



**GEARING MACROECONOMIC POLICIES TO MANAGE LARGE INFLOWS OF ODA:  
THE IMPLICATIONS FOR HIV/AIDS PROGRAMMES**

# GEARING MACROECONOMIC POLICIES TO MANAGE LARGE INFLOWS OF ODA: THE IMPLICATIONS FOR HIV/AIDS PROGRAMS

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## **ABSTRACT**

This paper examines how macroeconomic policies can be managed to accommodate a large inflow of foreign aid to combat the HIV/AIDS epidemic and still maintain macroeconomic stability. Because of the daunting scale of this epidemic, funds need to be disbursed urgently in order to contain its spread, yet some economists worry that rapidly scaling up foreign assistance for this purpose will cause inflation and appreciation of the real exchange rate.

If such effects occur, they could impair a country's international competitiveness and endanger its growth prospects. However, this paper maintains that such effects can be minimised if governments and central banks coordinate fiscal, monetary and exchange rate policies. If they do, they should be able to both 'spend' aid in order to finance larger government programs and 'absorb' aid in order to import more real resources. Often, governments that receive foreign aid neither spend nor absorb it fully, defeating the basic purpose of development assistance. Because governments fear inflation, they are reluctant to finance a significant increase in spending on HIV/AIDS programs even when the funding is available. Central banks are reluctant to sell the foreign currency they receive from HIV/AIDS related aid because they fear that such an action might appreciate the domestic currency. However, if aid-induced spending on HIV/AIDS programs minimizes the adverse impact of the epidemic on human capabilities, not only would it combat a grave human development crisis but also it could safeguard long-term economic growth.

Instead of adhering to restrictive macroeconomic policies, governments could target their increased spending on productivity enhancing public investment and central banks could amplify the flow of low-cost credit to stimulate private investment. If the real exchange rate does begin to appreciate, the central bank can implement means to manage its fluctuations in order to maintain competitiveness. Moreover, if a significant proportion of HIV/AIDS funds is used to directly finance the import of drugs and medical equipment that are not produced domestically (which is often the case), there is likely to be even less impact on inflation or appreciation of the exchange rate..

# 1 INTRODUCTION: TACKLING HIV/AIDS AS A HUMAN DEVELOPMENT DISASTER

Globally, AIDS has killed more than 23 million people. In 2004 alone, more than 3 million people died, and nearly 5 million people became HIV-positive. An estimated 40 million people worldwide are now living with HIV and this number continues to grow. It rose from 35 million in 2001 to 38 million in 2003. Today the figure stands at close to 40 million. With an estimated 15,000 people contracting the virus each day, HIV has become a huge epidemic. At the rate of about 1.5 million a year, the number of HIV positive persons globally will be over 60 million by the Millennium Development Goals (MDGs) target year of 2015.<sup>1</sup> While this is frightening, what is more disturbing is its distribution – more than 65 per cent of HIV positive persons live in sub-Saharan Africa, and 95 per cent of new infections occur in the developing world.

The HIV/AIDS epidemic globally, and in countries of sub-Saharan Africa in particular, is causing a large-scale human development crisis. Although AIDS is a slow killer, an estimated 4,000 people die of it every day, contributing to nearly 1.5 million deaths a year. Thus, the scale of this crisis requires nothing less than an emergency response of unprecedented proportions.

The impact of the epidemic can also be examined in economic terms. The full economic impact of HIV/AIDS in high prevalence countries will become apparent only in the long run. When a large number of children and working age adults become HIV positive, this effect directly reduces the supply of labour. It also seriously constrains the labour force participation of other members of the household who have to care for sick relatives. Through the adverse impacts on educational attainment and the strains on government expenditures, a high prevalence of HIV/AIDS will impair a country's long-term growth potential. Hence, unless this epidemic is tackled now, the long-run growth of countries with a high HIV/AIDS prevalence will be grievously impaired. (See Haacker, 2004).

Thus, there is a vicious circle: HIV/AIDS and the human development crisis that it precipitates adversely affect growth, and faltering growth increases poverty, which then heightens the risk of infection. As the rate of infection rises, there is a self-reinforcing cumulative circular causation of poverty and HIV/AIDS.

Therefore, whichever perspective – human development crisis or economic growth – one takes, there is an urgency in dealing with HIV/AIDS. The infection rate needs to be capped and then reversed. At the same time, 40 million HIV-positive persons need to be treated. The task is daunting, involving complex socio-cultural and economic challenges.

On the economic front, one burning issue is financing – how much is needed, what are the sources, and how to spend it. The latest UNAIDS estimates show that the cost of a comprehensive response to HIV/AIDS in low- and middle-income countries will rise from \$9.6 - \$11.3 billion in 2005 to \$14.1 - \$18.8 billion by 2007 (UNAIDS, 2005). In several countries, financing needs for HIV/AIDS programs could rise to 10 per cent of GDP, putting enormous pressure on government budgets. Therefore, the financing of essential HIV/AIDS treatment and prevention programs will require large aid inflows. The international community has already committed a large sum to support national efforts. For example, out of about \$6 billion spent globally on HIV/AIDS related programs in 2004, close to \$3.7 billion came from international sources (OECD, 2005). This represented a near doubling of international efforts between 2002 and 2004.<sup>2</sup>

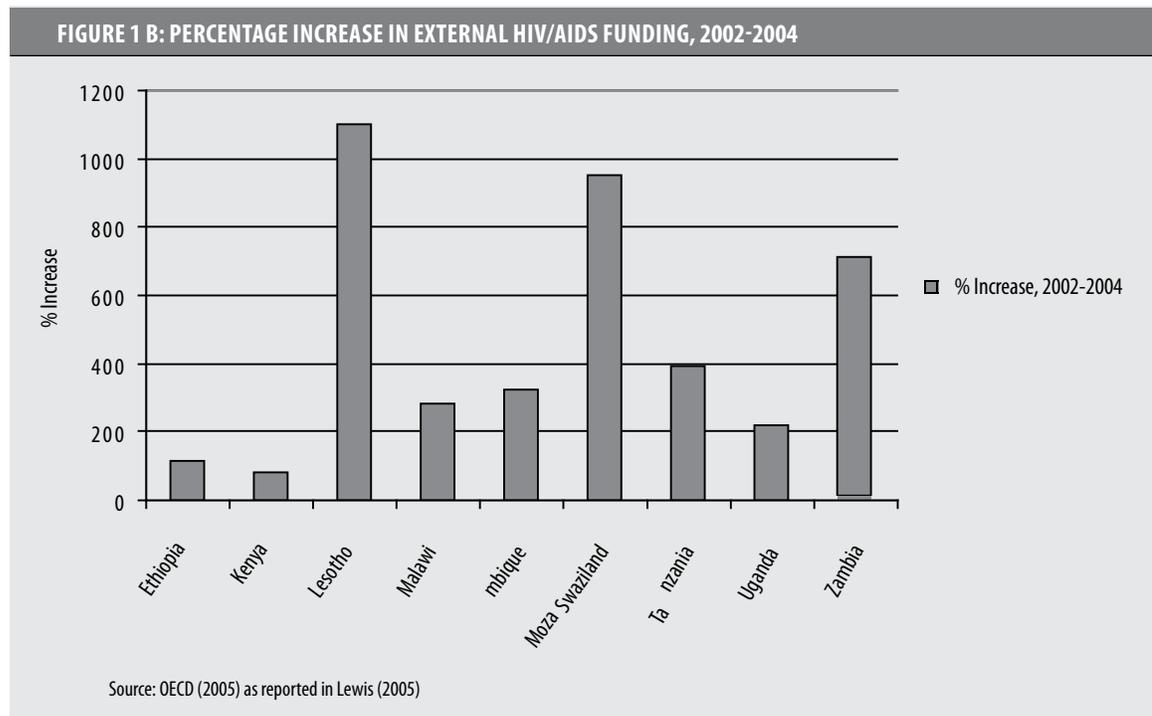
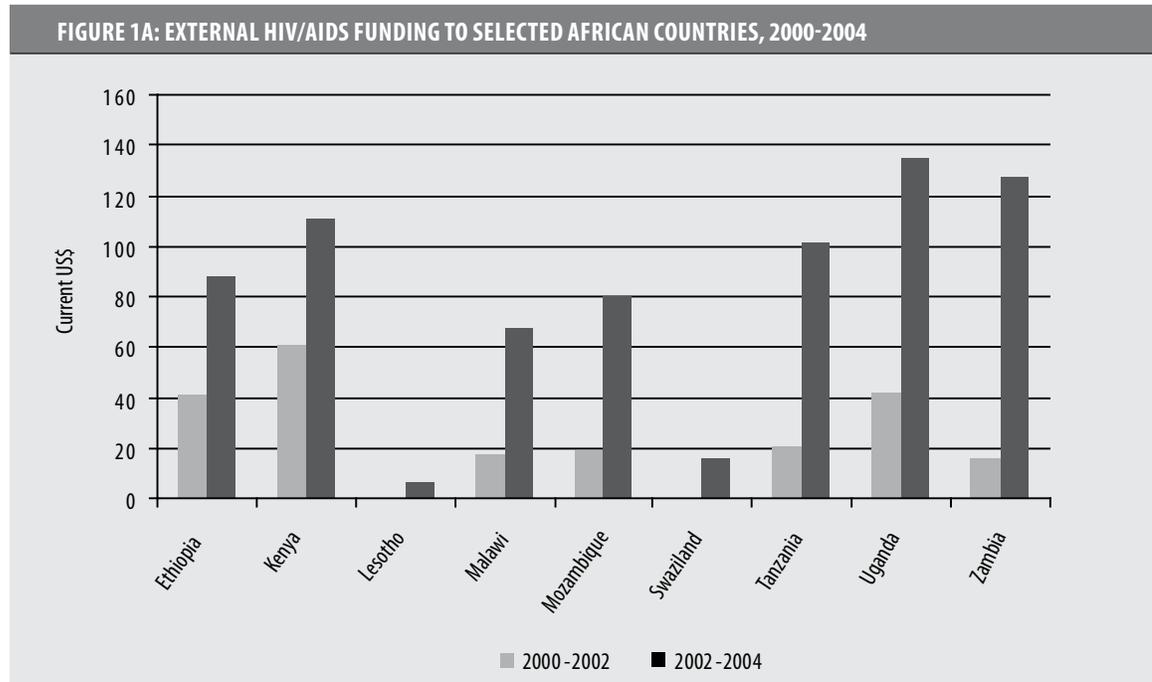
For many sub-Saharan African countries in which HIV/AIDS prevalence is very high, foreign aid has been

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<sup>1</sup> See report of the International AIDS Vaccine Initiative [www.iavi.org/AIDSandMDG\\_report](http://www.iavi.org/AIDSandMDG_report)

<sup>2</sup> Multilateral assistance comes from international agencies, such as the World Bank and UNDP's Global Fund to Fight HIV/AIDS, Tuberculosis and Malaria (GFATM), which are financed by bilateral donors and private foundations, such as the Gates and Clinton Foundations. In addition to contributing to the GFATM, bilateral donors also fund HIV/AIDS programs directly. One significant initiative is that of the United States. Under the President's Emergency Plan for HIV/AIDS Relief (PEPFAR), the US has committed \$15 billion for 15 countries over five years (2004-2008).

the dominant source of funding. As can be seen from Figures 1A and 1B, HIV/AIDS related external funding increased significantly in these countries in just two years. In the case of Lesotho, for example, the increase was about 1,100 per cent.



Because of this scaling up, donors have expressed concerns about these countries' ability to absorb such a large surge in aid flows. For example, they cite such problems as institutional weakness and the lack of critical complementary inputs such as skilled manpower. There are also other major concerns, such as the possibility of disincentive effects on governments' resolve to mobilize domestic resources and the vulnerability of these countries to the uncertainty of aid flows. A major concern that has recently received increased attention is the possibility of large aid-induced macroeconomic instability, such as higher inflation and real appreciation of the domestic currency (UN Millennium Project, 2005, pp. 239-240).<sup>3</sup> One way of posing the question is, will the rise in inflation and real appreciation of the domestic currency be large enough to adversely affect long-term growth so that aid inflows become counter-productive?

This paper is a brief survey of the theories and the evidence related to the likelihood of aid-induced macroeconomic instability. In particular, the questions that it tries to address are:

- 1. To what extent can the utilisation of foreign assistance to combat HIV/AIDS cause macroeconomic instability to the detriment of long-term growth?**
- 2. If there is a possibility of such instability, are there adequate policy instruments to mitigate it?**
- 3. How to track macroeconomically whether countries receiving foreign assistance are spending and absorbing it?**
- 4. What should be the overall macroeconomic policy framework to achieve HIV/AIDS objectives without causing macroeconomic instability?**

In answering the above questions, one should bear in mind that foreign aid is a transfer of resources to the recipient countries. In the standard foreign aid model, this transfer implies a widening of the trade gap, which could be accompanied by a real appreciation of the domestic currency. That is, foreign aid helps finance a larger trade gap caused by increased import demands, which are prompted by increased economic activity arising from aid-funded expenditures. Hence, some real appreciation is likely to be a by-product of the absorption of foreign aid. The real appreciation becomes problematic if it hinders export growth; that is, the trade gap widens also because of a significant reduction in exports. The key to prevent this syndrome from occurring is to offset the impact of real appreciation on international competitiveness by productivity enhancing public policies. In the short run, the government can also respond to this problem with such policies as export subsidies and exchange rate controls.

One condition under which foreign aid can be absorbed without the likelihood of real appreciation is commodity aid, wherein resources are transferred directly, or the entire aid is used to buy non-competitive imports<sup>4</sup>, without bringing the foreign currency into the recipient country.<sup>5</sup> This is important to note since a large share of HIV/AIDS related foreign funding is likely to be used to buy essential drugs abroad, which will be transferred directly to HIV/AIDS affected countries. This is unlikely to have a significant adverse effect on the real exchange rate.

The rest of this paper elaborates on these points. It is organized as follows: Section II describes the rationale for foreign aid inflows and the nature of transfer mechanisms under fixed and flexible exchange rate systems; Section III provides a survey of the theoretical possibilities and empirical evidence for aid induced 'Dutch disease'; Section IV uses the analytical framework recently developed within the International Monetary Fund to examine policy options for aid receiving countries; Section V draws policy implications for HIV/AIDS related aid inflows; and Section VI contains concluding remarks.

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<sup>3</sup> See Heller (2005) and Lewis (2005) for brief reviews of issues.

<sup>4</sup> Goods and services that are not domestically produced or goods and services that would have been imported even in the absence of foreign aid.

<sup>5</sup> Technical assistance is another form of ODA that is not likely to cause real appreciation if the money is spent mainly on foreign consultants, who spend most of it in their home countries (which has, admittedly, its own drawbacks).

## 2 THE RATIONALE FOR FOREIGN AID

As is well known, the theoretical rationale for foreign aid (FA) is to fill the savings-investment and/or foreign exchange gaps: developing countries have a deficient level of domestic savings to finance a level of investment necessary to achieve their desired rates of economic growth, and/or a lack of foreign exchange reserves to acquire imported capital goods.<sup>6</sup> The role of FA within this traditional 'two-gap' model can be shown by using the national income identity.

The national income or gross domestic product (Y) is equal to gross national expenditures, or the sum of consumption (C), government expenditure (G), investment (I) and net exports (X – M) ex post. That is,

$$Y = C + I + G + X - M \quad \dots (1)$$

GDP is also equal to the sum of consumption (C), savings (S) and taxes (T), so that

$$Y = C + S + T \quad \dots (2)$$

From (1) and (2), we get

$$S + T = I + G + X - M$$

$$\text{Or, } I - [S + (T - G)] = M - X = F - J \quad \dots (3)$$

where  $T - G$  = government savings (fiscal surplus or deficit).

$F - J$  = the difference between net capital inflows (F) and net factor payments abroad (J).<sup>7</sup>

Equation (3) states that ex post the gap between investment (I) and total domestic savings ( $S + T - G$ ) must be equal to the imports-exports gap. That is, if there is any shortfall in domestic savings (compared to investment), this must be met by net foreign savings ( $F - J$ ) flowing into the country. Most low-income countries receive foreign aid (FA) as their main form of foreign savings.<sup>8</sup>

There is no reason for the two gaps to equal ex ante. Chenery and his associates argued that aid was more effective where the trade gap ( $M - X$ ) or the foreign exchange gap ( $F - J$ ) was larger ex ante. A binding or dominant trade gap (or foreign exchange gap) means that the country is unable to utilise its entire savings. That is, due to a shortage of critical imports, it cannot increase investment even when domestic savings are available. The country suffers from deficient demand (i.e., investment < savings) and has Keynesian type unemployment or underemployment.

Bacha (1990) extended the 2-gap model into a 3-gap model, wherein the fiscal gap (T-G) constrains private sector investment at a level below what available national savings would permit.

This derives from an assumed relationship between private investment (IP) and public investment (IG) as follows:

$$IP = kIG \quad \dots(4)$$

Where  $k > 0$

<sup>6</sup> The gaps produced by the savings or exports required for the planned investment or importation of capital goods to achieve a target growth rate are:

(a) savings-investment gap =  $s^*Y - sY$ , where  $s^*$  is the target savings rate and  $s$  is the actual savings rate;

(b) foreign exchange gap =  $m^*Y - mY$ , where  $m^*$  is the target import rate and  $m$  is the actual import rate, permitted by export earnings. In the pre-take-off stage, a developing country would have a dominant savings-investment gap, followed by a dominant foreign exchange gap. See Chenery and Bruno (1962), Chenery and Strout (1966) and Thirlwall (1999).

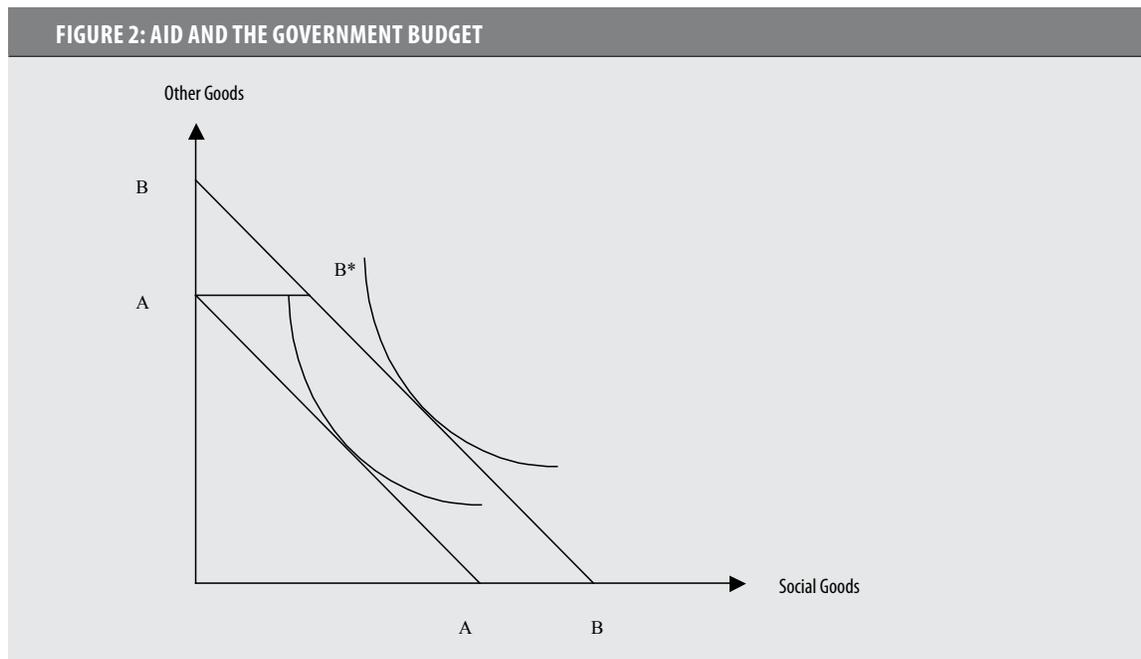
<sup>7</sup> From the balance of payments, the excess of imports over exports is equal to foreign transfers. Equation (3) assumes that the accumulation of foreign reserves is netted out of the capital account of the balance of payments to obtain the net value of capital inflows. For most low-income countries, there should be positive net capital inflows but, unfortunately, this is not always the case. Their net factor payments abroad are usually positive since they are making payment on inward foreign investment and have little outward investment of their own.

<sup>8</sup> Most developing countries receive minuscule amounts of private capital. Some, however, have substantial amount of remittance income.

Equation (4) recognises that in developing countries, government investment in social and economic infrastructure sets an upper limit for profitable private investment.<sup>9</sup> The low level (or lack of) of fiscal surplus ( $T - G$ ) in the recurrent budget (referred to as the primary surplus) limits public investment (IG) and, according to equation (4), therefore limits private investment (IP).

The government can finance its deficit by borrowing from the central bank. Government borrowing from the private sector is limited since the domestic capital market is very thin in most developing countries. Borrowing from the central bank (printing money) yields seigniorage (an inflation tax), through which unutilised private savings can be transferred to the government for public investment, which can, in turn, stimulate private investment.<sup>10</sup> However, this method of financing public investment has its own limits because excessive inflation may become debilitating for private investment.

In such circumstances, according to the 3-gap model, foreign aid can relax the financing constraint by supporting the budget. From the development or planning (ex ante) perspective, the government of a developing country can estimate the fiscal gap, and place the foreign exchange needs to the donors, who can then fill the gap.<sup>11</sup> In other words, FA shifts the government budget constraint outward and allows government to spend more to meet development needs without having to resort to inflationary financing. See an illustration of this effect in Figure 2.



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