



How Did Heavily Indebted Poor Countries Become Heavily Indebted? Reviewing Two Decades of Debt Relief

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Summary. — The paradox of debt is that heavily indebted poor countries (HIPCs) became heavily indebted *after* two decades of debt relief efforts. Average policies in HIPCs 1980–97 were worse than other less-developed countries (LDCs), controlling for income. Terms of trade and wars do not show a different trend in HIPCs than in non-HIPC LDCs. Financing HIPCs shifted away from private and bilateral nonconcessional sources toward International Development Assistance and other multilateral concessional financing—but this implicit form of debt relief also failed to reduce net present value debt. The record is not encouraging for the success of current debt relief efforts.
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1. INTRODUCTION

The central paradox of the heavily indebted poor countries (HIPCs) is that they became heavily indebted after two decades of partial debt relief and concessional lending. How did this happen? This may suggest that the factors that lead to high debt are long-lasting and not easily changed by debt relief. Consider the following example.

The HIPC of Haiti is not growing. The ratio of foreign debt service to exports has reached 40%, well above the 20–25% thought to be “sustainable.”¹ The debt was accumulated not to finance productive investments, but to finance the government’s patronage employment and large military and police forces. Corruption has been endemic, so there is the suspicion that some of the proceeds of foreign loans found their way into the pockets of the rulers. This is a description of Haiti’s experience in the 90s. The 90s to which these facts refer are not the 1990s, but the 1890s.²

The problem of heavily indebted countries is not a new one. From the two Greek city-states who defaulted on loans from the Delos Temple in the fourth century BC to Mexico’s default on its first foreign loan after independence in 1827 to Haiti’s 1997 ratio of debt to exports of 484%,

debt servicing difficulties have been a feature of the world economy throughout history.³

The problems of the HIPCs are very much in the news today (Third World debt was even mentioned in the hit movie *Notting Hill*, starring Hugh Grant and Julia Roberts.) A coalition of nongovernmental organizations called Jubilee 2000 asked for a write-off of all debt of poor countries on the occasion of the turning of the millenium (Jubilee 2000). Support for Jubilee 2000 has been expressed by such diverse figures as Bono from the rock group U2, the Pope, Jeffrey Sachs, Muhammad Ali,

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Mikhail Gorbachev, and the Dalai Lama. ⁴ Jubilee 2000 said that with debt forgiveness, “the year 2000 could signal the beginning of dramatic improvements in healthcare, education, employment and development for countries crippled by debt.” ⁵

Demonstrators from Washington to Prague to Gothenburg to Genoa have thrown stones for debt relief. The successor to the Jubilee 2000 movement is a coalition called Jubilee Plus, which calls for an unconditional cancellation of debt of the poor countries. ⁶ Kofi Annan in April 2001 noted

The Jubilee 2000 movement to cancel the debts of the poorest countries was an inspiration to us all. But its work did not finish with the Jubilee Year. We should all be grateful that it is carrying on in the short term as “Drop the Debt,” and broadening its agenda. . . . In the Millennium Declaration, world leaders called for all the bilateral debts of the least developed countries to be cancelled, in return for their making demonstrable commitments to poverty reduction. And they promised to deal “comprehensively and effectively” with the debt problems of low- and middle-income countries.

The World Bank and the International Monetary Fund (IMF) now have a program called the HIPC initiative to provide debt writedowns—including for the first time, writedowns of IMF and World Bank claims in present value terms—for poor countries with good policies. The G-7 summit in Cologne in June 1999 and the World Bank/IMF annual meetings in October 1999 agreed on an expansion of this program, increasing the number of eligible countries, speeding up the process of receiving relief and increasing the amount of debt relief provided for each country. The expansion increased the total cost—in net present value terms—of the HIPC initiative from US\$12.5 billion to US\$27 billion. ⁷ The IMF, World Bank, and other multilateral and bilateral creditors had committed HIPC debt relief to 26 countries by April 1, 2001, for total commitments of \$40 billion. (The World Bank defines 41 countries as heavily indebted poor countries—HIPCs. The HIPC problem has an Africa slant, as 33 of the 41 HIPCs are in Africa; four are in Latin America. A number of HIPCs are in the midst of violent conflict and so cannot be considered for debt relief yet.) Jeffrey Sachs suggests that that the World Bank, IMF, commercial banks and rich country governments could absorb a writeoff of the \$106 billion the poorest countries currently owe to them. ⁸

The only problem with these arguments for the salutary effects of debt relief is the lack of recognition that debt relief is not a new phenomenon. In the past, debt relief brought little of the benefits promised for a new wave of debt relief. In fact, debt relief did not even bring a reduction in debt, as poor country governments borrowed anew until they had again become heavily indebted.

Although there were intimations as long ago as 1967 that “debt-service payments have risen to the point at which a number of countries face critical situations,” the current wave of debt relief for poor countries really got underway in 1979. ⁹ The 1979 World Debt Tables of the World Bank noted “lagging debt payment” on official loans to poor countries, although “debt or debt service forgiveness has eased the problems for some.” The 1977–79 UNCTAD meetings led to official creditors writing off \$6 billion in debt to 45 poor countries. The measures by official creditors included “the elimination of interest payments, the rescheduling of debt service, local cost assistance, untied compensatory aid, and new grants to reimburse old debts.” ¹⁰

The 1981 Africa report by the World Bank (usually known as the Berg Report) noted that Liberia, Sierra Leone, Sudan, Zaire, and Zambia (all of which would become HIPCs) had already experienced “severe debt-servicing difficulties” in the 1970s and “are likely to continue to do so in the 1980s.” The Berg Report hinted of debt relief, namely “longer-term solutions for debt crises should be sought” and “the present practice of *donors* separating aid and debt decisions may be counterproductive.” ¹¹

The 1984 World Bank Africa report was more forthright: “where monitorable programs exist, multiyear debt relief and longer grace periods should be part of the package of financial support to the program.” ¹² The wording got even stronger in the World Bank’s, 1986 Africa report: low income Africa’s financing needs will “have to be filled by additional bilateral aid and debt relief.” ¹³ The Bank’s 1991 Africa report continued escalating the rhetoric: “Africa cannot escape its present economic crisis without reducing its debt burden sizably.” ¹⁴

Meanwhile, the June 1987 G-7 summit in Venice called for interest rate relief on debt of low-income countries. The World Bank noted “the past year has brought increasing recognition of the urgency of the debt problems of

the low-income countries of sub-Saharan Africa.”¹⁵ One year later, the June 1988 G-7 summit in Toronto agreed on a menu of options, including partial forgiveness, longer maturities, and lower interest rates (these became known as the “Toronto terms”).¹⁶ Meanwhile, in order to help African countries service their official debt, the World Bank in December 1987 initiated a special program of assistance (SPA) to low-income Africa. The IMF complemented the SPA with the enhanced structural adjustment facility. Both programs sought to provide “substantially increased, quick-disbursing, highly concessional assistance to adjusting countries.”¹⁷ The 1990 Houston G-7 summit considered “more concessional reschedulings for the poorest debtor countries.” The UK and the Netherlands proposed “Trinidad terms” that would increase the grant element of debt reduction to 67%, from 20% under the “Toronto terms.”¹⁸ The 1991 London G-7 summit agreed “on the need for additional debt relief measures... going well beyond the relief already granted under Toronto terms.”¹⁹ Through November 1993, the Paris Club (the club of official lenders) applied enhanced Toronto terms that were even more concessional.²⁰ In December 1994, the Paris Club announced “Naples terms” under which eligible countries would receive yet additional debt relief.²¹

Then, in September 1996, the IMF and World Bank announced the HIPCs debt initiative, which was to allow the poor countries to “exit, once and for all, from the rescheduling process” and to resume “normal relations with the international financial community, characterized by spontaneous financial flows and the full honoring of commitments.” The multilateral lenders for the first time would “take action to reduce the burden of their claims on a given country,” albeit conditional on good policies in the recipient countries. The Paris Club at the same time agreed to go beyond Naples terms and provide an 80% debt reduction in net present value terms.²²

Finally, as we saw above, the IMF and World Bank expanded the “once and for all” program in, 1999. Nor is the story over, as independent analysts like Birdsall, Williamson, and Deese (2002) point out that there remain HIPCs outside the program such as Indonesia, Nigeria, and Pakistan, while the IMF and World Bank assumed optimistic projections for export growth to make even existing HIPCs’ post-relief situation manageable.²³

Besides explicit debt relief, there also has been an implicit form of debt relief going on throughout the period, which is the substitution of concessional debt for nonconcessional debt. It’s remarkable that the net present value of future debt service for HIPCs rose throughout the period despite the large net transfers of resources from concessional lenders like the International Development Association of the World Bank and the concessional arms of bilateral and other multilateral agencies.

The necessity to provide continuing waves of debt relief one after another, from UNCTAD to Venice to Toronto to Houston to Trinidad to London to Naples to HIPC to expanded HIPC, all the while substituting concessional for nonconcessional debt, may suggest something is wrong with the implementation of debt relief. There is the paradox that a large group of countries came to be defined as heavily indebted at the *end* of two decades of debt relief and increased concessional financing.

This paper reviews possible explanations. The revealed preference of debtors for high debt may simply lead to new borrowing to replace old cancelled debts. Even if borrowing is constrained, poor countries that have a high discount rate against the future may run down country assets. This is the external adjustment equivalent to the fiscal adjustment “illusion” discussed by Easterly (1999a).

The granting of progressively more favorable terms for debt relief may also have perverse incentive effects, as countries borrow in anticipation of debt forgiveness and delay policy reforms waiting for the best deal. Burnside and Dollar (2000) and World Bank (1998b) suggest that aid does not raise growth in countries with poor economic policies. The World Bank’s landmark Africa report (World Bank, 1994b) suggested that many African countries failed to depart from poor economic policies during the process of receiving adjustment loans from the World Bank and IMF.

Since private lending withdraws because of the poor creditworthiness of HIPCs, the process of debt relief has also led to a substitution of official lending for private lending and foreign direct investment (FDI), which raises the concern that official lending may have not followed the same standards of creditworthiness as private lending. There has been a redistribution of roles even among official lenders, with some agencies making net transfers (debt flows net of interest) to HIPCs and others receiving net transfers from HIPCs.

2. THEORETICAL CONSIDERATIONS ON DEBT RELIEF

A country that has gotten an “excessive” external debt may be one with a high discount rate against the future—reflecting factors such as a profligate government, political instability, or interest group polarization.²⁴ After receiving debt relief, the high-discount rate country would like to accumulate the same amount of external debt again. There will be an amount of new borrowing corresponding to the amount of debt relief, until the old ratio of net worth to GDP is restored. Alternatively, debt relief conditionality could try to control new borrowing by constraining a country’s noninterest current account deficit. Even this constraint could be ineffective, however, because a country can reduce its assets to restore its desired low level of net worth in the long run. Finally, a government can impose its own high discount rate on the rest of the economy through policies that tax private sector capital accumulation. If the government’s discount rate is unchanged before and after debt relief, then these bad policies will persist with debt relief.

Poor countries may have a higher discount rate because individuals with shorter expected lifetimes have higher discount rates (Blanchard & Fischer, 1989, Chap. 3.3), and lifetimes are shorter in poor countries. Alternatively, the government in poor countries may have a higher discount rate because its expected tenure in office is shorter, because poor countries have more political instability (Easterly, 1999b). The government may then impose its higher discount rate on the whole economy, as I argue below.

The “high discount rate” can also be seen as shorthand for political economy factors that cause the government to overspend, prey on private enterprise, and overextract rents from the economy to distribute as patronage. There is a large literature on the “neopatrimonial” and “predatory” state (see Nafziger, 1993 and Van de Walle, 2001 for African examples). The ruling elite in impoverished societies keeps itself in power by buying off potential rivals and rewarding supporters, not to mention repressing opposition by force. All of this requires the state to mobilize resources, which it does by borrowing against the future as well as explicitly or implicitly taxing current production at the cost of future growth. Given the elite does not feel secure, the future does not have a strong voice in elite circles.

Therefore, if the discount rate is unchanged before and after debt relief, the government will respond to debt relief by new borrowing until the old ratio of net worth to consumption is restored. In the same vein, if the terms of lending are made more favorable by substituting concessional for nonconcessional debt then countries will reborrow to maintain the net present value of debt service. Alternatively, the country could run down assets to restore the old ratio of net worth to consumption.²⁵ (The country does benefit from higher consumption than would have been possible in the absence of debt relief.)

On the other hand, what would happen if the discount rate of the government changes? If a reformist government succeeds a spendthrift one, then debt relief would successfully provide a painless transition to a higher ratio of net worth to consumption (higher assets and lower debt to consumption ratios).

Above, I described one possible reaction to debt relief is for the country to reborrow enough to restore the old ratio of net worth to GDP. But, the external creditors (many of them official lenders) may impose a limit on borrowing. A common formulation is to provide enough loans as to maintain a certain target debt ratio (usually a ratio to GDP or to exports). I will suppose here that a country’s external creditors supply an amount of credit such that its debt to GDP ratio is equal to some stable constant.²⁶

Suppose that debt relief lowers the permitted debt ratio and imposes the lower level of borrowing associated with maintaining the new debt ratio. This kind of debt relief could simply cause a one-for-one reduction in national assets with the amount of debt reduction as percentage of GDP. Since liabilities have been reduced, assets will in the long run decrease as well. Being prevented from running up as much debt as previously to finance consumption, the country will compensate by running down assets instead. If the current debt level was “unsustainable” in that it represented too heavy a burden relative to assets, then the new debt level will be equally “unsustainable” because society’s assets will decrease with the debt.²⁷

So far I have not focused on the government, leaving it unclear whether a high discount rate could also characterize the private sector. We would generally expect that the government will be more impatient than the private sector, because of uncertainty of tenure and lower

concern for future generations of government. Governments in poor countries are subject to greater instability (e.g., more coups) than in rich countries, thus have shorter expected tenures in office, and thus have a higher discount rate than in rich countries. Governments in poor countries could however, impose their high discount rate on the whole economy through high tax rates and other policies adverse to growth.

The government has a tradeoff between taxing the private sector to finance government consumption today versus government consumption tomorrow financed by the future tax base (which is decreasing in the tax rate today). The private sector accumulates net worth and grows faster the more that the rate of return to capital exceeds the discount rate, except that the government imposes a tax on the rate of return to capital.

The optimal tax rate for the government is increasing in the government's discount rate. Intuitively, the government is trading off consumption today (increasing in the tax rate) versus consumption tomorrow (increasing in private wealth tomorrow and thus decreasing in the tax rate). A high discount rate government will choose to tax the private sector heavily. The government will succeed in imposing its intertemporal preferences on the whole economy through its policies. The policies may include predatory behavior that implicitly rather than explicitly taxes capital accumulation, such as high corruption, real overvaluation, a high black market premium, high inflation, or financial repression.

The empirical prediction is that a high discount rate government will have bad policies that explicitly or implicitly tax the private sector. If the government's high discount rate is unchanged over time, then we would expect these bad policies to remain unchanged before and after debt relief.

There are other ways in which debt relief creates perverse incentives for new borrowing. The way that debt relief has been granted, offering progressively more favorable terms over time for two decades, also has perverse incentive effects. Most obviously, it creates moral hazard incentives to borrow in the expectation that part of this debt will be forgiven.

More subtly, incremental debt relief creates incentives to delay policy reforms, waiting for a progressively higher "price" at which to "sell" policy reforms. If the rate at which the amount of relief is increasing exceeds the international

market interest rate, then policy-makers will wait to "sell" policy reforms.

Going further, we can think of a Hotelling-type model for the depletion of the "stock" of needed policy reforms. If there is a supply of needed reforms in HIPCs and a demand for reform by donors, then the equilibrium "price" of a marginal reform will rise at the rate of interest. If HIPCs reform "too fast," this would drive down the price below the interest rate trajectory—which means that HIPCs prefer to wait in such a case, driving the price back up to the equilibrium interest rate trajectory. This suggests policy-makers will adopt a gradualist rather than big-bang strategy of economic reform in response to gradual debt relief, only gradually depleting their stock of "necessary reforms." This result is undesirable because it means that countries will be stuck longer with poor policies.

There is also a perverse incentive created by the response of debt relief to *changes* rather than the *level* of policies. Obviously, countries with worse initial policies have more scope for improvement. If debt relief responds exclusively to *changes*, it may result in aid resources going to countries with a worse *level* of policies on average. Countries could even engage in zig-zag behavior, getting debt relief as they improve policies and then backsliding to the old level of policies. This is the kind of result that Burnside and Dollar (2000) depicted as unproductive aid.

Finally, I have been dealing with the *demand* for external loans, but not with their *supply*. Countries that have negative growth, falling assets, bad policies, and increasing debt are poor credit risks. The prospect of debt forgiveness also would tend to chill private lending. We could expect that private creditors will stop lending at some point. If multilateral and other official lenders perceive their role as "filling the financing gap," then their role will increase over time in countries with falling assets and increasing debt.

The official lenders may want to keep lending even when the loans do not promote development because multilateral and donor agencies are often rewarded for volumes of assistance rather than results. The official lenders may feel the need to keep lending so the country does not default on earlier obligations to private or official creditors. The International Financial Institutions will thus fail to enforce conditions even as they keep giving new loans. (The World Bank (1998b) mentioned that it had given loans

to finance the same agricultural policy reforms in Kenya five separate times.) The official lenders should then bear some of the blame for financing bad governments who pursue policies detrimental to their own citizens.

I will not try to distinguish these stories from each other in explaining becoming heavily indebted after debt relief. One alternate hypothesis to these that I will test would be that HIPC's became heavily indebted through bad shocks such as adverse terms of trade growth and war. I test this hypothesis in the results below. The other testable predictions from these stories are that high-debt countries will show other signs of heavily discounting the future (such as asset decumulation), that new borrowing will be associated with debt relief, and that policies will be worse in high debt countries. The irresponsible official lender story predicts that public debt will substitute for private debt. These are sharp predictions contrasting with conventional wisdom that debt relief finances or encourages asset accumulation and that actual debt falls over time with improved terms on the debt.

3. THE EMPIRICAL EXPERIENCE WITH DEBT RELIEF

We can examine successively the response of new debt and assets to debt relief. I examine the 41 HIPC's as so classified by the IMF and World Bank.²⁸ The countries are Angola, Benin, Bolivia, Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, Congo (Dem. Rep.), Congo (Rep.), Côte d'Ivoire, Equatorial Guinea, Ethiopia, Ghana, Guinea, Guinea-Bissau, Guyana, Honduras, Kenya, Lao PDR, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Myanmar, Nicaragua, Niger, Rwanda, Sao Tome and Principe, Senegal, Sierra Leone, Somalia, Sudan, Tanzania, Togo, Uganda, Vietnam, Yemen, and Zambia.

The reader may worry that we have a sample selection bias, because these countries were classified as HIPC's at the *end* of the period. Hence, it would not be so surprising if we find that things did not go well for these countries in the period prior to their classification. This sample selection is justified, however, because it is this group that the debt relief efforts targeted. We can think of the following results as documenting the extent of adverse selection in debt relief efforts. We will retrace the path of this

group to see if the prediction of unchanged behavior before and after debt relief hold relative to other developing countries.

(a) *Debt accumulation and asset decumulation*

The theoretical stories predicted that a high-discount rate country would be characterized not only by high debt accumulation but also by low asset accumulation, or even asset decumulation. This contrasts with the traditional view that debt accumulation finances asset *accumulation*. The natural place to look for evidence on asset accumulation is investment. This is a poor indicator, however, as Devarajan, Easterly, and Pack (2001) have found that traditionally measured investment is not productive in Africa where most of the HIPC's are concentrated.

A better albeit indirect way of getting at productive asset accumulation is to look at the behavior of per capita output. If we take per capita output as proportional to a broad concept of productive capital per capita, including physical and human capital, technological capital, knowledge, etc., then the evolution of per capita output would tell us something about the tangible and intangible forms of asset accumulation.

The natural measure of HIPC's' external liabilities is their debt to GDP ratio. But since much of the HIPC's' debt is concessional, the face value of the debt is a poor measure of the debt burden. I use the present value of debt service as a ratio to GDP as the debt indicator. Surprisingly, despite the attention given to the poor countries' debt problem, I was unable to find time series of the present value of debt service for HIPC's. (The World Bank's *Global Development Finance* reports an estimate of the present value of debt service for the latest year, while earlier reports reported three year moving averages going back to 1991. These moving averages do not give internally consistent numbers for individual years, so I do not use them.) Using data on scheduled debt service from the Debt Reporting System of the World Bank, a time series 1979–97 for each of the HIPC's' present value of debt obligations was calculated for this paper.²⁹

Figure 1 shows the evolution of the HIPC's' per capita output in 1997 prices and their median debt to GDP ratio in present value terms.³⁰ If we take the trend fall in output over 1979–97 as representing a drop in potential output, and potential output as proportional to a broad notion of productive assets, then there

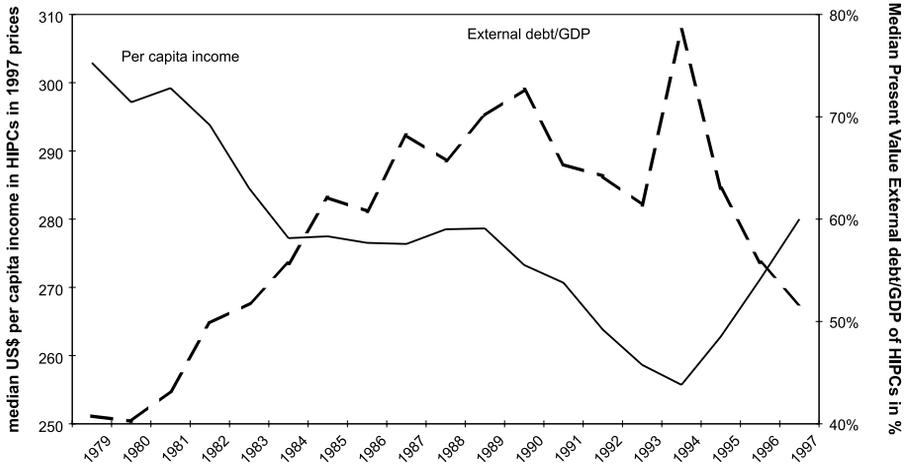


Figure 1. *External debt/GDP (present value terms) and per capita income in HIPCs.*

was asset decumulation at the same time as there was high debt accumulation. The HIPCs' debt problem arose not just because of new borrowing, but because of disinvestment in productive potential. This is consistent with a story in which the HIPCs can be characterized as persistently high discount rate countries.

There is some possibility of a break point toward the end of the period in which the debt ratio went down and output went up. This corresponds to the period after the new HIPC debt relief initiative was launched, which could indicate more success for this latest debt relief attempt. But, the period after the break is too short to evaluate whether it is a permanent change.

I next turn to oil production, for which we have 1987–96 data. There are 10 HIPCs that are oil producers. Oil production is a form of asset decumulation, since it takes an asset in the form of oil in the ground and turns it into cash that can be an alternative form of financing consumption if conventional debt is constrained. Did HIPCs have higher oil production growth over this period of debt relief than did the non-HIPC oil producers? The answer is yes. The average log growth in oil production is 6.6 percentage points higher in the HIPCs than in the non-HIPCs, which is a statistically significant difference. The average log growth in oil production in HIPCs was 5.3%; in non-HIPCs, it was -1.3%.

Another form of asset decumulation taking place at this time was sales of state enterprises to foreign purchasers. We have data on priv-

atization foreign exchange revenues for 1988–97. Over this period, total sales of state enterprises in the HIPCs amounted to US\$4 billion. This is an underestimate, because not all privatization revenues are recorded in the official statistics. Even using this flawed data, there is a positive and significant correlation of 0.35 across the 41 HIPCs between the amount of debt forgiveness and the amount of privatization foreign exchange revenues. Privatization may have been done for efficiency reasons or even as a condition for debt relief, but it also may suggest a high discount rate economy running down its assets.

(b) *Debt relief and new borrowing*

The data on debt relief from the World Bank's World Debt Tables only go back to 1989. The relationship between debt relief and new borrowing over this period is interesting: total debt forgiveness for 41 heavily indebted poor countries over 1989–97 totaled US\$33 billion, while their new borrowing was US\$41 billion. This seems to point in the direction of the prediction above that debt relief will be met with an equivalent amount of new borrowing.³¹

Was new borrowing the highest in the countries that got the most debt relief? Running a regression for the 40 HIPCs that have complete data, there is a statistically significant association between average debt relief as a percent of GDP and new net borrowing as percentage of GDP. The offset in this case is

less than one for one: one percentage point of GDP higher debt forgiveness translated into 0.34% of GDP new net borrowing.

Another bit of evidence that debt relief did not lower debt significantly is to look at external debt to export ratios over 1979–97. I again use the present value of debt service as a measure of external debt, but now as a ratio to exports. I again use 1979 as a base year because it was the year the UNCTAD summit inaugurated the current wave of debt relief. I have data for 28–37 HIPCs over 1979–97. Despite the ongoing debt relief, the median present value debt to export ratio rose strongly during 1979–97 (Figure 2). We can see three distinct periods: (i) 1979–87 when debt ratios rose strongly; (ii) 1988–94 when debt ratios remained constant; and (iii) 1995–97 in which debt ratios fell. The behavior in periods (i) and (ii) is consistent with failed debt relief, while the drop in the last period may indicate that the 1996 HIPC debt relief program has been more successful than earlier efforts.

Despite the drop in the last period, however, the median debt to export ratio is statistically

significantly higher in 1997 than it was in 1979. Again this result is not surprising given that we have selected the sample based on their debt at the end of the period. Still, it suggests that for a large group of 41 countries, new borrowing (more than) kept pace with the amount of debt relief, as would have been predicted by the model for countries with unchanged discount rates.³²

(c) *Regression analysis of HIPCs' macroeconomic imbalances and country policies*

In this section, I develop summary statistics of HIPCs' policy stance. I regress an average over the debt relief period 1980–97 of each policy indicator or macroeconomic imbalance on the log of initial income, and a dummy for HIPCs for the whole sample of less-developed countries (LDCs).

Table 1 shows the results. We see that the average levels over 1980–97 of current account deficits, budget deficits (with or without grants), M2/GDP, and real overvaluation, were worse

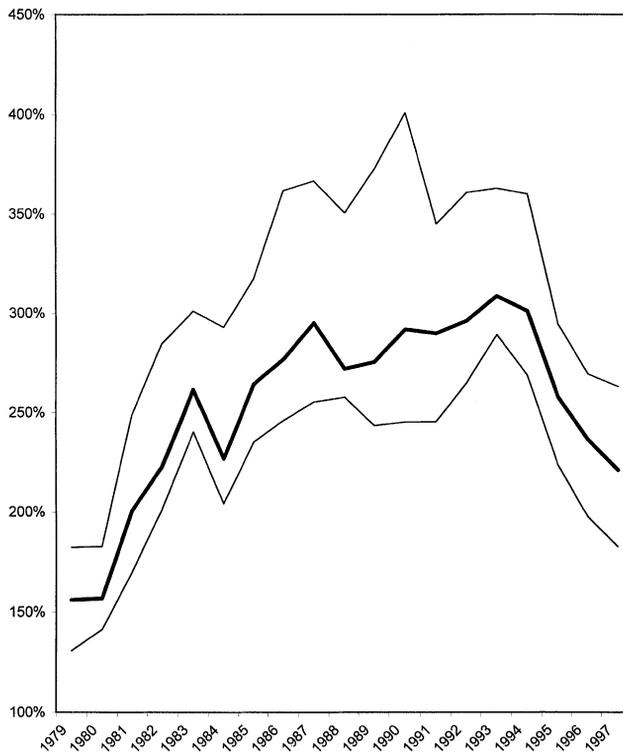


Figure 2. 95% confidence interval for median present value of debt of HIPCs as a ratio to exports.

Table 1. *Regression results for policies in LDCs 1980–97, controlling for income (sample of all LDCs)*

Dependent variable, average 1980–97	Current account balance/GDP		Budget deficit excl. grants/GDP	
	Coefficient	<i>t</i> -Statistic	Coefficient	<i>t</i> -Statistic
Log income, 1979	0.08	0.11	1.47	2.08
Dummy for HIPCs	-5.58	-4.36	-4.26	-3.67
R2	0.25		0.32	
# Observations	77		81	
	Budget deficit incl. grants/GDP		M2/GDP	
Log income, 1979	-0.34	-0.46	1.50	0.48
Dummy for HIPCs	-4.97	-3.94	-15.65	-2.96
R2	0.19		0.15	
# Observations	84		83	
	Log(1 + inflation rate)		Index of overvaluation (based on Dollar, 1992)	
Log income, 1979	0.13	2.60	9.07	1.13
Dummy for HIPCs	0.15	1.79	64.19	4.92
R2	0.08		0.30	
# Observations	82		68	
	Real interest rate		Log(1 + black market premium)	
Log income, 1979	-0.01	-0.47	0.04	0.60
Dummy for HIPCs	-0.05	-1.79	0.09	0.78
R2	0.05		0.01	
# Observations	74		77	
	CPIA (1–5 scale)			
Log income, 1979	0.07	0.72		
Dummy for HIPCs	-0.33	-2.15		
R2	0.11			
# Observations	77			

for HIPCs. The differences in HIPCs' real interest rate, black market premium, and inflation rates from the rest of the LDC sample are not statistically significant (although inflation and real interest rates are marginally significant at the 10% level).

The HIPCs also were worse on the broad measure of policy given by the World Bank's Country Policy and Institutional Assessment (CPIA). This measure of policies not only includes a rating of policy stance, but also of institutional quality—like the prevalence of corruption. The HIPCs' average CPIA 1980–97 was worse than the CPIA for other LDCs.

The result on the current account deficit is not surprising: obviously HIPCs got to be HIPCs by borrowing a lot! The results on policies are not as obvious, as the debt accumulation could have come from bad external shocks (on which more in a moment) rather than bad policies like real overvaluation, low financial depth, and poor CPIA.

Even more interesting is to examine the composition of financing the current account

deficit. Table 2 shows some intriguing patterns. First, HIPCs received less FDI than other LDCs, controlling for income. This may be an indirect indicator of the bad policies found on the other indicators: investors do not want to invest in an economy with high budget deficits, high overvaluation, and high corruption. Investors may also have worried what debt relief may have meant for other external liabilities like the stock of direct foreign investment. It also is a confirmation of the prediction that private capital flows will dry up in high discount rate economies with falling assets and increasing debt.

Second, despite their poor policies, HIPCs received more in World Bank and IMF financing than other LDCs. The result on World Bank financing is controlling for initial income (negatively related to World Bank financing). The effect (0.96% of GDP) is small relative to the size of the current account deficit, but large relative to the mean amount of World Bank financing (1.1% of GDP). The share of World Bank financing in gross disbursements also was

Table 2. *Financing composition of debt accumulation, 1979–97*

Dependent variable, average 1980–97	FDI/GDP		Coefficient	<i>t</i> -Statistic
	Coefficient	<i>t</i> -Statistic		
Log income, 1979	0.11	0.66		
Dummy for HIPCs	-0.84	-2.92		
R2	0.17			
# Observations	77			
	World Bank Financing/GDP		IMF Financing/GDP	
Log income, 1979	-0.40	-3.76	0.05	0.41
Dummy for HIPCs	0.96	5.35	0.73	3.40
R2	0.53		0.15	
# Observations	83		83	
	World Bank share of disbursements/GDP		IMF share of disbursements/GDP	
Log income, 1979	-8.10	-5.72	0.69	0.79
Dummy for HIPCs	7.17	3.14	4.37	3.12
R2	0.54		0.13	
# Observations	76		76	

Table 3. *Terms of trade shocks and war, 1979–97*

Dependent variable, average 1979–97	Least-squares log growth in terms of trade		Percent of period at war	
	Coefficient	<i>t</i> -Statistic	Coefficient	<i>t</i> -Statistic
Log income, 1979	0.00	-0.97	-0.04	-0.75
Dummy for HIPCs	0.00	-0.05	-0.09	-1.10
R2	0.02		0.02	
# Observations	77		76	

significantly higher (by 7.2 percentage points) in HIPC than in non-HIPCs. This confirms the prediction that multilateral lenders “filling the financing gap” will have a significant role in financing high-discount rate economies.

The results are similar for the IMF. I regressed IMF financing on a constant, initial per capita income and the HIPCs dummy. The HIPC dummy is indeed significant. Like the World Bank HIPC dummy, the effect is small relative to current account deficits (0.73% of GDP), but large relative to the non-HIPCs average IMF financing (0.5% of GDP). The HIPC effect for the IMF’s share of disbursements is of the same sign and significant—the IMF had 4.4 percentage points more of gross disbursements to HIPCs than to non-HIPCs, controlling for income. The HIPCs got to be HIPCs in part by borrowing from the World Bank and IMF. I will go into more detail on who gave loans to the HIPCs (and when) in a later section.

One explanation of the HIPCs’ becoming heavily indebted is that they suffered adverse

terms of trade shocks. Table 3 shows, however that the least-squares log growth in terms of trade over 1979–97 was not significantly worse for HIPCs. The LDC sample as a whole shows significantly worsening terms of trade over 1979–97, but the HIPCs do not stand out as any different than their less heavily indebted neighbors.

Another possible shock that might have caused HIPCs to have high debt ratios is war, since it both destroys productive assets and causes additional government spending that has to be financed. But, as shown in Table 3, HIPCs were not more likely to be at war than the rest of the LDC sample.³³

In sum, we have a pattern of poor policy indicators that most needed to be improved to avoid a debt crisis. Not surprisingly, HIPCs’ policies were worse precisely in those areas—high current account deficits and budget deficits—that led to high debt accumulation. Less obvious were bad policies on financial repression and exchange rate overvaluation. This is consistent with these countries having a high

discount rate that was unchanged before and after debt relief. This is also consistent with policy-makers waiting for the best deal during the incremental process of debt relief. It is also consistent with the moral hazard problem that after the initial debt relief in 1979, HIPCs may have rationally anticipated that much of their new borrowing would be later forgiven.

(d) *Current account deficits and budget deficits over time*

In addition to averages over 1980–97, it is important also to look for trends. Did HIPCs' policies get better over the two decades of debt relief? On the current account deficit, perhaps the most important measure of policy stance for heavily indebted countries, the news is not good. (This measure of the current account deficit treats grants as revenue rather than financing.) The median current account deficit has stayed high and constant at around 7.5% of

GDP over the period of incremental debt relief 1979–97.

The budget deficit to GDP ratio also fails to improve over the debt relief period 1979–97 (Figure 3), for a sample of 23–35 countries, if anything deteriorating to the very high level of around 10% of GDP. These figures treat grants as a source of financing. This would be justified if we think of grants as temporary, with the donors planning that the country exit from needing foreign aid after a certain interval. But, grants in practice may be permanent and they do not imply future debt servicing requirements, so it's of interest to see the budget deficit including grants. The grant-inclusive budget deficit still fails to improve for HIPCs (Figure 3).

The results on the current account deficit and budget deficit do not show a clear improvement in behavior during the process of incremental debt relief. This is consistent with the HIPCs being persistently high-discount rate economies.

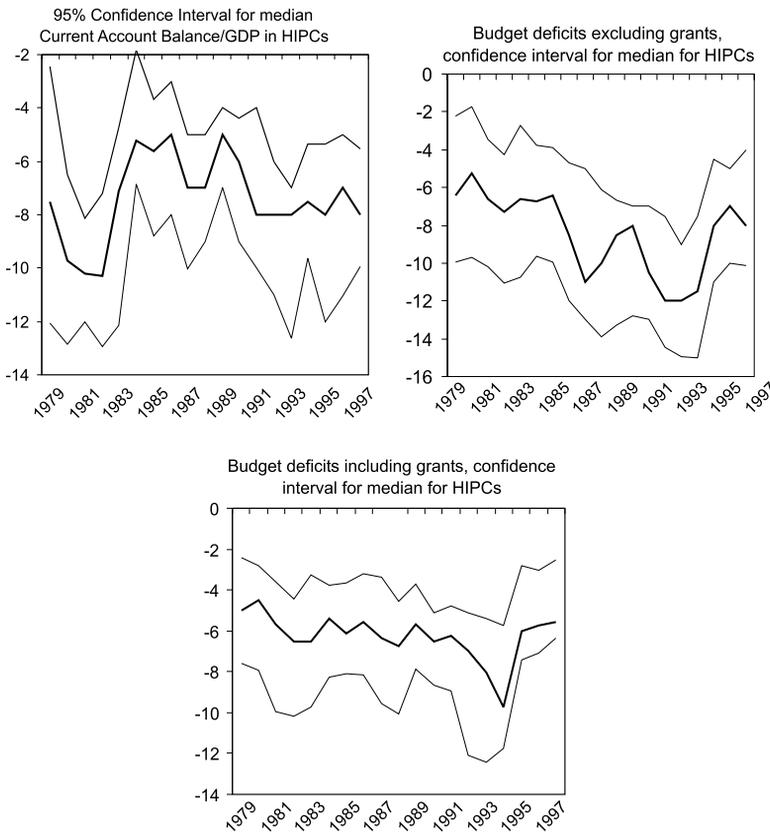


Figure 3. *Current account and fiscal balances over time in HIPCs.*

(e) *Debt relief and other country policies over time*

How have other HIPC policies behaved during the period of incremental debt relief 1979–97? As noted in the theoretical section, poor policies is one mechanism by which the government imposes its own high discount rate on the rest of the economy. There is also the worry that countries would respond to incremental debt relief by postponing policy reforms, waiting for a higher “price” at which to “sell” policy reforms. Alternatively, countries could slowly reform, selling off pieces of reform as the price rises. The intent of the debt relief efforts, in contrast, was that policies would improve immediately as a condition for getting new debt relief. Which happened?

The evidence is very mixed, as shown in Figure 4. The real interest rate for HICPs is an indicator of either the private return to capital if interest rates are uncontrolled or financial repression if there is a nominal interest rate ceiling. HICPs had flat real interest rates over time. Contrary to the stereotype of HICPs as financially repressed, the median real interest rate was positive for most of the period (although not significantly different than zero).

A different variable related to financial repression, the ratio of M2 to GDP (financial depth) in HICPs, shows a different picture. We have already seen that HICPs had worse financial depth than other LDCs. Financial depth, which King and Levine (1993a,b) identified as a critical determinant of growth, does not improve in the HICPs over time.

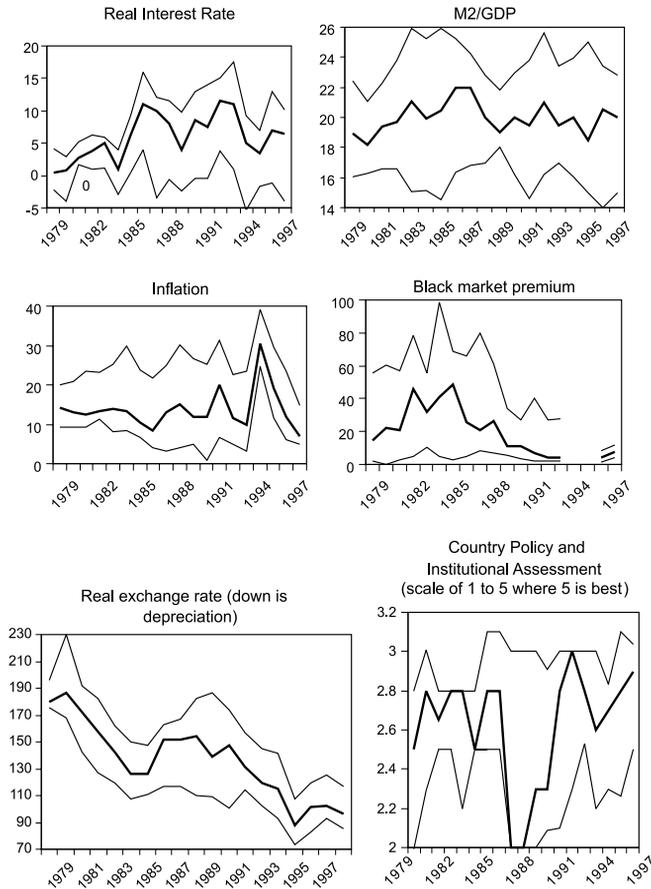


Figure 4. HICPs country policy indicators over time (95% confidence interval for median current account balance/GDP in HICPs).

The inflation rate oscillated in the HIPC's without any clear trend over 1979–97. The inflation rate was not in the range that (Bruno & Easterly, 1998) identified as associated with negative growth performance (40% and above), although it spent a few years in the 20–40 danger zone where there is a high risk of slipping into the above 40% zone (Bruno, 1995).

HIPC's spent a good part of the debt relief period with the black market premium above the 20% threshold defined by Sachs and Warner (1995) as one of the criteria for being a “closed” economy. After a wild period in the mid-1980s, however, there is a tendency for both the median and variance of the black market premium to fall over time in the HIPC's.³⁴

There is good news and bad news on another exchange rate measure, the measure of deviation of local prices from purchasing power parity at the official exchange rate. I construct an purchasing power parity index of Dollar (1992) to benchmark the real exchange rate as an average of 1976–85 for each country, then convert it to a time series using the usual definition of the real exchange rate ($P_{\text{Domestic}}/EP_{\text{US}}$). The good news is that the real exchange rate depreciates over 1979–97 in the HIPC's. This is one of the major achievements of this 20-year process of adjustment and debt relief.

The bad news is that the initial position was extreme overvaluation and the improvement was only gradual, so that the average exchange rate in the HIPC's for the period is severely overvalued (as we saw in the regression analysis). Another piece of bad news is that other LDC's also had a tendency toward real depreciation, so that at the end of the period the HIPC's were still 24% overvalued relative to other LDC's.

The HIPC's fared worse on our broadest measure of policy, the World Bank's subjective rating called the CPIA.³⁵ The HIPC's display no clear trend over time. This is consistent with the story that intertemporal preferences were unchanged before and after debt relief, and the government used poor policies to impose its high discount rate on the whole economy.

(f) *Supply of financing*

Figure 5 shows the composition of gross disbursements to HIPC's over 1979–97. The prediction that private credit would disappear and multilateral financing assume an increased share are more than confirmed. World Bank

International Development Association (IDA) financing alone more than tripled its share in disbursements. The share of private credit began the period 3.6 times higher than the IDA share; by the end of the period, the share of IDA was 8.6 times higher than that of private financing. The private credit flows do not take into account private capital flight, and so probably understate the degree to which private capital flows reversed themselves. A recent study found that Africans held 39% of private capital outside of the home country during the period in which Africa's high debt was accumulated (Collier, Hoeffler, & Patillo, 1999). Similarly, Ajayi (1997) finds that the stock of accumulated capital flight over 1980–91 was on average 40% of the external debt outstanding in the HIPC's, with such extremes as Rwanda (94.3%), and Kenya (74.4%).

The share of IMF financing, which began at the same level as IDA financing, remained roughly unchanged. The other important change is away from bilateral financing in favor of IDA and other multilateral concessional finance.

Another important thing to examine is net transfers (net flows minus interest payments). On debt that carries a market interest rate, positive net transfers imply that the debt is growing faster than the interest rate. This implies the debt is unsustainable (if the recipient continued to borrow to pay the interest and then some, this would imply the present value of debt is unbounded). Net transfers from concessional sources, on the other hand, carry a large grant element and so do not have the same implications for debt sustainability; if anything higher concessional net transfers should increase the likelihood of sustainability.

Figure 6 shows that all the nonconcessional net transfers were positive, and so contributed to the rapid growth of debt during 1979–87 (recall Figure 2). But, there were also large net transfers from concessional sources (IDA, other multilaterals, and the bilaterals)—total net transfers to the HIPC's of US\$33 billion—which makes it all the more striking that these countries became increasingly highly indebted in net present value terms over this period.

Figure 7 shows that there was a huge shift in net transfers from 1979–87 to 1988–97, a period in which debt ratios stabilized. Large positive net transfers from IDA and bilateral concessional sources offset negative net transfers for IBRD, IMF, bilateral nonconcessional, and private sources.³⁶ This was another form of

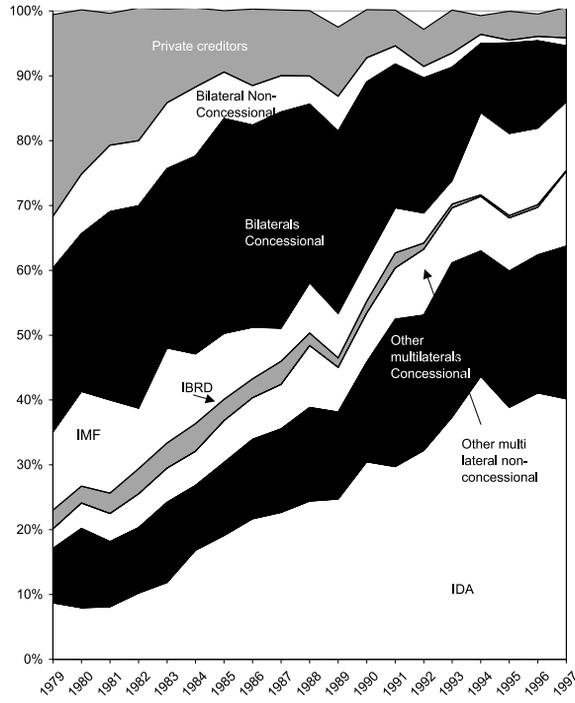


Figure 5. Composition of gross disbursements to HIPC's.

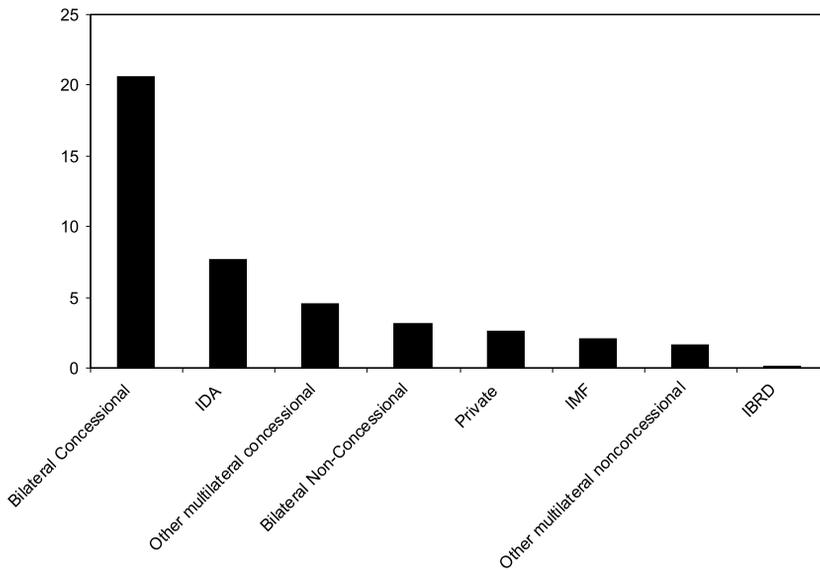


Figure 6. Net transfers to HIPC's by creditor, 1979-87 (billion US\$).

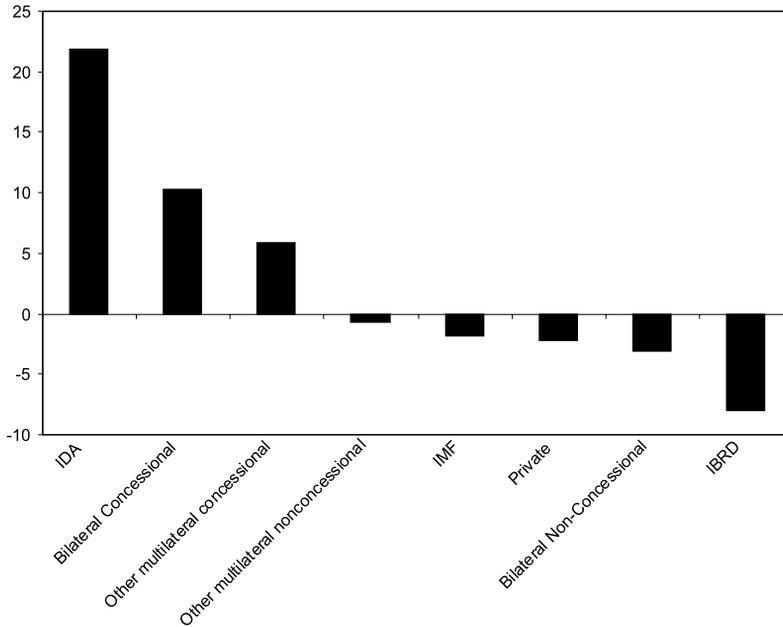


Figure 7. Net transfers to HIPC's by creditor, 1988-97 (billion US\$).

“debt relief,” since it exchanged concessional debt with a large grant element for nonconcessional debt. The net present value of debt however, remained roughly unchanged over this period, at least until the last few years, suggesting that these economies persisted in “high discount rate behavior.”

This increase in multilateral lending (a good part of it structural adjustment lending) took place despite the poor policies noted earlier, which casts doubt on the wisdom of official lending that took place. For example, Zambia received 18 adjustment loans over 1980-99 from the IMF and World Bank but had sharply negative growth, large current account and budget deficits, high inflation, a high black market premium, massive real overvaluation, and a negative real interest rate for most of that period. As of the year 2000, when it received a commitment of debt relief under the HIPC initiative, Zambia still had high inflation and high budget deficits.

Côte d'Ivoire got 26 adjustment loans over 1980-99 but had negative growth, high current account deficits, and an overvalued real exchange rate. After the initiation of adjustment lending, Bolivia had a hyperinflation, negative real interest rates, and overvaluation. Bolivia

stabilized inflation by 1987, but growth was poor, real interest rates went from excessively negative to excessively positive, and overvaluation remained.

A cynical interpretation would be that as countries could not or would not pay their nonconcessional debt, official lenders replaced their nonconcessional debt with concessional debt that had a large grant element. This should have significantly eased the debt servicing burden of the HIPC's. Even so, the HIPC's still had enough of a debt problem at the end of the period that lenders initiated more debt relief.

A major motivation of the HIPC Initiative has been to use the resources freed up by debt relief to help the poor. It is quite a challenge however for the HIPC governments to implement effectively conditions on increasing poverty-reducing spending when they have such a mixed record on conditions on improving macroeconomic policies—macropolicies are usually considered easier to implement than poverty reduction programs. Moreover, the data are not in place for governments to even know whether spending is reaching the poor. A survey in March 2001 found that only two of 25 of HIPC's would be able to carry out satisfactory

expenditure-tracking systems within one year (IMF & IDA, 2001). A year later, in March 2002, none of the HIPC's expenditure tracking systems was rated as satisfactory and Uganda was the only HIPC to have reported actual poverty-reducing spending in fiscal year 2000/2001 (IMF & IDA, 2002).

Concessionary finance used unproductively leads to indebtedness which is then used as an argument for further concessionary finance (Bauer, 1972, p. 127).

4. CONCLUSIONS

The theoretical concepts in this paper predict that governments with unchanged discount rates in the long run will respond to debt relief by running up new debts or by running down assets. There are some signs that the incremental process of debt relief over the past two decades fulfilled these predictions. New borrowing was correlated with debt relief so that debt ratios actually got worse. Per capita output had a trend decline, suggesting decumulation of productive assets, broadly defined. Oil reserves were depleted more rapidly and sales of state enterprises to foreign owners were higher in countries that got debt relief.

Policies by which government implicitly or explicitly taxes asset accumulation displayed a mixed pattern of some gradual policy improvements and some failures to improve. The most important policy indicators for heavily indebted countries—the current account deficit and the budget deficit—failed to improve, and they remained above other LDCs' levels controlling for their initial values in 1979.

There is also some good news. HIPC's exchange rate overvaluation and black market premium improved over time. Debt ratios fell in the past three years, and per capita income rose. This could indicate that the most recent HIPC debt relief initiative has been more successful than earlier debt relief efforts, although we have only a few years of data on which to draw conclusions. Debt relief at least makes possible higher consumption in HIPC's, if nothing else.

Still, the problem of the adverse selection of HIPC's remains a serious one. By 1997, with the coming of the new multilateral debt relief initiative, HIPC's received 63% of the flow of resources devoted to poor countries despite only accounting for 32% of the population of those countries.³⁷ Including debt reduction as aid,

Côte d'Ivoire received 1,276 times more per capita aid net flow than India in 1997.³⁸

The results on composition of financing are also rather alarming. The HIPC's debt crisis developed because of the expansion of official lending. The official lenders did not seem to follow the same prudential rules as private capital, which pulled out of the HIPC's. The IMF and World Bank provided more financing to HIPC's over 1979–97 than other countries of their income level, despite their worse policies. In the second half of the period, positive net transfers from IDA and bilateral concessional sources offset negative net transfers from IBRD, IMF, bilateral nonconcessional and private sources.

What are the policy implications? Debt relief is futile for governments with unchanged long-run preferences (i.e., governments that continue to be dominated by rent-seeking elites). At best, only governments that display a fundamental shift in their development orientation should be eligible for debt relief. To assess whether governments have made such a fundamental shift in preferences, some track record of development-oriented behavior should be required prior to granting debt relief. There were important steps in this direction in the 1996 HIPC initiative, which unfortunately may have been weakened by the 1999 "enhanced HIPC." Official lenders should not keep "filling the financing gap" in violation of prudential standards of creditworthiness.

Perhaps what has been most damaging to incentives for new borrowing and delayed reforms is the creeping process of debt relief over the past 20 years. Although debt relief is done in the name of the poor, the poor are worse off if debt relief creates incentives to delay reforms necessary for growth.

A once-and-for-all program is greatly superior to a gradual program of increasing relief. The once-and-for-all program has to attempt to establish a credible policy that debt relief will never again be offered in the future, and that it is only giving debt relief to governments with a shift in development orientation. If this is problematic, then the whole idea of debt relief is problematic. It results in more resources going to countries with bad policies than poor countries with good policies. It is ironic that the aid community allegedly arrived at the consensus "aid works in a good policy environment" while one of the principal development efforts has been a program that selects countries based on past *bad* policies.

NOTES

1. World Bank (1998a, p. 56).
2. Dupuy (1988, p. 116) and Lundahl (1992, p. 39, 41, 244).
3. Dommen (1989) and Wynne (1951, pp. 5–7).
4. On September 23, 1999, a delegation including U2's Bono, pop entertainment figures Quincy Jones and Bob Geldof, and Jeffrey Sachs met with Pope John Paul II on Third World debt relief. For more on Jubilee 2000, see the web sites www.jubileeusa.org and www.jubilee2000uk.org.
5. <http://www.jubilee2000uk.org/main.html>.
6. <http://www.jubilee2000uk.org/> In 2001, there was also a campaign called “drop the debt,” featured at <http://www.dropthedebt.org/home.html>. On June 19, 2001, the coalition unveiled a controversial ad featuring a healthy Western baby breast-feeding from a malnourished African mother and asked “have not we taken enough?” As of April 2002, the “drop the debt” web site was no longer operating but the www.jubileeusa.org site uses the same slogan.
7. *International Herald Tribune*: June 14, 1999, p. 1; *Financial Times*: June 21, 1999, p. 3; see also the World Bank web site on the HIPC initiative www.worldbank.org/hipc.
8. *International Herald Tribune*: June 12, 1999, p. 6; see also Center for International Development (1999).
9. The quote is from UNCTAD (1967, p. 3).
10. World Bank (1979, pp. 7–8); UNCTAD (1983, p. 3).
11. World Bank (1981, p. 129).
12. World Bank (1984, p. 46).
13. World Bank (1986, p. 41).
14. World Bank (1991a, p. 176).
15. World Bank (1988a, p. xix). The general literature started noticing low-income African debt at about the same time. See Greene (1989), Humphreys and Underwood (1989), Husain and Underwood (1991), Lancaster and Williamson (1986), Mistry (1988), Nafziger (1993), and Parfitt and Riley (1989). For more recent compilations of analysis, see Iqbal and Kanbur (1997) and Brooks *et al.* (1998).
16. World Bank (1988b, p. xxxviii).
17. World Bank (1989, p. 31).
18. World Bank (1990, p. 29).
19. World Bank (1991b, p. 31).
20. World Bank (1993, p. 6).
21. World Bank (1994a, p. 42).
22. Boote, Kilby, Thugge, and Van Trotsenburg (1997, p. 126, 129).
23. Other analysts like Roodman (2001) also point out that Indonesia, Nigeria, and Pakistan have as good a claim to be HIPCs as the official HIPCs according to most objective criteria.
24. See Easterly and Levine (1997) on ethnic polarization.
25. The consumption path will also shift up by the annuity value of the lump-sum transfer implied by debt relief. In a real life example of part of this consumption effect, the President of Nicaragua gave workers a half day off to celebrate being part of the HIPC program.
26. The idea of maintaining a stable external debt to GDP ratio as one criterion for current account sustainability is common in official agencies and in the academic literature. See for example, Cohen (1996), Dadush, Dhahreshwar, and Johannes (1994), Milesi-Ferretti and Razin (1996), Roubini and Wachtel (1998), Van Wijnbergen, Anand, Chhibber, and Rocha (1992), and World Bank (1998a).
27. I have treated all assets as domestic capital stock, and have not introduced the possibility of foreign assets. It is straightforward to extend the definition of A to include foreign assets (capital flight). Therefore, the country could reduce its accumulation of flight capital abroad in response to a reduction in available new borrowing. There is ample scope for flight capital to adjust at the margin, and flight capital is a major factor in HIPCs (see below). Of course, the flight capital is in

private hands while the debt is public, so there is the “transfer problem” of taxing the private sector to pay the public debt.

28. See the World Bank web site www.worldbank.org/hipc.

29. The discount rate used is the average LIBOR over 1979–97.

30. Since debt is not in PPP prices, I also use a non-PPP measure of output—the World Bank’s World Development Indicators Atlas method per capita income in 1997, and then apply median real per capita growth in HIPCs to get the series. The HIPCs’ median debt to GDP ratio is somewhat lower than that in the World Bank’s Global Development Finance (50% here compared to 70% in GDF), because the discount rate I used is higher. Nevertheless, the correlation of debt to GDP ratios between GDF and mine across the HIPCs is 0.90.

31. Unfortunately, these figures are in nominal rather than NPV terms. But, since NPV of debt to exports is fairly stable over this period, this supports the idea that new borrowing replaced forgiven debt. Moreover, the relationship between debt relief and new borrowing year by year is not contemporaneous. New borrowing is concentrated toward the beginning of the period, while debt relief is concentrated toward the end of the period. One possibility is that the high level of new borrowing caused a threshold to be passed that resulted in debt relief; this possibility suggests a potentially serious problem with moral hazard. Another related possibility is that borrowing countries expected progressively more favorable terms of debt relief and engaged in pre-emptive new borrowing to keep their long-run ratio of net worth to GDP unchanged. In this case, debt relief was an illusion. Finally, it is possible that the debt relief efforts of 1996–97 were more successful than earlier efforts.

32. The calculation for this paper that the median debt to export ratio in 1997 is 221% is lower than the World Bank’s Global Development Finance (GDF) estimate of 278%. Obviously, the present discounted value is sensitive to the assumption on the discount rate. Still, the correlation across HIPCs between the debt to export ratios from GDF and those from this paper in 1997 is 0.78.

33. The war variable was the percent of time at war on national territory during 1979–94.

34. Drazen and Easterly (2001) find that inflation and the black market premium display a “crisis provokes reform” property, whereas the growth rate, the budget deficit, and the current account deficit do not. They also find that aid is reduced at high levels of inflation and the black market premium, while it increases with current account deficits and budget deficits.

35. The CPIA has four components, which are Macroeconomic Management and Sustainability of Reforms, Policies for Sustainable and Equitable Growth, Policies for Reducing Inequalities, and Public Sector Management. It is available for 1977–98. These results should be taken with a grain of salt, not only because of the subjective element but also because the methodology for the rating has changed over time.

36. IDA is the concessional lending arm of the World Bank, while IBRD is the nonconcessional lending part of the World Bank.

37. This calculation sums net flows of long-term debt and debt stock reductions going to HIPCs and to other low income economies, where low income is defined as in the World Bank’s World Development Indicators.

38. India’s low per capita aid receipts represent not only its suffering from the adverse selection of aid donors, but also from the tendency of large countries to receive small amounts of aid per capita.

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