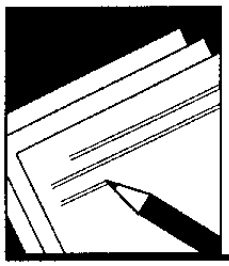
PDP/02/5



IMF Policy Discussion Paper

Challenges in Expanding Development Assistance

Peter S. Heller and Sanjeev Gupta

INTERNATIONAL MONETARY FUND

 PDP/02/5

IMF Policy Discussion Paper

Fiscal Affairs Department

Challenges in Expanding Development Assistance

Prepared by Peter S. Heller and Sanjeev Gupta [1]

March 2002

Abstract

This paper highlights the macro and microeconomic challenges associated with success of the effort to mobilize 0.7 percent of GNP for official development assistance (ODA). To promote achievement of the Millennium Development Goals, enhanced ODA must be as productive as possible. In weighing the distribution of enhanced ODA among countries, the paper emphasizes the need to limit potentially adverse "real transfer effects." It recommends a multi-pronged approach to ODA that includes, inter alia, in addition to direct bilateral transfers, enhanced use of trust funds and the financing of global public goods.

JEL Classification Numbers: F35, H40, I32

Keywords: ODA, poverty, absorptive capacity, international public goods

Authors' E-Mail Addresses: pheller@imf.org; sgupta@imf.org

---

[1] We wish to thank Gabriela Inchauste, Erwin Tiongson, Shamit Chakravarti, and Solita Wakefield for extensive help in preparing this paper. Eduardo Aninat, George Abed, and Michael Hadjimichael, Timothy Lane, Kevin Fletcher, and Edward Frydl provided helpful comments on an earlier draft.

I. INTRODUCTION

In recent years, there has been a renewed call within the international community for industrial countries to meet the goal of devoting 0.7 percent of their GNP for official development assistance (ODA). Originally proposed by the Pearson Commission in 1968, only a few countries (Denmark, Luxembourg, the Netherlands, Norway, and Sweden) are currently meeting this target and the average ODA level (0.24 percent of industrial country GNP in 1999) is only a third of the target. The recent report of the U.N. Commission on Financing for Development, chaired by former President (of Mexico) Zedillo, highlighted the importance of a dramatic expansion of aid resources, given the large and growing gap between rich and poor countries and the fact that more than a billion persons are living on incomes below US$1 per day. The Commission emphasized that achieving the Millennium Development Goals (MDGs) by 2015 (that comprise halving the poverty rates) would require a dramatic growth in ODA, creating conditions for rapid economic growth in the beneficiary developing countries, and an expanded supply of needed global public goods.[2]

The purpose of this paper is to highlight the challenges that would need to be addressed by the world development community—rich and poor nations alike—in the effective transfer and productive utilization of this magnitude of resources to developing

[2] There are eight Millennium Development Goals and over 40 indicators for monitoring these goals.

countries. Specifically, the issues raised in this paper can be simply put. If the 0.7 percent target were realized, it would generate a sum of resources amounting to about US$175 billion, slightly more than three times current levels. In principle, these resources could be extremely important in addressing the income and nonincome dimensions of worldwide poverty. However, economists have long recognized the potential macroeconomic and microeconomic difficulties associated with effecting a transfer of resources that is substantial relative to the size of a recipient country's economy. These "resource transfer" difficulties could be particularly relevant if the additional resources generated in meeting the 0.7 percent target in ODA were distributed only to the poorest of potential recipient countries. Thus, the criteria for distribution of augmented ODA among potential recipients should seek to limit the extent that absorption issues prove a pressing concern. The paper also underscores the Zedillo Commission's conclusion that beyond direct bilateral transfers of resources to developing countries, there are other ways in which ODA could contribute to the achievement of the MDGs and the fostering of self-sustaining development by the poorest countries.

Section II outlines the principal challenges that would emerge if the world community were to succeed in realizing the 0.7 percent ODA target. It illustrates the quantitative dimensions of the potential problems that could arise, and then reviews some of the macroeconomic and microeconomic absorption issues that would need to be considered in providing direct ODA transfers. Section III provides concrete suggestions on how these issues might be tackled, including proposals for alternative uses of enhanced ODA other than direct ODA transfers.

II. Concerns and Challenges

A. The Scope of the Challenge

In giving a quantitative sense of the problems that might be associated with the 0.7 percent target, one quickly discerns the following conundrum. If one were to distribute the full 0.7 percent of GNP to the least developed countries of the world (LLDC)—those with per-capita income under US$500 (and subject to whatever additional criteria might be imposed in terms of governance or policy track record of potential recipients), the scale of the transfers would be massive relative to the size of the domestic economies of these countries. This would create the risk of significant macroeconomic and microeconomic distortions prejudicial to sustainable development (the factors potentially leading to this "resource transfer problem" are discussed in Section IIB). Moreover, applying such a distributional criterion would result in enormous differences in the scale of per-capita transfers to the absolute poor of the world; it would mean that no transfers would be "provided" to those poor residing in countries above the relevant per-capita income threshold. Countries that would be excluded by this criterion (typically classified as "other low-income (OLIC)" or "lower-middle-income (LMIC)" countries) include some of the larger countries of the world, e.g., such OLICs as India, Vietnam, Nigeria, and Pakistan, and such LMICs as China, Indonesia, and the Philippines.

Alternatively, if one were to distribute the enhanced ODA resources according to a different criterion, say, on the basis of the location of the world's poor—seeking perhaps equality in per-capita transfers to those in absolute poverty (and again, subject to the same concerns

about governance or economic policy track record), one would find that the macroeconomic issues associated with the resource transfer would be significantly diminished. However, one would also find that the bulk of the enhanced ODA would no longer go to the poorest countries of the world, but rather mainly to the larger countries noted above.

The purpose of this paper is not to explore the relative merits of the alternative distributional criteria that have been discussed by policy analysts. However, it is important to provide some quantitative dimension of the impact of these alternatives on potential recipient countries, were the 0.7 percent target to be realized, in terms of the implied size of transfers relative to GDP or to the size of domestic resource mobilization efforts. Among the criteria typically mentioned in deciding how much aid to provide, the key factors tend to be the level of a country's development (with particular emphasis on how poor a country is in terms of its per-capita income level), the extent of poverty in the country (as measured by the number of those in absolute poverty), the quality of its economic policies, and the state of its governance. Countries in conflict obviously will be weaker candidates for assistance until they are in a reconstruction phase. Ceteris paribus, for any given set of criteria, more aid would tend to be given to larger countries in terms of population size. In what follows, we will also assume that ODA is distributed directly to developing countries, rather than having a portion used to finance global public goods or other broad policy initiatives to reduce world poverty and foster development.

While it is straightforward to examine a distribution of aid according to fairly deterministic criteria—level of per-capita income, population size, and/or number of

those in absolute poverty within a country—assessments of the quality of economic policies are more subjective. Recently, Paul Collier and David Dollar of the World Bank carried out an analysis that identified how **existing** aid (in 1996) might be reallocated if one were to target countries with severe poverty and good policies.[3] In this context, they also thus identified those countries that would presently be excluded in terms of civil strife or poor quality of economic or governance policies. Building on the Collier-Dollar results, four alternative criteria or scenarios are examined:[4]

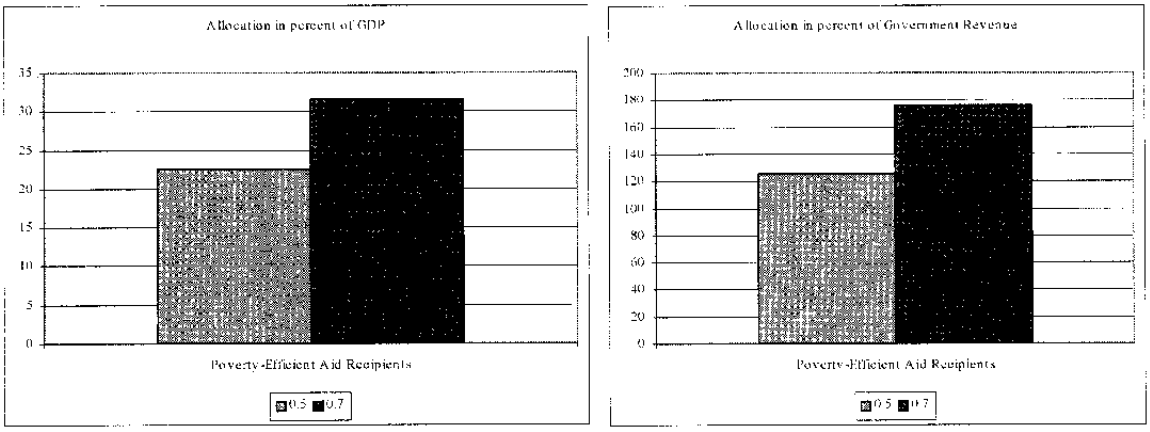
Scenario 1, where the Collier-Dollar allocation is scaled up based on the higher level of assistance implied by the 0.7 target, immediately reveals the potential macroeconomic absorption issues that would arise from transfers at the expanded ODA level under a plausible scenario that takes account of poverty and performance. Figure 1 suggests that the average ratio of ODA to GNP would be 32 percent, almost two and a half times the existing ratio. ODA would almost **triple** the amount of revenue available for government programs. For many countries however, the scale of the transfer would be substantially larger (see Table 1), reaching 90 percent of GDP in Ethiopia, 52 percent in Uganda, 60 percent in Burundi, 48 percent in Vietnam, 43 percent in Nicaragua, 57 percent in Guyana, and 74 percent in the Kyrgyz Republic. These results are not significantly different if one assumes, under **Scenario 2**, that only the *increment* of resources above existing ODA levels

[3] It is interesting to note that their calculations assume a diminishing return to aid. Their results suggest that for a country with very good policies, the return to aid reaches zero at about 15-20 percent of GDP.

[4] Detailed assumptions underlying each scenario are discussed in Appendix II.

is allocated according to the Collier-Dollar criteria (with existing ODA recipients constrained to at least receive their current ODA receipts). In this case, the average ratio of ODA to GNP is even higher, at 38 percent of GDP, with ODA double average government revenues.

Figure 1. Aid Based on Poverty-Efficient Allocation of Aid1/
(unweighted averages)



1/ Based on Collier and Dollar's (1999) poverty-efficient allocation of aid. The implied share of total aid for each country in their dataset was calculated, then US$175 billion and US$125 billion were allocated accordingly, corresponding to 0.7 percent and 0.5 percent, respectively, of industrial country GNP.

Figure 2. Scenario 2: Incremental Allocation

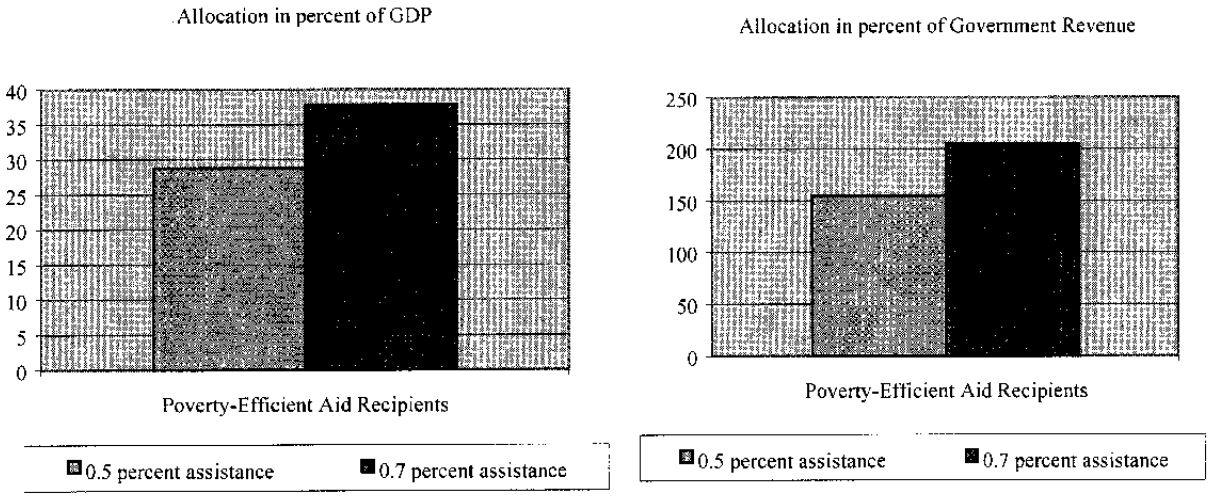
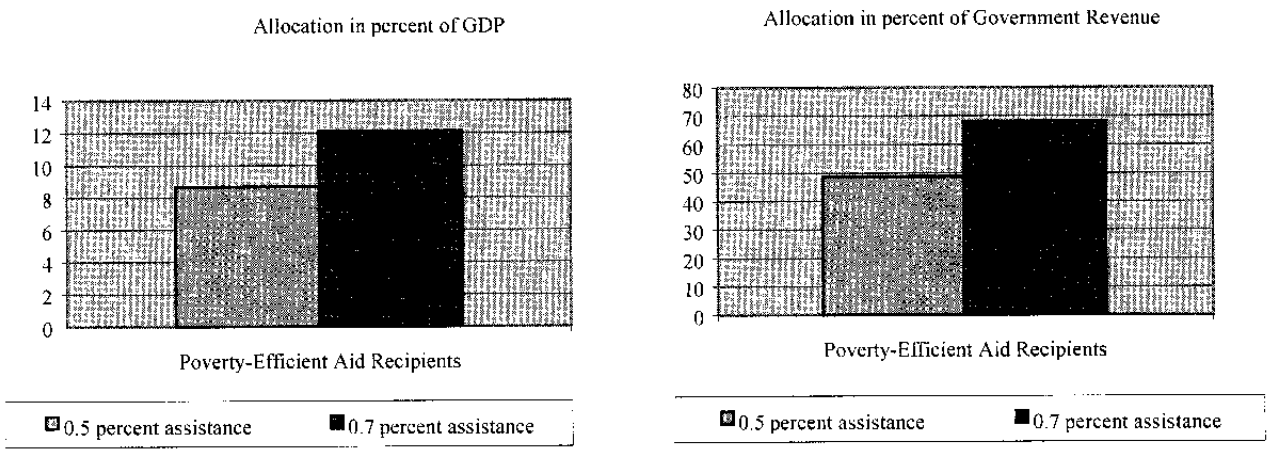


Figure 3. Scenario 3: Poverty Efficient Allocation with Increased Assistance to China and India



In contrast, **Scenario 3, which builds on Scenario 1 but with increased allocation to China and India,** suggests a far more manageable scale of absorption requirements, with ODA averaging about 12 percent of GDP. While there would still be significant issues of absorption in many of the least developed countries, e.g. for Ethiopia, ODA transfers would be 33 percent of GDP and for many others, the ratio would be in the range of 10 percent–20 percent, these cases would be more of an exception. **However, the source of the improvement underscores the nature of the difficulties.** Scenario 3 assumes that China and India are allowed to receive a significantly larger share of total ODA receipts, commensurate both with the level of poverty prevailing in these two countries and the effectiveness of their policy regime. In effect, under this scenario, China and India would

together receive about US$116 billion of the US$175 billion in ODA.[5] Other large countries, none of which are among the least developed of the world—Vietnam, Nigeria, Pakistan (all with annual per-capita income over US$500), and the Philippines (with annual per-capita income above US$800)—would receive about US$25 billion in ODA. **It then becomes clear that the reason why this scenario is more credible, in terms of the scale of the macroeconomic absorption implied, is that no more than about US$30 billion of the ODA target would be allocated to the least developed countries. Moreover, of this US$30 billion, about a third would go to Bangladesh. No more than US$20 billion of the ODA would go to Sub-Saharan Africa, and of this US$4 billion would be allocated to Nigeria.**

Even in Scenarios 1 and 2, where ODA to China and India is constrained, the bulk of the ODA would be allocated to countries that do not fall in the category of the least developed. In Scenario 1, ODA to Indonesia, Vietnam, Nigeria, Pakistan, Philippines, China and India would amount to about US$86 billion; ODA to Sub-Saharan Africa would be about US$52 billion (of which US$10 billion would be allocated to Nigeria). **The underlying story is then clear. The greater is the extent that the enlarged ODA would be allocated to the least developed countries—those with per-capita incomes less than US$500 per year, the greater is the likely macroeconomic absorption problem likely to be**

[5] In contrast, in Scenarios 1 and 2, aid receipts to China and India are constrained together to be no more than 11 percent of aid flows (its share of ODA flows in 1996), such that China and India together would receive approximately US$20 billion in ODA.

encountered.[6] Similarly, the larger the share of the ODA allocated to the next tier or tiers in the per-capita income scale—OLICs (with per-capita income between US$500 and US$800) and LMICs (with per-capita income over US$800)—the smaller the scale of the macroeconomic absorption, essentially a reflection of the larger absolute size of these latter economies.

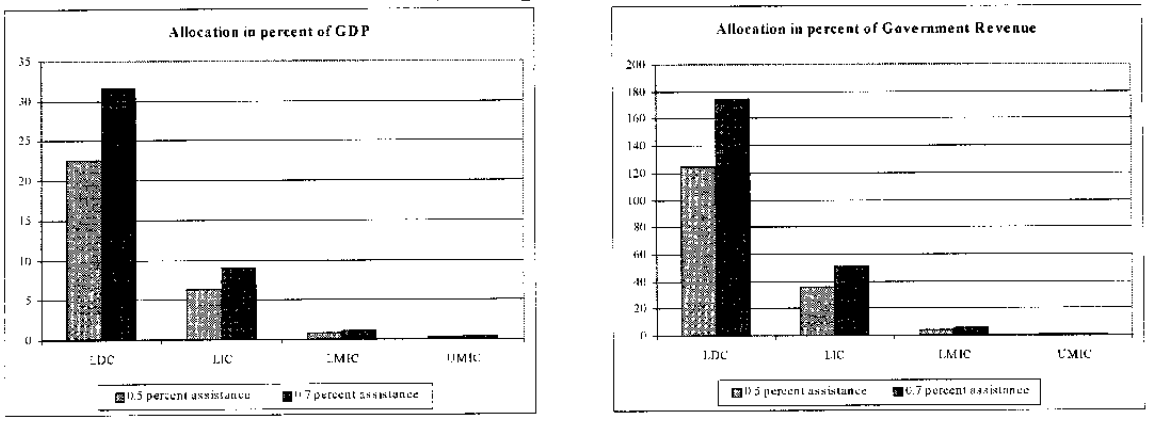
There is much support that can be given for an ODA distributional criterion that is expansive in terms of the per-capita cut-off. Absolute poverty is not limited only to the poorest countries. Indeed, if one were to focus simply on the criterion of equal ODA per individual in absolute poverty (defined for all households with less than US$1 per day in per-capita income), viz., Scenario 4, one would observe a distributional outcome not too dissimilar from that in Scenario 3 in terms of the scale of ODA to China and India together, viz., about US$112 billion. The principal difference would be that in Scenario 4, India would receive the larger amount US$73 billion (as opposed to US$39 billion for China) reflecting the relatively larger concentration of individuals in absolute poverty; in Scenario 3, the reverse is the case, with China receiving US$76.4 billion and India US$40 billion. Similarly,

---

[6] In Appendix Table 1, we have provided some additional tabulations which indicate the quantitative dimensions of alternative distributions based strictly on level of per-capita income and population (with no constraints associated with blocking aid to poor performers). These alternative cases quickly underscore the size of the transfers that would emerge were one to focus enhanced ODA only on the poorest countries or a sample also including OLICs. To witness the extreme case, if all of the ODA mobilized under a 0.7 percent target (0.5 percent target) were distributed to the LLDCs—the 35 poorest economies—ODA would average 120 percent (85 percent) of GDP and 300 percent of government revenues! Even if the criterion were broadened to include both LLDCs and OLICs (i.e., that is the 60 countries with per-capita income under US$800, and thus including India), the ratio would still be high—28 percent of GDP.

using the criterion of numbers in absolute poverty, Sub-Saharan African countries would receive no more than US$33 billion in ODA. In terms of the scale of the potential macroeconomic absorption required, Scenario 4 would imply that recipients among the least developed countries would encounter ODA transfers averaging about 32 percent of GDP, while low income countries would be in the range of 8 percent).

Figure 4. Aid Based on Number of Poor 1/
(unweighted averages)



1/ Based on the combined (poor) population of the 18 least developed countries (LDC), 17 low-income countries (LIC), 26 low-middle-income countries (LMIC) and 13 upper-middle-income countries (UMIC) for which data on the number of poor living on less than US$1 per day is available.

In concluding this section, it is worth emphasizing that the quantitative issues raised above can be seen as a direct consequence of the success of many of the poorest countries of the world in achieving growth and development in the decades since the 0.7 percent target was originally proposed. The magnitude of ODA that would have been implied in 1970 from a 0.7 percent target was not then of such a scale that it would have posed as much of a macroeconomic and microeconomic absorption problem. At that time, per-capita incomes in the industrial countries were lower than at present. But equally, the

number of countries that would have been classified as among the least developed would have been considerably larger. At that time, many of the countries that have now graduated out of the categories of least developed and even low income, would have been classified among the poorer countries of the world. The share of the world's population in the least developed countries has commensurately fallen, reflecting the significant growth of such large population countries as China, India, and Indonesia.[7]

Since the late 1960's, the aggregate size of the industrial economies has grown substantially, while the share of the world's population in the poorest countries has fallen and their per-capita income levels have stagnated if not reduced. The result is that the magnitude of the resources implied by a target of 0.7 percent of industrial country GNP has grown relative to the GDP in the least developed countries (see Table 2). This is **not** to say that the number of the poor in the world has not grown, or that the need for this level of ODA for addressing world poverty is any less relevant.[8] The data simply suggest that more of the world's poor are now located in countries that are not typically classified by the world donor community as among the least developed, but rather are living in countries that are in

[7] GDP per capita for China, for example, has grown by about 6 percent over the past 35 years, increasing its GDP over sevenfold. During this same period, annual GDP per capita of India and Indonesia grew by 2.4 percent and 4.8 percent, respectively (World Bank 2001a).

[8] The share of the population living on less than US$1 a day has fallen from 28 percent in 1987 to 23 percent in 1998; as the population has increased, however, the number of poor people has remained roughly constant (World Bank, 2001b).

the next higher per-capita income brackets (viz., OLICs and LMICs).[9] In Table 2, this is illustrated well by the large jump shown in the ratio of ODA to the GDP of the least developed countries (with real per-capita income under US$400) between 1990 and 1999 a period when India, China, and Indonesia drop out of this group of least developed countries.

B. Macroeconomic and Microeconomic Policy Challenges Associated with the 0.7 Percent Target

The preceding section gave some sense of the scale of transfers relative to the size of the economies of potential recipient countries that could be associated with a substantial increase in ODA transfers, depending on the criterion used for distributing this ODA. It suggested that were the transfers to be principally distributed among the poorest of developing countries, the ratio of transfers to GDP or government revenues would be very large. This section examines why a large scale of transfers, relative to the size of an economy, can have adverse implications. It thus underscores some of the factors and bottlenecks which would have to be addressed if a significant expansion of ODA were to occur for many countries.

Macroeconomic issues of absorption

The likelihood of significant macroeconomic problems will depend both on the size of the external resource transfers relative to the scale of the recipient economy *and* the extent to which such transfers take the form of financial transfers for spending on

[9] China and India together account for over half of the world's poor (World Bank, 2001b).

domestic goods and services rather than imports. If ODA were spent entirely on imports, the balance of payments would be unchanged; the increase in imports would be completely financed by foreign inflows. In this case, there would be no direct impact on the money supply or aggregate demand in the domestic economy.[10] Thus, for example, a significant expansion of externally financed imports of antiretrovirals for the treatment of AIDS could be readily absorbed with only negligible macroeconomic effects. (Of course, their productivity would be contingent on the availability of a complementary domestic medical infrastructure to effectively monitor their distribution and usage).

In contrast, if a significant share of foreign inflows were to be spent on nontradable goods, the price of domestic goods and services would increase. The economic channels by which this would occur can be simply described. To make local purchases, foreign exchange would need to be converted into local currency that in turn would expand the monetary base. This would fuel an increase in domestic demand, some of which would be met by expanded imports, contributing to a weakening of the trade balance. However, there would also be a significant increase in demand for nontraded goods. Because the worsening of the trade balance would be more than offset by foreign inflows, the pressure of demand for nontraded goods, coupled with supply constraints on their production, would contribute to an increase in their prices, leading to an increase in the overall domestic price level. In the case of a fixed exchange rate regime, the pressure of expanded liquidity on domestic demand and prices of

[10] If government spending substitutes for existing private consumption, private consumers may shift resources to other uses, thus possibly generating second-round effects.

nontraded goods would lead to a real exchange rate appreciation, as the domestic price level rises while the nominal exchange rate remains unchanged. In the case of a flexible exchange regime situation, the increased supply of foreign currency, not wholly absorbed by imports of goods and services, would drive up the price of the domestic currency, in effect leading to an appreciation in the nominal exchange rate. [11] Neither situation would be conducive to growth or poverty reduction. When domestic inflation is high, the poor and middle-income groups are likely to suffer. But the poor would also suffer if the competitiveness of the goods they produce were adversely affected by an exchange rate appreciation. Likewise, a poor country's capacity to compete in world markets, and ultimately to be weaned from ODA, will suffer if the competitiveness of its export industries is undermined by a real exchange rate appreciation.

This phenomenon, associated with sharply increased or sustained high inflows of external resources, is often termed the "Dutch disease" problem.[12] It is not a new problem. The debate on the relationship between international payments and the real exchange rate (the so-called transfer problem) dates back to the 1920s when the issue of German war reparations arose. Effecting a large capital transfer requires a flow of **real** goods and services or the appreciation of real exchange rates (see Mundell, 1991). The sharp

---

[11] Hjertholm and Laursen (1998) suggest that foreign aid that eases local supply bottlenecks can have a deflationary impact, which may, in turn, exceed the upward pressure on the real exchange rate as a result of significant external resource transfers.

[12] The "Dutch disease" problem refers to a situation when a booming export sector causes problems for the rest of the economy, such as inflation. See, for example, Younger (1991).

increase in oil prices in the 1970s, and subsequently, the macroeconomic policy management challenges confronting some of the poorer countries that have benefited from substantial aid flows, have all led to a resurgence of interest in this topic. Recent studies on aid inflows and the exchange rate have provided evidence of Dutch disease for Burkina Faso, Côte d'Ivoire, Senegal, and Togo (Adenauer and Vagassky, 1998); Malawi (Fanizza, 2001) as well as for Sri-Lanka (White and Vignaraja, 1992).[13] In Ghana, substantial aid inflows in the 1980s increased aggregate demand and made foreign exchange relatively abundant. Attempts by the government to maintain the real exchange rate at a lower level resulted in an inflation rate of between 30 percent and 40 percent, despite tight credit policy and a fiscal surplus (Younger, 1991).

Resolving the macroeconomic policy challenges posed by significant external resource transfers are difficult, given the limits to which direct commodity imports can be readily absorbed without incurring adverse domestic disincentive effects. For most poor countries, with limited infrastructure and human capital, absorptive capacity bottlenecks cannot be quickly removed. The experience of Uganda is instructive. Donor flows have increased over the last few years and are projected at over 10 percent of GDP in 2001/02, with grants contributing more than 5 percent of GDP. Partly as a result of this, the overall fiscal deficit excluding grants has also increased from 6.5 percent of GDP in 1995/96 to over

[13] The evidence with regard to Tanzania is more ambiguous. While others have identified symptoms of the Dutch disease in Tanzania, Nyoni (1998) contends that the aid boom has in fact led to an exchange rate *depreciation.*

10 percent of GDP in 2001/02. The fiscal deficits have been more than financed by external resources (including grants), resulting in the retirement of government domestic debt and a steady build up of government deposits with the banking system. [14]

The large inflow of donor funds has left the Bank of Uganda facing a trade-off between selling foreign exchange or treasury bills in order to mop up the excess liquidity generated from these inflows. Both instruments are being used, leading to a real exchange rate appreciation and an increase in interest rates on treasury bills. The transmission mechanism is outlined in Fanizza (2001). Both outcomes have adverse effects on growth, as the real appreciation of the exchange rate hurts competitiveness while selling government securities crowds out private sector credit. In the case of foreign exchange intervention, the adverse impact on growth of a real appreciation of the exchange rate may be mitigated by low inflation. In effect, the foreign inflows in Uganda have tended to constrain the exchange rate adjustment needed to respond to the recent terms of trade shock. While the terms of trade have dropped sharply in recent years, with coffee export prices falling to their lowest level in a decade, the real effective exchange rate has been broadly unchanged. While in the past, foreign exchange interventions were primarily undertaken as smoothing operations, now the volume and timing of interventions has been influenced by the need to absorb domestic liquidity. Higher interest rates on treasury bills have also crowded out lending by commercial banks to the private sector. The commercial banks now prefer to hold risk-free treasury bills,

---

[14] Annual domestic interest costs have grown from 0.4 percent of GDP in 1997/98 to 0.6 percent of GDP in 2000/01, and are expected to grow to close to 1.0 percent of GDP in 2001/02.

rather than financing risky private-sector projects. In addition, there is the potential adverse impact on the domestic revenue mobilization effort of increased foreign inflows. Such flows create a disincentive for policy makers to incur the political costs of a strengthening in tax administration.

Another policy challenge that arises with heavy reliance on external assistance for financing basic public services is an increase in fiscal uncertainty, making long-term planning more difficult. The disbursement of donor aid is often conditional not only on satisfactory progress in the efficient use of resources but also on other factors. These include political concerns, the various requirements of donors, and the often-cumbersome procedures for disbursing aid flows. Time-series data show that donor commitments systematically exceed disbursements and that aid flows cannot be predicted reliably on the basis of donor commitments alone (Bulir and Javier Hamann, 2001).[15] Aid in such circumstances becomes a source of instability and year-to-year fiscal volatility. Over the longer term, the permanent increases in expenditure commitments may also have a negative impact on long-run fiscal sustainability, as countries are expected to eventually "graduate" from their dependence on aid.

The cross-country evidence on the volatility of aid, however, is mixed. One study (Collier, 1999), using data for 36 African countries over the period 1970-1995, found that aid is both

[15] A recent paper also finds that for most African countries, aid flows are volatile and significantly procyclical (Pallage and Robe 2001). This suggests that aid flows may not smooth out fluctuations in consumption among some recipient countries.

less volatile than other revenue sources and is negatively correlated with them (thus providing a buffer to revenue shocks). In contrast, a recent paper using a sample of 72 countries over the period 1975-97, observed that aid is more volatile than revenues and that the relative volatility increases with the degree of aid dependency (Bulir and Javier Hamann, 2001). Such volatility may have significant social costs, as welfare consequences of volatility are often higher in poorer countries.

Microeconomic absorption issues

In addition to adverse macroeconomic and fiscal consequences, there are a number of microeconomic challenges that would need to be addressed if external inflows were substantially increased, reflecting the limited domestic absorption capacity of many potential recipient countries.

First, studies show that large inflows of aid can overwhelm the management capacity of governments.[16] Over the 1990s, ODA commitments of the European Union exceeded gross disbursements by more than US$1.6 billion each year, peaking at US$2.2 billion in 1994 (OECD, 1998). This has been attributed in part to the limited absorptive and administrative capacities of the recipient countries. It is also possible that the existing administrative infrastructure is such that recipient countries may be unable to use additional resources efficiently, thus leading to wastage and a congestion externality.

[16] See, for example, Kanbur, Sandler, and Morrison (1999).

This is particularly true for countries where fiscal decentralization has gone hand in hand with donor support and where increasingly the resources are being channeled through subnational governments for strengthening local service delivery. In Uganda, for example, the large expansion of resources for education, health, and water supply have exposed administrative difficulties, such as deficiencies in payroll systems. This could reduce the productivity of increased expenditures.

Second, it would be critical to ensure that increased aid does not reduce the incentive of countries to adopt good policies and discourage efforts to reform inefficient institutions. This is analogous to the observed "welfare dependency" among poor households, where welfare payments create high implicit marginal tax rates and discourage work. For recipient countries, the implicit marginal tax rates would correspond to a situation where donors would reduce aid flows in response to rising per-capita income levels. As such, aid may create perverse incentives for recipient governments; in effect, a "moral hazard" problem. In addition, foreign aid may undermine progress in institutional development, such as in the recipient government's efforts to strengthen revenue-collection (Azam, and others, 1998).

Third, in the past, aid dependence has been said to weaken accountability and encourage rent seeking and corruption. Aid can impede the development of a healthy "civil society," with recipient governments becoming accountable to donors rather than to domestic taxpayers. Unless donors' commitment and disbursement practices change, with higher levels of external assistance, recipient governments will need to increase further the

time spent fulfilling the requirements of donors.[17] In addition, because aid may be used for patronage purposes, such as the provision of subsidies to state-owned enterprises and increased public employment, aid can represent a potential source of rents, thus leading to unproductive, rent-seeking activities. Using cross-country data for about 80 countries, Knack (2000) finds that indeed higher aid levels may erode the quality of governance.[18]

III. A Multi-Pronged Approach to Allocating an Expanded ODA Effort for Poverty Reduction

In seeking to meet the Millennium Development Goals and obtain a dramatic reduction in the incidence of world poverty, the world community has set out ambitious but realistically achievable objectives. Many believe that the long-standing goal of raising ODA to 0.7 percent of industrial country GNP should be an important element of this overall strategy. From the perspective of the scope for mobilizing additional financial resources, there is some urgency in moving quickly to realize this target. Within 10 to15 years, the industrial countries of the world will begin to confront the budgetary pressures of aging populations,

---

[17] With increased aid, however, recipient governments also have more resources for fulfilling donor requirements.

[18] Recent reviews of the impact of aid on growth and economic development have concluded that the record of aid has, at best, been mixed. The World Bank (1998) found that foreign aid has been "highly effective, totally ineffective, and everything in between." In addition, the review suggested that aid has had a beneficial impact only in countries that have made substantial progress with reform of policies and institutions. Easterly (2001) has also suggested that aid has tended to reward poor performance, going to countries with poor policies where aid is wasted, rather than countries with good policies where aid could have high payoffs.

arising from extensive government commitments in the social insurance sector. Once the constraints arising from the present global recession ease, most industrial countries are likely to have more budgetary room now for an expanded ODA effort in the short period ahead than they will in the longer term.

A number of strategies and options exist to address the challenges that we have raised above with respect to the effective allocation and utilization of expanded ODA for addressing the problem of world poverty. In essence, we believe the world community should adopt a multi-pronged strategy that has five essential elements. First, by reconsidering the criteria according to which ODA is distributed, a large share of ODA should be channeled to countries for which the macroeconomic absorptive challenges would not be significant, and yet where there are large segments of the population in absolute poverty. Second, for those countries where the macroeconomic and microeconomic absorptive capacity is heavily constrained, there will inevitably be limits as to the magnitude of the real resource transfer that can be successfully realized consistent with macroeconomic stability and adequate incentives for sustainable and rapid real growth. This means that policy programs must intensely focus on ways to relax the key microeconomic and institutional bottlenecks that limit a country's capacity to absorb significant external financial resources. Third, there is considerable scope to consider investments in R&D that, while not involving direct bilateral resource transfers to the poorest countries, could result, over time, in the development of technological innovations that could be readily absorbed by such countries in their production technologies. In effect, by expanding the opportunity set of appropriate consumption possibilities and production technologies relevant for the situation

of poor countries, one could facilitate an expansion of their effective productive capacity and foster significant gains in productivity.

Fourth, there is scope to mobilize ODA resources now, while deferring the distribution of these resources, pending a strengthening of a country's absorptive capacity. The increasing emphasis on the accumulation of trust funds in multilateral institutions is illustrative of this approach. And fifth and finally, there may be scope for introducing programs that could address some of the factors which have proved barriers to access by the poorest countries to the markets of the industrial economies. This section expands on these ideas.

A. Reconsidering the Distributional Criteria for Expanded ODA

The results described in Section II underscore that part of the solution can come from the channeling of some of the increased ODA funds to countries that are not normally seen as the poorest.[19] We have already argued that simply on the basis of responding to the problems of absolute poverty, this would appear appropriate. But it would be consistent with the present distribution of ODA. Donor countries have multiple objectives in the granting of external assistance in addition to a country's per-capita income level or its incidence of poverty. Political considerations obviously enter, e.g., as relates to aid to post-conflict and transition countries, or to countries where geopolitical considerations are critical.

---

[19] This appears to be implicitly recognized by both the UN and the Zedillo Commission in their advocacy that between US$37.5 billion (0.15 percent of GDP) and US$50 billion (0.2 percent of GDP) should be earmarked for the least developed countries.

It would be unrealistic to assume that an expanded ODA effort would imply a diminution of assistance that has been based on such criteria. But equally, as noted above, if the objective of the expanded ODA effort is to achieve the MDGs and reduce poverty, then it will be critical to direct additional resources to where the poor are. This would mean a significant expansion of ODA to countries in South and East Asia. An important corollary implication of such a distributional criterion would be that low and middle-income countries with high concentrations of poverty must do their part as well, utilizing ODA resources to address inequalities in income distribution and the sources of endemic poverty.

B. Facilitating an Expanded Direct Flow of ODA to the Poorest Countries

For the least developed countries, the scale of the resource transfer associated with the realization of the 0.7 percent target would be large relative to the size of the domestic economy, even when one takes account of the large amount of resources likely to be provided in the form of imports and services. **This will put a premium on limiting the scale of the expansion of domestically produced services involving nontradeable goods and services, particularly within the public administration, that is feasible over the short to medium term.**

A higher concentration of imported goods and services would thus be necessary in the short term; it is not difficult to conceive of many necessary import goods that could make an enormous difference in addressing critical shortages in many poor countries (e.g., pharmaceutical products, including antiretrovirals (ARVs) to address the

HIV/AIDS crisis). Of course, to the extent that it may take some time before overall aid flows actually realize the 0.7 percent target, the gradual enhancement in absorption capacity may occur naturally. The role of external technical assistance—the supply of skilled manpower to address initial shortages—may also be necessary. [20]

Careful monitoring of the macroeconomic situation will be critical. Some macroeconomic pressures in the form of inflation and real exchange rate depreciation are probably inevitable, but there are limits beyond which such effects will undermine the very sustainability of the desired development effort. A testing of the limits will be necessary, and particularly with a significant risk of some inflationary pressure, it will be particularly important to ensure the adequacy of social safety net schemes to minimize the burden on the poorest groups within the society. Gradual augmentation of ODA levels may need to be considered for some countries, particularly if simply increasing the scale of imports is seen as inappropriately targeted for the country's development needs.

The PRSP process in low-income countries is critical, both to ensure local ownership in terms of decisions on the use of the enhanced resources and to provide some check on the governance process. Recent efforts to strengthen public expenditure and budget management systems will be even more important, if adequate accountability is to be provided to donor nations for this enhanced aid effort. Given the scale of the additional

---

[20] Many would argue that the more intensive importation and delivery of ARVs to treat HIV/AIDS must be accompanied by an adequate buildup of clinical and research services to monitor treatment and prevent the possible emergence of resistant strains of the HIV virus.

effort, in terms of the expansion of the public sector that would be implied by a significant ODA expansion, a sustainable and dependable flow of financing will be vital to avoid disruptions in the provision of public services.

A fraction of aid flows could be allocated to strengthen public institutions and improve the quality of governance (Knack, 2000). In this regard, targeting aid to countries that have taken steps to reduce corruption or increase accountability and transparency is advocated (Bräutigam, 2000). Many low-income countries have identified governance and/or institutional strengthening as critical in their poverty reduction strategies (Madagascar and Cameroon). In addition, efforts are being made by development partners to address governance and capacity constraints in low-income countries. The New Partnership for Africa's Development (NEPAD), for example, is promoting peer reviews of economic and corporate governance practices to make recommendations on appropriate standards and codes of good practice. For countries that are undertaking reforms to strengthen their PEM systems, **aid should be provided in the form of direct budgetary support. This is because budgetary resources are fungible and general budgetary support provides** recipient governments with greater flexibility in building administrative capacity, when donors are not designing and implementing projects, or providing tied aid and technical assistance (Knack, 2000).

Finally, aid flows should not create perverse incentives for the recipients. Good performance would have to be an explicit criterion for allocating aid.

C. Expanding the Potential for Increased Technological Innovations Benefiting the Poorest Countries

Another portion of the resources should be used for the production and provision of global public goods. This is recognized in the Zedillo Commission Report, as it recommends that only US$50 billion of the augmentation of ODA resources be distributed directly to recipient countries for the purposes of meeting the Millennium Development Goals. Among the types of public goods that could warrant funding, the recent report of the WHO-sponsored Commission on Macroeconomics and Health argues for expanded outlays on a significant research and development (R&D) effort directed at the principal disease problems underlying excess mortality in low and middle-income countries. It also urges the provision of commercial distribution incentives for any drugs and vaccines developed under such a program (CMH, 2001).

In a similar vein, R&D on alternative technologies to replace fossil fuels will be particularly important in the coming decades to provide low cost alternatives for developing countries seeking to substitute for inefficient and carbon-emitting energy facilities or technologies. The consequences of climate change in coming decades are likely to be the most adverse for developing countries. While much R&D effort is underway in the industrial world, it is important that affordable and efficient energy technologies relevant for developing countries are also developed and commercially brought on stream. This may require the financing of directed research that would not necessarily emerge from ongoing programs in industrial countries.

Additional financial support will also be needed for R&D on agricultural technologies that will facilitate adaptation by tropical countries in response to the already foreseeable extent of climate change (Heller and Mani, 2002). Such R&D may also be critical if countries that are heavily dependent on traditional agriculture are not to suffer adverse consequences from prospective technological developments in the agricultural sector. A critical focus of efforts of major commercial investors in agricultural R&D in the industrial countries is the development of "genetic use restriction technologies" (GURTs).[21] Recent research suggests that, over time, such GURTs could inhibit significant diffusion of technological gains and weaken the prospects for agricultural productivity growth in the poorest countries most susceptible to food shortages and high population growth. To facilitate their capacity to absorb and profit from new agricultural technology developments, many developing countries will need to develop a capacity for R&D in the agricultural biotech sector (Swanson, 2001) and enhanced ODA could finance such efforts.[22]

Finally, there will also be a need to focus on areas of key vulnerability in the future. If the industrial countries galvanize the necessary ODA resources, it will be desirable to proactively consider investments in the developing world that would frontally address some of the most important looming potential shortages that will affect both development and global stability in coming decades. For example, many analysts have identified pressures on

---

[21] These relate to plant varieties that cannot subsequently be reproduced by the purchaser in subsequent growing seasons.

[22] Only a limited number of developing countries, principally OLICs and LMICs, have such a capacity for agricultural biotech research (Swanson, 2002).

available water supplies, as a consequence of population pressures, economic development, and climate change, as a particularly dangerous source of political and economic vulnerability in coming decades. Such shortages are particularly worrisome in the Middle East and South Asia. **A multinational effort to consider alternative approaches to addressing potential emerging shortages can have a high payoff in terms of the problems of poverty in the future.**

D. Trust Funds for the Accumulation of ODA Resources

Given the limits on the amount of resources that can be sustainably transferred to some of the poorest countries, one possible option is to accumulate resources in a trust fund. Most industrial countries are likely to have more budgetary room for an expanded ODA effort now than in the future. Yet current absorptive capacity constraints in poor countries may limit the effectiveness of expanded aid. In such circumstances, **consideration could be given to mechanisms to sever the temporal link between disbursement of aid and its expenditure.** For example, increased ODA could be paid into internationally controlled "trust fund" arrangements and released on a pre-determined schedule or according to observable milestones related to improvements in absorptive capacity. Such a trust fund already exists to finance the HIPC Initiative. The total cost of HIPC assistance—estimated to be about US$33 billion in 2000—is financed by both bilateral creditors and multilateral lenders. The multilateral component of the initiative has been provided through the HIPC Trust Fund, administered by the World Bank, the total pledges for which have reached

US$2.6 billion, with paid-in contributions amounting to almost US$1 billion. Should ODA increase gradually over time, the need for inter-temporal planning will be less critical.

Specialized global trust funds are also starting to emerge to finance the provision of selected global public goods. These act as endowments for future earmarked pro-poor programs, sometimes focused on specific sectors, and managed at the center, provincial, or community levels, in a developing country. For example, a global fund was recently set up to pool, manage, and allocate new resources to fight AIDS, Tuberculosis, and Malaria, diseases that collectively cause 25 percent of deaths worldwide. It is projected to finance plans developed through country partnerships in severely affected countries. This global fund, which is supported by a small Secretariat based in Brussels, already has received US$1.7 billion in pledges. The problem with such funds is that they promote earmarking of resources for specific uses and thus suffer from well-known adverse consequences of earmarking. On the other hand, the urgent health problems of developing countries require increased donor funding and The Global Fund to Fight AIDS, TB, and Malaria is attracting new sources of financing, particularly in the private sector.[23]

E. Addressing Barriers to Industrial Country Market Access by the Poorest Countries

A strengthening of social policy instruments in industrial countries may be a necessary investment to soften some opposition to the removal of trade barriers in these countries.

---

[23] The Gates foundation recently committed US$100 million to the Global Fund to Fight AIDS, TB and Malaria. See http://www.gatesfoundation.org.

Most observers recognise that the opening up of industrial country markets to the products of the developing world is as essential as additional ODA for engendering self-sustaining development.

IV. Concluding Remarks

In conclusion, the key message of this paper is that, concomitant with any significant expansion of ODA, there must be a concerted effort by all partners in the development community to anticipate the macro and microeconomic challenges associated with utilizing external resources effectively. This is an issue which extends beyond simply the multilateral and bilateral donors. It will also entail a collaborative partnership with aid recipients, external NGOs, civil society, and the private sector. The central objectives are to achieve the MDGs in the years ahead and to foster self-sustaining development by the poorest countries of the world. The potential channels and instruments through which additional ODA funds can play a productive role are many. This paper outlines only a few. In addition to ensuring good usage of ODA resources and pursuing effective policies, the paper emphasizes the importance of targeting ODA as much on the basis of the size of a country's population in absolute poverty as on whether it is among the least developed countries. It also suggests that other modalities other than direct bilateral ODA transfers may contribute to the goal of world poverty reduction. But it will not be easy to secure consensus on both the allocation and institutional modalities for creative and effective use of these resources. At the same time, the importance of moving quickly to achieve such a consensus is great. Much

goodwill would be lost if additional resources are inefficiently used or diverted from their principal objectives.

References

Adenauer, Isabell, and Laurence Vagassky, 1998, "Aid and the real exchange rate: Dutch disease effects in African countries," *Intereconomics: Review of International Trade and Development* Vol. 33 (July/August): pp. 177-85.

Azam, Jean-Paul, Shantayanan Devarajan, and Stephen A. O'Connell, 1999, "Aid Dependence Reconsidered," World Bank Policy Paper No. 2144.

Bräutigam, Deborah, 2000, Aid Dependence and Governance (Stockholm: Almqvist and Wiksell).

Bulir, Ales, and A. Javier Hamann, 2001, "How Volatile and Predictable Are Aid Flows and what are the Policy Implications?" International Monetary Fund Working Paper No. 01/167.

Collier, Paul, 1999, "Aid Dependency: A Critique," *Journal of African Economies*, Vol. 8, No. 4: pp. 528-545.

——, and David Dollar, 1999, "Aid Allocation and Poverty Reduction," World Bank Policy Research Working Paper No. 2041.

Commission on Macroeconomics and Health, 2001, *Macroeconomics and Health: Investing in Health for Economic Development* (WHO, Geneva)

Easterly, William, 2001, *The Elusive Quest for Growth: Economists' Adventures and Misadventures in the Tropics* (Cambridge: MIT Press).

Fanizza, Domenico, 2001, "Foreign Aid, Macroeconomic Stabilization and Growth in Malawi," Paper presented at the IMF Research Department Seminar Series, January 31.

Financing for Development. Prepared by the staff of the World Bank and the IMF for the Development Committee.

Heller, Peter S. and Muthukumara Mani, 2002 "Adapting to Climate Change" *Finance & Development*, Vol. 39 (March), pp. 29–31.

Hjertholm, Peter and Jytte Laursen, 2000, "Macroeconomic issues in foreign aid," University of Copenhagen, Institute of Economics Discussion Paper No. 00-05.

Kanbur, S. M. Ravi, Todd Sandler, and Kevin M. Morrison, 1999, *The future of development assistance: common pools and international public goods* (Washington, DC: Overseas Development Council).

Knack, Stephen, 2000, "Aid Dependence and the Quality of Governance: A Cross-Country Empirical Analysis," World Bank Policy Paper No. 2396.

Lane, Philip R., and Gian Maria Milesi-Feretti, 2000, "The transfer problem revisited: Net foreign assets and real exchange rates," CEPR Discussion Paper No. 2511.

Mundell, Robert, 1991, "The Great Exchange Rate Controversy: Trade Balances and the International Monetary System," in C. Fred Bergsten, ed., *International Adjustment and Financing: The Lessons of 1985-1991* (Washington: Institute for International Economics).

Nyoni, T.S., 1998, "Foreign Aid and Economic Performance in Tanzania," *World Development* Vol. 26(7): pp. 1235-40.

OECD, 1998, "European Community," *Development Cooperation Review Series No. 30* (Paris: Organization for Economic Co-operation and Development).

Pallage, Stéphane and Michael Robe, 2001, "Foreign Aid and the Business Cycle," Review of International Economics, Vol. 9, No. 4, pp. 641-672.

Swanson, Timothy, 2001 forthcoming, *Biotechnology, Agriculture and the Developing World: The Distributional Implications of Technological Change,* (Edward Elgar, Cheltenham, UK: 2002).

White, H. and Wignaraja, G., 1992, "Exchange Rates, Trade Liberalization and Aid: The Sri Lankan Experience," *World Development* Vol. 20(10): pp. 1471-80.

World Bank, 2001a, *World Development Indicators* (Washington: World Bank).

——, 2001b, *Global Economic Prospects and the Developing Countries* (Washington: World Bank)

——, 1998, *Assessing aid: what works, what doesn't, and why* (Washington, D.C.: Oxford University Press).

Younger, Stephen, 1991, "Aid and the Dutch Disease: Macroeconomic Management when Everybody Loves You," Cornell Food and Nutrition Policy Program Working Paper (December).

Table 1: Distributing 0.7 percent of GDP in ODA Under Different Distributional Scenarios: Outcome by Country Income Level
(unweighted averages)

Region	Scenario 1: 1/				Scenario 2: 2/				Scenario 3: 3/			
	Total amount of ODA implied	Percent of			Total amount of ODA implied	Percent of			Total amount of ODA implied	Percent of		
	(in billions of $)	GDP	Government Revenue	Government Expenditure	(in billions of $)	GDP	Government Revenue	Government Expenditure	(in billions of $)	GDP	Government Revenue	Government Expenditure
Least Developed Countries (LLDCs)	55.8	42.2	255.6	203.2	54.5	50.4	303.5	244.6	21.1	15.0	90.0	72.5
of which												
Bangladesh	23.5	50.7	514.3	360.1	19.7	42.4	430.2	306.7	8.9	19.1	194.0	138.3
Burundi	0.5	59.8	342.3	247.9	0.6	72.6	415.5	301.5	0.2	22.6	129.0	93.5
Ethiopia	5.8	89.5	416.8	291.0	5.5	84.7	394.4	275.4	2.2	33.8	157.1	109.7
Madagascar	1.4	37.9	252.1	215.4	1.4	37.4	249.0	212.6	0.5	14.3	95.0	81.2
Malawi	0.9	49.4	200.8	169.6	1.1	61.3	249.3	210.7	0.3	18.6	75.7	64.0
Mozambique	1.7	40.7	173.3	165.5	2.3	55.8	237.7	223.2	0.6	15.4	65.3	61.4
Nepal	3.0	59.8	520.4	383.5	2.7	54.6	475.1	350.1	1.1	22.5	196.2	144.6
Sudan	...	...	...	...	...	...	...	...	...	...	...	...
Tanzania	...	...	...	...	...	...	...	...	...	...	...	...
Uganda	3.3	51.7	330.6	306.8	3.2	50.5	323.4	300.1	1.2	19.4	124.6	115.6
Yemen, Rep. Of	...	...	...	...	...	...	...	...	...	...	...	...
Other Low Income Countries (OLICs)	82.3	25.8	129.7	100.8	74.7	27.7	134.5	91.5	67.3	9.6	48.6	34.2
of which												
Ghana	3.3	42.4	235.1	161.8	3.1	40.5	225.1	155.0	1.2	16.0	88.7	61.0
India	10.2	2.3	12.3	7.8	10.2	2.3	12.3	7.8	40.1	9.1	48.3	30.7
Indonesia	6.8	4.8	28.2	25.9	6.2	4.4	25.8	23.7	2.6	1.8	10.6	9.8
Kenya	3.4	32.0	136.0	134.0	3.1	29.7	120.8	124.6	1.3	12.0	49.0	50.6
Nigeria	10.6	30.6	99.6	80.2	8.3	23.9	78.0	62.7	4.0	11.5	37.5	30.2
Pakistan	22.6	37.7	230.7	166.5	18.2	30.4	186.2	134.8	8.5	14.2	87.0	63.0
Vietnam	13.8	48.3	233.7	224.8	11.5	40.3	195.2	187.8	5.2	18.2	88.1	84.8
Lower Middle Income Countries (LMICs)	37.0	5.0	21.0	17.7	42.4	9.1	34.5	29.4	86.6	2.0	9.0	7.6
of which												
China	9.8	1.0	6.9	5.4	9.8	0.9	7.0	5.4	76.4	7.7	54.0	41.8
Egypt	6.4	7.2	23.2	23.7	7.3	8.2	26.3	26.3	2.4	2.7	8.7	8.7
Philippines	13.1	17.2	105.1	83.0	11.0	14.4	88.0	69.5	5.0	6.5	39.8	31.3
Thailand	0.0	0.0	0.0	0.0	0.8	0.7	3.9	3.4	0.0	0.0	0.0	0.0
Turkey	0.0	0.0	0.0	0.0	0.2	0.1	0.5	0.3	0.0	0.0	0.0	0.0
Upper Middle Income Countries (UMICs)					3.3	0.8	2.6	2.6	0.0	0.0	0.0	0.0
of which												
Brazil					0.4	0.1	0.2	0.1	0.0	0.0	0.0	0.0
Mexico					0.2	0.1	0.2	0.2	0.0	0.0	0.0	0.0
South Africa					0.4	0.3	1.0	1.0	0.0	0.0	0.0	0.0

1/ Based on Collier and Dollar's (1999) poverty-efficient aid allocation, scaled up for the higher level of allocation implied by the 0.7 percent ODA target. China and India are constrained to receive no more than their 1996 share of total aid.
2/ All countries receive the ODA they got in 1996, plus an incremental amount when the additional aid implied by the 0.7 percent target is allocated according to the Collier-Dollar criterion. China and India are constrained to receive no more than their 1996 share of total aid.
3/ Same as scenario 1 except that China and India are not constrained at their actual 1996 ODA levels, but are allocated aid amounting to 0.5 percent of their GDP.
4/ Aid distributed on the basis of number of poor in the 74 LLDCs, OLICs, LMICs and UMICs for which data on the number of people living below $1 per day is available in World Development Indicators, 2001.

Table 1 (cont'd.)

Table 1: Distributing 0.7 percent of GDP in ODA Under Different Distributional Scenarios: Outcome by Country Income Level
(unweighted averages)

Region	Scenario 4: 4/			
	Total amount of ODA implied	Percent of		
	(in billions of $)	GDP	Government Revenue	Government Expenditure
Least Developed Countries (LLDCs)	22.3	31.5	174.3	137.7
of which				
Bangladesh	6.4	13.8	141.0	100.5
Burundi	..	..	..	..
Ethiopia	3.2	50.6	235.5	164.4
Madagascar	1.6	43.1	287.3	245.4
Malawi	..	..	..	..
Mozambique	1.1	26.9	114.7	107.7
Nepal	1.5	29.9	260.4	192.0
Sudan	..	..	..	..
Tanzania	1.0	12.5	96.2	90.7
Uganda	..	..	..	..
Yemen, Rep. Of	0.5	7.4	25.0	24.7
Other Low Income Countries (OLICs)	103.0	8.9	50.3	39.2
of which				
Ghana	1.3	16.4	91.2	63.0
India	73.3	16.6	88.3	56.2
Indonesia	2.7	1.9	11.3	10.4
Kenya	1.5	14.3	58.1	59.0
Nigeria	14.7	42.6	138.7	111.6
Pakistan	7.0	11.7	72.0	52.0
Vietnam	..	..	..	..
Lower Middle Income Countries (LMICs)	43.7	1.1	5.5	4.5
of which				
China	39.1	3.9	27.6	21.4
Egypt	0.3	0.3	1.2	1.2
Philippines	..	..	..	..
Thailand	0.2	0.2	1.1	9.0
Turkey	0.3	0.1	0.6	0.4
Upper Middle Income Countries (UMICs)	6.0	0.3	1.0	0.8
of which				
Brazil	2.7	0.5	1.5	1.1
Mexico	2.1	0.4	2.1	1.6
South Africa	0.8	0.6	2.0	1.9

1/ Based on Collier and Dollar's (1999) poverty-efficient aid allocation, scaled up for the higher level of allocation implied by the 0.7 percent ODA target. China and India are constrained to receive no more than their 1996 share of total aid.
2/ All countries receive the ODA they got in 1995, plus an incremental amount when the additional aid implied by the 0.7 percent target is allocated according to the Collier-Dollar criterion. China and India are constrained to receive no more than their 1996 share of total aid.
3/ Same as scenario 1 except that China and India are not constrained at their actual 1998 ODA levels, but are allocated aid amounting to 0.5 percent of their GDP.
4/ Aid distributed on the basis of number of poor in the 74 LLDCs, OLICs, LMICs and UMICs for which data on the number of people living below $1 per day is available in World Development Indicators, 2001.

Table 2. Long-Term Economic Growth in Donor Countries and Least Developed Economies
(In units as indicated; number of countries in parentheses)

	1965	1970	1980	1990	1999[1]	Average Annual Growth Rates 1965-99
GDP per capita		(In constant US$)				(In percent)
Donor countries[2]	12,711	15,352	19,476	24,085	28,438	2.4
Fixed sample						
Least developed and other low income countries[3]	373	399	424	419	413	0.3
Least developed countries[4]	319	329	332	311	296	-0.2
Variable sample[5]						
Least developed countries ($400 per capita)	228	251	270	281	263	...
Least developed countries ($500 per capita)	287	294	302	319	306	...
		(In units as indicated)				
0.7 Percent of Donor Countries GNP						
In billions of constant US$	52.1	67.7	94.8	128.7	156.9	...
Fixed sample						
In percent of least developed and other low income countries GDP[3]	24.2	25.4	24.6	21.7	19.8	...
In percent of least developed countries GDP[4]	162.8	173.7	220.5	214.5	193.7	...
Variable sample[5]						
In percent of least developed countries GDP ($400 per capita)	19.0	19.7	21.4	16.9	148.1	...
In percent of least developed countries GDP ($500 per capita)	17.4	18.2	20.9	15.7	30.1	...

Source: World Bank, 2001, *World Development Indicators.*

[1]The estimates for 1999 are not comparable to those in Figures 1 to 3 and Tables 2 to 4 owing to differences in country coverage.

[2]Includes 21 donor countries with time-series data from 1965 to 1999. These are Australia, Austria, Belgium, Canada, Denmark, Finland, France, Greece, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, United States.

[3]Includes 17 least developed and 12 low income countries with time-series data from 1965 to 1999. The least developed countries are Bangladesh, Benin, Burkina Faso, Burundi, Central African Republic, Chad, Haiti, Lesotho, Madagascar, Malawi, Mauritania, Nepal, Niger, Rwanda, Sierra Leone, Togo, and Zambia. The other low income countries are Cameroon, Rep. of Congo, Cote d'Ivoire, Ghana, India, Indonesia, Kenya, Nicaragua, Nigeria, Pakistan, Senegal,and Zimbabwe. This follows the classification in Figures 1 to 3 and Tables 2 to 4.

[4]Includes 17 least developed countries with complete time-series data from 1965 to 1999. These are Bangladesh, Benin, Burkina Faso, Burundi, Central African Republic, Chad, Haiti,Lesotho, Madagascar, Malawi, Mauritania, Nepal, Niger, Rwanda, Sierra Leone,Togo, and Zambia. This follows the classification in Figures 1 to 3 and Tables 2 to 4. China, India, and Indonesia were counted among the least developed in the 1960s but they are no longer classified as least developed in the current classification system.

[5]Includes countries with GDP per capita in constant US$ below the indicated level. For countries below $400 GDP per capita, the sample size drops from 19 to 16 between 1965 and 1999. For countries below $500 GDP per capita, the sample size drops from 26 to 21 between 1965 and 1999. Among the countries that drop out over timeare China, India, and Indonesia.

Table 3: Distributing 0.7 percent of GDP in ODA Under Different Distributional Scenarios: Outcome by Country Income Level
(unweighted averages)

Region	If ODA only to LLDCs 1/				If ODA only to LLDCs and OLICs 1/				If ODA to LLDCs, OLICs & LMICs 1/			
	Total amount of ODA implied	Percent of			Total amount of ODA implied	Percent of			Total amount of ODA implied	Percent of		
	(in billions of $)	GDP	Government Revenue	Government Expenditure	(in billions of $)	GDP	Government Revenue	Government Expenditure	(in billions of $)	GDP	Government Revenue	Government Expenditure
Least Developed Countries (LLDCs)	175.0	120.2	688.0	552.0	42.0	28.8	165.2	132.4	23.0	15.8	90.5	72.5
of which												
Bangladesh	41.4	89.2	906.0	646.0	9.9	21.4	217.0	155.0	5.4	11.7	119.0	85.0
Burundi	2.0	251.0	1437.0	1042.0	0.5	60.2	344.8	250.0	0.3	33.0	189.0	137.0
Ethiopia	19.4	302.3	1406.9	982.3	4.7	72.5	337.0	235.0	2.6	39.7	184.0	129.1
Madagascar	4.7	127.2	847.5	724.0	1.1	30.5	203.3	173.7	0.6	16.7	111.4	95.1
Malawi	3.2	176.1	716.1	605.0	0.8	42.2	171.8	145.0	0.4	23.1	94.1	79.5
Mozambique	5.5	133.0	566.0	531.6	1.3	32.0	135.8	127.5	0.7	17.5	74.4	69.8
Nepal	7.4	148.5	1291.7	951.8	1.8	35.6	310.0	228.0	0.9	19.5	170.0	125.1
Sudan	8.6	84.0	1027.9	930.4	2.1	20.1	246.7	223.2	1.1	11.0	135.1	122.3
Tanzania	10.3	117.4	904.7	652.6	2.5	28.1	217.1	204.6	1.4	15.4	119.0	112.0
Uganda	6.7	104.8	670.8	622.5	1.6	25.1	149.3	161.0	0.9	13.8	88.2	81.8
Yemen, Rep. Of	6.5	87.6	297.2	295.0	1.5	21.0	71.3	70.7	0.9	11.5	39.0	38.7
Other Low Income Countries (OLICs)					133.0	17.7	103.0	81.1	72.8	9.7	56.4	44.4
of which												
Ghana					1.4	19.0	105.5	72.6	0.8	10.4	57.0	39.7
India					74.4	16.8	89.6	57.0	40.7	9.2	49.0	31.2
Indonesia					15.8	11.2	66.0	60.7	8.7	6.1	36.2	33.2
Kenya					2.5	24.2	98.4	101.0	1.4	13.2	54.0	55.6
Nigeria					9.4	27.2	88.6	71.3	5.1	15.0	48.5	39.0
Pakistan					10.1	17.0	104.0	75.3	5.6	9.3	57.0	41.3
Vietnam					5.8	20.4	98.9	95.2	3.2	11.2	54.1	52.1
Lower Middle Income Countries (LMICs)									79.1	2.9	12.0	10.3
of which												
China									52.0	5.2	37.0	28.4
Egypt									2.6	2.9	9.5	9.5
Philippines									3.0	4.0	24.5	19.3
Thailand									2.5	2.1	11.0	12.8
Turkey									2.7	1.5	5.8	3.8
Upper Middle Income Countries (UMICs)												
of which												
Brazil												
Mexico												
South Africa												

1/ Aid distributed on the basis of population in country groups.

SCENARIOS

This section describes the technical assumptions underlying the scenarios discussed in Section II:

Scenario 1 scales up the Collier-Dollar allocation for the higher level of assistance implied by the 0.7 percent target[24]. Collier and Dollar divide 113 low-income countries into four categories with good policies and high poverty (32); with poor policies and high poverty (32); with poor policies and low poverty (16); and with good policies and low poverty (31). Collier and Dollar (1999) devised a mechanism for "poverty-efficient allocation" of aid, which essentially provides the highest weight for aid to the first category, a lower weight to the next, and a zero weight to the others. In order to avoid disproportionate aid being allocated to China and India—countries that both have large numbers of absolute poor and which have pursued good policies—Collier and Dollar constrained aid to these two countries at existing levels (thus implying a ceiling on the *share* of aid under our higher ODA level that would go to them). One other important feature of this scenario is that there is no presumption that existing aid recipients would continue to receive ODA if they do not fall within the first two above categories. Thus, one would not see, under this scenario, any aid received, inter alia, by such present aid recipients as Belize, Botswana, Brazil, Bulgaria,

[24] Estimates are also made for a target of 0.5 percent of the GNP of industrial countries, corresponding to estimates of the amount needed to meet the MDGs.

Colombia, Costa Rica, Dominican Republic, Ecuador, Fiji, Gabon, Jamaica, Jordan, Mauritius, Mexico, Morocco, Romania, Russia, South Africa, and Ukraine.

(ii) **Scenario 2** assumes that *all* countries at least receive the magnitude of ODA, in dollar terms, provided in 1996. The difference between the ODA mobilized at the 0.7 percent (or 0.5 percent) target and that provided in 1996 (incremental amounts ranging from US$80 to US$125 billion) is then distributed according to the Collier-Dollar criteria (again with China and India constrained to receive no more than their 1996 share of total aid).

(iii) **Scenario 3** uses the Collier-Dollar criteria as in Scenario 1, but with the important adjustment that the constraints on the share of aid resources that can be allocated to China and India have been relaxed. In doing so, we have sought to apply similar criteria as Collier and Dollar applied to other potential recipients (in taking account of good policies and the extent of absolute poverty).[25]

---

[25] Including China and India is not completely straightforward. If one had treated these two countries in a manner fully comparable to the other good performing countries, one would have observed China and India receiving the bulk of total existing aid. Thus, instead of replicating Collier and Dollar's calculations with China and India included, some sensitivity tests were made as to what would happen when the poverty-efficient aid going to India and China is increased. For example, one could let China and India receive the **median** poverty-efficient aid (in percent of GDP). In Collier and Dollar's dataset, China and India's actual aid (in percent of GDP) is about 0.1. The median poverty-efficient aid (in percent of GDP) is about 2.4. Not surprisingly, because China and India both have huge GDPs in absolute terms, they would have ended up getting more than the total available aid. An alternative scenario would be to let China and India each receive aid amounting to 1 percent of their respective GDP. However, even this scenario would have resulted in China and India getting slightly more than the total available aid. Aid amounting to 0.5 percent of GDP resulted in a more realistic scenario. Nevertheless, China and India still get a disproportionately large share of total aid (22 percent and 44 percent of total aid, respectively), with other aid recipients

(continued...)

Scenario 4 allocates ODA simply on the basis of the number of absolute poor in a country, such that ODA is equalized per person in absolute poverty (defined as an individual receiving income of less than US$1 per day, and using World Bank poverty data). Although not likely to be a politically realistic distributional criterion, this last scenario does provides a useful point of comparison with the other scenarios in terms of how well they target those countries where the world's absolute poor reside.

---

receiving the residual. The new shares of the other countries were calculated by subtracting the increase in China and India's aid from the amount they (the other aid recipients) originally received, weighted by their original share. This allows the sum of shares to remain equal to 100.