

Working Paper

INTERNATIONAL MONETARY FUND

IMF Working Paper

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WP/99/142

INTERNATIONAL MONETARY FUND

Policy Development and Review Department

**From Toronto Terms to the HIPC Initiative:
A Brief History of Debt Relief for Low-Income Countries**

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October 1999

Abstract

The low-income country debt crisis had its origins in weak macroeconomic policies, and official creditors' willingness to take risks unacceptable to private lenders. Payments problems were initially addressed through nonconcessional reschedulings and new lending that maximized financing while containing the budgetary costs for creditors. This led to an unsustainable buildup in debt stocks. More recently, debt ratios have improved, reflecting both adjustment and substantial debt relief. The paper estimates debt relief initiatives since 1988 have cost creditors at least \$30 billion, and possibly much more. This compares with the estimated costs of about \$27 billion under the enhanced HIPC Initiative.

JEL Classification Numbers: H63, F34

Keywords: External Debt; HIPCs; Low-Income Countries

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¹Both Policy Development and Review Department at time of writing. We would like to thank Barbara Dabrowska for her valuable research assistance as well as other colleagues in PDR, the Paris Club Secretariat, the World Bank and the OECD for their helpful comments on this paper. Errors and omissions are our responsibility alone.

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I. INTRODUCTION

The approach of the millennium and the associated campaign to cancel the debt of low-income countries has heightened public awareness of initiatives to solve the debt crisis of low-income countries (LICs). In practice, the history of debt relief efforts goes back at least two decades. LIC debt issues have remained high on the agenda of G-7 economic summits since the mid-1980s and throughout the 1990s—most recently at the G-7 summit in Cologne. How did the crisis arise, and why is it taking so long to resolve? What debt relief has been provided during this time, and what has been the financial cost to creditors? These are questions this paper addresses.

Official creditors have been providing substantial debt service relief to low-income countries ever since repayment problems first developed on a systematic basis in the late 1970s and early 1980s. The Cologne Initiative is a further chapter in a story which started with official attempts to help those LICs with payments difficulties to grow out of their liquidity problems. The strategy involved comprehensive rescheduling of payments falling due and new lending packages linked to structural adjustment programs supported by the IMF. By the late 1980s, however, the assumption of the ultimate recoverability of much of the debt which had accumulated started to be seriously questioned by many creditors. The accounts of the official export credit agencies (ECAs) came under much closer scrutiny as the consequences of earlier lending policies began to be reflected in their net cash flow positions. Over time, there was an increasing acceptance that the payments problems of many LICs were related to solvency as well as liquidity, and that this would require action beyond traditional rescheduling and refinancing.

Many aid agencies started to forgive their aid-related debts in the late 1970s and 1980s. Various initiatives launched since 1987 to deal with official commercial claims from Toronto to Trinidad, and from London to Naples terms gradually shifted the focus of Paris Club rescheduling techniques from simple cash flow (or program financing) support to more complex mechanisms which would—in addition—slow the growth or reduce the stock of debt outstanding. Private creditors largely sold the stock of their claims on LICs at a deep discount to face value as part of an exit strategy. By 1996, debt relief from multilateral creditors was also placed on the agenda as part of the IMF and World Bank's comprehensive approach incorporated in the Heavily Indebted Poor Countries (HIPC) Initiative.

While the staffs of the IMF and the World Bank have published annual updates of the additional debt relief beyond traditional mechanisms expected to be forthcoming as a result of the HIPC Initiative,² there is currently no comparable estimate available of the impact of those earlier debt-relief mechanisms or, therefore, of their financial cost to the creditors concerned. Reliable data on past debt relief is sparse. Parties to individual agreements often

² See most recently "Modifications to the Heavily Indebted Poor Countries (HIPC) Initiative" EBS/99/138, available on the IMF web site, "www.imf.org"

wish the details to remain confidential. Different creditors have, in the past, measured and reported debt relief using different conventions and methodologies. Only recently have the OECD creditors reporting to the Development Assistance Committee (DAC) come to an agreement which will make reporting of debt forgiveness more comprehensive and consistent than it has been to date. Data is particularly weak and incomplete for relief provided on military debts and debts owed to non-Paris Club bilateral creditors.

Part II of this paper discusses some of the origins of the LIC debt crisis. It describes the evolution of official debt relief schemes thus placing the HIPC and Cologne Initiatives in their wider context. Part III attempts to quantify the costs of past debt relief efforts in present value (or budgetary cost) terms, allowing their scale to be compared with that expected to be provided through the enhanced-HIPC Initiative. Part IV provides conclusions.

II. HISTORY OF THE LIC DEBT CRISIS

During the 1970s and early 1980s many developing countries experienced a sharp increase in their external borrowing. Middle-income countries were largely borrowing from private creditors, especially the commercial banks. Most low-income countries, however, had more restricted access to private finance and were more often contracting loans either directly from other governments or their export credit agencies (ECAs) or through private loans which had been insured for payment by an ECA.

The role of the ECAs has largely been to support domestic exports by providing loans to developing countries in the context of a private sector unwillingness to accept certain risks, especially political risks.³ From the creditor government perspective, the motivation for much of the commercial lending or guaranteeing of loans to LICs during the 1970s and 1980s was the stimulation of their own exports, and the associated economic and industrial benefits of protecting or creating domestic employment, as well as the benefits of cementing diplomatic relations with the trading partners concerned. This was sometimes known as “national interest” lending. It was, by definition, a highly risky business, with a real possibility that eventually much of the debt would not be repaid. Industrial country governments were, however, willing to accept these risks. Most of the LICs were also aid recipients, and many official creditor governments saw the provision of commercially-priced export credit guarantees (a contingent liability, but not usually an immediate cost to the national budget) as a complement to direct grants and concessional Official Development Assistance (ODA) loans in their overall development cooperation policy.

Apart from the willingness of official creditors to lend (and the debtors to borrow), a number of other important factors contributed to the build up of the debt burden and the deterioration of debt indicators of LICs. These included adverse terms of trade shocks, a lack of sustained macroeconomic adjustment and structural reform, weak debt management

³ For a discussion of the historical role and objectives of Export Credit Agencies see M. Stephens “The changing role of the export credit agencies”, IMF, 1999.

practices, and political factors, such as wars and social strife. By the early 1980s, as the debt crisis developed, many low-income countries had been brought to the point of collapse by years of economic mismanagement.⁴

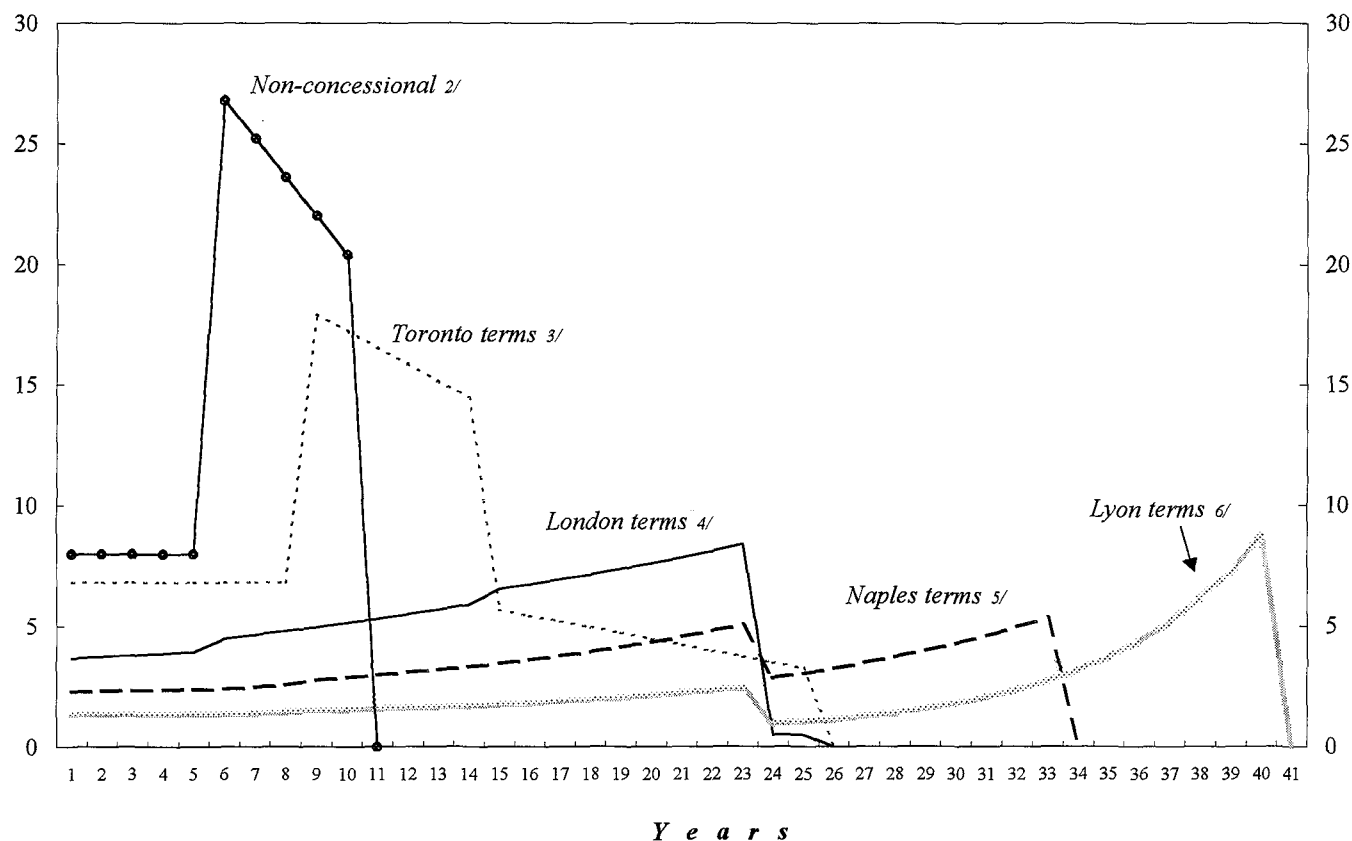
While private creditors typically reduced their exposure and cut their losses in response to LIC payments difficulties, the immediate response of official creditors came in the form of comprehensive non-concessional "flow reschedulings" in the Paris Club, new lending from multilateral agencies, such as the IMF and the multilateral development banks, as well as some additional credits from the ECAs. The then Soviet Union also continued to provide substantial financing to countries with which it had close ties. In responding to the crisis the official creditors were again willing to take risks beyond those acceptable to private commercial lenders, in order to support the adjustment programs of the debtor countries concerned. To encourage additional flows of official financing, new commercially-priced ECA credits, as well as multilateral loans, were effectively excluded from rescheduling, and thus given seniority over the bilateral debts which had been contracted prior to the first request for rescheduling.

A "flow rescheduling" in the Paris Club involves the creditor accepting to delay receipt of payments falling due during the period of an economic program supported by the IMF, and to reschedule such amounts for eventual repayment over the medium and long term. As the 1980s progressed, LIC Paris Club reschedulings increasingly involved the delay of most or all principal and interest payments falling due. Chart 1 illustrates that even under a non-concessional flow rescheduling payments demanded on rescheduled debts were typically reduced by over 90 percent immediately following an agreement. From 1976 to 1988 the Paris Club agreed 81 non-concessional flow reschedulings with 27 of the countries now identified as HIPC's (Table 1). These non-concessional flow reschedulings allowed for payments equivalent to about \$23 billion to be delayed into the future. The debt service paid by HIPC's nonetheless increased from about 17 percent of exports on average in 1980 to a peak of about 30 percent of exports on average in 1986, although this was of course less than scheduled debt service ratios.⁵ While this approach provided substantial cash flow relief, and allowed comprehensive adjustment programs to be fully financed, the regular rescheduling of debt service payments also helped to steadily increase the debt stocks outstanding.

⁴For a discussion of the factors leading to high indebtedness in a sample of ten low-income countries, see Brooks, Cortes, Fornasari, Ketchekmen, Metzgen, Powell, Rizavi, D. Ross, and K. Ross, "External Debt History of Ten Low-Income Developing Countries: Lessons from Their Experience", IMF Working Paper, WP/98/72 (1998).

⁵A flow rescheduling actually increases scheduled debt service as recorded in the balance of payments accounts, due to the additional interest and principal payments resulting from the rescheduling itself, which is added to the original debt service. A corresponding item of "debt relief obtained" is entered in the financing section of the accounts, with the difference between these two items being the cash debt service expected to be paid.

Chart 1. Low-Income Rescheduling Countries: Payments Profile
for Flow Reschedulings Under Non-concessional, Lyon, Naples, London, and Toronto Terms 1/
(In percent of amounts consolidated)



Sources: Paris Club; and IMF staff estimates.

1/ Assuming a market interest rate of 8 percent.

2/ Assuming equal principal repayments over 10 years of maturity and 5 years of grace.

3/ Equal distribution among the options. Based on actual distribution observed.

4/ Distribution (in percent) of Debt Reduction (DR) 40; Debt-Service Reduction (DSR) 45; Capitalization of Moratorium Interest (CMI) 10; LM 5. Based on actual distribution observed.

5/ 67 percent reduction in PV terms. Distribution (in percent) of DR 45; DSR45; CMI 10. The LM option is not included, given that any creditor choosing this option undertakes best efforts to change to a concessional option at a later date when feasible.

6/ 80 percent reduction in PV terms. Distribution (in percent) of DR 50; DSR50.

Table 1. HIPC: Paris Club Reschedulings by Type of Terms: 1976-98 1/

Paris Club Terms	Dates	Number of Reschedulings	Number of Countries	Amount Consolidated (In millions of U.S. dollars)	Stock or Flow	Stock of Debt Operations Amount Total (U.S. \$m)
Non-concessional	Before Oct. 1988	81	27	22,803	flow deals only	-
Toronto terms	Oct. 1988 - June 1991	28	20	5,994	flow deals only	-
London terms	Dec. 1991 - Dec. 1994	26	23	8,857	flow deals only	-
Naples terms	Since January 1995	34	26	14,664	7 stock deals	2,518
Lyon terms	Since December 1996	5	4	2,775	2 stock deals	709

Source: IMF staff estimates.

1/ Excludes Nigeria.

Provisioning Against Bad Debts

When Mexico and some other middle-income countries rescheduled their private debt in the early 1980s, default was seen as a significant threat to the world banking system, which was not yet prepared to take such losses on its books. By 1987, however, commercial banks started to announce large provisions against losses and this eventually allowed for a negotiated write-down, under the Brady Plan, of outstanding obligations owed to private creditors in a way that reflected the secondary market's valuation of the ultimate recoverability of the debts.

The secondary market prices for low-income country private debt, where they existed at all, were typically below those of the middle income countries, but export credit agencies continued to argue publicly that official exposure would eventually be recovered in full. Being supported by the full guarantee of their governments, ECAs were not generally obliged to follow the accounting practices required of other commercial lenders and insurance companies. Throughout the 1980s, therefore, ECAs generally reported the value of their sovereign claims at the full contractual value and had not made any provisions for bad and doubtful debts.⁶

These accounting practices allowed bilateral creditors to continue to provide comprehensive rescheduling or refinancing of payments falling due, without paying too much attention to the medium term prospects for ultimate repayment of these debts. One reason why the process was able to continue for so long was that in practice the rescheduling approach worked for both creditors and debtors, at least in the short run. Comprehensive non-concessional rescheduling reduced the pressure on official donors to find other—potentially more costly—approaches to ensuring fully financed adjustment programs in LICs. Within industrial country governments, aid ministries typically had no desire to provide additional direct finance to LICs, which would simply allow their export credit agencies to receive greater repayments on old export credits. Moreover, some aid ministries rightly feared that budgetary allocations for actual debt reduction on export credit loans would in practice compete with direct aid allocations, with all their alternative development uses. Similarly, the continued flow reschedulings allowed adjustment programs to be fully financed and the LICs to benefit from substantial new financing from both bilateral and multilateral creditors and donors. The approach, therefore, allowed for substantial cash flow financing to continue to be made available to LICs during the 1980s. Unfortunately, much of the money provided was not used effectively, and the debt stocks continued to grow.

⁶ See G.G. Johnson, M. Fisher, and E. Harris, "Officially Supported Export Credits: Developments and Prospects" IMF, May 1990, for a discussion of export credit agencies policies and approach to provisioning against sovereign claims during the 1980s.

Toronto Terms and Trinidad Terms

1987 marked a watershed in the financing of LICs. In April, Nigel Lawson, then UK Chancellor of the Exchequer, launched the first of what proved to be a series of UK LIC debt Initiatives, by arguing that Paris Club rescheduling for LICs should be at below market rates of interest.⁷ Thus, for the first time it was proposed that reschedulings of commercially priced ECA debt should involve a reduction in the present value of the debt outstanding. Governments were now being asked to formally acknowledge and finance past losses on their ECA activities.⁸ In addition, at the Venice G7 summit in 1987, Michel Camdessus, Managing Director of the IMF, put forward a plan for a new concessional IMF lending window for LICs—the Enhanced Structural Adjustment Facility (ESAF). This too would be financed by grants from the wealthier countries. Both these initiatives had as their goal a desire to avoid the debts of LICs rising in an unsustainable way, and to limit any significant new non-concessional lending or refinancing to uncreditworthy poor countries. Under the flow rescheduling approach creditors are able, if they wish, to agree to receive no payments at all during the consolidation period except interest on the rescheduling (moratorium interest); in exceptional circumstances creditors even agreed to defer this. Even so, if the rescheduling terms are non-concessional this implies no reduction in the present value of debts being rescheduled, and hence no accounting loss. The perceived problem was therefore not cashflow, but an excessive and unsustainable build up of the stock of debt—a “debt overhang”.

While the UK proposals were to lower interest rates charged on reschedulings, the French suggested reducing payments falling due by a third, while rescheduling the remainder at the appropriate market interest rate. The U.S., however, was unable to accept any form of present value reduction (accounting loss) but accepted to reschedule with longer grace periods—although this would not affect the book value of their debt which continued to be valued at 100 cents on the dollar. Eventually a compromise was reached at the Toronto G-7 summit in 1988, providing Paris Club creditors with a menu of these three options, loosely considered to be comparable. These became known as the “Toronto terms”.

From 1988-91, 20 LIC countries received reschedulings on Toronto terms, with about \$6 billion of payments falling due being either partially cancelled or rescheduled on a concessional basis. As early as 1990, however, it was clear to many Paris Club creditors that

⁷ See H. Evans “Debt relief for the Poorest Countries: Why did it take so long?”, Development Policy Review, ODI, 1999 for a review of the political economy surrounding the UK LIC Debt Initiatives of 1987 and subsequently.

⁸ Paris Club practice had always rescheduled aid debts using the concessional interest rate of the original loan contract which implies a reduction in its present value. The Paris Club had, therefore, already been providing concessional reschedulings on ODA debts. The new development was the suggestion that this should be extended to rescheduling commercial ECA debts.

the concessions—or present value debt reductions—provided under Toronto terms would be insufficient to prevent the continued and unsustainable rise in the debt stocks. While the Paris Club had the tools available to continue to provide immediate cash flow assistance to LICs, medium term repayment profiles associated with the rescheduling agreements were increasingly seen as unrealistic (see Chart 1 and Table 2). In September 1990, John Major, as UK Chancellor of the Exchequer, argued at the Commonwealth Finance Minister's meeting in Trinidad, that a present value reduction of two-thirds (67 percent) would be more realistic for LICs, that the full stock of a country's eligible debt needed to be addressed in a single operation, and that repayment profiles should rise steadily over time. These proposals were labeled the "Trinidad terms".⁹

As always, progress required a consensus, and Paris Club creditors would not immediately go as far as the Trinidad terms proposals suggested but agreed instead to increase the degree of concessionality to 50 percent in 1991, under what became known as the "London terms". Creditors did, however, accept that after a period of good performance—typically 3 years—they would be willing to discuss the possibility of an agreement covering the full stock of eligible debt.¹⁰ It was not until the Naples economic summit in 1994, that a consensus emerged to deepen the concessions to 67 percent; "Naples terms" were implemented from January 1995. In the period since 1991, 26 rescheduling agreements were signed under London terms, and a further 34 under Naples terms—seven of which covered the full stock of eligible debt—with a total of about \$25 billion of payments being either partially forgiven or rescheduled at low interest rates over the medium and long term.

The slow progress in reducing official debt stocks largely reflected accounting and budgetary concerns and the need for a consensus to develop among all the major creditor agencies involved. Different creditors saw their relations with LICs in different ways, and this was reflected in their approach to establishing the appropriate combination of debt relief, new lending, and grant financing—as well as in their assessment of the importance of conditionality. While debt stocks were clearly rising well beyond sustainable levels in many cases, creditors were able to use concessional rescheduling techniques to contain the growth of payments being requested. In practice, the average paid debt service ratios for HIPC,

⁹See R Powell "UK proposals to reduce the the debt burden of the poorest countries: The Trinidad Terms". UK Treasury Economic Bulletin, 1990

¹⁰Eligible debt is defined as pre cut-off date medium term debt. Short term debt and debt relating to contracts signed after the cut-off date are normally excluded from rescheduling.

Table 2. Evolution of Paris Club Rescheduling Terms for Low-Income Countries

	Naples Terms 2/ Options															
	Toronto Terms Options			London Terms 1/ Options				DSR					Lyon Terms 3/ Options			
	DR	DSR	LM	DR	DSR	CMI	LM	DR	Flows	Stocks	CMI	LM	DR	DSR	CMI	LM
Implemented	Oct. 1988-June 1991			Dec. 1991-Dec. 1994				Since January 1995					Since December 1996			
Grace (in years)	8	8	14	6	--	5	16 4/	6	--	3	8	20	6	8	8	20
Maturity (in years)	14	14	25	23	23	23	25	23	33	33	33	40	23	40	40	40
Repayment schedule	----- Flat -----			----- Graduated -----				----- Graduated -----					----- Graduated -----			
Interest rate 5/	M	R	M	M	R	R	M	M	R	R	R	M	M	R	R	M
		6/			7/	7/			8/	8/	8/			9/	9/	
Reduction in present value (in percent)	33	20-30	--	50	50	50	--	67	67	67	67	--	80	80	80	--
		10/														
<i>Memorandum items</i>																
ODA credits																
Grace (in years)	14	14	14	12	12	12	16	16	16	16	16	20	16	16	16	20
Maturity (in years)	25	25	25	30	30	30	25	40	40	40	40	40	40	40	40	40

Source: Paris Club

1/These have also been called "Enhanced Toronto" and "Enhanced Concessions" terms.

2/ Most countries are expected to secure a 67 percent level of concessionality; countries with a per capita income of more than \$500, and an overall indebtedness ratio on present value loans of less than 350 percent of exports may receive a 50 percent level of concessionality decided on a case-by-case basis. For a 50 percent level of concessionality, terms are equal to London terms, except for the debt-service-reduction option under a stock-of-debt operation that includes a three-year grace period.

3/ These terms are to be granted in the context of concerted action by all creditors under the HIPC Initiative. They also include, on a voluntary basis, an ODA debt-reduction option.

4/ Fourteen years before June 1992.

5/ Interest rates are based on market rates (M) and are determined in the bilateral agreements implementing the Paris Club Agreed Minute. R= reduced rates.

6/ The interest rate was 3.5 percentage points below the market rate or half of the market rate if the market rate was below 7 percent.

7/ Reduced to achieve a 50 percent present value reduction.

8/ Reduced to achieve a 67 percent present value reduction; under the DSR option for the stock operation, the interest rate is slightly higher, reflecting the three-year grace period.

9/ Reduced to achieve an 80 percent present value reduction.

10/The reduction of present value depends on the reduction in interest rates and therefore varies. See Footnote 6.

after peaking at about 30 percent of exports in 1986, have since fallen fairly steadily to an average of about 17 percent by 1997 (Chart 2, upper panel). Aggregate debt service of HIPCs, as a group, fell even more to 14 percent of aggregate exports in 1997 (Chart 2, lower panel).¹¹ Moreover, debt service paid by HIPCs has typically remained in the range of about 25–35 percent of total gross external financing (including official grants) for most of the period since 1980. Rescheduling, therefore, has helped to ensure that after other official support was taken into account, overall official transfers to LICs remained highly positive throughout the period. Reflecting the adoption of more concessional reschedulings and the impact of stock-of-debt operations as well as more concessional new finance, the present value of debt-to-exports ratios only began to fall after 1992.

The impact on debt service paid of increasingly concessional and comprehensive reschedulings and the other debt relief mechanisms described above is also reflected in a comparison of debt service ratios of HIPCs (broadly equivalent to the Severely-Indebted Low-Income Countries as defined by the World Bank¹²) with the debt service ratios of Moderately Indebted Low-Income Countries (which largely contains non-rescheduling low-income countries).¹³ It is striking that since 1986, the aggregate paid debt service ratio of the latter group is somewhat higher than that of the HIPC group, and that the gap has effectively widened.

These concessional reschedulings, culminating in Paris Club stock-of-debt operations on Naples terms, together with debt relief by non-Paris Club official bilateral and commercial creditors on at least comparable terms,¹⁴ came to be defined in the term “traditional debt-relief mechanisms”, as has been used in the context of the HIPC Initiative. Part III of this paper attempts to provide estimates of the aggregate costs to creditors of the past debt relief mechanisms described here, on a basis which is broadly comparable to the methodology used for estimating the costs of the HIPC and enhanced-HIPC Initiative.

¹¹ The upper panel of Chart 2 illustrates simple averages of individual debt service ratios for 31 HIPCs for which data were available. The lower panel, which is based on the World Bank's *Global Development Finance*, 1999, uses aggregate figures for the group of severely-indebted countries—largely made up of rescheduling HIPCs—as a whole, thereby giving greater weight to larger countries.

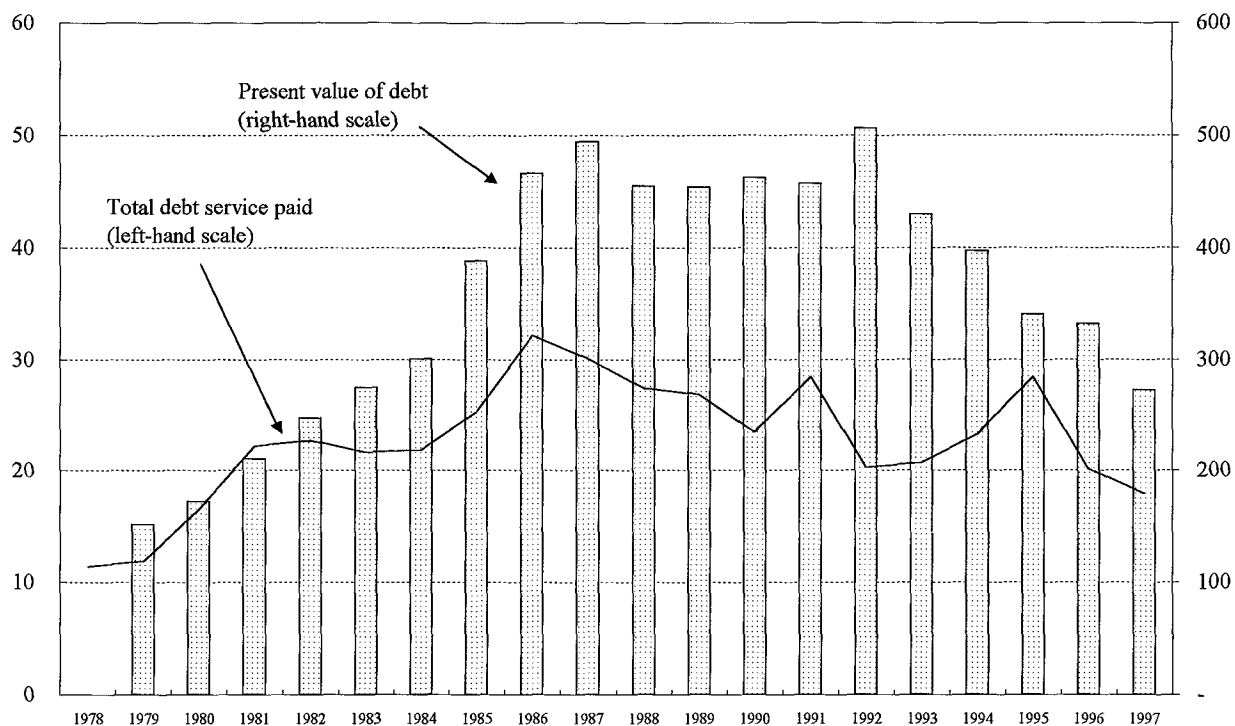
¹² See *Global Development Finance*, 1999, for definitions.

¹³ This group of 14 countries includes, for example, India, Bangladesh, Pakistan, Kenya, and Zimbabwe. GDF ratios for these groups are aggregate ratios, so that larger countries are given greater weight than smaller countries.

¹⁴ The provision to seek at least comparable terms on non-Paris Club official bilateral and commercial debt is required of the debtor country, whenever it signs an agreement with the Paris Club.

Chart 2: Debt Burden Ratios, 1979 - 1997
(In percent of exports of goods and services)

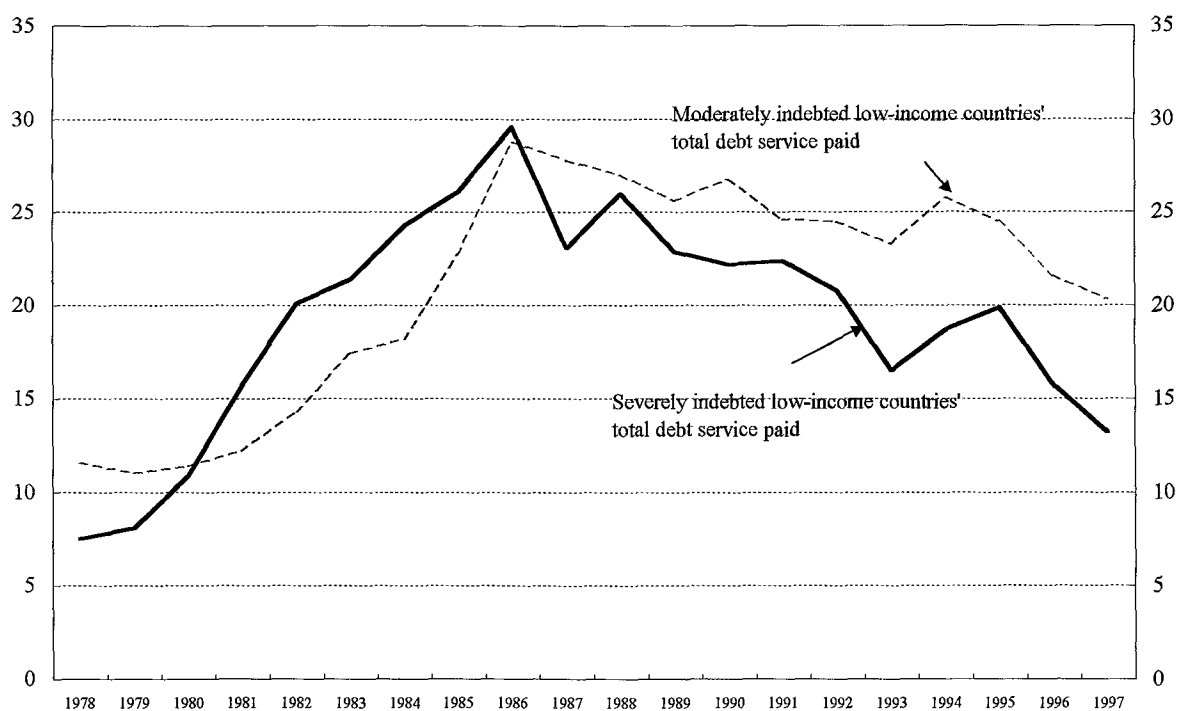
HIPC Debt Service and Present Value of Debt 1/



Source: World Bank Debtor Reporting System, IMF World Economic Outlook, and staff estimates.

1/ Average of individual ratios for 31 HIPCs for which consistent data is available.

Debt Service of Severely- and Moderately-Indebted Low-Income Countries 2/



Source: World Bank, Global Development Finance, 1999

2/ Aggregate debt-service paid as a percent of aggregate exports.

III. COSTS OF DEBT RELIEF UNDER TRADITIONAL MECHANISMS

This section presents four alternative estimates for the debt relief which has been provided to HIPC countries under traditional mechanisms, since the first concessional reschedulings were granted by the Paris Club in 1988. The first three methods estimate the actual relief provided since 1988, using data obtained from the World Bank, the Paris Club creditors, and the OECD, respectively. The fourth estimate, based largely on Paris Club data, projects the hypothetical impact of the full application of traditional debt-relief mechanisms, as defined under the HIPC Initiative. Each of these methods is applied to a group of 37 of the original 41 HIPC countries, excluding Nigeria, which is not IDA-only, and Ghana, Kenya, and Lao P.D.R., which have never received concessional Paris Club reschedulings.¹⁵ While each of the four approaches has its problems and limitations, considering them as a whole helps to provide a sense of the order of magnitude—and budgetary costs—of past debt relief efforts.

Traditional mechanisms are defined as all measures of debt-relief that are not provided in the context of the HIPC Initiative. This includes specifically concessional flow reschedulings, stock-of-debt operations, and bilateral forgiveness of ODA claims by Paris Club creditors; reschedulings and bilateral debt forgiveness by non-Paris Club official bilateral creditors; and private commercial debt relief and buy-back operations. The debt relief generated by these operations can be measured in two principal ways: (i) as cash-flow relief, which is generated whenever debt-service payments falling due are canceled, rescheduled, or temporarily deferred; and (ii) as a reduction in the present value of the debt outstanding. The distinction between these two definitions is important and can cause confusion. The cash-flow relief produced by a flow rescheduling operation is important for countries facing immediate severe balance of payments or fiscal constraints, but the relief is limited to the consolidation period and it adds to future debt-service obligations even if it is accompanied by a reduction in the present value (PV) of debt.¹⁶ The PV reduction measures the discounted stream of all future debt-service payments but which were forgiven as a result of the operation, and thus captures the concessional element involved. It thereby allows a meaningful comparison of the effective relief provided across the various implementation methods chosen by different creditors. The PV concept also better reflects the budgetary costs to creditors of their past debt-relief efforts. For these reasons, the estimates presented

¹⁵ The original group of 41 HIPC countries was established in 1994 for analytical purposes and included 32 countries, with a 1993 per capita GNP of US\$695 or less, and either a 1993 NPV of debt-to-exports ratio of at least 220 percent or an NPV of debt-to-GNP ratio of at least 80 percent. Also included were nine countries that had received, or were eligible for, concessional reschedulings from the Paris Club. While this list is likely to cover nearly all countries that are potentially eligible for HIPC assistance, inclusion is neither a condition nor a guarantee for eligibility.

¹⁶ See IMF "Official Financing for Developing Countries", 1998, for further details of Paris Club rescheduling terms and methodology.

below focus on the PV effects of the various debt-relief mechanisms, starting in 1988 with the Paris Club's adoption of concessional reschedulings under Toronto terms. This concept is directly comparable to that used for costing the HIPC Initiative.

Actual Debt Relief: Method 1

The first method for estimating the actual debt relief provided under traditional mechanisms utilizes the World Bank's Debtor Reporting System (DRS) data as published in *Global Development Finance (GDF)*, 1999. The GDF does not provide specific information on the PV reduction generated by debt relief operations. While the DRS covers debt and interest forgiven, it does not measure PV reductions through rescheduling at reduced interest rates. Thus, an estimate of the overall PV of debt reduction has to rely on a number of stylized assumptions. Under Methodology 1, the PV of debt reduction is estimated as the end-1998 present value of *debt forgiveness or reduction*, plus *interest forgiven*, plus one-third of the *total amount of debt rescheduled*.¹⁷ The discount rate used to derive the PV of debt reduction is 8 percent, roughly equivalent to the average commercial interest reference rate (CIRR) of the U.S. dollar over the 10-year period 1988–1997.¹⁸

Including part of the *total amount of debt rescheduled* in the calculation of the PV of debt reduction reflects the fact that concessional reschedulings of the Paris Club have offered individual creditors the choice between two main options, considered broadly equivalent in PV terms. The debt reduction option involves an up-front reduction of the consolidated amount (i.e., the amount of debt payments being treated) and a rescheduling of the remaining debt at market rates (i.e., without further PV relief). The debt-service reduction option, on the other hand, contains no element of direct forgiveness but instead provides the same overall PV relief through a rescheduling of the consolidated amount at reduced interest rates. Since the implied PV of debt reduction cannot be obtained directly from DRS data, it can only be estimated.

Estimating the PV relief provided through the debt-service reduction option is further complicated by the fact that the DRS does not include information on the breakdown between amounts rescheduled at market rates (i.e., without any PV reduction) and those rescheduled at reduced rates. Thus, estimates of the PV reduction generated by these reschedulings using DRS data has to rely on assumptions about the following elements:

- (i) the share s of the consolidated amount C treated under the debt-service reduction option (with $1-s$ corresponding to the share treated under the debt reduction option) and

¹⁷Terms in italics are those used in the Global Development Finance database, and are defined in Global Development Finance (1999), Volume I.

¹⁸The CIRRs are published monthly by the OECD for all major currencies. In the case of the U.S. dollar, the rates used reflect the yield on 7-year U.S. Treasury bonds, plus a margin of 100 basis points.

- (ii) the average PV reduction x applied in the restructuring operations.¹⁹

In general, the *total amount of debt rescheduled*, R , includes two parts:

the first, equivalent to $(1-x) * (1-s) * C$, will not be subject to any further PV reduction (since it was already reduced by x percent up-front under the debt reduction option)

the second, equal to $s * C$, will be reduced by x percent, in PV terms, via rescheduling on reduced interest rates.

Thus, the PV relief provided on, and expressed in percent of, R is equivalent to

$$(1) \quad \frac{x * s * C}{R} = \frac{x * s}{1 - x * (1 - s)}$$

where $R = [1 - x * (1-s)] * C$

Reflecting the evolution of concessional Paris Club reschedulings from a PV of debt reduction of up to 33 percent under Toronto terms to 50 percent under London and 67 percent under Naples terms, and assuming similar terms granted by non-Paris Club creditors, the average PV of debt reduction x would be in the range of 33–67 percent. The share s of debt treated under the debt-service reduction option, on the other hand, would be any figure between zero and one. This estimate assumes, for illustrative purposes, figures of 50 percent for both.²⁰ Inserted into equation (1) above, this implies a PV of debt reduction delivered via lower interest rates of $0.25/(1-0.25)$, or one-third, of the *total amount of debt rescheduled*, R .

The results of Method 1 are summarized in Table 3. The PV of debt reduction is estimated at about **\$72 billion**, in end-1998 U.S. dollars. The main recipients of debt relief under traditional mechanisms, according to this methodology, are Angola, Bolivia,

¹⁹ It is assumed that Official Development Assistance (ODA)—which under Paris Club agreements is rescheduled at a rate identical to or lower than its original concessional interest rate (with different implications for the NPV reduction)—is subsumed under the amounts treated under the debt-service reduction option and receives the same underlying NPV reduction as commercial claims.

²⁰ For those countries which have never received a concessional rescheduling from Paris Club creditors, x was assumed to be zero, implying that all past reschedulings were based on market rates of interest. These countries are Angola, Burundi, Liberia, Myanmar, São Tomé, Somalia, and Sudan.

Table 3. Present Value of Debt Reduction Under Traditional
Debt-Relief Mechanisms
Actual Relief 1988-97--Method 1 1/

Country 2/	PV of debt reduction 3/	
	In millions of end-1998 U.S. dollars	In percent of 1987 PV of debt 4/
Angola	4,389	37.6
Benin	1,247	83.5
Bolivia	5,909	57.3
Burkina Faso	674	58.3
Burundi	249	29.2
Cameroon	3,419	35.1
Central African Rep.	470	58.6
Chad	353	91.0
Congo, Dem. Rep. of	2,367	13.4
Congo, Rep. of	1,726	20.0
Cote d'Ivoire	9,982	34.0
Equatorial Guinea	46	13.2
Ethiopia	702	5.9
Guinea	1,180	34.7
Guinea-Bissau	231	29.6
Guyana	1,765	54.8
Honduras	1,718	26.6
Liberia	1	0.0
Madagascar	2,200	35.8
Mali	838	30.1
Mauritania	625	17.2
Mozambique	2,700	34.0
Myanmar	130	1.9
Nicaragua	11,035	67.1
Niger	1,177	47.5
Rwanda	134	19.2
Sao Tome and Principe	-	0.0
Senegal	3,024	46.6
Sierra Leone	760	37.3
Somalia	-	-
Sudan	13	0.1
Tanzania	2,873	30.0
Togo	968	50.3
Uganda	719	25.4
Vietnam	1,617	4.1
Yemen, Rep. of	3,262	36.6
Zambia	3,756	28.2
TOTAL	72,260	...
AVERAGE	1,953	32.3

Sources: World Bank Global Development Finance (GDF); and IMF staff estimates.

1/ Assumes, for illustrative purposes, that creditors have applied the debt reduction and debt-service reduction option in equal proportions. An average level of concessionality of 50 percent is assumed for debt service reduction (DSR) options, except for Angola, Burundi, Liberia, Myanmar, Sao Tome, Somalia, and Sudan where no concessionality is assumed to come from DSR options.

2/ 37 of the original 41 HIPC's, excluding Nigeria, which is not IDA-only, and Ghana, Kenya, and Lao P.D.R. which have never received concessional Paris Club reschedulings.

3/ Derived from GDF data as the 1998 present value of "debt forgiveness or reduction", plus "interest forgiven", plus one-third of "total amount of debt rescheduled" over the period 1988-97, applying an 8 percent discount rate.

4/ The 1987 PV of debt is derived by multiplying the 1987 debt stock (1989 for Vietnam) with the 1991 PV/debt ratio (1993 for Vietnam) taken from the World Bank's 1992-93 World Debt Tables (1994-95 for Vietnam). It is expressed in end-1998 U.S. dollars, consistent with the numerator. Russian debt is valued at official exchange rate.

Côte d'Ivoire, Nicaragua, and Zambia, accounting together for about one-half of the total PV of debt reduction provided to the group of HIPC's, as a whole. The estimates for Angola and Nicaragua, in particular, reflect the treatment in the DRS of debts owed to Russia, which have been valued at the original official exchange rate (Ruble 0.6/\$).

In sum, the use of the World Bank's DRS data to measure the debt relief provided to HIPC's under traditional mechanisms has the advantage of capturing, in general, operations provided by all groups of creditors, including non-Paris Club creditors, as well as private buybacks supported by the IDA debt reduction facility. It is the only comprehensive database with these characteristics, as it is based on information received from debtors themselves. On the other hand, apart from possible misclassification problems (such as the inclusion of military debt only on a partial basis), and the dollar valuation of Russian claims, data is only presently available through 1997, and thus, does not capture the impact of more recent Paris Club operations. Also, some reschedulings that were agreed by the Paris Club prior to the end of 1997 may not be fully reflected in the data, as long as bilateral agreements with individual creditors were not implemented by this date.

Actual Debt Relief: Method 2

The second method for estimating the actual debt relief provided under traditional mechanisms uses a variety of data sources, including debt stock figures collected from Paris Club creditors at the time of rescheduling meetings, and information provided by the World Bank on commercial debt buy-back operations covered under the IDA debt reduction facility. This method, however, makes no provision for individual bilateral forgiveness of Official Development Assistance by Paris Club creditors, debt reduction through swaps, or debt relief provided by non-Paris Club creditors, due to a lack of comprehensive information on these operations.²¹

To estimate the PV of debt reduction provided by Paris Club creditors, the consolidated amount of each flow rescheduling is multiplied with the corresponding concessionality factor, e.g., 33 percent for a rescheduling on Toronto terms.²² This approach

²¹Creditors who have written off all or nearly all ODA debt to HIPC's include, for example, the United Kingdom, the Netherlands, the Nordic countries, Switzerland, and Canada. Other creditors have also forgiven significant amounts of ODA.

²²This treatment does not distinguish between the rescheduling of "original" debt service and debt service as a result of previous reschedulings. In practice, to the extent that previous reschedulings were on concessional terms, the latter would only be subject to a "topping up" of the concessionality to the new higher level. However, given the comparatively long grace and maturity periods applied under these reschedulings, it is assumed that in the case of flow reschedulings—typically covering arrears and debt service due over a three-year period—the part of the debt service that is falling due on rescheduled debt (and would only be subject to "topping up") is negligible.

implies that ODA is again assumed to receive the same PV reduction as commercial claims. In the case of stock-of-debt operations on Naples terms, the PV reduction of 67 percent is applied only to that part of the consolidated amount that was either not previously rescheduled or rescheduled on nonconcessional terms. The "topping up" of previously rescheduled debt is simulated by applying an additional one-third and one-sixth reduction, respectively, to the amounts previously treated on Toronto and London terms, so as to increase their concessionality levels from 33 percent and 50 percent, respectively, to 67 percent under Naples terms. The PV of debt relief provided on commercial debt to private creditors through the IDA debt reduction facility is included, but only the principal extinguished is counted. All amounts are then expressed in end-1998 U.S. dollars, using a discount rate of 8 percent, in line with the historical average.²³

Finally, with regard to the debt relief granted by Russia, this method uses the information provided in the context of the September 1997 Memorandum of Understanding (MOU) on Russia's participation as a creditor in the Paris Club.²⁴ For all countries with a concessional Paris Club agreement, the MOU stipulates (i) an up-front discount of 70 or 80 percent, respectively (depending on the proportion of military debt), on total Russian claims disbursed prior to 1992; and (ii) an additional rescheduling of pre-cutoff date claims on the same terms applied by the other Paris Club creditors. Consistent with the provisions in the MOU, both operations are considered effective as of September 1997.²⁵

Determining the debt relief resulting from Russia's commitment under the MOU requires a breakdown of Russian claims by pre- and post-cutoff date arrears and debt service, expressed in nominal and PV terms. However, the MOU includes information only on the face value of total Russian claims disbursed prior to 1992 and on post-cutoff date arrears. Thus, to estimate the debt relief resulting from the agreed actions, it is assumed, for simplicity, that all debt to Russia was in arrears at the time of the agreement. This simplifying assumption has two implications: (i) all claims other than post-cutoff date arrears are subject to the additional PV reduction following the up-front discount; and (ii) the PV of debt reduction as of September 1997 is equivalent to the reduction in the nominal debt stock, i.e., either 70 percent or 80 percent of the outstanding debt, plus an additional 67 percent (50 percent for Cameroon, Equatorial Guinea, Guinea, and Vietnam) on all debt other than post-

²³For this purpose, the timing of flow reschedulings is assumed at the end of the year following the Paris Club agreement, as an approximation of the middle of the consolidation period, while the timing of stock-of-debt operations is assumed in the middle of the agreement year.

²⁴In the cases of Ethiopia and Mozambique, the updated information underlying the most recent HIPC Initiative documents was used instead.

²⁵In line with the MOU, no action is assumed on Russian claims in countries without a Paris Club agreement, such as Angola, Burundi, São Tomé and Príncipe, Somalia, and Sudan.

cutoff date arrears. The PV of debt reduction is higher, by about 10 percent, when expressed in end-1998 dollars, using a discount rate of 8 percent.

The results of Method 2 are summarized in Table 4. The PV of debt reduction, excluding action by Russia, is about **\$24 billion**. The largest amounts of relief are provided to Cameroon, Côte d'Ivoire, Nicaragua, Tanzania, and Zambia. In addition, Russian relief is estimated at about **\$31 billion** when using the official exchange rate, of which about **US\$24 billion** reflects the up-front discount and about **\$7 billion** reflects parallel action to Paris Club agreements after the discount. Under the aggregate estimate (i.e., including the up-front discount on Russia claims), the main recipients of relief under Method 2 are, as expected, countries benefiting over-proportionately from the agreed action on Russian claims, such as Ethiopia, Mozambique, Nicaragua, Vietnam, and Yemen.

Compared with Method 1, the main caveat of Method 2 is its exclusion of debt relief provided by non-Paris Club official bilateral creditors, debt swaps, and bilateral ODA forgiveness by the Paris Club. Besides these obvious omissions, Method 2 can be further criticized for a number of technical reasons. First, the use of total amounts consolidated on concessional terms as the basis for Paris Club debt relief overstates the actual relief, whenever certain tranches of rescheduling agreements were not implemented, and part of the original amount to be consolidated was included again in later reschedulings.²⁶ This double counting could be large in countries with a mixed track record of performance under IMF-supported programs. Second, the simulation of Paris Club reschedulings, and particularly the topping up of previously rescheduled debt, is rather crude. Third, the simplified assumptions on the treatment of Russian claims probably imply an upward bias for two reasons: (i) the assumption that all debt is in arrears overstates the PV of this debt—which was typically contracted on below-market interest rates—and thus, the reduction implied by the agreed treatment; and (ii) the assumption that total post-cutoff date debt is equivalent to the amounts identified as post-cutoff date arrears results in an overstatement of pre-cutoff date claims, and thus, overall debt relief (since only pre-cutoff date debt is subject to the additional PV reduction provided after the up-front discount).

Consequently, while the estimate of \$24 billion is likely to be an understatement of the PV of debt reduction under traditional mechanisms, owing to the exclusion of relief on non-Paris Club debt and bilateral ODA forgiveness by Paris Club creditors, the estimates for Russia be considered on the high side.

²⁶Flow reschedulings by the Paris Club are activated in annual tranches, subject to the country's satisfactory performance under its IMF-supported program (which is a condition for the provision of debt relief by the Paris Club) and its payments record with Paris Club creditors.

Table 4. Present Value of Debt Reduction Under Traditional Relief Mechanisms
Actual Relief 1988-98 -- Method 2 1/

Country 2/	PV of debt reduction In millions of end-1998 U.S. dollars 3/				In percent of 1987 PV of debt 5/
	Total Paris Club excl. Russia	Russia	IDA Debt Reduction Facility 4/	Total excluding Russia	
Angola	-	-	-	-	-
Benin	372	58	-	372	24.9
Bolivia	1,046	-	261	1,308	12.7
Burkina Faso	99	6	-	99	8.6
Burundi	-	-	-	-	-
Cameroon	2,518	2	-	2,518	25.9
Central African Rep.	57	2	-	57	7.1
Chad	42	4	-	42	10.9
Congo, Dem. Rep. of	944	-	-	944	5.3
Congo, Rep. of	1,266	389	-	1,266	14.6
Cote d'Ivoire	1,683	-	768	2,450	8.3
Equatorial Guinea	62	4	-	62	17.6
Ethiopia	447	5,781	283	730	6.2
Guinea	378	411	-	378	11.1
Guinea-Bissau	165	158	-	165	21.1
Guyana	275	-	111	385	12.0
Honduras	193	-	-	193	3.0
Liberia	-	-	-	-	-
Madagascar	1,080	454	-	1,080	17.6
Mali	98	569	-	98	3.5
Mauritania	232	-	63	295	8.1
Mozambique	1,188	2,562	212	1,400	17.6
Myanmar	-	-	-	-	-
Nicaragua	1,315	3,477	1,385	2,700	16.4
Niger	291	-	194	485	19.6
Rwanda	40	-	-	40	5.7
Sao Tome and Principe	-	-	14	14	10.0
Senegal	690	0.2	83	773	11.9
Sierra Leone	175	-	301	476	23.4
Somalia	-	-	-	-	-
Sudan	-	-	-	-	-
Tanzania	1,945	624	-	1,945	20.3
Togo	320	-	48	368	19.1
Uganda	184	-	240	424	15.0
Vietnam	538	9,542	-	538	1.4
Yemen, Rep. of	151	6,888	-	151	1.7
Zambia	1,631	399	277	1,908	14.3
TOTAL	19,423	31,330	4,240	23,663	...
AVERAGE	525	847	115	640	10.7

Sources: Agreed Minutes of Paris Club debt reschedulings; Paris Club Secretariat; World Bank Global Development Finance (GDF); and IMF staff estimates.

1/ Includes total amounts rescheduled on concessional terms under Paris Club agreements through 1988-98, including by Russia in the context of the September 1997 Memorandum of Understanding, and debt extinguished under the IDA debt reduction facility through May 1998. No provision has been made for bilateral ODA forgiveness or debt relief provided by non-Paris Club creditors.

2/ 37 of the original 41 HIPC's, excluding Nigeria, which is not IDA-only, and Ghana, Kenya, and Lao P.D.R., which have never received (and are not expected to request) concessional Paris Club reschedulings.

3/ Equivalent to the total amounts treated on concessional terms. In addition, for Paris Club stock-of-debt operations, savings on future interest payments were added.

4/ Equivalent to the principal extinguished, expressed in 1998 U.S. dollars.

5/ The 1987 PV of debt is derived by multiplying the 1987 debt stock (1989 for Vietnam) with the 1991 PV/debt ratio (1993 for Vietnam) taken from the World Bank's 1992-93 World Debt Tables (1994-95 for Vietnam). It is expressed in end-1998 U.S. dollars, consistent with the numerator.

Actual Debt Relief: Method 3

A third estimate of actual debt relief comes from creditor reporting to the Development Assistance Committee (DAC) of the OECD. Each year OECD creditors report estimates of debt relief granted to aid recipients. In the past, however, definitions of debt relief and methodology for reporting debt or debt service relief have varied among the creditors. Some creditors, for example, have reported interest and principal payments forgiven each year in the amount of the original debt service falling due, while others have reported the full stock of debt erased at the time of the agreement. Some creditors have only reported relief on aid debt. Often the differences in reporting have reflected the different budgetary practices and requirements in creditor countries. Only recently have DAC reporting countries come to an agreement which will make the reporting of debt forgiveness more comprehensive and consistent than in the past.

DAC estimates of debt relief provided by OECD creditors to the 37 HIPC countries covered in this paper are reported by creditors in nominal terms. Figures for 1988-97 were adjusted to end-1998 present values, using a discount rate of 8 percent. The total reported is about **\$14 billion** in end-1998 PV terms. This estimate excludes any allowance for non-OECD creditors, commercial creditors, and Russia. Moreover, the above-mentioned practice of many DAC creditors to report debt relief only as payments forgiven actually fall due, implies that this figure can be considered a lower bound for debt forgiveness agreed in the past decade by OECD creditors.

Hypothetical Debt-Relief: Method 4

The final method for estimating debt relief expands on Method 2 and again uses Paris Club data, but focuses on the hypothetical concept of "the full use of traditional mechanisms", (i.e., a stock-of-debt operation on Naples terms) whether or not such assistance has yet been formally agreed. It is therefore a different concept than Methods 1-3, which focus on actual relief provided. In practice, countries that qualify for HIPC Initiative assistance are not expected to receive a stock-of-debt operation on Naples terms. Instead, they would be granted flow reschedulings between the decision and completion points, followed by a stock-of-debt operation at the completion point, each on "Lyon terms", with a PV reduction of 80 percent or perhaps more under the enhanced HIPC Initiative. Thus, the full use of traditional mechanisms remains largely a theoretical concept with the exception of those countries that already received stock-of-debt operations on Naples terms before the adoption of the HIPC Initiative, or those that qualify for Naples terms but not for HIPC assistance. Nevertheless, it provides the yardstick for debt relief under the HIPC Initiative and may thus be considered a more suitable comparison with the latter.²⁷

²⁷The definition of HIPC assistance as the relief provided beyond the hypothetical full application of traditional mechanisms is not a purely theoretical exercise but has very practical implications for the burden sharing between bilateral and multilateral creditors under the HIPC Initiative.

The data sources used to estimate the hypothetical effect of Naples terms stock-of-debt operations are the same as under Method 2. The estimated PV of debt reduction generated by commercial debt buy-back operations under the IDA debt reduction facility is unchanged at about \$4 billion.

The estimated PV of debt reduction by the **Paris Club, excluding Russia**, of the hypothetical full use of traditional mechanisms is estimated by applying a 67 percent reduction to the level of total pre-cutoff date debt outstanding at each country's first concessional rescheduling. For Angola, Liberia, Somalia, and Sudan, which have never received concessional Paris Club reschedulings, the reduction is applied instead to pre-cutoff date Paris Club debt at the time of their last rescheduling on nonconcessional terms.²⁸ For HIPC countries without a Paris Club history, such as Burundi, Myanmar, and Sao Tome and Principe, the reduction is applied to estimates of total Paris Club debt obtained from the latest IMF staff reports. The timing of the stock-of-debt operation is assumed to take place at the earliest projected decision point (mid-year) under the HIPC Initiative or at the time of the actual stock operation for those countries that already received one.²⁹ The resulting PV reduction is expressed in end-1998 U.S. dollars, using the historical average CIRR rate of 8 percent, if the stock-of-debt operation or decision point occurred prior to the end of 1998, or 6 percent, in line with more recent and forward-looking CIRRs, if not.

For debt relief provided by **Russia**, the methodology is identical to Method 2, but instead of being confined to countries with Paris Club agreements, it is now applied to all HIPC countries with debt to Russia. The discount rate used to express the projected PV reduction in end-1998 U.S. dollars is 6 percent, consistent with the rate applied to hypothetical future operations by other Paris Club creditors.

The hypothetical measure of full traditional debt-relief mechanisms provided to HIPC countries is presented in Table 5. The total PV of debt reduction is estimated at about **US\$26 billion**, if Russian debt is excluded. Similar to Method 2, we may add a further **\$37 billion** from Russia, if the official exchange rate is used, of which about **\$8 billion** would correspond to relief after the up-front discount.

²⁸In a few cases where Paris Club debt data were not available, the relevant figures were estimated on the basis of IMF staff reports.

²⁹The timing of the earliest possible decision points is taken from the joint IMF/World Bank paper on *Modifications to the Heavily Indebted Poor Countries (HIPC) Initiative* (EBS/99/138), available on the IMF web site.

Table 5. Hypothetical Present Value of Debt Reduction Under the Full Application of Traditional Debt-Relief Mechanisms 1/

Country 2/	In millions of end-1998 U.S. dollars 3/				In percent of 1987 PV of debt 7/
	Hypothetical Paris Club PV reduction 4/ excl. Russia	Russia 5/	IDA Debt Reduction Facility 6/	Total excluding Russia	
Angola	547	4,724	-	547	4.7
Benin	241	58	-	241	16.1
Bolivia	1,058	0	261	1,319	12.8
Burkina Faso	276	6	-	276	23.8
Burundi	57	16	-	57	6.6
Cameroon	2,202	2	-	2,202	22.6
Central African Rep.	54	2	-	54	6.8
Chad	25	4	-	25	6.5
Congo, Dem. Rep. of	1,985	0	-	1,985	11.2
Congo, Rep. of	1,852	389	-	1,852	21.4
Cote d'Ivoire	1,997	0	768	2,764	9.4
Equatorial Guinea	48	4	-	48	13.6
Ethiopia	460	5,781	283	743	6.3
Guinea	235	411	-	235	6.9
Guinea-Bissau	50	158	-	50	6.4
Guyana	173	0	111	284	8.8
Honduras	566	0	-	566	8.8
Liberia	172	0	-	172	4.8
Madagascar	532	454	-	532	8.7
Mali	50	569	-	50	1.8
Mauritania	178	0	63	241	6.6
Mozambique	638	2,562	212	851	10.7
Myanmar	1,794	0	-	1,794	26.5
Nicaragua	573	3,477	1,385	1,958	11.9
Niger	145	0	194	339	13.7
Rwanda	56	0	-	56	8.0
Sao Tome and Principe	34	8	14	48	33.9
Senegal	631	0	83	714	11.0
Sierra Leone	109	0	301	411	20.1
Somalia	88	433	-	88	2.4
Sudan	1,071	5	-	1,071	4.5
Tanzania	1,034	624	-	1,034	10.8
Togo	229	0	48	277	14.4
Uganda	288	0	240	527	18.6
Vietnam	878	9,542	-	878	2.3
Yemen, Rep. of	502	6,888	-	502	5.6
Zambia	822	399	277	1,099	8.2
TOTAL	21,652	36,517	4,240	25,893	...
AVERAGE	585	987	115	700	11.3

Sources: Agreed Minutes of Paris Club debt reschedulings; Paris Club Secretariat; World Bank Global Development Finance (GDF); and IMF staff estimates.

1/ Includes debt extinguished under IDA debt reduction facility through May 1998, and assumes for all countries a 67 percent reduction in eligible debt owed to the Paris Club. No provision has been made for bilateral ODA forgiveness or debt relief provided by non-Paris Club creditors.

2/ 37 of the original 41 HIPC's, excluding Nigeria, which is not IDA-only, and Ghana, Kenya, and Lao P.D.R., which have never received (and are not expected to request) concessional Paris Club reschedulings.

3/ Based on a discount rate of 8 percent.

4/ Derived by applying a 67 percent reduction to the level of pre-cutoff date debt at the first concessional rescheduling.

5/ Equivalent to the principal extinguished, expressed in 1998 U.S. dollars.

6/ Equivalent to the principal extinguished, expressed in 1998 U.S. dollars.

7/ The 1987 PV of debt is derived by multiplying the 1987 GDF debt stock (1989 for Vietnam) with the 1991 PV/debt ratio (1993 for Vietnam) taken from the World Bank's 1992-93 World Debt Tables (1994-95 for Vietnam). It is expressed in end-1998 U.S. dollars, consistent with the numerator.

A country-by-country comparison sheds more light on the differences between Methods 2 and 4. The hypothetical Method 4 results in much larger estimates of debt relief than Method 2 in countries that have (i) relatively high levels of exposure to the Paris Club; (ii) not received a stock-of-debt operation; and (iii) relatively short or no record(s) of concessional Paris Club reschedulings, such as Angola, the Democratic Republic and the Republic of Congo, Myanmar, and Sudan. On the other hand, by assuming a timing of the hypothetical stock-of-debt operation at the decision point without counting debt relief provided under concessional flow reschedulings, this method understates the debt relief, in PV terms, that has already been provided to many countries in the context of such operations. Thus, Method 4 generates much lower estimates of debt relief than Method 2 in countries with similarly large exposure to the Paris Club but a comparatively long history of concessional flow reschedulings, such as Cameroon, Madagascar, Mozambique, Nicaragua, Tanzania, and Zambia.

In addition to the exclusion of debt relief generated by existing concessional flow reschedulings, the main caveat of this method is, once again, that it does not take into account the relief provided on non-Paris Club official bilateral debt and the ODA forgiveness by Paris Club creditors. These factors point to a downward bias in the hypothetical estimate of the full use of traditional debt-relief mechanisms under Method 4. Estimates made in the context of the HIPC Initiative point to a PV reduction of over **\$50 billion** for the 41 HIPCs relative to end-1997 debt stocks shown in the GDF, which would already reflect significant past debt relief. This estimate includes hypothetical stock-of-debt agreements from non-Paris Club bilaterals and commercial creditors. On the other hand, the estimate of Russian action, as discussed earlier in the context of Method 2, introduces an upward bias to these calculations.

IV. CONCLUSIONS

This paper has argued that the LIC debt crisis was facilitated by a willingness of official export credit agencies to take commercial lending risks—especially political risks—that private creditors would not find acceptable. When adverse terms of trade shocks and weak macroeconomic adjustment and reform policies combined with other factors, such as civil strife, to create payments difficulties for many LICs, official creditors responded largely with more non-concessional lending and refinancing. These early policies were designed to provide the maximum cash flow assistance to the debtors concerned, while containing the direct budgetary cost to creditors. They provided substantial cash flow assistance to HIPCs, and allowed many LIC adjustment programs during the 1980s to be fully financed. A lack of provisioning against potential losses, however, meant that it was not until the late 1980s, that export credit agencies started to publicly acknowledge that such non-concessional rescheduling and refinancing was leading to an unsustainable build up of the debt stock in many LICs, with possible negative consequences for adjustment and reform programs. From this period, debt relief efforts began to pay much greater attention to the impact of agreements on the debt stock and to the realism of the medium term payments profile. Debt relief started to be measured not in terms of payments delayed, but in the present value of future payments forgiven.

The different coverage and estimates of debt relief obtained under the four methods described in Part III are summarized in Table 6. Recognizing that the figures reported to the OECD probably underestimate agreed relief, the Paris Club may have provided about **\$19 billion** of PV relief under its concessional rescheduling terms since 1988. The IDA debt reduction facility accounts for a further \$4 billion of relief making a total of about **\$23 billion**, excluding Russia and non-Paris Club bilaterals, and Paris Club forgiveness of ODA debt. These figures are, therefore, probably lower bounds on the amount of actual debt relief which has been provided in the period since 1988. If Russian action is valued after the up-front discount agreed with Paris Club creditors, then this would add about \$7 billion—making a total of about **\$30 billion**. If the up-front discount of Russian claims, valued at the official exchange rate, is included, then this total increases to about **\$60 billion**.

The debt initiatives of the past two decades have therefore had a significant effect on the debt burden of LICs. The enhanced-HIPC Initiative is expected to bring debt burden ratios down further to levels last seen in the 1970s. While different definitions can yield different average debt-service ratios, it is clear that the various initiatives from 1987 onwards have helped bring debt-service payments of HIPCs down from about 30 percent of exports in the mid-1980s to roughly half that level by 1997, and below the aggregate level for LICs more generally.³⁰ The HIPC Initiative is designed to build on and reinforce these past efforts. Total assistance in addition to traditional mechanisms expected to be provided through the enhanced-HIPC Initiative is currently estimated at about **\$27 billion**, in 1998 present value terms.³¹

GDF data suggest that the present value of debt of the 41 HIPCs at end-1997 was about \$157 billion (Table 7). As noted above, the IMF in the context of the HIPC Initiative, has estimated that the present value of the external debt of these 41 countries after the hypothetical full application of all traditional mechanisms would be about \$104 billion. After HIPC assistance, the stock of debts is estimated to fall to about \$68 billion in present value terms, or about two-fifths of the end-1997 stock.

By resolving the LIC debt crisis through these various debt-relief initiatives, governments in rich countries have implicitly acknowledged the significant net transfer of resources they have provided unintentionally to a subset of the poorest countries over time. Exports of creditor countries were supplied but not ultimately paid for. While there are strong

³⁰ Preliminary GDF estimates show the debt service ratio of HIPCs in 1998 as about 13.9 percent, compared with 17.8 percent for the group of 61 Low Income Countries.

³¹ \$27 billion excludes potential costs for Sudan, Somalia, or Liberia. Including these countries the estimated cost of the enhanced HIPC Initiative is about \$36 billion, in 1998 present value terms, although the estimates for these countries are particularly weak.

Table 6. Summary of Debt Relief Under Traditional Mechanisms
(In billions of end-1998 U.S. dollars)

Creditor	Est. Actual Debt Relief GDF data		Est. Actual Debt Relief Paris Club data		Actual Debt Relief OECD data		Hypothetical Debt Relief Paris Club data	
	Coverage	PV of debt reduction	Coverage	PV of debt reduction	Coverage	PV of debt reduction 1/	Coverage	PV of debt reduction
	1988-97		1988-98		1988-97			
Paris Club (excluding Russia)	yes, up to 1997	...	yes	19	yes	14	yes	22
Russia-based on official exchange rate	yes	...	yes	31	no	-	yes	37
Russia-after up front discount	yes	7	no	-	yes	8
Non-Paris Club bilateral creditors	yes, up to 1997	...	no	-	no	-	no	-
IDA Debt Reduction Facility	yes, up to 1997	...	yes	4	yes	4	yes	4
Total PV of debt reduction								
excluding Russian claims		n/a		23		18		26
after up-front discount on Russian claims		n/a		30		n/a		34
including up-front discount on Russian claims		72		54		n/a		63

1/ OECD data does not reflect all debt forgiven, as some creditors only report debt forgiveness as payments fall due.

Table 7. HIPC Debt Stocks Before and After Assistance

	33 Countries expected to receive assistance (excl. Sudan, Somalia, Liberia) (In billions of U.S. dollars)	All 41 countries 3/ (incl. Sudan, Somalia, Liberia)
Nominal Debt end-1997 (GDF) 1/	137	200
PV of debt of end-1997 (GDF) 1/ 2/	101	157
PV of debt after traditional mechanism	72	104
Less PV of HIPC assistance	27	36
PV of debt after HIPC assistance	44	68

Source: Global Development Finance, 1999, and IMF staff estimates.

1/ Global Development Finance (GDF) values Russian Ruble debt at official exchange rate of R0.6/\$.

2/ GDF methodology for calculating present value does not correspond exactly to that used in the HIPC Initiative which uses detailed loan-by-loan data, and currency specific discount rates.

3/ Includes Malawi, which was not originally classified as a HIPC, but excludes Nigeria which is not IDA-only.

arguments for transfers of resources to low-income countries, it is doubtful whether this was the most effective means of providing them: resources were neither targeted at the most efficient projects nor at the poorest people. In future, more disciplined lending and borrowing practices, greater provision of grant financing within a multi-year framework, and the development of nationally-owned Poverty Reduction Strategies, as recently proposed by the IMF and World Bank, hold out the prospect for increasing the effectiveness of external assistance—including debt relief—within a more coherent framework for achieving poverty reduction in all LICs.