  | 2002 | 2003 Est. | 2004 Proj. | 2005 Proj. | 2006 Proj. |
|-----------------------------|-------|------|-----------|------------|------------|------------|
| <b>Capital Expenditures</b> | 239.1 | 252  | 224.6     | 300.9      | 350.8      | 387.7      |

*Source: PRSP of Burkina Faso, 2004*

As Table 9 indicates, there is a significant increase in capital expenditures. While there may not be a direct causal relationship between debt relief and increased capital expenditure, the implication is that at the very least HIV/AIDS related health care expenditures do not seem to be hindering capital expenditure expansion.

While using HIPC resources to increase health expenditures may ease the fiscal burden that Burkina Faso faces, there are potential efficiency losses associated in devoting such a significant portion of HIPC resources towards health mainly due to corruption in the health sector. The Burkinabé NGO REN-LAC (Reseau National de Lutte Anti Corruption “National Network for the Fight Against Corruption”), places the health sector as one of the sectors worst hit by corruption in Burkina Faso. In a poll, more than 50% of respondents had experienced corruption in the health sector. What is more, corruption in the health sector got progressively worse from 2000 to 2003 (REN-LAC, 2003). Therefore, dedicating a significant amount of resources towards a sector that is particularly corrupt could potentially lead to some of these funds being diverted from their rightful causes, and thus an efficiency loss. On the other hand, devoting additional resources towards health care could lead to efficiency gains if the resources are used properly. REN-LAC indicates that the corruption in the health care industry is due in large part to poor wages, a lack of necessary equipment, and inadequate training of medical personnel. Devoting the HIPC resources spent on the health sector towards higher wages and better training and equipment for medical personnel could improve efficiency in the health care system.

Despite the fact that Burkina Faso may not be engineering its HIV/AIDS strategy in a fashion that is most efficient for growth, it seems to be nonetheless making some progress in the fight against HIV/AIDS. The epidemic seems to have at least leveled off, and according to the government is in decline. There are bound to be positive externalities associated with this drop in prevalence rate. The effect, however, of this decline in prevalence on growth is not likely to appear for a number of years as the consequences of high levels of prevalence in past years are likely only beginning to make an economic impact.

In conclusion a summary of the findings of the case study is presented. Statements such as a “ twofold and threefold increase in the death rates for workers, managers, and public-service and private sector employees will drive up labor costs and diminish the

quantity of services provided” are typical of the PRSP of Burkina Faso. Burkina Faso recognizes the economic impact of the HIV/AIDS epidemic but does not harmonize its strategy to fight HIV/AIDS and its strategy to promote economic growth. It fails to do so by i) devoting a large portion of HIPC resources towards education and relying solely on education as a means to develop human capital and not accounting for the negative impact of HIV/AIDS on educational attainment, ii) inefficient structuring of its HIV/AIDS strategy by not focusing strategy on protecting the workforces of industries that are key to economic growth. Nonetheless some gains have been made in reducing prevalence rate, which is bound to help future growth.

#### **IV.2 Ghana**

The PRSP prepared by Ghana, heretofore referred to by its more common and specific name, GPRS (Ghana Poverty Reduction Strategy), is a document that recognizes the importance of HIV/AIDS as an impediment to economic growth and poverty reduction. Moreover, the GPRS makes several key realizations about the dynamic of the HIV/AIDS epidemic in Ghana and the potential negative economic impacts of such a dynamic. These negative impacts are all recognized to have an impact on productivity and human capital. Specifically the GPRS mentions that the epidemic can result in the deaths of young people during their most productive years which will hurt the ability of households to support themselves, that it can result in the loss of agricultural laborers due to HIV/AIDS related deaths, and that the epidemic carries with it the potential for the loss of skilled manpower in industry. The GPRS reaches some important conclusions regarding these last two points. First of all, it notes that a reduction in the size of the agricultural labor force will not only lead to decreased agricultural production, it will change what the agricultural sector grows. The GPRS suggests that a decreased agricultural labor force will result in a shift of production from export crops to food crops. This would be a step backwards from an agricultural sector geared towards crops that would bolster economic growth to a sector that is based on subsistence. Secondly, the GPRS recognizes not only the potential productivity losses in industry associated with the deaths of skilled workers, but also the high costs of training replacements and paying the health bills of workers infected with HIV/AIDS. Thus, the GPRS seems to have an understanding of the complex issues surrounding the economic impact of HIV/AIDS. The impact on both agriculture and industry occurs in more than one time period. There

is the initial loss of productivity associated with the deaths of workers, followed later on by other impacts resulting from these deaths.

The GPRS displays its understanding of the complex issues surrounding the economic impact of HIV/AIDS by noting the impact of the epidemic on the familial social safety net. The GPRS recognizes not only that the deaths of heads of households result in the loss of income, but also that such deaths result in the depletion of family savings and assets, as well as increased numbers of orphans and declining school enrollment. The last realization is vital, as it recognizes the potential human capital affects associated with declining school enrollment.

#### **IV.2.2 Ghana's Strategy to fight HIV/AIDS**

The GPRS notes that the prevalence rate of HIV/AIDS in Ghana has not declined as desired but has remained more or less unchanged at around 3.6%. The GPRS views this as a reflection of a lack of attitudinal change amongst Ghanaians and limited gains in achieving behavior changes that would help stop the spread of HIV/AIDS. Consequently, the GPRS strives for a renewed and bolstered effort at HIV/AIDS prevention and cites the low cost of prevention relative to treatment as further justification for its focus on prevention. Nevertheless, the GPRS does not focus entirely on prevention efforts and acknowledges the need to provide treatment to those living with HIV/AIDS and their families.

Ghana believes that increased spending and a greater capacity to respond to HIV/AIDS are vital. The GPRS therefore advocates an expanded multi sector response both at the national and local level that involves not only the government but also the private sector, NGOs, unions, religious leaders, traditional leaders, the media and other civil society and community organizations. This multi sector approach is perhaps an admission of the fact that the HIV/AIDS epidemic has reached a level such that the government alone cannot effectively handle the situation. Furthermore, such an approach not only releases some of the burden placed on the government, it has proven to be effective. Specifically, the involvement of tribal, local and religious leaders has been demonstrated as important in reducing the stigma associated with HIV/AIDS and creating important behavioral changes that lower the prevalence of HIV/AIDS (Allen and Heald, 2004).

Ghana's strategy to cope with HIV/AIDS, as presented in the GPRS, prioritizes three objectives: preventing new transmission of HIV, provision of a continuum of care for people living with HIV/AIDS and their families, and laying an effective institutional framework. In terms of preventing new transmissions of HIV the GPRS plans to focus on improved service delivery, intensifying behavioral change communication and organizing special programs for high-risk groups. The emphasis placed on behavioral change is quite interesting, as it indicates that Ghana views behavioral change as vital to helping prevent the spread of HIV/AIDS. Furthermore, the GPRS views not only schools, but also the workplace, employers, and unions as important communicators of the behavioral change message. This targeting of the workforce can be viewed as an effort at guarding the productive capacity of the workforce from the ill effects of HIV/AIDS.

#### **IV.2.3 Ghana's Economic situation and growth strategy**

Generally speaking, the economic situation in Ghana is better than that of neighboring Burkina Faso. According to a report from the OECD Development Center Ghana has, in recent years, experienced, "steady if unspectacular economic growth and lower inflation," (OECD, 2005). Furthermore, in terms of social indicators, Ghana does relatively well in comparison with the rest of Sub-Saharan Africa (World Bank, 2003). Although the economy depends primarily on cocoa and a few other products, Ghana would like to diversify its economy and has already made progress in doing so. Perhaps most encouragingly, the OECD report notes that Ghana has benefited not only from HIPC debt relief but from sound macroeconomic policies and structural reforms as well.

As Table 10 indicates, Ghana has been able to achieve steady real GDP growth.

**Table 10: Real GDP Growth for Ghana**

| <b>Year</b>      | <b>Real GDP Growth</b> |
|------------------|------------------------|
| 2003             | 5.2                    |
| 2004             | 5.8                    |
| 2005 (projected) | 5.9                    |
| 2006 (projected) | 5.7                    |

*Source: OECD Development Center, "African Economic Outlook 2004/2005"*

This recent growth trend has been fueled by good agricultural performance and more specifically, by better than expected cocoa output. In 2003, the agricultural sector grew at its highest rate in 20 years. Nevertheless, as the GPRS acknowledges, the reliance of the Ghanaian economy on cocoa and a few other products leaves the economy in a fragile

position and makes it quite susceptible to price fluctuations as well as a variety of other shocks. Furthermore, the growth in cocoa production is somewhat misleading, as much of the increased output owes itself not to better productivity, but to more acreage devoted to farming cocoa (OECD, 2005). This means that Ghana must focus on increasing productivity if it wishes to continue its strong cocoa output.

The GPRS acknowledges the dangers associated with an economy based on a few primary agricultural products, and it engineers its strategy for growth around the need for diversification. The main goal as stated by the GPRS is “to ensure sustainable equitable growth, accelerated poverty reduction, and the protection of the vulnerable and the excluded within a decentralized democratic environment” (Ghana, 2003). In order to achieve sustainable economic growth, the GPRS focuses on the development of the agricultural and rural sector as “the catalyst for the transformation of the national economy and the drive to economic maturity.” The GPRS recognizes that there is an underutilization of human and physical resources in the rural sector. Government intervention is necessary in order to restructure and develop the rural agricultural sector as well as to create entrepreneurial opportunities for agricultural development. The GPRS suggests that “the transformation of the rural environment from its subsistence orientation to a commercially attractive, viable and dynamic sector” is crucial for the country’s sustained economic growth.

This transformation of the agricultural sector is linked with Ghana’s overall assessment that it needs to industrialize. Although Ghana has made progress in industrial growth, its industrial sector, like its agricultural sector, is based on a few sub-sectors including petroleum and oil refining (OECD, 2005). Therefore, the GPRS recognizes the need to diversify its industry. The GPRS takes a prudent approach to the industrialization of the national economy by beginning its industrialization in its strongest sector, the agricultural sector. Thus, agro-industrial projects are viewed as the first step towards a greater and more diverse industrialization of the economy. Agro-industrial enterprises, including the processing of agricultural products, are viewed as the key to making the agricultural sector, and the economy as a whole more dynamic. Such prioritization of agro-industry, is likely to require increased investment in capital and technology.

In brief, although Ghana’s economic performance has been relatively sound in recent years, this has been attributable to some degree to positive shocks, including



favorable weather conditions. The GPRS acknowledges that this is the nature of the Ghanaian economy and seeks to reduce the potential for such shocks to determine the fate of the economy. In order to do so, the GPRS calls for diversification of the economy, with the structural reform of the agricultural sector viewed as the key for economic growth. The GPRS prioritizes industrialization led by agro-industrial projects as important for economic growth.

While a strategy that builds itself around the strongest element of the Ghanaian economy is sound, there are a few shortcomings of the GPRS in terms of its plan to achieve economic growth. First, the government passes the buck on the increased capital expenditures and new technology that are needed for such a plan. While it acknowledges the need for new capital and technology for its agro-industrial projects, it suggests that foreign direct investment and foreign firms will provide such capital and technology. It is perhaps overly optimistic to assume that such investment will materialize. Secondly, Ghana has a tremendous comparative advantage given that it is a country with a coastline. Opportunities for shipping, fishing and other marine industries would seem to logically play an important role in Ghana's strategy for economic growth. However, the GPRS makes little mention of how to exploit its coastal position. Finally, the GPRS is relatively short sighted. It lays out only a 3-5 year framework and does not have a long-term vision (World Bank, 2005).

#### **IV.2.4 HIV/AIDS strategy in the context of Ghana's growth strategy**

The GPRS misses a great opportunity to integrate its HIV/AIDS strategy into its strategy for economic growth in a debt relief context. As noted earlier, the GPRS understands the complicated economic problems associated with HIV/AIDS, including changes in labor force composition and potential shifts in the composition of agricultural output. However, while the GPRS seems to have a firm grasp on the complex economic ramifications of the HIV/AIDS epidemic as discussed in the relevant literature, it does not take the next step to fully address these issues. For example, the GPRS cites the potential negative impact of the epidemic on both the agricultural and industrial sectors, both of which are crucial to the growth of the Ghanaian economy. However, the strategy to fight HIV/AIDS as presented in the GPRS simply does not address these sectors specifically. Moreover, the GPRS treats the whole HIV/AIDS epidemic in a seemingly vague fashion. In essence, it is quite difficult to separate the goals of the GPRS with

regards to HIV/AIDS from the overall health related goals. As evidence of this fact, the GPRS does not specifically earmark funds made available from the HIPC to go towards HIV/AIDS programs. This is quite demonstrative of the overly neglectful manner in which HIV/AIDS is treated by the GPRS. In essence, again keeping in mind the Cobb-Douglas production function put forth by Cuddington and Hancock (1994), Ghana encounters much of the same problem as Burkina Faso. Both Burkina Faso and Ghana recognize the detrimental effect of HIV/AIDS crisis on their labor forces, but they do not do enough to address the problem in key economic sectors.

Perhaps the most glaring missed opportunity on the part of Ghana is its failure to specifically earmark HIPC funds for HIV/AIDS expenditures. While the GPRS outlines increased social expenditures by sector, it does not indicate how much of these expenditures will be financed by HIPC savings. In fact, nowhere does the GPRS indicate in a clear and organized fashion how it plans to disburse funds made available from debt relief. Only one thing is clear from GPRS: the government plans to use 20% of annual HIPC relief to pay down domestic debt, and dedicate the remaining 80% to poverty reducing expenditures. Fortunately, the annual government budget reports provide better information as to how Ghana plans to use its HIPC resources. Table 11 gives a snapshot for the breakdown of Ghana's HIPC expenditures for the year 2004. It is important to keep in mind that these expenditures represent only 80% of resources made available from HIPC relief.

**Table 11: HIPC expenditures, 2004**

| Sector   | Percentage of HIPC resources allocated |
|--|--|
| <b>Human Resource Development</b>                          | 46%                                    |
| <i>Educational Programs, Activities and Infrastructure</i> | 23.5%                                  |
| <i>Health</i>  | 10.6%                                  |
| <i>Access to Potable Water</i>                             | 4.7%                                   |
| <i>Other</i>   | 7.2%                                   |
| <b>Private Sector Development</b>                          | 40%                                    |
| <i>Rural Electrification Programs</i>                      | 13.6%                                  |
| <i>Roads and Transport</i>                                 | 6.1%                                   |
| <i>Agricultural Machinery</i>                              | 4.3%                                   |
| <i>Farmer Subsidies</i>                                    | 3.6%                                   |
| <i>Other</i>   | 12.4%                                  |
| <b>Governance</b>  | 8.5%                                   |
| <b>Other</b>   | 5.5%                                   |

*Compiled from Information in Government of Ghana's 2005 Budget Statement*

A few things are worth noting taking this table into account. First, Ghana does not clearly earmark any HIPC funds for HIV/AIDS. This is something viewed as important for helping growth in the context of the Enhanced HIPC Initiative (UNAIDS and the World Bank, 2001). Thus, this failure to earmark funds represents a missed opportunity for Ghana. Secondly, health, the area under which HIV/AIDS treatment presumably falls, receives a comparatively small fraction of the total resources freed up by the HIPC Initiative. With health receiving 10.6% of HIPC resources, it appears to be less of a priority than even rural electrification programs. Finally, in terms of human resource development, education is far greater a priority than health. This is perhaps a reflection of a belief that lack of education is much more of an impediment to human capital development than poor health. In essence, it can be inferred from this spending pattern that lack of education hurts productivity more so than poor health.

Perhaps Ghana's decision to use only 10.6% of HIPC resources for expenditures on health, and consequently an even lower though indeterminable portion for HIV/AIDS, can be explained by their strategy to combat HIV/AIDS as outlined in GPRS. This strategy is one that seeks low cost and efficient solutions. The GPRS takes into account the opportunity costs of treatments. In deciding to pursue prevention as its primary means of coping with the HIV/AIDS epidemic, it explicitly states, "prevention is key to achieving sustainable poverty reduction, given the low costs relative to treatment." Thus, in terms of human capital, Ghana's HIV/AIDS strategy is an interesting one. The strategy does not appear to tailor itself towards the needs of the economy, taking into account what policies should be pursued to make the economy most viable. The GPRS seems to look for simply the cheapest way to deal with the epidemic.

In this context, the emphasis placed on behavioral change strategy as the best way to prevent new infections is interesting. While this strategy has been proven to be effective, it also is likely the cheapest route to take towards prevention relative to the other prevention strategies presented in the GPRS. If Ghana is able to achieve its goals of prevention largely through behavioral change, then its strategy to combat HIV/AIDS as outlined in the GPRS will have worked in an incredibly efficient and cost effective manner.

Nevertheless, even the earmarking done by Ghana creates some problems. First, as Table 11 indicates, there are significant percentages of HIPC resources that are not designated for some explicit purpose. This certainly does not lend itself well to the complete and full accountability and transparency that is viewed as essential for the disbursement of HIPC resources (UNAIDS and World Bank, 2001). In essence, failure to explicitly earmark all HIPC resources seems to lend itself to opportunities for corruption and other misuse of the funds.

Furthermore, a report by the Ghana AIDS Commission reveals Ghana loses efficiency not only by failing to mark HIPC funds for HIV/AIDS, but in the general way in which it targets all of its resources in the fight against HIV/AIDS.

**Table 12: How Ghana Targets its HIV/AIDS expenditures**

| <b>Target Group</b>                    | <b>Percent of Total HIV/AIDS expenditures, 2003</b> |
|--|---|
| Non targeted                           | 57.8  |
| School Children                        | 6.1   |
| Workers                                | 7.3   |
| Commercial Sex Workers                 | .2  |
| Child in risk of vertical transmission | 0   |
| Blood Donors                           | .2  |
| Migrant Workers                        | .1  |
| Uniformed Population                   | .2  |
| Prison Inmates                         | .2  |
| Pregnant Women                         | .2  |
| Children and youth in social risk      | 1.0   |
| Health Facilities Staff                | 9.3   |
| People living with HIV                 | .2  |
| People living with AIDS                | 17.1  |

*Source: Ghana AIDS Commission*

As table 12 indicates, 57.8 % of all of the resources that Ghana spends on HIV/AIDS are not targeted for any specific population or group. This is dreadfully inefficient, especially in light of the fact that Ghana explicitly mentions in the GPRS specific groups that would be strongly affected by the epidemic. While this table represents all of Ghana's expenditures on HIV/AIDS, and not just solely those made available from debt relief, it is nevertheless telling. In essence, this table is most likely a good proxy for how Ghana targets its funds for HIV/AIDS made available from debt relief.

In terms of better allocation of resources, it would clearly be more efficient for Ghana to do two things. First, Ghana should earmark HIPC resources explicitly for the purpose of coping with HIV/AIDS. This would ensure that at least some portion of the

resources made available from debt relief would go towards programs that would counteract the negative economic impacts of the epidemic. Secondly, Ghana could best serve itself economically by better targeting of its HIV/AIDS expenditures. The GPRS rests on the principle that the rural sector is to act as the key to economic growth in Ghana. Furthermore, the GPRS also notes that inequities exist in the healthcare system. The result of these inequities is that those living in urban areas receive far better health care than those in rural areas. Keeping this in mind, it would be more efficient for Ghana to target at least some of the untargeted 57.8% of its resources towards those living in rural areas and specifically those involved in agriculture and agro-industrial entrepreneurial projects. In other words, in terms of economic growth it would be most efficient for Ghana to improve its human capital and workforce productivity in the specific areas that are viewed as keys to economic growth.

As Table 12 indicates, Ghana appears to prioritize education as a recipient of HIPC funds. The GPRS makes it clear that Ghana views education as quite important for improving human capital and for improving its workers' earnings potential. This is not a bad strategy for developing human capital, however it ignores the negative impacts of the HIV/AIDS epidemic on educational attainment. Both Hamoudi and Birdsall (2004) and Bonnel (2000) discuss the negative impact of HIV/AIDS on investment in education and enrollment rates. Thus, to some degree the negative effects of the HIV/AIDS epidemic will offset the positive effects of higher expenditures on education. In order to maximize human capital gains, the GPRS should attempt to account for and rectify the negative impacts of HIV/AIDS on educational attainment.

In conclusion, Ghana understands the complex multi-level and multi time problems associated with HIV/AIDS. The GPRS, however, does not turn this understanding into sufficient action. The GPRS does not take advantage of the opportunity that debt relief presents to deal with the negative economic impacts of the HIV/AIDS epidemic in Ghana. To summarize, the GPRS suffers from the following inefficiencies: i) failure to earmark HIPC resources specifically for HIV/AIDS, ii) choosing a strategy to cope with the HIV/AIDS epidemic based more on its low cost than anything else, and which does not focus on the areas of the economy deemed most essential for economic growth. In brief, although the GPRS designates HIV/AIDS as a cross cutting issue that should be dealt with on a multiple levels and in multiple sectors, it

does not appear that this is truly the case. As a clear example of this, there is no mention whatsoever of the relationship between HIV/AIDS and education in the GPRS.

#### **IV.3.1 Uganda**

As the first country to complete the HIPC Initiative in April 1998 and the Enhanced HIPC Initiative in 2000, Uganda is the “forerunner” of the Poverty Reduction Strategy Paper method (Driscoll and Evans, 2005). In fact, Uganda developed a Poverty Eradication Action Plan (PEAP) in 1997, before the creation of such a document became one of the conditions for debt relief. In 2005, Uganda published its third PEAP. This third generation PEAP is not drastically different from the first two in terms of its overall goals; it merely represents an update and refinement of the strategy.

Uganda’s 2005 PEAP is a document with great strengths. The PEAP recognizes the great importance of the HIV/AIDS epidemic in Uganda and designates HIV/AIDS as one of the PEAP’s cross cutting issues. The PEAP recognizes the potentially grave negative economic impacts of the epidemic. It notes that HIV/AIDS is the leading cause of death amongst the most productive 15-49 year old age demographic. Furthermore, it takes note of the economic consequence of HIV/AIDS in specific sectors. For example, it notes the need to not only deal with the impact of HIV/AIDS on the productivity and delivery of public services, but also notes that the HIV/AIDS epidemic has had an impact on the labor supply in certain regions which has resulted in poor agricultural growth. To this end, the PEAP also recognizes the potential long term economic impact of the HIV/AIDS epidemic in hypothesizing that between 1985 and 2020 Uganda will have lost 14% of its agricultural labor force due to AIDS. This clearly leaves the agricultural sector below its productive capacity and hurts growth in Uganda. The PEAP also notes that HIV/AIDS constrains investors and thus hampers capital accumulation and the growth of industry and services.

It is in discussing the human capital effects that the PEAP demonstrates how firm a grasp Uganda has on the deep and multi-layered economic issues surrounding HIV/AIDS. As the relevant literature (Hamoudi and Birdsall, 2004, Bonnel, 2000) suggests, how HIV/AIDS affects human capital is a complex issue. The PEAP grasps the complexities discussed in the literature stating:

By killing primarily young adults, AIDS does more than destroy human capital; it also deprives their children of the requirements (parents' care, knowledge, and capacity to finance education) to become economically productive adults. This weakening of the mechanism through which human capital is transmitted across generations becomes apparent only after a long time lag, it is progressively cumulative in its effects (Uganda, 2005).

In recognition of this fact, the PEAP discusses how specifically to offset the human capital losses associated with high numbers of AIDS orphans. Also, in terms of human capital, the PEAP notes that the HIV/AIDS epidemic has had an impact on the demand for education, which in turn has an effect on human capital.

Not only does the PEAP devote significant attention to the discussion of the relevant economic issues surrounding the HIV/AIDS epidemic, it does a reasonable job of integrating these issues into its strategy for growth. In essence, in terms of economic growth, Uganda recognizes the negative impacts of HIV/AIDS on its labor force productivity and is trying to at mitigate the impact of household savings depletion by offering free HIV/AIDS treatment. Most importantly, Uganda is able to some degree to harmonize its strategy to combat HIV/AIDS with its strategy to achieve economic growth.

#### **IV.3.2 Uganda's Strategy to Fight HIV/AIDS**

In the early stages of its HIV/AIDS epidemic, Uganda was viewed as one of the countries worst affected by the HIV/AIDS epidemic with prevalence rates averaging 18% in the early 1990s (Uganda AIDS Commission). Despite its early struggles with the epidemic, Uganda is today "held up as the African HIV/AIDS success story" (Parkhurst, 2005). There is general agreement (Parkhurst, 2005, Allen and Heald, 2004) that the actions of the Ugandan government characterized by an early and active response at the highest levels of government and the opening of a national dialogue on HIV/AIDS, proved vital in Uganda's ability to significantly lower its prevalence rate to its current level of roughly 4 to 6% depending on the estimate.

The PEAP seeks to continue the government's good track record with regards to HIV/AIDS policy. In designating HIV/AIDS as one of its "cross cutting issues" Uganda acknowledges that the results of its fight against HIV/AIDS have an impact on multiple

levels and across sectors. The strategy to combat HIV/AIDS as presented in the PEAP focuses on prevention, impact mitigation, anti-retroviral drug (ARV) diffusion, and the mainstreaming and coordination of AIDS policies.

In terms of prevention, Uganda emphasizes the importance of education and public information. The PEAP, continuing with the logic adopted by Uganda in the early stages of its epidemic, notes that AIDS education helps debunk myths and prejudices about the disease and its transmission and helps reduce the social stigma associated with it. The PEAP notes that increased levels of education, not just HIV/AIDS education, have been proven to be correlated with better knowledge about behavioral strategies that can prevent HIV transmission.

The section of the PEAP that deals with impact mitigation is quite unique. This section suggests that it is vital for Uganda to deal with the non-health related impact of the epidemic. In other words, the PEAP recognizes that the disease has effects that go beyond simple loss of health and life, and part of Uganda's strategy must be to deal with these psychological, social, and economic effects.

The PEAP places an emphasis on the importance of treatment of those living with HIV/AIDS. In a somewhat revolutionary move, Uganda has decided to provide free treatment for HIV/AIDS. This mainly means that Uganda will provide ARVs free of charge to those in need. This decision represents a strong commitment on the part of Uganda to truly focus on serious treatment, and not just on simple palliative measures. Uganda acknowledges the risk involved in placing priority on serious treatment of HIV/AIDS by providing free ARVs. It recognizes that such a strategy may not be the most cost effective, and that furthermore the financial implications of such a decision are not completely clear and understood by the government.

Finally, Uganda's strategy to combat HIV/AIDS involves the mainstreaming and coordination of AIDS policies. The PEAP recognizes that the actions necessary to treat and prevent HIV/AIDS are the responsibility of all sectors, not just the health sector. Following this logic, the PEAP suggests that the actions necessary to deal with the epidemic must be included in the human resource and budgetary planning of all sectors. The ultimate aim of such mainstreaming is to strengthen the national capacity to cope with the HIV/AIDS epidemic on a multi-sector basis.

#### **IV.3.3 Uganda's Economic Situation and Growth Strategy**



The economic situation in Uganda is somewhat remarkable considering its history. In essence, Uganda has emerged quite well from under the dictatorial regime of Idi Amin. According to a recent OECD report, Uganda's solid macroeconomic policies have resulted in consistent growth of around 5%. Real GDP grew at 5.2% in 2003, and 5.9% in 2004. Moreover, in the past 15 years Uganda has made substantial progress in reducing poverty. The percentage of the population living in poverty dropped from 56% in 1992 to 35% in 2000. Much of this poverty reduction is due to Uganda's development of its PEAP and to increased pro-poor public expenditures due to HIPC relief and to other sources of external funds. Uganda has made tangible gains in terms of poverty reduction since joining the HIPC Initiative. For example, gross primary enrollment shot up from 2.6 million students in 1997 to 7.3 million in 2002.

Despite its consistent growth and gains in terms of poverty reduction, there is still much to be achieved in Uganda. Tables 13 and 14, reproduced from a report on the Ugandan budget for 2005-2006, show sector contribution to GDP and sector GDP growth rates by sector, respectively.

**Table 13: Sector Contribution to GDP**

| Sector      | 2000/01 | 2001/02 | 2002/03 | 2003/04 | 2004/05 |
|-------------|---------|---------|---------|---------|---------|
| Agriculture | 40.8%   | 39.9%   | 39.0%   | 37.6%   | 36.3%   |
| Industry    | 18.6%   | 18.9%   | 19.3%   | 19.7%   | 20.4%   |
| Service     | 40.6%   | 41.2%   | 41.7%   | 42.7%   | 43.3%   |

*Source: Government of Uganda, "Background to the Budget For Financial year 2005/06."*

**Table 14: Annual Real GDP Growth Rates by Sector**

| Real GDP Growth | 2000/01 | 2001/02 | 2002/03 | 2003/04 | 2004/05 |
|-----------------|---------|---------|---------|---------|---------|
| Agriculture     | 4.6%    | 3.9%    | 2.3%    | 1.6%    | 2.1%    |
| Industry        | 6.0%    | 8.2%    | 6.7%    | 8.1%    | 9.1%    |
| Services        | 5.2%    | 8.2%    | 5.7%    | 8.1%    | 7.2%    |

*Source: Government of Uganda, "Background to the Budget For Financial year 2005/06."*

These tables are quite striking and highlight a shift in the Ugandan economy discussed in its PEAP. There is a notable shift in the structure of Uganda's economy, with agriculture making up 40.8% of GDP in 2000/2001 and only 36.3% in 2004/2005. The shift is even more striking as the PEAP notes that agriculture accounted for 51% of GDP in 1992. Moreover, subsistence agriculture's contribution to GDP dropped by 10% from 1992 to 2002. As should be expected, the change in sector contribution to GDP was accompanied by a change in the labor force. The PEAP notes that between 2000 and 2003, the proportion of households employed in agriculture dropped from 71% to 58%,

while the self-employed outside of agriculture jumped from 12% to 25%. Nevertheless, agriculture in Uganda remains highly labor intensive, and the government would like to increase agricultural productivity in order to free up labor to be used in other areas of the economy.

While Uganda is in the midst of a shift away from agriculture, its agricultural sector still relies on a few main export products, namely coffee, fish, tea and cotton. This reliance on a few products leaves Uganda vulnerable to shocks, and to volatile world market prices.

It is the ultimate goal of Uganda's PEAP to help transform Uganda into a middle-income country. In the short run, the government wants to strengthen both manufacturing and agriculture as a means to foster balanced growth. Over the medium term, the strategy aims to boost growth by amongst other things, removing bureaucratic barriers to investment, improving transport infrastructure and utility services, modernizing and commercializing agriculture, enhancing environmental stability, and continuing to focus on HIV prevalence reduction and mitigating the impact of HIV/AIDS. This last point is quite important as it indicates how integral a role Uganda feels HIV/AIDS plays in issues of economic growth. In order to fully pursue these goals, the strategy focuses on a few critical objectives. It seeks to further develop and restructure the agriculture sector, industrialize, build human capital and improve workforce productivity, and ensure that public expenditures are used both transparently and efficiently.

The PEAP considers the further development and restructuring of the agricultural sector as critical. Not only does the sector provide the majority of employment, but also increasing agricultural incomes are seen as necessary to expand non-agricultural rural production. Furthermore, the PEAP aims to capitalize on Uganda's geographic location and resources to pursue agro-industrialization and the processing of agricultural products as a way to make the agricultural sector more productive and more profitable.

The PEAP suggests that agro-industrialization will be one of the primary forms of industrialization, however, this is not the sole form of industrialization that Uganda hopes to pursue. Diverse industrialization in order to foster growth that will help steer Uganda towards middle-income status will require increased private investment. The PEAP

implies that Uganda may be obtaining the necessary private investment, as private investment tripled between 1990/1991 and 2002/2003.

In recognition of the fact that Uganda has had a high growth in its labor force, comprised largely of workers with low levels of education, the PEAP prioritizes education and human capital development as a means to improve worker productivity. The PEAP aims to take measures such as providing sufficient financing for technical and vocational schools as a means to create a more highly productive workforce that earns higher wages and can increase the competitiveness of the products of the Ugandan economy.

Finally, the PEAP suggests that part of Uganda's strategy to achieve growth requires the transparent and efficient use of public expenditures. To this end, Uganda has created the Poverty Action Fund (PAF), a virtual fund within its own budget. Savings from HIPC debt relief, government revenue and other donor funds finance the PAF. It is a mechanism by which Uganda can ensure that resources go towards poverty reducing expenditures. This type of transparency reduces the chance for corruption, and allows for efficient disbursement of HIPC funds. Uganda's PAF has been effective at achieving its goals and channeling the appropriate funds to the appropriate places (Williamson and Canagarajah, 2003).

In brief, Uganda has an ambitious goal of achieving middle-income status, and has tailored its strategy for growth with this objective in mind. As outlined in its PEAP, Uganda's plan focuses on the continued transformation of its agricultural sector, industrialization, human capital development, and accountability for its pro-poor expenditures. Such a strategy aims at achieving middle-income status in an efficient and reasonable fashion.

#### **IV.3.4 HIV/AIDS strategy in context of Uganda's growth strategy**

In brief, Uganda's PEAP recognizes the complex economic implications of its HIV/AIDS epidemic, and more specifically the potential impact of such an epidemic on the growth prospects for the Ugandan economy. In fact there is a special section of the PEAP dedicated entirely to the mitigation of the economic impact of the epidemic. Moreover, with its emphasis on addressing the economic challenges posed by the HIV/AIDS epidemic across multiple sectors and levels, the PEAP does a good job in harmonizing its strategy to combat HIV/AIDS with its strategy for growth and poverty

reduction. The result is an efficient use of HIPC resources to combat HIV/AIDS and promote growth. The PEAP achieves such harmony by: i) directing all HIPC resources into the PAF, ii) demonstrating an understanding of the complex human capital issues associated with HIV/AIDS and dealing with them effectively, iii) offering free treatment of HIV/AIDS, iv) acknowledging the need to focus HIV/AIDS treatment on specific sectors of the economy.

In 1997, Uganda paid \$9 per capita annually on debt service and spent only \$3 per capita on health, and furthermore a study cited by Mijumbi (2001) suggests that resources dedicated towards servicing Uganda's debt crowded out investment. With its completion of the HIPC Initiative, Uganda has received and will continue to receive significant debt relief. Clear designation of these resources towards specific purposes is viewed as important in order to achieve growth in the most efficient manner (UNAIDS and the World Bank, 2001). By diverting all of its HIPC resources into the PAF, Uganda is able to ensure that all of its HIPC resources will be earmarked for appropriate pro-poor expenditures outlined in the PEAP. Furthermore, Uganda is able to combine its debt relief funds with other sources as the PAF is funded not only by resources made available from debt relief, but from government revenue and other donor aid as well. This type of combination allows for greater efficiency as HIPC resources are integrated with other resources, providing a larger pool of funds from which more ambitious projects are likely to be funded. Moreover, as Williamson and Canagarajah (2003) note, not only does the PAF ensure that debt relief funds are channeled to specific PEAP programs, the creation of the PAF has mobilized additional resources from donors. In other words, donors are more willing to give to Uganda as the PAF helps reassure them that their contributions will be used for their intended uses.

Tables 15 and 16 adapted from a report by USAID show the sources of PAF funding and the uses of the fund respectively.

**Table 15: Sources of PAF Funds (In billions of Ugandan shillings)**

|                      | 1997/98 | 1998/99 | 1999/00 | 2000/01 | 2001/02 | 2002/03 |
|----------------------|---------|---------|---------|---------|---------|---------|
| HIPC Resources       | ---     | 44.64   | 63.00   | 139.82  | 153.28  | 155.11  |
| Government Revenues  | 141.57  | 153.97  | 144.6   | 162.33  | 231.86  | 294.97  |
| Donor Budget Support | ---     | 33.76   | 94.78   | 141.07  | 138.96  | 171.38  |

|                            |        |        |        |        |        |        |
|----------------------------|--------|--------|--------|--------|--------|--------|
| Total PAF Resources        | 141.57 | 232.37 | 302.38 | 452.55 | 524.10 | 621.46 |
| HIPC as % of PAF Resources | 0.0%   | 19.2%  | 20.8%  | 30.9%  | 29.3%  | 25.0%  |

*Source: USAID "Uganda's Poverty Action Fund (PAF): Sources of Resources, Including HIPC, and The Programming of Those Resources"*

**Table 16: Poverty Action Fund Expenditures**

| PAF expenditures under PEAP            | 1997/98 | 1998/99 | 1999/00 | 2000/01 | 2001/02 | 2002/03 |
|--|---------|---------|---------|---------|---------|---------|
| Rural Roads                            | 8.42    | 20.18   | 24.59   | 30.46   | 32.88   | 35.52   |
| Implementation of the land act         | ---     | ---     | 3.00    | 3.00    | 6.50    | 10.00   |
| Agricultural extension                 | 0.54    | 0.21    | 4.32    | 7.99    | 8.71    | 9.59    |
| Micro-finance/Restocking program       | 0.47    | 0.49    | 7.29    | 10.35   | 13.30   | 14.97   |
| Primary health care                    | 4.35    | 20.76   | 21.07   | 60.04   | 80.76   | 120.08  |
| Water & sanitation                     | 3.86    | 12.34   | 17.43   | 35.56   | 39.40   | 41.43   |
| Primary education                      | 120.23  | 169.83  | 211.35  | 275.00  | 290.58  | 322.96  |
| Adult literacy                         | ---     | ---     | ---     | 1.50    | 4.00    | 6.00    |
| Reduction of court case backlog        | ---     | 0.87    | 0.50    | 1.00    | 1.05    | 1.10    |
| Wetlands protection                    | ---     | ---     | ---     | 0.30    | 0.33    | 0.36    |
| Studies/pilot projects for the PEAP    | ---     | ---     | ---     | 1.00    | 6.00    | 12.92   |
| Equalization grants                    | ---     | ---     | 2.00    | 4.00    | 4.40    | 4.84    |
| PMA grant for LC3                      | ---     | ---     | ---     | 6.70    | 7.37    | 8.17    |
| Dutch district development grant       | ---     | ---     | 2.00    | 17.33   | 18.81   | 20.29   |
| Key accountability institutions        | 3.70    | 4.99    | 6.90    | 7.11    | 7.80    | 9.11    |
| M & E of PAF program                   | ---     | 2.69    | 3.93    | 11.34   | 12.65   | 15.28   |
| <b>Grand Total of PAF expenditures</b> | 141.57  | 232.27  | 302.38  | 461.98  | 522.78  | 619.61  |
| <b>As % of total government Budget</b> | 17%     | 24%     | 25%     | 30%     | 31%     | 33%     |

*Source: USAID "Uganda's Poverty Action Fund (PAF): Sources of Resources, Including HIPC, and The Programming of Those Resources"*

As these tables indicate, Uganda is using its HIPC resources in an efficient manner.

Uganda uses the HIPC resources to contribute to the PAF and they HIPC provide a significant portion of the funds for the PAF. Furthermore, as Table 16 indicates, the PAF has been able to increase both its total expenditures and its share of the total government budget since its inception in 1997. This means that an increasing portion of the government's budget is going towards poverty reducing expenditures as outlined in its PEAP. No doubt, resources made available from debt relief have contributed to this ever

increasing level of pro-poor expenditure. The contribution of HIPC resources is most striking when comparing expenditures from 1997/98 to 1998/99 in Table 16.

Expenditures jumped significantly in many areas due to debt relief. For example, primary health care expenditures jumped from 4.35 to 20.76 billion Ugandan shillings.

Table 16 indicates that expenditures on primary education financed by the PAF dwarf any other type of expenditure. This means that Uganda is relying on education to build its human capital. This is quite consistent with the strategy outlined in Uganda's PEAP.

Such a strategy to build human capital would be incomplete if Uganda failed to recognize and address the ill effects of HIV/AIDS on education as the PRSP of Burkina Faso fails to do. Uganda, however, demonstrates an understanding of the complex problems that the epidemic poses for human capital and worker productivity.

In essence, in terms of human capital development, the PEAP is efficient because it recognizes that there is an important relationship between human capital development, education and HIV/AIDS. It recognizes that primary education could reduce the economic impact of HIV/AIDS. It suggests that if universal primary education were implemented, 700,000 new cases of HIV/AIDS would be prevented each year. Thus, Uganda's strategy to spend a large portion of its PAF funds appears quite wise and serves a double purpose. Not only will it develop human capital by providing education, but it will simultaneously offset the economic impact of HIV/AIDS not only by avoiding medical expenditures associated with 700,000 cases of HIV/AIDS but preserving the human capital potential of 700,000 people per year. Furthermore, the PEAP recognizes that effects on enrollment and demand for education as pointed to by Hamoudi and Birdsall (2004) and Bonnel (2000). The PEAP recognizes that the HIV/AIDS epidemic has had a negative impact on the demand for education and pledges to work to address this issue. Finally, the PEAP recognizes the significant problems that HIV/AIDS orphans pose to human capital development. According to estimates, one in four Ugandan families hosts an AIDS orphan (Deininger, Commelynck and Kempaka, 2005). In recognition of the negative economic impacts associated with HIV/AIDS orphans, the PEAP states that making sure these orphans obtain education is vital. In brief, the PEAP of Uganda efficiently addresses the human capital problems posed by low levels of education and HIV/AIDS by treating them not as two separate issues, but as one

connected issue. While increased spending on education and increased spending on HIV/AIDS independently of one another are both ways to improve human capital and worker productivity, it is far more efficient to treat them as one interrelated issue as Uganda does.

Uganda's decision to offer free treatment for those suffering from HIV/AIDS, including free ARV treatment is quite important and represents a new phase in Uganda's fight against HIV/AIDS. The decision presents several difficulties and raises several questions for the government of Uganda. First, the free provision of ARVs is not something that can be done haphazardly. Currently, only around 6% of those in need of ARV treatment in Uganda are receiving it. Secondly, as the PEAP notes, those placed on ARVs must be closely monitored to ensure that they are adhering to their ARV regime. Failure to do so could lead the virus becoming resistant to the drugs. Thus, in order to provide ARVs to all of those in need, and to closely monitor those taking ARVs, the capacity of the health care system in Uganda needs to be significantly increased. This involves strengthening the infrastructure of the system, and training many more health care workers.

The aim of such free provision is to reduce the cost burden of HIV/AIDS treatment at the household level. The PEAP notes that out of pocket expenditures on HIV/AIDS treatment crowd out other expenditures on things such as food, education and shelter. Nevertheless, in offering free ARV treatment the government is simply shifting the cost burden from the household to the national level, and the economic implications of such a strategy are uncertain. Surely, there will be high costs associated with the expansion and strengthening of the health care system necessary to provide free ARV treatment for all in need. Furthermore, the PEAP notes that the ultimate costs of such a decision are uncertain, and could be quite large if the cost of ARVs does not fall. Also, the PEAP notes that such a strategy may not be the most cost effective and is somewhat risky as it may require further donor support, which has yet to be procured.

While the PEAP acknowledges the importance of many of the issues surrounding the free provision of ARVs, there is a set of issues that it does not address. Logically speaking, an announcement that ARV treatment will be provided free of charge may create an influx of AIDS "refugees" that could potentially overwhelm Uganda. In other words, people from other neighboring countries as well as Ugandans living abroad who

are infected may emigrate to Uganda in order to take advantage of its offer to provide free ARV treatment. While the potential for an overwhelming influx of new AIDS patients exists, it is likely not a threat due to the nature of Uganda's ARV provision program. The provision of ARVs is quite an involved process that requires a multitude of services including counseling and close monitoring to ensure that a patient is adhering to his or her drug regimen. As a result, Uganda's program to provide free ARVs has strict eligibility criteria to ensure the drugs are given to the right people. Furthermore, only health facilities that meet specific criteria, including an acceptable level of security to prevent drug theft, are allowed to distribute ARVs. Consequently, there are presently a limited number of health centers that can provide ARV treatment. In brief, simply because Uganda has decided to provide ARVs for free does not mean that they are easy to acquire. Thus the incentive to emigrate to Uganda created by free ARV treatment may be offset by a disincentive presented by the difficulty to acquire the drugs.

Despite these uncertainties, the government's decision to pursue curative health measures is a significant one and one which is clearly viewed as important. It represents a commitment to preserving the livelihood and thus the productivity of those suffering from HIV/AIDS. In choosing to pursue comprehensive treatment measures, Uganda is choosing to try and preserve the health and productivity of its workforce. If workers are healthier and live longer because they are receiving free ARV treatment, they are likely to make a positive contribution to the economic situation in Uganda. In essence, Uganda recognizes the importance of education in preventing new infections, but it does not ignore the need to help make its workforce as productive as possible by taking seriously its decision on how to treat those living with HIV/AIDS.

Finally, the PEAP of Uganda recognizes that it can best serve its growth prospects by concentrating its treatment for HIV/AIDS on certain sectors of the economy. The PEAP notes that HIV/AIDS affects all sectors of the economy and that specific measures need to be taken in the human resource planning of each sector to help address the impacts of the epidemic. Thus, the PEAP succeeds at linking the HIV/AIDS epidemic with specific sectors of the economy. Such a link is necessary to help integrate Uganda's strategy to fight HIV/AIDS into its strategy to achieve sustained economic growth.

The PEAP of Uganda suggest that developing its rural agricultural sector is critical to achieving economic growth. The PEAP makes specific mention of the need to



strengthen its delivery of HIV/AIDS treatment in rural sectors. While the PEAP does not explicitly mention the economic benefits that will come with such a commitment to treating HIV/AIDS in the rural sector, the benefits are implicit. If the rural agriculture sector is deemed to be important for economic growth, and if the labor force productivity in that sector is hurt by HIV/AIDS, then focusing on providing equal treatment to those in rural areas should result in positive economic gains.

The rural sector is not the only sector that is specifically targeted as an area that needs to receive focused attention in terms of HIV/AIDS treatment. The PEAP mentions the need for the effect of HIV/AIDS on public sector productivity to be addressed. In essence, the PEAP sees a loss of productivity and efficiency in public service associated with HIV/AIDS. Since good governance is deemed to be quite important by the PEAP to achieve economic growth, such losses in public service efficiency must be addressed. The PEAP, however, does not outline a specific strategy as to how to address this issue and such a strategy is needed.

To summarize, the PEAP of Uganda is a document with great strengths and potential. It recognizes the potentially grave negative economic impacts of the epidemic, and displays a firm grasp on the complex human capital problems created by the AIDS epidemic. The PEAP seeks to continue the government's good track record with regards to HIV/AIDS policy, and makes the additional step of offering free HIV/AIDS treatment for all. Uganda's strategy for growth takes into full account the shifting nature of the Ugandan economy and seeks to capitalize on such shifts. While by no means perfect or free from risk, the PEAP does a relatively good job of integrating its strategy to combat HIV/AIDS with its strategy to achieve economic growth. It achieves such harmony i) directing all HIPC resources into the PAF, ii) demonstrating an understanding of the complex human capital issues associated with HIV/AIDS and dealing with them effectively, iii) offering free treatment of HIV/AIDS, iv) acknowledging the need to focus HIV/AIDS treatment on specific sectors of the economy.

## **V. Conclusions**

Based on the case studies of Burkina Faso, Ghana, and Uganda, a few conclusions can be reached and a few suggestions can be made. First of all, all three countries realize the opportunity that HIPC debt relief presents in terms of increased pro-poor

expenditures, including HIV/AIDS related expenditures. All three also recognize the wide array of consequences associated with HIV/AIDS. In essence, coping with the HIV/AIDS epidemic is viewed by all three as a necessary and important component of their overall poverty reduction strategies.

Secondly, all three countries disburse more resources made available from debt relief on education than they do on health. This implies that these countries assume that greater benefits will be reaped from investment in education than from investment in healthcare. Implicit in this decision is perhaps the notion that productivity losses associated with lower levels of education are far greater than productivity losses associated with ill health, including HIV/AIDS. Thus, resources from debt relief are seen as most efficiently used to achieve economic growth by improving the human capital stock through education. This is not an unwise strategy for two reasons. First, all members of a country's population could conceivably directly benefit from and take advantage of increased expenditures on education. On the other hand it is likely that only those in ill health or those suffering from HIV/AIDS will benefit directly from increased health expenditures. Secondly, HIV/AIDS is a global humanitarian crisis, and governments are likely to receive greater external donor funds to help finance their fight against HIV/AIDS than to finance their educational projects. Perhaps in recognition of this, more resources made available from debt relief are dedicated to education under the assumption that resources will be made available from other sources to fight HIV/AIDS.

Thirdly, all three PRSP documents understand the negative economic effects of HIV/AIDS. All three countries understand that HIV/AIDS is not just a public health problem, but has social and economic costs that cut across all sectors. The level of comprehension, however, varies from country to country. Only Uganda, with a section of its PRSP dedicated specifically to offsetting the negative economic impacts of HIV/AIDS, truly succeeds at converting its comprehension of the problems into action.

Given the difficulty of the PRSPs at turning comprehension of the complex economic issues surrounding HIV/AIDS into action, a few suggestions can be made as to how a country can best utilize the resources made available from HIPC debt relief to combat HIV/AIDS and help foster economic growth.

First, and most importantly, a country should earmark which portion of its debt relief funds will go specifically towards HIV/AIDS. Such explicit designation will help

improve overall efficiency by reducing corruption, improving accountability, and making sure all resources that are to be dedicated to HIV/AIDS actually go towards that purpose and do so in a timely manner. Furthermore, the specific earmarking of funds can potentially lead to further outside donor support for increased poverty reducing expenditures, as is the case with Uganda's PAF. Based on the successes of Uganda's PAF as discussed by Kuteesa and Nabbumba (2004) and Williamson and Canagarajah (2003), it may be advisable for countries receiving debt relief to establish a virtual poverty fund comparable to Uganda's PAF. The combination of debt relief funds with other resources creates a greater resource pool for financing not only HIV/AIDS expenditures but other pro-poor expenditures as well.

Secondly, there appears to be a need for countries receiving debt relief to turn their comprehension of the economic impacts of HIV/AIDS into greater action. In essence, the PRSPs of HIPC countries should do a better job of harmonizing their strategies to fight HIV/AIDS with their strategies for growth. While Uganda is relatively successful at achieving this harmonization, more needs to be done. The PRSPs operate under the assumption that growth has a feedback effect on HIV/AIDS. In other words, in the face of economic growth, more resources become available to fight AIDS. Therefore, perhaps the best strategy is to tailor AIDS strategy to growth strategy in the short run, in order to create economic growth and the feedback effects associated with such growth. For example, if the agricultural sector is deemed to be the most important sector for economic growth, the strategy to combat HIV/AIDS should act in recognition of this. In other words, if one sector is viewed as crucial for the growth of the economy, and especially if this sector's growth is perceived to be important for spurring growth in other areas, it makes sense to make the workforce in that sector as productive as possible. Thus, greater efforts should be made in that sector relative to any other to offset the negative impacts of HIV/AIDS.

In brief, countries receiving debt relief can best help themselves by first devoting a specific amount of debt relief resources towards HIV/AIDS expenditures. Secondly, a country can best foster economic growth by using these earmarked resources in areas where they are likely to reap the greatest gains in terms of economic growth. Such a process will ensure that debt relief resources will be used as efficiently as possible to both combat HIV/AIDS and help achieve economic growth.

There are a few points surrounding the issues discussed that merit further discussion. Perhaps most notably is the concern raised by Kuteesa and Nabbumba (2004) that HIPC resources have led to poverty reductions but not debt sustainability. This needs to be addressed. Furthermore, a comparative study between the HIPC and non-HIPC countries facing a similar HIV/AIDS epidemic might provide some insight into how countries choose to solve complex allocation problems, and whether debt relief truly makes allocation decisions easier. Finally, some of the topics touched on briefly in this paper, including the role that additional donor funding for HIV/AIDS expenditures plays into how a country decides to allocate its debt relief resources are important and deserve closer attention.

## References

- Allen, Tim, 2004. "Introduction: Why Don't HIV/AIDS Policies Work?" *Journal of International Development*, 16: 1123-1127.
- Allen, Tim and Suzette Heald, 2004. "HIV/AIDS Policy in Africa: What Has Worked in Uganda And What Has Failed In Botswana?" *Journal of International Development*, 16: 1141-1154.
- Arslanalp, Serkan and Peter Blair Henry, 2004. "Helping the Poor To Help Themselves: Debt Relief or Aid." NBER Working Paper 10230
- Bird, Graham and Alistair Milne, 2003. "Debt Relief for Low Income Countries: Is It Effective and Efficient?" *World Economy*, 26: 43-59.
- Bonnel, René, 2000. "HIV/AIDS: Does It Increase Or Decrease Growth in Africa?" Washington, D.C.: World Bank.
- Bloom, David E., David Canning, and Jaypee Sevilla, 2001. "Economic Growth and the Demographic Transition." National Bureau of Economic Research, Working Paper 8685.
- Bloom, David E, and Ajay S. Mahal, 1997. "Does the AIDS Epidemic Threaten Economic Growth?" *Journal of Econometrics*, 77: 105-124.
- Booth, David, 2003. "Introduction and Overview." *Development Policy Review* 21 (2): 131-159.
- Burkina Faso, Government of, 2005. "Poverty Reduction Strategy Paper."
- Chowdhury, Abdur, 2004. "External Debt, Growth and the HIPC Initiative: Is the Country Choice Too Narrow?" [Collective Volume Article] *Debt Relief for Poor Countries*. Addison, Tony, Henrik Hansen and Finn Tarp, eds., Studies in Development Economics and Policy. New York: Palgrave Macmillan.
- Craig, David and Doug Porter, 2003. "Poverty Reduction Strategy Papers: A New Convergence." *World Development*, 31 (1): 53-69.
- Cuddington, John T. and John D. Hancock, 1994. "Assessing the Impact of AIDS on the Growth Path of the Malawian Economy." *Journal of Development Economics*, 43: 363-368.
- Deininger, Klaus, Anja Crommelynck, and Gloria Kempaka, 2005. "Impact of AIDS on Family Composition, Welfare, and Investment: Evidence from Uganda." *Review Of Development Economics*, 9 (3): 303-324.
- Dijkstra, Geske, 2005. "The PRSP Approach and the Illusion of Improved Aid Effectiveness: Lessons from Bolivia, Honduras, and Nicaragua." *Development Policy Review*, 23 (4): 443-464.
- Driscoll, Ruth and Alison Evans, 2005. "Second Generation Poverty Reduction Strategies: New Opportunities and Emerging Issues." *Development Policy Review*, 23 (1): 5-25.
- Easterly, William, 2001. *The Elusive Quest for Growth*. Cambridge, MA: The MIT Press.
- Easterly, William, 2002. "How Did Heavily Indebted Countries Poor Countries Become Heavily Indebted? Reviewing Two Decades of Debt Relief." *World Development*, 30 (10): 1677-1696.
- Gaffeo, Edoardo, 2003. "The Economics of HIV/AIDS: A Survey." *Development Policy Review*, 21(1): 27-49.
- Gautam, Madhur, 2003. *Debt Relief for the Poorest: An OED Review of the HIPC Initiative*. Washington, D.C.: The World Bank.
- Ghana, Government of, 2003. "Poverty Reduction Strategy Paper."

- Ghana, Government of, 2005. "2005 Budget Statement."
- Ghana AIDS Commission, 2003. "Level and Flow of Financial Resources in Response To HIV/AIDS."
- Gottschalk, Ricardo, 2005. "The Macro Content of PRSPs: Assessing the Need for a More Flexible Macroeconomic Policy Framework." *Development Policy Review*, 23 (4): 419-442.
- Hamoudi, Amar and Nancy Birdsall, 2004. "AIDS and the Accumulation and Utilisation Of Human Capital." *Journal of African Economies*, 13: i96-i136.
- International Monetary Fund, 2005a. "IMF to Extend 100 Percent Debt Relief for 19 Countries Under the Multilateral Debt Relief Initiative." Press Release No.5/286. December 21, 2005.
- International Monetary Fund, 2005b. Heavily Indebted Poor Countries (HIPC) Initiative Status of Implementation. Washington, D.C.: IMF.
- Knack, Stephen and Philip Keefer, 1997. "Does Social Capital Have an Economic Payoff? A Cross-Country Investigation." *Quarterly Journal of Economics*, 112 (4): 1251-1258.
- Krugman, Paul, 1988. "Financing vs. Forgiving A Debt Overhang." *Journal of Development Economics*, 29: 253-268.
- Kuteesa, Florence N., and Rosetti Nabbumba, 2004. "HIPC Debt Relief and Poverty Reduction Strategies: Uganda's Experience." [Collective Volume Article] *HIPC Debt Relief: Myths and Reality*. Jan Joost and Age Akkerman, eds., The Hague: Forum on Debt and Development
- Michaelowa, Kathrina, 2003. "The Political Economy of the Enhanced HIPC Initiative." *Public Choice*, 114: 461-476.
- Mijumbi, Peter B., 2001. "Uganda's External Debt and the HIPC Initiative." *Canadian Journal of Development Studies*, 22 (2): 495-525.
- OECD Development Center, 2005. *African Economic Outlook 2004/2005*.
- Oster, Emily, 2005. "Sexually Transmitted Infections, Sexual Behavior, and the HIV/AIDS Epidemic." *The Quarterly Journal of Economics*, 120 (2): 467-515.
- Parkhurst, Justin, 2005. "The Response to HIV/AIDS and the Construction of National Legitimacy: Lessons From Uganda." *Development and Change*, 36 (3): 571-590.
- Rauner, Marion S., and Margaret L. Brandeau, 2001. "AIDS Policy Modeling for the 21<sup>st</sup> Century: An Overview of Key Issues." *Health Care Management Science*, 4: 165-180.
- Reseau National de Lutte Anti Corruption (REN-LAC), 2003. *Etat de la Corruption, 2003*.
- Sachs, Jeffrey, 2005. *The End of Poverty: Economic Possibilities for Our Time*. New York: Penguin Press.
- Stark, Rodney, 2005. *The Victory of Reason: How Christianity Led to Freedom, Capitalism and Western Success*. New York: Random House.
- Teunissen, Jan Joost, 2004. "HIPC Debt Relief: Myths and Reality: Introduction." [Collective Volume Article] *HIPC Debt Relief: Myths and Reality*. Teunissen, Jan Joost and Age Akkerman, eds., The Hague: Forum on Debt and Development.
- Uganda, Government of, 2005. "Poverty Eradication Action Plan."
- Uganda Ministry of Finance, Planning and Economic Development, 2005. "Background To The Budget For Financial Year 2005/06."
- Uganda Ministry of Health, 2003. "Antiretroviral Treatment Policy for Uganda."
- UNAIDS and the World Bank, 2001. *AIDS, Poverty Reduction, and Debt Relief: A*

- Toolkit for Mainstreaming HIV/AIDS Programmes Into Development Instruments.* Geneva: UNAIDS.
- UNAIDS, 2004. *UN Epidemiological Fact Sheets on HIV/AIDS and Sexually Transmitted Diseases.*
- Williamson, Tim and Sudharshan Canagarajah, 2003. "Is There a Place for Virtual Poverty Funds in Pro-Poor Spending Reform? Lessons from Uganda's PAF." *Development Policy Review*, 21 (4): 449-480.
- World Bank, 2003. *Toward Country-led Development: A Multi-Partner Evaluation of The Comprehensive Development Framework.* Washington, D.C.: The World Bank.
- World Bank, 2005. *Poverty Reduction Strategies.* Washington, D.C.: The World Bank.
- World Health Organization and UNAIDS, 2005. *AIDS Epidemic Update 2005.*