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HELPING THE POOR TO HELP THEMSELVES: DEBT RELIEF OR AID

Serkan Arslanalp
Peter Blair Henry

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Arslanalp is a Ph.D. candidate in the Stanford University Department of Economics. Henry is Associate Professor of Economics at the Stanford University Graduate School of Business and a faculty research fellow of the National Bureau of Economic Research. This article will appear in the book, *Sovereign Debt at the Crossroads*, Oxford University Press 2004. We thank Jeremy Bulow, Nick Hope, Diana Kirk, Fraser Preston, and Paul Romer for helpful conversations. Rania Eltom provided excellent research assistance. Henry thanks the National Science Foundation's CAREER Program, the Stanford Institute of Economic Policy Research (SIEPR), and the Stanford Center for International Development (SCID) for financial support. The views expressed herein are those of the authors and not necessarily those of the National Bureau of Economic Research.

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ABSTRACT

Debt relief is unlikely to stimulate investment and growth in the world's highly indebted poor countries (HIPCs). This is because the HIPCs do not suffer from debt overhang. The principal obstacle to investment and growth in the world's poorest countries is a lack of basic economic institutions that provide the foundation for profitable economic activity. If the goal is to help poor countries build the institutions that best suit their development needs, then the energy and resources currently devoted to the HIPC initiative could be more effectively employed as direct foreign aid.

Serkan Arslanalp
Department of Economics
Stanford University
Stanford, CA 94305-6072
serkan@stanford.edu

Peter Blair Henry
Graduate School of Business
Stanford University
Stanford, CA 94305-6072
and NBER
pbhenry@stanford.edu

Introduction

In the world's highly indebted poor countries (HIPCs), one in ten infants die at birth. For those who survive, life is an uphill battle. The unholy trinity of malaria, AIDS, and malnutrition conspire to deliver a life expectancy 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 HIPCs' economies offer much hope of pulling their 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 are not easy to take (see Table 1). 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 the rock star Bono, there is an increasingly popular view—from NGOs to the Pope to US Senator Jesse Helms—that the staggering level of debt is the primary obstacle to improved economic growth and living standards in the HIPCs.

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 growth by improving efficiency and incentives for investment? 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 1B provides some important facts about sixteen countries whose economies suffered from excessive debt during the 1980s: Argentina, Bolivia, Brazil, Bulgaria, Costa Rica, The Dominican Republic, Ecuador, Jordan, Mexico, Nigeria, Panama, Peru, Philippines, Poland, Uruguay, and Venezuela. The debt overhang of these countries was alleviated by the debt relief plan engineered by former US 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 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. These new funds provided the impetus the countries needed to stimulate investment and growth.

It is tempting to conclude that debt relief for the HIPCs 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 HIPCs because the HIPCs 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 HIPCs is a lack of infrastructure, there is little reason to believe that debt relief there will stimulate a sudden rush of private foreign capital that leads to higher investment and growth.

This is not an argument for leaving the HIPCs to wither on the vine. The point is that the HIPCs should be targeted not for debt relief but direct aid that would assist their citizens in building the institutions and infrastructure to eventually make them attractive places for both domestic and foreign investment.

Some argue that debt relief is equivalent to aid, but 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. The issue is not whether we should give aid, but rather how to design aid programs that work more effectively.

The cruel irony of the current debate is that debt relief might 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) less developed countries (LDCs) whose social infrastructure resembles those of the Brady countries: Colombia, Indonesia, Jamaica, Malaysia, Pakistan, 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 that suffer from debt overhang. Aid

is the most effective way of addressing the basic economic problems of the world's poorest countries. Our aim should be to make sure everybody gets what is most efficient.

1. Debt Relief Promotes Economic Growth When Countries Have 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 (which is called debt overhang). When such conditions prevail, debt relief can improve economic efficiency, making both debtors and creditors better off.

1A. Theory

There are two 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). Advocates of this view demonstrated that during the Debt Crisis the stock prices of US commercial banks reflected significant expected losses on the banks' loans (Sachs and Huizinga, 1987). 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 for a safe asset with lower face value.

Second, debt relief can make both borrowers and lenders better off when the borrower suffers from debt overhang. A corporation suffers from debt overhang when its existing stock of debt is so large that for a given project with positive net present value (NPV), the NPV of the project is less than the change in the value of the debt that will result from undertaking the project (Myers, 1977). In other words, debt overhang exists

[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.

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 debt overhang results in a transfer to existing debt holders that acts as an implicit 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. 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 extends the tax analogy to a macroeconomic context. Because a sovereign government raises the money to service its debt by taxing firms and households, an increase in the government's obligation to external creditors implicitly constitutes an increase in the private sector's expected future tax burden. As in all tax problems, there is an optimal level of taxation. At reasonable levels of debt and debt servicing, increasing the face value of the debt increases its expected value. Beyond a certain level of debt, however, the tax burden becomes so large that it acts as a disincentive to investment. As current investment falls, future growth decreases and government revenues decline, along with the expected value of the debt.

While debt overhang may arise when a country accumulates too much debt, just as importantly, it can also occur when a previously manageable stock of debt becomes intractable due to a change in a country's circumstances. To see the point, consider the net resource transfer (NRT)—the net flow of real resources into a country (debt, equity,

and FDI minus debt servicing, dividends, and profit repatriation). In theory, LDCs should experience positive NRTs, as the rate of return in these countries should be higher than in rich ones. However, the NRT may suddenly turn negative if adverse economic shocks or poor economic management (1) drive creditors to call in existing loans and (2) make potential new creditors unwilling to lend. When the country's NRT suddenly turns negative, the private sector's tax burden once again increases sharply, with all of the previously mentioned consequences for investment, growth, and the value of creditors' claims.

Just as an infusion of new debt can solve a corporation's debt overhang, debt relief can also alleviate the problem in a sovereign context. Writing down the debt reduces the implicit marginal tax rate on expected future cash flows and raises the rate of return to private investment. Also, by forcing all creditors to accept some losses, debt relief removes the uncertainty associated with unresolved debt issues and paves the way for profitable new lending.[2] New lending in turn means more investment, growth, and total tax revenues. In other words, when a country suffers from debt overhang, the creditors can actually increase the expected value of their claims by forgiving some of the debt (Krugman, 1988, 1989; Sachs, 1989).

1B. Facts

The theoretical arguments suggest that the crucial test of debt relief is whether it successfully restores positive net resource transfers to countries where international lending is profitable (Bulow, 2002). Table 2 demonstrates that debt relief succeeded in

[2] Forgiveness will not happen without coordination, because any individual creditor would prefer to have a free ride, maintaining the full value of its claims while others write off some debt. See **chapter ??** of this book for a discussion of how to overcome the free rider problem.

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—US 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, 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 is that it paves the way for new capital inflows.

The indirect effect of debt relief is more important than the direct effect. During the Brady Plan, approximately 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 2 shows that during the five-year period after the Brady Plan, there was a total resource transfer of about $210 billion to the Brady countries.[3] In the following five years, there was an even larger resource transfer of $330 billion. The surge of capital

[3] 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.

following the Brady-induced resolution of the debt crisis in these countries provides tangible support for the Dornbusch maxim that "Unresolved debt problems, not debt *per se*, are an obstacle to investment"(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 2 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 (Arslanalp and Henry, 2003).

Table 3 shows that the stock market did, in fact, go up in the ten countries that have stock markets and reached debt relief agreements between 1989 and 1995. On average, the stock market rose by 65 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 dollar terms, the market capitalization of the Brady countries rose by a total of $42 billion in anticipation of the Brady Plan.

Is the stock market increase spurious? In 1966 Paul Samuelson quipped that the "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.

Table 4 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 0.63 percentage points per year. 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 percent per year. In the five years following debt relief, they grew at 1.6 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.

2. Debt Overhang Is Not the HIPCs Principal Problem

Debt relief worked for the Brady countries. If all else were equal, it might be reasonable to expect current debt relief efforts in the HIPCs to produce similar results. The problem is that all else is not equal. Debt relief worked in the Brady countries,

because it eased a debt overhang that was inhibiting private lending, investment, and growth. But it is hard to argue that debt relief will generate investment and growth in the HIPCs because they do not suffer from debt overhang.

There are at least three pieces of evidence to suggest that debt overhang 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 2 shows that the NRT to the HIPC countries has always been positive. If debt overhang hinders capital flows to the HIPCs, 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. If the goal of debt relief is to restore positive NRTs in scenarios where it has turned negative, then it is not clear how this policy will help a set of countries that have experienced an uninterrupted stream of positive NRTs since 1970.

Second, although things went sour beginning with Mexico's default in 1982, creditors 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 5 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 to the HIPCs. As a fraction of total inflows, loans to the private sector in the HIPCs have never exceeded 13 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 5 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 constituted the chief source of net resource flows. No such shift has taken place in the HIPCs. 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 HIPCs.

2A. The HIPCs Principal Problem Is Weak Economic Institutions

Recent advances in law and finance help explain why private capital does not flow to the HIPCs. The degree to which a country's law protects the legal rights of minority shareholders exerts a significant influence on that country's access to external finance, (La Porta, Lopez-de-Silanes, Shleifer and Vishny (LLSV) 1997, 1998, 2002; Shleifer and Vishny, 1997). Weak investor protection can lower the marginal product of capital and eliminate the incentive for capital to flow from rich to poor countries (Shleifer and Wolfenzon, 2002). If investors get poor protection they will stay away, outside funds will dry up, and fewer resources will be available to finance growth (Dornbusch, 2000; Henry and Lorentzen, 2003).

The connection between investor protection and external finance is germane to the present discussion. Row 1 of Table 6 shows that the median Brady country ranks lower than the median G7 country on the LLSV index of investor protection.[4] The private capital that does flow to the Brady countries pales in comparison to what we

[4] The index is a composite measure of shareholder rights, creditor rights, efficiency of judicial system, rule of law, and rating of the accounting system.

would see in a world where minority shareholders in those countries enjoyed the same legal protection as their U.S. counterparts. While the median Brady country ranks low on the LLSV index, the HIPCs do not even make the list. If private capital trickles to the 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.

Having capital markets that are not sufficiently developed to make the LLSV ranking is probably correlated with weak economic institutions in general. In turn, economic institutions can be a crucial factor in determining the level of human capital accumulation and the marginal product of capital (Kremer, 1993). In other words, the rate of return to private lending in HIPCs is low 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.

Row 2 of Table 6 investigates this claim by using the Hall and Jones (1999) measure of social infrastructure to compare the HIPC and Brady countries. The social infrastructure measure ranks 130 countries and attempts to capture the extent to which a country has "an environment that supports productive activities and encourages capital accumulation, skill acquisition, invention and technology transfer" (Hall and Jones, 1999). 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; 27 of the 38 HIPC countries with available data are in the lowest 30th percentile.

Table 6 also compares the 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; 24 of 39 HIPC countries with available data are in the lowest 40th percentile over the same period.

It is interesting to note that six highly or moderately indebted countries that closely resemble the Brady countries have received no consideration for debt relief. The six are: Indonesia, Pakistan, Colombia, Jamaica, Malaysia, and Turkey. The median LLSV score for this group of six is 4.6 out of 10. The median LLSV score for the Brady countries is 4.9. Similarly, the median country in the group of 6 ranks 61st on the Hall and Jones measure of social infrastructure; the median Brady country ranks 63rd. Finally, the median country in the group of six ranks 58th on the Heritage House Index of Economic Freedom; the Median Brady country ranks 59th. While we do not suggest that countries should receive debt relief based solely on their resemblance to Brady countries, the analysis does suggests that debt relief for the group of six might constitute a more efficient use of resources than debt relief for the HIPCs.

Put another way, the HIPCs principal problem is an inadequate provision of public goods, stemming from the following kind 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. The externality that debt relief is designed to address is quite different. When debt problems arise, the country and its creditors would be better off if all creditors would either extend new loans or reduce their repayment demands. But the externality—individual lenders acting in their self-interest will not take into account the effect of their inflexibility on the country and its other creditors—means that no rational lender will do so of their own volition.

Distortions arising from an externality should be tackled with policy instruments that address the externality directly. Rich country governments address the public goods externality by collecting taxes. Poor countries, by definition, do not have the tax base to raise the resources they need, but this is the classic economic rationale for foreign aid—not debt relief (Bulow and Rogoff, 1988; Bulow, 2002). Undoubtedly, aid will not solve all of the HIPCs' problems. No amount of road building will convince entrepreneurs to invest if inflation is high, corruption rampant, and the exchange rate 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. In Section 4 we make the case for aid over debt relief more extensively, but first we look at the effect of debt relief on the HIPCs thus far.

3. It Is Not Clear That Debt Relief for the HIPCs Has Led To Faster Growth

We have argued that debt relief for the HIPCs is unlikely to produce the salutary economic effects that occurred with the passage of debt relief for the Brady countries. Table 7 evaluates the evidence to date. Row 1 shows that the HIPC countries that have begun receiving debt relief have seen a modest improvement in their growth performance. From 1990-95 the growth rate of these HIPCs was negative 0.5 percent.

From 1996-2000 it was 1.5 percent—an increase of 2.0 percentage points. Ostensibly, this suggests that debt relief has worked. But there are three pieces of evidence that suggest the improvement in growth may not be attributable to debt relief *per se*.

First, Row 2 of Table 7 shows that the change in growth of those countries that have not yet begun receiving debt relief does not differ much from those that have. The growth rate of all the HIPCs from 1996 to 2000 is 2.1 percentage points higher than it was from 1990 to 1995.

Second, for the HIPC countries that have been receiving debt relief, the relief process did not actually begin until 2000. Therefore, it is not clear that the improvement in growth performance between 1996 and 2000 can credibly be attributed to debt relief. The original framework of the HIPC Initiative was arranged so that countries would have to show a track record of reform for three years before they could reach a "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, and 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; sixteen additional HIPC countries reached their decision points and began receiving debt relief in 2000.[5] 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.

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 7 shows, the growth performance of the HIPC countries has improved during the period from 1996 to 2000. Since the HIPCs did not begin receiving debt relief until 2000, it would seem that the improvement in growth performance was mainly due to reforms.

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. 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 economic infrastructure from which they suffer. As we have argued in Section 2, aid, not debt relief, is the best way to tackle this problem.

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

[5] 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 and as of January 2003, four more countries have reached their decision points: Chad and Ethiopia in 2001; Ghana and Sierra Leone in 2002.

helpful. If the goal is to improve economic performance and reduce poverty, then aid may provide the most constructive way forward. The emphasis on aid over debt relief begs an obvious question: Is debt relief not a form of aid? The answer is that there are at least two reasons why aid and debt relief are not equivalent. 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 net resource transfers to the HIPCs, proponents of the HIPC Initiative have been pushing for a reduction in debt servicing. But ironically, the HIPC Initiative has actually reduced the net resource transfer to the world's poorest countries. Table 8 displays the point. Aid flows to the HIPCs increased continually from 1970 to the mid-1990s. Since 1996, however, 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. 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 HIPCs.

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

Aid flows have declined since the beginning of the HIPC Initiative, but this is not the only problem. Debt relief may also result in a shift in the composition of aid—away from multilateral inflows and towards bilateral inflows. To see why debt relief may

induce this shift—which we will soon show to be undesirable—consider the net resource transfer identity.

By definition, the NRT is equal to capital inflows minus debt service. As we have shown in Table 5 there are no significant private capital inflows to the HIPCs. Their capital inflows come principally from official sources in the form of grants: either bilateral or multilateral aid. To a first approximation, then, we can denote the NRT to the HIPCs as:

NRT = BILATERAL AID + MULTILATERAL AID - DEBT SERVICING

Now assume that, as a share of GDP, the NRT to the HIPC countries is constant. Table 8 shows this assumption to be reasonable. The NRT as a share of GDP has not increased substantially in the past 30 years. This fact suggests that the developed countries are not prepared to increase their contribution of real resources to the development of these countries. Assume also that, bilateral aid to the HIPCs is constant as a share of GDP. This may also be 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 (Alesina and Dollar, 2000).

Under our assumptions, a fall in the HIPCs' debt servicing necessarily leads to a fall in multilateral aid. This shift from multilateral to bilateral aid is undesirable. The reason is that multilateral aid is released only when the multilateral agency pays for pre-approved services rendered to the country. Bilateral aid, on the other hand, is like free cash flow to the recipient government. 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, we are saying the following. Rich governments set aside a certain fraction of their budgets for aid (bilateral and multilateral). The bilateral portion of that aid budget will always be distributed on the basis of political not efficiency considerations. But given that the overall amount of aid resources is fixed, writing off the debt means that multilateral aid must fall.

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 building economic 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 infrastructure.

5. Making Aid Work

Aid critics 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 may be effective under certain circumstances. A precise formulation of how to optimally allocate aid is beyond the scope of this paper.[6] Nevertheless, we outline three basic principles that may be helpful.

[6] See Easterly (2002) for a discussion of issues in designing effective aid.

First, aid has been effective when it was given conditional on the economic policies of the recipient country (Burnside and Dollar, 2000).[7] 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. Since aid programs work best 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 promising recipients of aid, as Table 8 shows, aid flows to the HIPC countries have fallen since the HIPC Initiative has begun.

Second, aid is more effective when managed multilaterally rather than bilaterally. Multilateral aid tends to favor countries that pursue sound economic policy (Burnside and Dollar, 2000). As we argued earlier, political and strategic interests tend to drive bilateral aid flows. For instance, bilateral aid goes disproportionately to former colonies and military allies (Alesina and Dollar, 2000). Given that more than half of total aid flows to the HIPCs 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. Here are some salient examples. According to former US Treasury Secretary Paul O'Neill (2002) it

[7] Easterly (2003) and Easterly, Levine and Roodman (2003) challenge this view.

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. There are three reasons why aid-in-kind might be a good idea in order to deal with corruption. First, corrupt governments are likely to prefer aid-in-cash over aid-in-kind. So, insisting on aid-in-kind may help select governments that are less corrupt. Second, aid-in-kind forces both the donor and the recipient to think harder about what kind of aid is in the best interest of the recipient. Third, fungibility may be 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—that is, according to the 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. Suggesting that debt is not the primary obstacle to their growth and development seems ironic, perhaps even cruel. But "the truth is an offense, not a sin" (Marley, 1976). Since the HIPCs do not suffer from debt overhang, they are not good candidates for debt relief. If the goal is to help poor countries build the economic infrastructure and institutions that best suit their development needs then aid holds more promise of achieving that goal.

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Table 1. Prospects Are Grim for the Highly Indebted Poor Countries (HIPCs)

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. * As of January 2003 these countries have reached the "decision point" status under the Enhanced HIPC Initiative.

Table 2. Debt Relief Restores Positive Net Resource Transfers (NRTs) to the Brady Countries; the HIPCs Have Never Experienced Negative NRTs: 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 3. 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
All Countries		65.4	41.5

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

Table 4. Capital Stock Growth and GDP Growth Surge After the Brady Plan

	5 Years Before	5 Years After
Investment	1.6	3.5
GDP Growth	0.0	1.6

The second column lists the average GDP and capital stock growth five years before each country's Brady deal. The third column lists the average GDP and capital stock growth five years after the Brady deal.

Table 5. The HIPCs Have Never Received a Significant Quantity of Private Capital Flows.

	1970-74		1975-79		1980-84		1985-89		1990-94	
	Millions of US$	Percent of Total	Millions of US$	Percent of Total	Millions of US$	Percent of Total	Millions of US$	Percent of Total	Millions of US$	Percent of Total
HIPC										
Net Resource Flows	61	100.0	172	100.0	269	100.0	305	100.0	412	100.0
Public Debt	39	64.6	111	64.5	176	65.4	158	51.9	120	29.2
Private Debt	3	4.2	3	1.8	5	1.9	-1	-0.3	0	-0.1
FDI	4	5.9	12	7.0	11	4.0	14	4.4	50	12.2
Portfolio Equity	0	0.0	0	0.0	0	0.0	0	0.0	5	1.1
Grants	15	25.2	46	26.7	77	28.7	134	44.0	237	57.6
Brady										
Net Resource Flows	530	100.0	1562	100.0	1938	100.0	722	100.0	2645	100.0
Public Debt	264	49.8	1045	66.9	1346	69.4	443	61.4	309	11.7
Private Debt	133	25.1	219	14.0	212	11.0	-177	-24.5	466	17.6
FDI	116	21.9	253	16.2	305	15.7	365	50.6	982	37.1
Portfolio Equity	0	0.0	0	0.0	2	0.1	6	0.9	708	26.8
Grants	17	3.3	46	2.9	74	3.8	83	11.6	180	6.8

This table presents data on the composition of net resource flows for different groups of countries from 1970 to 2000. The first column lists the components of net resource flows. Net resource flows are the sum of net resource flows on public debt, private debt, foreign direct investment, portfolio equity, and official grants. The following columns display the data as averaged over intervals of five years. The HIPC countries are displayed in Table 1. The Brady countries are displayed in Table 3. The data on net resource flows and its components are obtained from World Bank's Global Development Finance Data Base.

Table 6. The HIPCs Have Much Weaker Social Infrastructure Than the Brady Countries

	G7	Brady	HIPC	Group of 6
LLSV Score	7.5	4.9	N/A	4.6
Hall and Jones (1999) Rank	14	63	102	61
Heritage House Index of Economic Freedom Rank	14	59	110	58

The first row lists the median La Porta, Lopez-de-Silanes, Shleifer and Vishny (LLSV) score of social infrastructure for the G7 countries, Brady countries, HIPCs, and the group of six countries. The countries in the group of six are Indonesia, Pakistan, Colombia, Jamaica, Malaysia, and Turkey. The second row lists the median Hall and Jones (1999) rank for each country group. The third row lists the median Heritage House Index of Economic Freedom rank.

Table 7. The HIPCs Receiving Debt Relief Have Not Grown Faster Than Those That Have Not.

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

Source: World Bank, World Development Indicators.

Table 8. Aid Flows to the HIPCs Have Fallen With the Onset of Debt Relief.

	1970-79		1980-89		1990-95		1996-00	
	Millions of Dollars	Percentage of GDP	Millions of Dollars	Percentage of GDP	Millions of Dollars	Percentage of GDP	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.