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**The World's Poorest Countries: Debt
Relief or Aid?**

by

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Introduction

The world's poorest countries are deeply ill. In the highly indebted poor countries (HIPC) of the world, one in ten infants die at birth. For those who survive birth, life is an uphill battle. The unholy trinity of malaria, AIDS, and malnutrition conspire to deliver a life expectancy in the HIPC of 51 years—the average child born in Mozambique will be approaching his death bed as his counterpart in the United States enters middle age and the prime income-earning years of his life. Nor do the HIPC's economies offer much hope of pulling its citizens out of grinding poverty anytime soon. Their average growth rate for the past 20 years has been negative—things are getting worse, not better, for the indigent of the world.

Statistics such as these (see Table 1) are not easy to take. Civilized people find talk of death and destitution rather unpleasant. Something must be to blame, and the debt burden of the world's poorest countries—169 billion dollars in 1999— is a highly visible target. There have always been those who think that the debts of the world's poorest countries should be forgiven. But in 1996 debt relief advocates redoubled their efforts. Catalyzed by Bono, there is an increasingly popular view—from NGOs to the Pope to Jesse Helms—that the staggering level of debt is the primary obstacle to improved economic growth and living standards in the HIPC.

Is debt relief a viable solution to worldwide poverty or a waste of time and money? The answer to this important question depends critically on another—does debt relief promote economic efficiency by improving incentives for investment and growth? Debt relief promotes investment and growth in circumstances where debt overhang—a term we later define more precisely—exerts a drag on economic performance. When a

country suffers from debt overhang, debt relief can improve economic efficiency and make everyone better off, creditors as well as debtors. Section 1 provides some prominent examples of countries whose economies suffered from excessive debt during the 1980s. The debt overhang of these countries was resolved by the debt relief plan engineered by former U.S. Treasury Secretary Nicholas Brady. Under the Brady Plan, the international commercial banks agreed to write down a substantial fraction of the debt owed to them by sixteen emerging economies (the Brady countries).

The major problem for the Brady countries was that they ran into temporary difficulty servicing their debt in August of 1982. A combination of adverse economic conditions and poor policy choices substantially increased the riskiness of the banks' loan portfolios in these countries. Creditors got worried and rushed to collect on their loans all at once, but the creditors' panic created an unmanageable short-term payment burden for the debtors. To make matters worse, new lending also ground to a standstill. With no new money coming in, scarce resources that would normally have funded investment were consumed by debt servicing. Growth came to an abrupt stop. Once some of the debt was relieved—seven years later—the path was clear for new funds to come from other sources. This provided the impetus the countries needed to stimulate investment and growth.

It is tempting to conclude that debt relief for the HIPC's would produce similar results, if only relief was forthcoming more quickly and in larger quantities. Unfortunately, the evidence does not support this conclusion. Debt relief is unlikely to stimulate investment and growth in the HIPC's and the reason is obvious: The HIPC's lack much of the basic infrastructure that forms the basis for profitable economic activity—

things like well-defined property rights, roads, schools, hospitals, and clean water. Since the principal problem of the highly indebted poor countries is a lack of infrastructure, there is no reason to believe that debt relief there will stimulate a sudden rush of foreign capital that leads to higher investment and growth.

Does this mean that the poorest countries of the world should be left to wither on the vine? No. The point is that the HIPC's should be targeted not for debt relief but direct aid that would assist their citizens in building the institutions and infrastructure that will eventually make them attractive places for both domestic and foreign investment.

Some argue that debt relief is equivalent to aid. This is not right. Debt relief is not equivalent to aid, because money is fungible. There is simply no reason to believe that writing down a government's debt by a billion dollars will translate into a billion dollars of additional infrastructure development. Having said that, aid is no panacea either, and we need to make sure that it is not wasted. But the issue is not whether we should give aid, but rather how to design aid programs that work.

The cruel irony of the current debate is that debt relief would be most efficient in a number of countries that are not being considered for such programs at all. These include highly indebted (but not so poor) countries whose social infrastructure resembles those of the Brady countries: Indonesia, Pakistan, Colombia, Jamaica, Malaysia, and Turkey. Given their level of infrastructure it is much more reasonable to expect that economies such as these might respond positively to debt relief.

The message here is ultimately a hopeful one. Debt relief works for relatively developed but highly indebted emerging economies. Aid is the most effective way of

addressing the basic economic problems of the world's poorest countries. Our job is to make sure everybody gets what is most efficient.

1. Debt Relief Promotes Economic Efficiency When There is Debt Overhang

Economic arguments for debt relief turn on the fact that there are circumstances in which too much debt exerts a drag on economic performance. When such conditions prevail, debt relief can improve economic efficiency and make everyone better off.

1. A. Theory

There are three principal reasons why debt relief may be economically efficient.¹ First, it is good accounting practice to write off debts that cannot be collected. That way, future loans can be given on a sounder economic basis (Summers, 2000). Early advocates of this view of debt relief included Sachs and Huizinga (1987), who demonstrated that US bank stock prices already reflected significant losses on the banks' loans to Less Developed Countries (LDCs). Since the market had already determined that the banks would be unable to recover the full value of their debt, Sachs and Huizinga argued that the banks should be willing to trade their LDC debt of a given value for a safe asset with lower face value.

Second, there are circumstances under which debt relief can benefit both creditors and debtors (Krugman, 1989). Krugman takes the Sachs and Huizinga logic a step further by postulating the existence of a "debt laffer curve" and formally demonstrating the conditions under which both creditor and debtor would benefit from debt relief. The Debt Laffer curve showed the expected value of creditors' claims on the vertical axis and

¹ Specifically, we discuss the circumstances under which debt relief yields ex-post efficiency. The question of whether debt relief is also ex-ante efficient is not explored in this paper.

the actual face value of the debt on the horizontal axis. The curve, sloped like an inverted parabola, peaked at a critical point D^* , after which it turned downward. Since the expected value of the creditor's claims on the debtor countries actually declined for quantities of debt beyond D^* , the analysis suggested that a country's debt burden could become so large that forgiving some of its debt would actually increase the expected value of creditors' claims.

The intuition for the Debt Laffer Curve result is straightforward. When the face value of the debt owed by a country surpasses a critical threshold, the expected value of the creditors' claims on the country declines, because external debt acts like a tax on the domestic economy. For reasonable levels of debt and debt servicing, increasing the "tax rate" increases expected revenue collection. Beyond the optimal tax rate, however, the debt tax becomes distortionary and reduces expected revenue. Because the expected value of the creditor's claims on the debtor countries actually declines for quantities of debt beyond the critical threshold, forgiving some of a country's debt may actually increase the expected value of creditors' claims.

Third, and related to the second point, one of the most influential lines of argument in pushing for debt forgiveness was the notion that the LDCs suffered from a debt overhang that deters investment. The basic argument stems from Myers (1977). According to Myers, a corporation suffers from debt overhang when its existing stock of debt is so large that for a given positive net present value (NPV) project, the NPV of the project is less than the change in the value of the debt that will result from undertaking the project. In other words, debt overhang exists when there is so much debt that the entire surplus of any new investment goes to the existing debt holders.

When a corporation suffers from debt overhang, equity holders will not finance new projects, even though undertaking the project would increase the value of the firm. The reason is that the debt overhang constitutes an implicit transfer to existing debt holders that acts as a tax on investment. Importantly, the debt overhang argument assumes that the corporation cannot issue new debt, which means that the cost of the project must be borne by the equity holders. It can be shown that an issue of new debt that has equal seniority with existing debt can alleviate the under-investment problem.

The debt overhang literature in international economics recasts the Myers' logic in a macroeconomic context, where a country's firms and households are analogous to Myers' equity holders and the government is analogous to the corporation. Because the government raises the money to pay its external creditors by taxing domestic firms and households, the government's obligations to external creditors imply a heavy expected future tax burden and discourage investment. This investment disincentive, the argument goes, actually results in creditors being able to recover less from the debtors than they could were they to forgive some of the debt. The obvious implication of this line of reasoning is that debt forgiveness, by reducing the implied tax burden (and implicit transfer to foreign creditors), would remove the overhang, thereby increasing current investment and future output (Sachs, 1989).

Just as an infusion of new debt can alleviate the under-investment problem in a corporate context, debt relief can also alleviate the debt overhang problem in a sovereign country setting. To see the logic more clearly, consider the effect of debt relief on the net resource transfer (NRT) to a country. The NRT measures the net flow of real resources into a country. Specifically, the NRT is defined as the total quantity of capital inflows

(debt, equity, and FDI) minus the total quantity of capital outflows (debt servicing, dividends, profit repatriation). In principle, poor countries will experience positive NRT for long periods of time, because rich countries with high capital to labor ratios will send capital to poor countries where it can be used more productively. The NRT will gradually change from positive to negative as poor countries mature and pay back the resources they borrowed.

However, there are times when the NRT may suddenly turn negative. Adverse shocks or poor economic management may temporarily dampen the countries economic prospects, driving creditors to call in existing loans and making potential new creditors unwilling to lend. When such a scenario arises, a country that ordinarily would be able to service all of its debt—if payments were spread out over time—finds itself unable to meet the demands of any of its creditors for immediate payment. Since lending would be profitable if the creditors did not all try to get their money at once, the negative NRT outcome is inefficient.

Now if each creditor would agree to forgive some of its claims, then the debtor country would be better able to service the debt owed to each creditor. Consequently, the expected value of all creditors' claims would rise (Krugman, 1988; Sachs, 1989). Forgiveness will not happen without coordination, however, because any individual creditor would prefer to have a free ride, maintaining the full value of its claims while others write off some debt. By forcing all creditors to accept a reduction in the value of their loan portfolio, debt relief can solve this collective action problem and pave the way for profitable new lending (Cline, 1995).

1. B. Facts

The theoretical arguments suggest that the crucial test of debt relief is whether it successfully alleviates the collective action problem by restoring positive net resource transfers to countries where international lending is profitable (Bulow, 2002). Sixteen developing countries reached debt relief agreements under the Brady Plan (named after Former U.S. Treasury Secretary Nicholas Brady) between 1989 and 1995. Table 2 provides a complete list of these countries.

Table 3 demonstrates that debt relief succeeded in restoring capital flows to the Brady countries. The table presents data on the average net resource transfer to Brady countries in event time. Year “0” is the year in which the Brady Plan was officially announced. The striking fact is that the sign of the NRT changes twice. The years “-19” to “-8” roughly correspond to the years 1970 through 1981. These were the boom years in international lending—U.S. commercial banks awash with liquidity from their OPEC clients were happy to lend to whomever sought to ask (Darity and Horn, 1988). In every one of the years from [-19, -8] the average net resource transfer is positive for the Brady countries. In year -7, roughly the time of the onset of the debt crisis (1982), the NRT turns negative and remains so until after the Brady Plan. After the Brady Plan, net resource flows become positive for the rest of the sample.

In order to fully appreciate the significance of these data, it is important to understand that debt relief has two effects on the debtor country— a direct effect and an indirect effect. The direct effect of debt relief is the actual reduction in the stock of debt. The indirect effect of debt relief, on the other hand, is the alleviation of the collective action problem, which paves the way for new capital inflows.

The indirect effect of debt relief is more important than the actual debt relief itself. During the Brady Plan, a total of 60 billion dollars of debt was forgiven. While significant—60 billion dollars is roughly 5 percent of the GDP of the Brady countries—this number pales in comparison to the sum of net resource transfers that the Brady countries received in new lending once outstanding debt problems were resolved.

Table 3 shows that during the five-year period after the Brady Plan, there was a total resource transfer of about \$210 billion to the Brady countries². In the following five years, there was an even larger resource transfer of \$330 billion. The surge of capital following the Brady-induced resolution of the debt crisis in these countries provides a tangible support for the Dornbusch maxim that “Unresolved debt problems, not debt *per se*, are an obstacle to investment. It is hard for a man to establish relationship with a lender if the estranged wife keeps barging in claiming alimony”(Dornbusch, 1993).

As a second barometer of the efficiency gains produced by debt relief, we also look at the stock market. The rationale for examining stock prices is clear. The stock market is forward looking— it asks what interest rates and cash flows lie ahead. The surge in capital inflows documented in Table 3 should have reduced interest rates in the debtor country and improved future growth prospects. If interest rates went down and growth prospects improved, the stock market should have increased.

Table 2 shows that the stock market did, in fact, go up. The stock market of the average Brady country appreciates by an average of 60 percent in the year prior to the official announcement of debt relief—the period in which each country was outlining its debt relief strategy with the anticipation of acceptance under the Brady plan. Stated in

² As Table 3 shows, the cumulative net resource transfer to the average Brady country during the five-year period after the Brady Plan was \$13 billion. In other words, there was a total net resource transfer of about \$210 billion to all of the sixteen Brady countries.

dollar terms, the market capitalization of the Brady Countries rose by a total of 42 billion dollars in anticipation of the Brady Plan.

Is the stock market increase spurious? As Paul Samuelson famously once quipped about the U.S. economy, “The stock market has successfully predicted 9 of the last 5 recessions.” Therefore, it is important to know whether the stock market reactions are reliable predictors of real economic improvement or merely short-lived “irrational exuberance.” After all, understanding why debt relief for the Brady countries led to a large stock market appreciation is pivotal to understanding the mechanism through which debt relief works and the circumstances under which it can be expected to achieve efficiency gains. Specifically, if the Brady countries really suffered from debt overhang then, in addition to the stock market boom, we should also see an increase in investment.

Figure 1 shows that debt relief coincided with an investment boom. In the five years prior to debt relief, the average growth rate of the capital stock was 1.6 percent per year. In the five years following debt relief, the capital stock grew at a rate of 3.5 percent per year. The difference between the two growth rates—1.9 percentage points—is not small. Assuming a standard production function in which capital accounts for about one-third of output, a 1.9 percentage point increase in the capital stock raises growth by almost one percentage point per year—0.63 percentage points, to be exact (one-third times 1.9). As a final consistency check of the stock market’s forecasting power, we also looked at the growth numbers. In the five years preceding debt relief, GDP per capita in the Brady countries grew at an average of 0.4 percent per year. In the five years following debt relief, they grew at 1.9 percent per year.

Debt relief produces rising asset prices, increased investment and faster growth. Importantly, these changes seem to take place not so much because of the actual amount of debt relief itself, but principally because of the new flow of lending to the private sector after the debt-overhang-induced lending standstill is over. These facts have important implications for the efficiency prospects of debt relief efforts for the HIPCs (HIPCs).

2. Debt overhang is not the HIPCs principal problem

Debt relief appears to have been a success for the Brady countries — it is hard to argue with rising stock markets, positive NRT, and faster growth. If all else were equal, it might be reasonable to expect current debt relief efforts in the HIPCs to produce similar effects.

The problem is that all else is not equal. Debt relief may generate efficiency gains in Brady-like countries, where the collective action problem impinges upon a country's ability to obtain new loans. But debt relief makes little sense for the HIPCs, because they do not suffer from a collective action problem—the principal impediment to investment in the HIPC countries is not excessive debt and debt payments. Rather, the main obstacle to investment in the HIPCs is that they do not have “an environment that supports productive activities and encourages capital accumulation, skill acquisition, invention and technology transfer”(Hall and Jones, 1999).

There are at least three pieces of evidence that the collective action problem does not deter capital flows to the HIPCs. First, in contrast to the Brady countries who suffered a sharp reversal of the NRT during the 1980s, the HIPC countries have never

suffered from a negative NRT. Table 3 shows that the NRT to the HIPC countries has always been positive. If the goal of debt relief is to restore positive NRTs, then it is not clear how this policy will help a set of countries that have experienced an uninterrupted stream of positive net resource flows since 1970. If the collective action problem was hindering capital flows to the HIPC countries, then we would have expected to see a reversal of the sign of the net resource transfer at some point in time. This never happened. The Brady countries, on the other hand, have experienced negative resource transfers during the debt crisis years. It was after the debt relief agreements that resource transfers turned positive again.

Second, although things went sour beginning with Mexico's default in 1982, private international lenders had expected to make money by lending to the Brady countries. Presumably, this is why they did so in the first place. In contrast, there has never been any such expectation for the HIPCs. Table 4 shows that loans to the private sector (private debt + foreign direct investment + portfolio equity) comprised almost half of the total net resource flow to the Brady market countries as early as 1974. On the other hand, international lending to the private sector has never been a significant fraction of the total net resource flows into HIPC countries. As a fraction of total inflows, loans to the private sector in the HIPC countries have never exceeded 10 percent and have been as low as 4 percent.

Third, there has also been a shift in the composition of international lending to the Brady countries, away from the public sector and toward the private sector. Again, Table 4 shows that at the peak of the debt crisis (1985-89) grants plus public and publicly guaranteed debt accounted for 73 percent of the net resource transfer to the Brady

countries. By 1994, lending to the private sector— foreign direct investment (FDI), portfolio equity, and private debt— constituted the chief source of net resource flows. No such shift has taken place in the HIPC countries. In fact, the opposite has occurred— official flows and flows to the public sector have become more, not less, important. The role of grants has increased to the point where they now constitute the majority of the net resource flows to the HIPC countries.

2.B. The principal problem in the HIPCs is poor social infrastructure

The principal problem facing the HIPCs is not debt overhang, but poor social infrastructure. By poor social infrastructure we mean the combination of poor institutions and the lack of physical infrastructure that depresses private rates of return and reduces the incentive to invest.

We investigate this claim by using the Hall and Jones (1999) measure of social infrastructure to compare the HIPC and Brady countries. Based on this definition, they construct a measure of social infrastructure for 130 countries. The median G7 country ranks 14th; the median Brady country ranks 63rd; the median HIPC country ranks 102nd. Moreover, all of the G7 countries are in the highest 20th percentile; all of the Brady countries, except for Nigeria and Dominican Republic, are in the highest 70th percentile, whereas 27 of the 38 HIPC countries with available data are in the lowest 30th percentile.

We also compare HIPC and Brady countries using the average value of their score on the Heritage House Index of Economic Freedom from 1995 to 2002. The results are similar. Out of 161 countries, the median G7 country ranks 14th; the median Brady country ranks 59th; the median HIPC country ranks 110th. Moreover, all of the G7

countries are in the highest 20th percentile; all the Brady countries, except for Bulgaria, are in the highest 60th percentile, whereas 24 of 39 HIPC countries with available data are in the lowest 40th percentile over the same period.

Recent advances in law and finance help explain why poor social infrastructure is the main impediment to investment in the HIPC countries. The degree to which a country's law protects the legal rights of minority shareholders exerts a significant influence on that country's asset prices, access to external finance, and physical investment (La Porta, Lopez-de-Silanes, Shleifer and Vishny (LLSV) 1997, 1998, 2002; Shleifer and Vishny, 1997). If investors get poor protection they will stay away. Outside finance will dry up, and fewer resources will be available for growth (Dornbusch, 2000). This insight is germane to the present discussion. The median Brady country ranks lower than the median G7 country on every component of the LLSV index of investor protection: shareholder rights, creditor rights, efficiency of judicial system, rule of law, and rating of the accounting system. While the Brady countries rank low on the LLSV index, the HIPC countries do not even make the list.

Social infrastructure can be a crucial factor in determining the level of human capital accumulation and the marginal product of capital (Kremer, 1993). Shleifer and Wolfenzon (2002) show that weaker investor protection lowers the marginal product of capital and can eliminate the incentive for capital to flow from rich to poor countries. According to their argument, the capital, which does flow to the Brady countries, pales in comparison to what we would see in a world where minority shareholders in the Brady countries enjoyed the same legal protection as their U.S. counterparts. If private capital trickles to Brady countries because they fare poorly on the LLSV index, then woe to the

HIPCs whose capital markets and investor protection laws are not sufficiently developed to even merit a ranking.

To summarize, the rate of return to private lending in HIPC countries is low not because they suffer from debt overhang, but because they lack the institutional development that is necessary to create an environment where: (1) entrepreneurs can earn an economically fair rate of return on capital and (2) lenders have an incentive to extend capital to the private sector.

2C. Debt Relief Will Not Yield Efficiency Gains for the HIPCs

Debt relief worked in the Brady countries because it helped reverse a tide of negative private capital flows, which helped to spur private investment and growth. Since the HIPCs have never been significant recipients of private capital, it is hard to see how debt relief will help them in any significant way. Put another way, debt relief is an effective tool for dealing with the collective action problem in international borrowing and lending. The HIPCs, however, face a different problem—the inadequate provision of public goods. The public goods problem stems from the following type of externality: It is in no individual's self-interest to build a road, so no one does; yet there would be large societal gains if someone did. In other words, in the HIPCs there are positive externalities to investing in projects that have high social but low private rates of return. Rich country governments solve this problem by collecting taxes. Poor countries, by definition, do not have the tax base to raise the resources they need.

Distortions arising from an externality should be tackled with policy instruments, which address that externality directly. When collective action problems arise in the

world of international capital flows because lenders do not take into consideration the effect of their actions on other lenders, debt relief is the appropriate policy response. When the externality, however, is the need to invest in social infrastructure, the most efficient policy instrument is not debt relief, but aid that is directed at projects with high social rates of return. In fact, this is the classic economic rationale for foreign aid (Bulow and Rogoff, 1988; Bulow, 2002).³ In Section 4 we make the case for aid over debt relief, but first we look at how debt relief has worked for the HIPCs thus far.

3. The HIPCs Have Not Fared Well Under the HIPC Initiative

We have argued that debt relief for the HIPCs is unlikely to produce the big economic effects that we witnessed with the passage of debt relief for the Brady countries. Let us evaluate the evidence to date.

Table 1 provides a list of all HIPC countries—those that have been receiving debt relief since the HIPC Initiative began in 1996, as well as those that are still under consideration. Table 5 shows that the HIPC countries saw a modest improvement in their growth performance after 1996. Ostensibly, this suggests that debt relief has worked. But there are three reasons why the improvement in growth may not be attributable to debt relief *per se*.

First, the pre-1996 and post-1996 growth performance of those countries that have been receiving debt relief is not dramatically different from those that have not.

Second, most HIPC countries did not begin receiving debt relief before 2000. The original framework of the HIPC Initiative was arranged so that countries would have to

³ Undoubtedly, aid will not solve all of the HIPC countries problems. No amount of road building can convince entrepreneurs to invest if taxes are over burdensome, or exchange rates misaligned. But even in the face of sound micro and macroeconomic policy, nobody is going to invest if they can't get their product to market.

show a track record of reform for three years before they could reach the “decision point.” At the decision point, a suitable debt relief package would be arranged, if the reform track record was adequate. After no more than three more years of proven policy implementation, countries would reach the “completion point” at which time debt relief would be provided. Under this framework, only six countries reached their completion points from 1996 to 2000: Bolivia and Uganda in 1998; Guyana and Mozambique in 1999; Burkina Faso and Mali in 2000. By late 1999, a consensus emerged that the HIPC framework was providing debt relief too slowly. As a result, the original HIPC Initiative was enhanced at the G7 meeting in Cologne during the Fall of 1999.

Under the Enhanced HIPC Initiative, countries began receiving debt relief as soon as they reached their decision points. Moreover, the enhanced framework made it easier to reach the decision point and provided more debt relief. Under this framework, sixteen additional HIPC countries reached their decision points and began receiving debt relief in 2000.⁴ In other words, most HIPC countries started receiving debt relief after 2000 and there are still a number of HIPC countries that have yet to receive debt relief. It is not clear that the improvement in growth performance between 1996 and 2000 can credibly be attributed to debt relief efforts that effectively did not begin until 2000.

Third, the reforms that were required as a precondition for debt relief may be the principal driving factor behind the modest improvement in growth performance. Perhaps the most important contribution of the HIPC Initiative has been that it has induced HIPC governments to institute economic reforms. As Table 5 shows, the growth performance

⁴ Under the enhanced HIPC Initiative, Benin, Cameroon, Gambia, Guinea, Guinea-Bissau, Honduras, Madagascar, Malawi, Mauritania, Nicaragua, Niger, Rwanda, Sao Tome and Principe, Senegal, Tanzania, and Zambia, reached their decision points in 2000. As of January 2003, four more countries have reached their decision points: Chad and Ethiopia in 2001; Ghana and Sierra Leone in 2002.

of the HIPC countries has improved during the period from 1996 to 2000. As we have shown, HIPC countries did not begin receiving debt relief before 2000. So, it would seem that the improvement in growth performance was mainly due to reforms, not debt relief.

Having said that, even with all the reforms in the late nineties, GDP per capita has grown by only 1.5 percent. At that growth rate it would take a country 46 years to double its standard of living—not exactly a growth miracle. Nevertheless, it is quite possible that this is the maximum that the HIPCs can do given their existing level of social infrastructure. In other words, reforms have helped replace economic contraction with slow growth, but the HIPC countries can only do so much without addressing the principal problem of poor social infrastructure from which they suffer. As we have argued in Section 2, aid, not debt relief is the best way to tackle the problem of poor social infrastructure.

4. Aid Not Debt Relief

Even if debt relief will not promote investment and growth in the HIPCs, isn't it a kind gesture to relieve the debts of the world's poorest countries? Kind maybe, but not helpful. If the goal is to improve economic performance and reduce poverty, then the HIPC countries need aid, not debt relief. But is debt relief not a form of aid? No. There are at least two reasons why debt relief is not equivalent to aid. First, debt relief may crowd out existing aid flows. Second, debt relief may have undesirable effects on the composition of existing aid flows. We now discuss each of these points in turn.

4.A. Debt Relief May Crowd Out Aid

In an effort to increase resource transfers to the HIPC, proponents of the HIPC Initiative have been pushing for a reduction in debt servicing. Ironically, debt relief has actually reduced the net resource transfer to the world's poorest countries. The HIPC countries need aid. Paradoxically, so far the effect of the HIPC Initiative has been to decrease aid flows. Table 4 displays this point. Aid flows to the HIPCs have continually increased from 1970 to mid 1990s. Since 1996, aid flows have decreased significantly. As a share of GDP, the decline in aid flows is even starker. In the early nineties, aid flows as a share of GDP were about 17 percent. Since 1996 they have been about only 12 percent.

Furthermore, debt relief has not brought about any reduction in debt service. As we noted earlier, most HIPC countries did not begin receiving debt relief until 2000. As a result, debt service has stayed constant throughout the 1990s. Table 4 shows that as a share of GDP, debt service has been 4.3 percent both in the first and the second half of the 1990s. Together, the fall in aid flows and the postponed reduction in debt service has caused a significant decline in the net resource transfers to the HIPC countries.

4.B. Debt Relief May Change the Composition of Aid

The size of aid flows have declined since the HIPC Initiative has begun, but this is not the only problem. Debt relief may also result in an adverse shift in the composition of aid—away from multilateral inflows and towards bilateral inflows. Bilateral aid is like direct cash flow to the recipient government. Multilateral aid, on the other hand, is released only when the multilateral agency pays for pre-approved services rendered to the country. Hence a shift from multilateral to bilateral aid would effectively increase the

ratio of fungible to non-fungible resources in a given recipient country. To see why debt relief may induce this undesirable shift in composition, consider the net resource transfer identity for the HIPC countries.

By definition, the NRT is equal to capital inflows minus debt service. Table 4 shows, that there are no significant private capital inflows to the HIPC countries. The lion's share of new capital inflows comes from official sources in the form of either bilateral or multilateral aid. To a first approximation, then, we can denote the resource transfer to HIPCs as follows:

$$\text{NRT} = \text{B} + \text{M} - \text{D}.$$

In this equation, B, M and D stand for bilateral aid, multilateral aid and debt service, respectively. Now, assume that, as a share of GDP, the NRT to the HIPC countries is constant. Table 4 shows this to be a reasonable assumption. The NRT as a share of GDP has not increased substantially in the past 30 years, which suggests that the developed countries are not prepared to substantially increase their contribution of real resources to the development of these countries. Assume also that, bilateral aid to HIPC countries is constant as a share of GDP. This is a realistic assumption, because bilateral aid is largely based on political and strategic considerations of the donor countries and is therefore exogenous to the current debt relief operations in the HIPCs (Alesina and Dollar, 2000).

Under our assumptions, a fall in the debt service of the HIPC countries will also lead to a fall in multilateral aid. The intuition is as follows. Since the NRT is constant—developed countries are not prepared to substantially increase their contribution of real resources to the development of the world's poorest countries—a decrease in debt

servicing must lead to a decrease in multilateral aid flows. Because multilateral aid is generally spent more judiciously than bilateral aid, the alteration in the composition of aid could have important efficiency consequences.

Expressed differently, what we are saying is the following. Rich governments set aside a certain fraction of their budgets for aid flows. The reality is that part of that aid budget will always be distributed with political aims in mind—bilateral aid is politically determined and is not affected by debt relief considerations. But given that the overall amount of resources that the government is willing to transfer to the poor country is also fixed, writing off the debt means that multilateral aid must fall. In other words, it is not just the size of the NRT that matters. The composition of the NRT is also important.

Even if we relax the first assumption and assume instead that rich country governments are willing to increase the size of the NRT, it is still relevant to ask what is the best way to do so—more multilateral aid or more debt relief? We think that increased multilateral aid is likely to be more beneficial. Why? The marginal multilateral aid dollar may go directly to social infrastructure (we discuss this further in the next section). Debt relief, on the other hand, is fungible—there is no guarantee that easing the government's budget constraint by a dollar will lead to an additional dollar of expenditure on social infrastructure.

5. Making Aid Work

The critics of aid argue that aid programs to poor countries have often been a failure. They point out that aid programs in general have not led to economic growth in recipient countries in the past (Boone, 1995, 1996).

More recent studies, however, have qualified this result by showing that aid has in

fact been effective under certain circumstances. First, aid has been effective when it was given conditional on the economic policies of the recipient country (Burnside and Dollar, 2000). Specifically, aid has a positive effect on economic growth if the recipient country has low inflation, a small budget deficit, and a high degree of trade openness. Second, aid is more effective when managed multilaterally rather than bilaterally (Burnside and Dollar, 2000). Taken together, this suggests that multilateral aid favors countries with good economic policies. Bilateral aid, however, does not have any tendency to favor countries that follow good economic policy.

The devil is in the details and a precise formulation of how to optimally allocate aid is beyond the scope of this paper.⁵ Nevertheless, we outline three basic principles that may help guide the process.

First, aid should be given only to countries with good economic policies. Since aid programs work when implemented in countries that follow sound macroeconomic policy, it is crucial that aid should be selective and disbursed only to the countries with a track record of good policies. In fact, one useful aspect of the HIPC Initiative has been its emphasis on economic policy reform. The environment that the HIPC Initiative is pushing for is the same environment in which aid can be effective. However, even though this makes HIPC countries more eligible recipients of aid than before, as Table 4 shows, aid flows to the HIPC countries have fallen since the HIPC Initiative has begun.

Second, aid should be managed multilaterally. Burnside and Dollar (2000) find that multilateral aid favors countries with good economic policies. Conversely, political and strategic interests usually determine bilateral aid flows. Studies have shown that bilateral aid goes disproportionately to former colonies and military allies (Alesina and

⁵ See Easterly (2002) for a discussion of issues in designing effective aid.

Dollar, 2000). Given that more than half of total aid flows to the HIPC countries have been bilateral, it is not surprising that past aid flows to these countries have been largely ineffective. Aid will be more effective if the composition of aid to the HIPCs shifts away from bilateral to multilateral flows. Again, as we have argued in Section 4.B., debt relief may have exactly the opposite effect.

Third, there should be more focus on the productivity of aid projects. Aid should be targeted towards projects where the social returns are the highest. The question is how can we use a billion dollars of aid most effectively? Here are some examples of aid that could be very effective.

According to former U.S. Treasury Secretary Paul O'Neill (2002) it would cost \$1000 to build a well for a village of 400 people. Given that there are about 10 million people in Ghana that do not currently have access to clear water, he calculates that an aid budget of only \$25 million can solve the whole problem. Another example is the Central Visayas Water and Sanitation project in Philippines. This is a \$30 million project, which will provide 500,000 people with clean water along with related improvements to their health.

Another highly effective aid project would be the provision of simple bed nets for protection against malaria. For instance, when bed nets were distributed to the people living in Rufiji, a rural district of Tanzania, infant mortality fell by 28 percent in a year (*The Economist*, 2002). Yet, a bed net costs only three dollars. Given that malaria is estimated to reduce GDP growth by 1.3 percent every year in countries where it has a significant presence (Gallup and Sachs, 2000), providing these simple bed nets could produce significant benefits.

Providing access to clean water and protection against malaria are both worthy projects whose returns would more than justify their costs. But there is still a lingering question as to whether these projects can be established in countries where corruption is a major problem. Aid-in-kind might be an effective way of dealing with this problem.

There are three reasons why aid-in-kind might be a good idea in order to deal with corruption. First, corrupt governments are more likely to choose aid-in-cash rather than aid-in-kind. So, providing aid-in-kind may help select the governments that are less corrupt. Second, aid-in-kind forces recipient governments to think beforehand about what they want to do. Third, fungibility is less of a problem if aid is given in kind, rather than in cash.

With rare exceptions, aid has not been effective. But the problem is not aid per se, but the way that it has been disbursed in the past. There is much to learn from past failures that can lead to future success. If disbursed judiciously—i.e., according to three principles outlined above—aid can more than pay for itself through gains in economic efficiency. That was the case with the Marshall Plan and many other aid programs to countries such as Korea, Taiwan, and Japan (De Long and Eichengreen, 1993). Improving the efficiency of aid, however, is not sufficient. One of the Millennium Development Goals is to cut in half by the year 2015 the proportion of people living on less than one dollar a day. In order to reach this goal, a United Nations panel headed by the former President of Mexico, Ernesto Zedillo, estimated that the donor countries have to double the amount of aid that they are currently giving (United Nations, 2001).

6. Conclusion

The world's poorest countries are deeply ill, but a thorough examination yields

nothing to suggest that debt overhang is among the list of possible illnesses. Suggesting that debt is not the primary obstacle to growth and development in the world's poorest countries seems ironic, even cruel. But "the truth is an offense, not a sin" (Marley, 1976). Since the HIPC's do not suffer from debt overhang, they are not good candidates for debt relief.

Instead, the proper treatment for the HIPC's is a judicious use of aid. A precise formulation of how best to administer such aid is beyond the scope of this paper. The relevant point for the debt relief debate is that building infrastructure and institutions may involve substantial expenditure on public goods with high social but low private rates of return. If the objective is to achieve more investment in public goods with high social rates of return then aid, not debt relief, is the policy instrument best suited for achieving that goal.

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Table 1. The Highly Indebted Poor Countries (HIPC)

| Receiving Debt Relief* | | Still Under Consideration | | |
|-------------------------------|---------------------------------------|----------------------------------|----------------------------------|---|
| Benin | Malawi | Angola | Lao PDR | |
| Bolivia | Mali | Burundi | Liberia | |
| Burkina Faso | Mauritania | Central African Republic | Myanmar | |
| Cameroon | Mozambique | Comoros | Somalia | |
| Chad | Nicaragua | Democratic Republic of Congo | Sudan | |
| Ethiopia | Niger | Republic of Congo | Togo | |
| Gambia | Rwanda | Cote d'Ivoire | Vietnam | |
| Ghana | Sao Tome and Principe | Kenya | Yemen | |
| Guinea | Senegal | | | |
| Guinea-Bissau | Sierra Leone | | | |
| Guyana | Tanzania | | | |
| Honduras | Uganda | | | |
| Madagascar | Zambia | | | |
| | Infant Mortality (per 1000 births) | Life Expectancy (years) | GDP per capita (current US\$) | GDP per capita growth (1980-2000) |
| HIPC Countries | 100 | 51 | 310 | -0.2 |
| United States | 7 | 77 | 34,370 | 2.0 |

Source: World Bank HIPC Initiative document: http://www.worldbank.org/hipc/progress-to-date/relief_and_outlook_Jan03.pdf; World Development Indicators Data Base.

* These countries have reached the “decision point” under the Enhanced HIPC Initiative: Status as of January 2003.

Table 2. Debt Relief Drives Up Stock Market Values in The Brady Countries

| Country | Date of Agreement | Change in Stock Market (Percentage Increase) | Change in Market Capitalization (Billions of Dollars) |
|--------------------|-------------------|--|---|
| Argentina | April 1992 | 121.2 | 19.8 |
| Bolivia | March 1993 | n.a. | n.a. |
| Brazil | August 1992 | 12.6 | 6.0 |
| Bulgaria | November 1993 | n.a. | n.a. |
| Costa Rica | November 1989 | n.a. | n.a. |
| Dominican Republic | May 1993 | n.a. | n.a. |
| Ecuador | May 1994 | 59.8 | n.a. |
| Jordan | June 1993 | 39.0 | 0.9 |
| Mexico | September 1989 | 58.2 | 8.6 |
| Nigeria | March 1991 | 29.1 | 0.2 |
| Panama | May 1995 | n.a. | n.a. |
| Peru | October 1995 | 1.1 | 1.4 |
| Philippines | August 1989 | 49.2 | 1.7 |
| Poland | March 1994 | 215.9 | 2.1 |
| Uruguay | November 1990 | n.a. | n.a. |
| Venezuela | June 1990 | 68.1 | 0.8 |
| Average | | 65.4 | 4.6 |

Source: IFC, Emerging Markets Data Base; Cline (1995) and authors' calculations.

Table 3. The Brady Plan Reverses the Sign of the Net Resource Transfers: Group Averages (Millions of US\$)

| Year in Event Time | Brady Countries | Highly-Indebted Poor Countries |
|--------------------|-----------------|--------------------------------|
| -19 | 284 | 15 |
| -18 | 388 | 41 |
| -17 | 247 | 38 |
| -16 | 385 | 45 |
| -15 | 395 | 84 |
| -14 | 778 | 108 |
| -13 | 1197 | 95 |
| -12 | 670 | 122 |
| -11 | 819 | 159 |
| -10 | 373 | 189 |
| -9 | 73 | 220 |
| -8 | 268 | 206 |
| -7 | -487 | 219 |
| -6 | -1179 | 183 |
| -5 | -1326 | 166 |
| -4 | -1335 | 182 |
| -3 | -1216 | 213 |
| -2 | -433 | 223 |
| -1 | -270 | 253 |
| 0 | 147 | 267 |
| 1 | 2369 | 321 |
| 2 | 1664 | 337 |
| 3 | 1505 | 344 |
| 4 | 3625 | 327 |
| 5 | 3749 | 346 |
| 6 | 6412 | 344 |
| 7 | 3528 | 322 |
| 8 | 5215 | 338 |
| 9 | 2448 | 312 |
| 10 | 3166 | 336 |

Net resource transfers are equal to net resource flows minus interest payments on long-term loans and foreign direct investment profits. The first column lists the years in event time. The number '0' represents the year in which its Brady Plan was announced. For Highly-Indebted Poor Countries (HIPC), 0 represents 1989. The next two columns show the progression of net resource transfers in event time to the Brady countries, and the HIPC countries. The data on NRT are obtained from World Bank's Global Development Finance Data Base.

Table 4. Annual Net Resource Transfers, Aid Flows, and Debt Service: HIPC and Brady Group Averages

| | 1970-79 | | 1980-89 | | 1990-95 | | 1996-00 | |
|--------------------------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|
| | Millions of Dollars | Percentage of GDP |
| HIPCs (All) | | | | | | | | |
| Net Resource Transfers | 90 | 5.8 | 213 | 6.2 | 337 | 9.3 | 320 | 7.1 |
| Aid Flows | 88 | 5.7 | 247 | 7.2 | 436 | 12.0 | 364 | 8.0 |
| Debt Service | 40 | 2.6 | 123 | 3.6 | 143 | 3.9 | 188 | 4.2 |
| HIPCs (Receiving Debt Relief) | | | | | | | | |
| Net Resource Transfers | 70 | 6.4 | 213 | 8.6 | 353 | 12.2 | 352 | 10.3 |
| Aid Flows | 69 | 6.3 | 238 | 9.6 | 486 | 16.8 | 416 | 12.2 |
| Debt Service | 36 | 3.3 | 94 | 3.8 | 124 | 4.3 | 146 | 4.3 |
| Brady Countries | | | | | | | | |
| Net Resource Transfers | 505 | 2.0 | -550 | -1.1 | 1294 | 1.5 | 3719 | 3.1 |
| Aid Flows | 83 | 0.3 | 198 | 0.4 | 407 | 0.5 | 288 | 0.2 |
| Debt Service | 926 | 3.7 | 2769 | 5.4 | 3022 | 3.5 | 7953 | 6.5 |

Source: The data on net resource transfers and debt service are obtained from World Bank's Global Development Finance Data Base. The data on aid flows are obtained from World Bank's World Development Indicators Data Base.

Table 5. GDP Per Capita Growth in the Highly Indebted Poor Countries (HIPCs)

| | 1970-79 | 1980-89 | 1990-95 | 1996-00 |
|-------------------------------|---------|---------|---------|---------|
| HIPCs (All) | 0.8 | -0.6 | -0.7 | 1.4 |
| HIPCs (Receiving Debt Relief) | 0.6 | -0.8 | -0.5 | 1.5 |

Source: World Bank, World Development Indicators.

Figure 1. Investment in the Brady Countries Surges Following Debt Relief

