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Debt Sustainability: Relief Target, Rule For Lending Or Policy Goal For Low-Income Countries?

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Task Force on Debt Restructuring and Sovereign Bankruptcy

Debt Sustainability: Relief Target, Rule For Lending Or Policy Goal For Low-Income Countries?

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1) INTRODUCTION

To move forward, we should redefine debt sustainability as the level of debt that allows a country to achieve the Millennium Development Goals and reach 2015 without an increase in debt ratios.

Kofi Annan, *In Larger Freedom*, UN 2005, para. 54

Since the 1970s, there has been a growing economic literature analyzing how to decide whether a country's debt is "sustainable".[2] Since 1996, "debt sustainability" has become much more important, as debt relief initiatives for some low-income countries – especially those covered by the Initiative for Heavily Indebted Poor Countries (HIPCs) – have for the first time been based partly on the aim of making countries' debt "sustainable", rather than on the lowest common denominator of what creditors are willing to provide. These initiatives have set threshold levels at which they consider debt to be "sustainable", and then encouraged creditors to reduce debt by amounts that allow countries to reach the thresholds, or go well below them.

More recently, having provided significant debt reduction to low-income countries, the international community has also tried to define thresholds to track whether a country will maintain "long-term debt sustainability", and on this basis, to decide whether a country can afford aid in the form of loans, or only as grants.

However, many, especially policymakers and officials from low-income countries, but also many parts of the United Nations (including the Secretary-General as quoted above) and global civil society, have questioned the validity of these methods of defining "debt sustainability" and the ways in which they are being applied.

This paper assesses the various definitions and mechanisms used to achieve debt sustainability. Section 2 examines the basis for the definition of sustainability currently used by the international community to determine debt relief levels and monitor long-term sustainability. Section 3 examines the different methods used to assess sustainability, using equations, models and thresholds. Section 4 looks at the application of definitions and thresholds to attain debt sustainability for developing countries, by using them as guidelines for providing debt relief and concessional new financing, and for deciding debtor country policies.

Section 5 concludes with ideas for how to analyze and achieve genuine long-term debt sustainability in developing countries. These ideas—and the analysis on which they are based – spring largely from the views of finance ministers and debt managers from 38 low-income governments, especially those of HIPCs, which have been expressed repeatedly in meetings organized by the HIPC Debt Strategy and Analysis Capacity-Building Program (HIPC CBP) since 1997.[3]

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[2] This paper does not deal with issues of market-based assessments of sustainability. For a good treatment of these, see Herman (2004).

[3] See www.hipc-cbp.org for more details. The HIPC CBP, which builds HIPC capacity to analyze and negotiate their own debt sustainability, is a program of Debt Relief International that has been funded by the governments of Austria, Canada, Denmark, Ireland, Sweden, Switzerland and the United Kingdom. However, this paper does not represent the official views of the governments which either fund or participate in the HIPC CBP.

2) IDENTIFYING DEBT SUSTAINABILITY?

At first sight, "debt sustainability", especially when translated into many languages used by low-income countries, sounds like the aim is to sustain (i.e., continue with) a particular level of debt. However, as defined by the International Monetary Fund (IMF), it is:

> "a situation in which a borrower is expected to be able to continue servicing its debts without an unrealistically large correction to the balance of income and expenditure" (IMF, 2002, p.4).

In more detail, debt sustainability incorporates several sub-components: solvency, liquidity and vulnerability. These in turn are best defined for governments as:

- *Solvency*: a situation in which the present discounted value of the government's primary surpluses (revenue and grants minus non-interest expenditures) is greater than the present discounted value of its debt servicing;
- *Liquidity:* a situation in which the liquid assets and available private financing are sufficient to meet or roll over its maturing liabilities;
- *Vulnerability:* the risk that liquidity will be interrupted or solvency eroded by an economic shock.

Sustainability is therefore a situation in which both solvency and liquidity can be achieved without foreseeing any major correction in the balance of income and expenditure, taking into account the vulnerability risks. Therefore, ideally, international debt relief initiatives would make maximum contributions to ensure that developing countries are solvent, liquid and well defended against vulnerability.

However, these definitions raise more questions than they answer, notably:

- How do we define future government liabilities, especially debt burdens? In particular, which types of debt should we include in the measurement?[4]
- How do we define future government income, liquid assets and financing, and calculate the government's payment capacity?
- How do we define future government (non-debt) expenditures?
- How do we know what is "expected" to happen to the borrower's debt levels and to its ability to service its debt? How do we model or forecast these aspects as accurately as possible? In doing this, how do we measure vulnerability risks?
- What is an "unrealistically large correction" to the balance of income and expenditure? Should this just be seen in relation to recent trends or baseline forecasts, or should it be set in relation to social and political goals of the borrowing country, such as the Millennium Development Goals?

2.1. Defining Debt Burdens

Three elements are usually suggested for measuring debt burdens

- Debt stock – the nominal amount of debt owed by a country
- Present value (PV) of debt (for details, see Martin, Johnson and Aguilar, 2000)
- The debt service – the annual amounts payable on the debt.

[4] In this paper we are not entering into ethical considerations on how external debt was contracted and on whether it was contracted for odious purposes or through odious processes.

Until the early 1990s, stock and service were the preferred concepts to measure debt burdens. Stock was used to analyze solvency, and service for liquidity. They were easy to understand and to calculate for governments, creditors and foreign and domestic private sector investors. In the 1980s, the World Bank introduced the concept of using the PV of debt to measure developing country debt burdens, as a way to take the actual financial burden of the debt more accurately into account.

Major donor governments have long calculated PV to compare their aid efforts. Their coordinating body, the Development Assistance Committee (DAC) of the Organization for Economic Cooperation and Development (OECD), needed a way to take account of the different degrees of subsidy embodied in concessional development loans of its members. They thus began calculating the present value of the nominal debt servicing over the life of each loan using a national commercial interest rate as the discount rate (in other words, the PV indicated how much money the debtor could borrow in the creditor country today at commercial rates and generate debt servicing obligations financially equivalent to those in the concessional loan). The difference between the nominal and the present value of a loan was known as the "grant element", and since 1972 only loans that had a grant element of at least 25% of the loan counted as aid (Führer, 1996, p. 24).

When the Paris Club creditors began to cancel some of the debt obligations of developing countries and not just reschedule them at commercial interest rates, they decided to apply the concept of PV in comparing debt reduction terms they offered, in parallel to the early DAC practice for aid.[5] The fundamental principle of the Club was that members should make comparable sacrifices when they jointly restructured a debtor country's official debt repayments. Each creditor thus would calculate the PV of pre- and post-relief debt servicing due to it (each using its own discount rate, the "CIRR" [6]), and the difference was the value of its relief. This also served as a means of ensuring comparable efforts by creditors that were providing debt relief in different ways (cancelling debt up front, or rescheduling payments at reduced interest rates).

Although calculated from the perspective of the creditors, the sum of the PV of each creditor's relief (converted into US dollars at the current exchange rate) has been taken to also represent the value of the relief to the debtors, This appeared to indicate that the different relief terms were equally valuable to debtors – even though virtually all debtors getting Paris Club debt cancellation had no access to long-term unrestricted credit on commercial terms from private lenders in the creditor countries. In other words, the debtors had no market basis for determining what their discount rate should be for converting their post-relief debt servicing obligations into a PV.

It is now often suggested (as in IMF 2003a) that PV is the most theoretically valid debt concept from the debtor's perspective, because it comes closer to reflecting the concessionality of the debt owed by low-income countries. However, it is neither a simple nor a satisfactory measure of effective "debt overhang" or "solvency" of low-income countries (LICs), for 4 reasons:

[5] See Cosío-Pascal (2007) on how the Paris Club treatment of low-income country debt evolved over time.

[6] Commercial Interest Reference Rates, applied to export credits by the official agencies participating in the OECD Working Party on Export Credits and Credit Guarantees. They are based on government bond yields in the markets of the agencies plus a margin and are changed frequently.

- First, the legal obligation is the face value. Most private market actors (such as credit rating agencies, bank lenders and foreign investors), debtor country civil societies, not to mention official creditors, even if they assess developing country debt burdens using PV, also focus on the nominal debt stock. Indeed, when national export credit agencies cancel or restructure debt obligations, they seek compensation from their government for the full nominal value of the credits treated (typically counted as development aid), and similarly, multilateral institutions seek full compensation from their government shareholders.
- Second, the "NPV" term itself is ambiguous. The HIPC Initiative often refers to its calculations as being "Net Present Value" (NPV), but this PV is not *net* of anything. *Net* present value of debt should mean deducting the PV of the income stream (such as budget revenue or exports) from the PV of the debt payment stream.
- Third, as already noted, it is difficult to determine the appropriate discount factor. The practice in the Paris Club and the HIPC Initiative may make sense in seeking comparable burden sharing among official creditors, as noted above, but it is not a useful calculation from the perspective of the debtor looking at its future obligations, or even from the perspective of potential new creditors who want to assess the payment capacity of the borrower. The IMF and World Bank "solve" this problem in their long-term debt sustainability calculations for low-income countries (see below) by simply adopting the US CIRR as the discount rate; but this is an arbitrary solution. If the debtor country could borrow unrestricted funds in the market at the US CIRR, it would not be receiving significant debt reduction from official creditors or large amounts of concessional loans and grant aid. In this sense, the discount rate for PV calculations is notional. Indeed, one might even redefine the PV for such countries not in terms of the interest rate on loans to which they have no access, but the interest rate on foreign currency assets they hold. The question in this case would be how much money would debtor country X have to put aside so that its earnings over time would cover the actual debt-servicing obligations? Such a question might lead to adopting the average interest rate on the country's foreign exchange reserves as the discount rate. That yield would be less than the CIRRs and thus the calculated PV of debt would be higher and the measured PV debt/export ratio and other debt indicators would be higher as well, requiring greater relief to bring the ratios down to targeted levels. Similarly, in post-relief debt monitoring, it would signal that a weaker situation existed compared to one based on the US CIRR.
- Fourth, estimated PV is highly volatile. The CIRR interest rates on which PV calculations are based fluctuate sharply and that means the calculated present value of debt will also fluctuate sharply. When interest rates rose in 1999-2000, countries reaching HIPC decision points in 2000-2001 lost hundreds of millions of dollars of debt relief compared to what they would have obtained earlier without any change in their long-term prospects. When interest rates tumbled after September 11, countries coming to decision and completion point in 2002-4 gained hundreds of millions of dollars of debt relief. With interest rates again on the rise in 2004-06, countries reaching decision points in 2005-06 would similarly be awarded less relief compared to the immediately preceding years.[7] This interest

[7] Those reaching completion points are partly protected against losses because they cannot receive less debt relief than they were promised at the decision point, though, they might not be accorded otherwise

variability introduces inappropriate distortion and uncertainty, undermining debt relief's ability to meet the medium to long-term needs of LICs.

In short, whatever the theoretical attraction of PV calculations and the confident use of them by donors and creditors, we find them highly unreliable indicators for debtors.

2.2. Which Debts to Include

All debts that determine borrower sustainability should be included in the analysis. For low-income countries, this means all public and publicly guaranteed (PPG) external and domestic debt[8] for government debt sustainability; and external PPG plus private sector external debts for national debt sustainability (see IMF 2002).

Yet the HIPC Initiative analysis used to determine how much relief was warranted did not follow these principles. It has omitted two types of debt which are burgeoning in low-income countries - domestic debt and private sector debt, as these are outside the scope of the debt the international community sought to address using HIPC funds:[9]

- *Domestic debt* has been a huge burden in many LICs (see HIPC CBP, 2005a). The outstanding stocks of treasury bills and bonds are small in many countries, partly because they have only recently begun to use market-based instruments. However, when central bank overdrafts and arrears to suppliers and government employees are taken into account, domestic debt service is higher than external debt service for many LICs, including more than 20 HIPCs. In addition, when making forecasts, *contingent liabilities* (e.g., any expected recapitalization of the central or commercial banks, or social security system through new bond issues) should be taken into account.[10] It is impossible to ensure adequate resources for MDG spending unless we analyze domestic debt problems and resolve them (c.f., Johnson 2000).
- Another key burden emerging for low-income countries, especially those which have liberalized capital accounts and received large foreign investment (e.g., Bolivia, Chad, Gambia, Ghana, Guyana, Mali, Mozambique, Tanzania, Uganda and Zambia) is rapidly growing *private sector debt* to help finance direct foreign investment projects or export/import transactions. Martin and Rose-Innes (2003) show previously unreported debt stocks of 50-100% of export earnings in several countries. It is vital to realize that many developing country debt crises, albeit not those of the HIPCs, have been provoked by private sector default on debt that was not guaranteed by government.

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warranted additional relief owing to the present value recalculation. The new long-term debt sustainability framework slightly reduces this problem in assessing sustainability by changing the discount rate only if the US$ CIRR changes by more than 1%.

[8] Including debt borrowed by public sector agencies (parastatals, federated states, municipalities), as well as debt contracted by the private sector with government guarantee.

[9] During the 2002-04 debate on long-term debt sustainability launched by the Bretton Woods institutions, proposals were made to exclude some public sector debt because it was used to finance "enclave" projects which earn enough foreign exchange to repay themselves; however, these suggestions now appear to have been dropped (see Martin (2004) for more details). This is fortunate because publicly guaranteed debt from projects that were thought to be self-financing has often been key contributors to debt crises (see IMF, 2002).

[10] Pension reform has recently been a powerful contributor to renewed debt unsustainability in Bolivia, and bank recapitalization has reduced sustainability in Mozambique.

2.3. Judging Payment Capacity

The payment capacity or income stream of a country is usually judged using output, exports or budget revenue, preferably expressed in present value terms if PV is used to measure the debt. But the fundamental issue for government debt in low-income countries is the revenue stream used to pay debt service. This means that the standard indicators may not be informative. In particular:

- Higher GDP is often assumed to mean a rise in government resources to repay debt. However, there is no necessary correlation between it and the availability of government budget or foreign exchange resources to pay debt.
- Exports of goods and services are taken to be an indicator of foreign exchange availability to meet external payments needs, including government (and private) foreign debt servicing. However, exports should not be used to judge LIC government payment capacity. Most LICs have liberalized their foreign exchange markets, do not have captive private sector export earnings to pay debt service, and may be unable (or unwilling given inflationary risks) to buy foreign exchange in the markets to transform private export earnings into government debt service. This is particularly true when export earnings are held in offshore accounts; or when export-earning projects are given long tax holidays, so that they contribute no tax revenue to government.[11]
- It is vital in most African countries to separately analyze government, parastatal and private sector export earnings (breaking down the private sector where necessary into sub-sectors or mega-companies or projects) and their fungibility to protect against foreign exchange shortage.
- Government debt payment capacity (for external, domestic or total debt) depends on budget revenue. Some suggest that it is difficult to use revenue to judge payment capacity because revenue data are poor and because this will risk a "moral hazard" of governments reducing revenue efforts to receive more debt relief. Low-income countries have demonstrated the existence of reliable revenue data and argued that the revenue targets of those receiving relief are set jointly with the IMF, are based on assessments of the maximum feasible for that country, and so are not subject to moral hazard.

Overall, it is clear that while debt sustainability can be analyzed using the broadest possible range of indicators (PV, debt stock and debt service, compared to GDP, exports and budget revenue), analysis should be tailored and indicators prioritized according to country circumstances. Low-income country policymakers are clear that for them, the binding constraint is budget revenue and the key debt burden debt service. As a result, they give top priority to analyzing debt service/revenue.

Another important issue is the ***time period*** used to judge payment capacity. As discussed in more detail in section 4 below, HIPC budget revenues, export earnings and GDP are highly volatile. Therefore analysis of payment capacity should be based on averages defined according to country-specific analysis of volatility. Though the original design of the HIPC Initiative envisaged this method for exports, all HIPC analyses have subsequently used a 3-year average to track the PV debt/export ratio, and only the most recent year of exports and budget revenue for the other ratios.

[11] Export earnings may represent a second-best proxy for revenues in the few low-income countries where taxes on mineral exporters represent a high proportion of budget revenues.

Finally, according to the IMF definition above, judgments on sustainability should be based on "expected" developments projected into the future for 15-20 years, in order to attempt to keep debt sustainable over the long-term. This implies assessing what should be included in the government's expenditure as the minimum essential that should not be compromised, but how should one make that assessment?

2.4. Judging Future Government Expenditures

The best way is by national social and political consensus on the expenditure needed to reach national and international development goals, provided that it is financeable and will not have negative macroeconomic effects. In 2000, the international community agreed at the United Nations Millennium Summit that developing countries should halve poverty and attain wider goals, including some that later came to be called the Millennium Development Goals (MDGs). To do this, two types of expenditures would need to be fully funded:

- The pro-poor public sector investment expenditures necessary to attain the economic growth needed to reach MDG poverty reduction targets, according to country-level calculations of the growth-poverty elasticity and the potential contribution to growth of investment in different factors;
- The well-costed expenditures needed to attain the other MDGs (such as 100% vaccination, 100% primary school enrolment, etc).

Broadly reliable data for calculating such expenditures are available for most low-income countries through poverty surveys, national accounts series, and estimated unit costs for anti-poverty expenditures (though countries continue to need to work to ensure that spending is best value for money and improve its impact), allowing robust estimates of the poverty-growth elasticity and costing of anti-poverty spending (c.f., HIPC Capacity-Building Program country reports and Millennium Project, 2003).

The key documents prepared for access to the IMF Poverty Reduction and Growth Facility (PRGF) and for the HIPC Initiative made little attempt to judge the impact on debt sustainability of funding the economic growth rates or costed the expenditures necessary to reach the MDGs or national development plan goals. However:

1. Studies by 15 HIPCs[12] indicated that annual growth of gross domestic product (GDP) would need to average 6.3% to attain the MDGs, compared to average projections of 5% in those countries' IMF programs (see Martin and Bargawi 2004).
2. Projections by the same countries of their costed expenditure needs to 2015 indicated that the expenditures programmed in their Poverty Reduction Strategy Papers (PRSPs) were $5.3 billion lower per year than those needed to attain the MDGs.
3. If these additional expenditures were to be funded on the same basis as currently projected external financing (55% grants and 45% loans), these HIPCs have calculated that they would result in unsustainable debt levels (as measured by HIPC PV debt/export and PV debt/revenue thresholds) and debt service/revenue above 10% for almost all of them.
4. The Millennium Project case studies of Bangladesh, Cambodia, Ghana, Tanzania and Uganda found even larger financing gaps, totaling $8.5 billion for the 5

[12] Benin, Bolivia, Burkina Faso, Ethiopia, Ghana, Guyana, Mali, Mauritania, Mozambique, Niger, Rwanda, Senegal, Tanzania, Uganda, Zambia.

countries, though the average per country excluding Bangladesh was $547 million a year (see http://www.unmillenniumproject.org).

In short, the technical difficulties in estimating needed expenditures, which previously provided a justification for why spending projections in PRGF and HIPC documents were not linked to the MDGs and LIC national development goals, can be addressed. There is therefore no valid reason for not estimating "necessary" government expenditure in forward-looking debt sustainability analyses. Of course, for many countries, this would mean reducing debt service to zero for the foreseeable future, as part of the funding for the MDGs. Various international civil society organizations have suggested variants of this approach.[13] In addition, as discussed in section 4.3 below, the Multilateral Debt Relief Initiative (MDRI) is based on ignoring debt sustainability thresholds and providing 100% relief on multilateral debt in order to provide extra funding for development.

If the principle is accepted and the possibility of measurement recognized, the question remains why this approach was not taken in practice. There seem to be two main reasons:

1. There were doubts about the availability of grant funding to pay for the additional expenditure, and therefore worries that loan funding of such large amounts would push LIC debt levels above sustainability thresholds. In the context of the large pledges of increased grant aid made during 2005 by the Group of 8 (G8) and the European Union (EU), these doubts seem exaggerated, yet they distort aid projections in IMF programs downwards, ruling out expenditure increases as "unfinanced" (Heller, 2006).
2. Some in the IMF and some LIC governments were worried about the potential inflationary or "Dutch Disease" impact of large additional extra spending, or lack of administrative capacity to spend money productively in some countries. However, the literature indicates that it is feasible to design policies which will minimize these problems and ensure that the spending benefits for the MDGs far outweigh the costs (see Adam and Bevan, 2003; Foster, 2003; and Nkusu, 2004).

[13] CAFOD (1998) suggested deducting some types of MDG expenditures from feasible budget revenue and then using this as the denominator for ratios; more recent papers (e.g., CAFOD et al., 2003, Jubilee Debt Campaign et al., 2005) suggest cancelling all debt if this is necessary to fund MDG spending. All acknowledge, however, that additional assistance beyond full debt relief would be required.

3) ASSESSING DEBT SUSTAINABILITY?

Once the terms to be used in the analysis are decided, they need to be combined into a debt sustainability assessment. There is a huge literature suggesting ways to assess sovereign debt sustainability.[14] Essentially it divides into using two methods:

- Equations which attempt to measure debt dynamics (i.e., the direction in which debt indicators are likely to move); and
- Analysis which attempts to set thresholds above which debt is deemed unsustainable.

3.1. Debt Dynamics and Other Equations

The simplest version of the debt dynamics equations is an "accounting" approach which states that a sufficient condition for debt to be unsustainable is if its interest rate is higher than the rate of growth of the variable used to measure payment capacity (GDP, exports or budget revenue). Under that condition, the debt ratio would grow indefinitely, even with no net new borrowing, which does not provide any prospect of repayment. Building on this, many authors have used more complex accounting frameworks, which suggest that the government's debt is unsustainable if its primary fiscal surplus is insufficient to cover the gap caused by the excess of the interest rate over the economic growth rate (or similarly for aggregate external debt, if the current account surplus is insufficient to cover the gap caused by the interest rate/growth rate differential). However, these simple formulations are usually rejected because they consider neither the intertemporal budget or balance of payments constraint, nor the financeable level of the fiscal or the balance of payments deficit. As a result, more complexity is usually introduced through the Present Value Budget Constraint (PVBC) approach, which uses the present value of budget variables, and considers different financing options for the budget or balance of payments.[15]

Based on these approaches, studies adopt one of three methods for assessing debt sustainability. One is to use "sustainability tests", which analyze historical performance for a country and draw implications for the future. This is commonly regarded as inadequate (see Croce and Juan-Ramon 2003). A second is to define synthetic indicators (e.g., Blanchard, 1990; Buiter, 1985; Rudin and Smith, 1994) based on debt/GDP or net worth/GDP, or adjusting these for assumptions about a policy effort by government to maintain sustainability taking account of the impact of shocks (Croce and Juan-Ramon, 2003). A third is to undertake projected simulations of debt sustainability (a good example is Fedelino and Kudina, 2003).

The ambition of the studies based on these approaches varies. Some attempt to define growth-optimizing debt levels, while others limits themselves to models that could be used to forecast the future sustainability of debt for an individual country. The most advanced of these models introduce variables allowing for the variability of interest and exchange rates, and of shocks to the denominators of ratios (e.g., Edwards, 2002; Kamel, 1988; Hjertholm, 1991).

[14] For good literature surveys of this type of analysis, see Chalk and Hemming (2000), Fedelino and Kudina (2003), and Hjertholm (1991).
[15] Good examples of this are Cuddington (1997) and Chalk and Hemming (2000).

These studies can provide simple indicators and rules for debt policy. However, most remain too full of simplifying assumptions to be of use in defining macroeconomic and financing/debt management policies that allow countries to keep their debts at sustainable levels. The models are useful in analyzing debt dynamics under different assumptions, but do little to tell us which paths are sustainable. For example, virtually none of the models explicitly treat the level of expenditure that needs to be sustained to reach the Millennium Development Goals. In these models, sustainability is typically measured as whether a country's debt dynamics are exploding or stable, not whether the level of debt is compatible with long-term sustainable growth. In addition, far too many focus on GDP rather than budget revenue, bypassing the main measure of government payment capacity.

Furthermore, the models are extremely sensitive to the values of input variables, especially for countries that have a relatively high debt burden. Small changes in GDP, exchange rate, inflation, or interest rate forecasts can push countries from sustainable to unsustainable debt dynamics. The implication is that the results of these models are often dependent on subjective viewpoints. In theory, the models should be used over a full probability distribution of outcomes, but often they look at just 3 scenarios (optimistic, pessimistic, and base case), which themselves tend to be subjective, or even only two scenarios (IMF program and historical trend).

3.2. Debt Sustainability Thresholds

A second set of articles has attempted to judge the sustainability of debt by setting specific "sustainability thresholds" for solvency and liquidity, and forecasting debt and macroeconomic variables to see whether countries' debt will stay below them. Various methods have been used to set the thresholds, dividing into two main groups: 1) those that use "events" (such as incurring arrears, Paris Club reschedulings or IMF programs) to date crises and then judge the level at which the debt became unsustainable; and 2) those that use econometric tests. Many studies (e.g. Cohen, 2001; Elbadawi, Ndulu and Ndung'u, 1997; IMF/World Bank, 2004; Johnson, 2000; Kraay and Nehru, 2004; Martin, 1999a; Pattillo, 2002; Underwood, 1990; and Vaugeois, 1999) have examined the levels of debt that have proven historically or econometrically unsustainable.

The results of the studies are shown in table 1. They have identified varying levels of thresholds for unsustainability of external debt as follows:

- PV debt/export threshold ranging between 140% and 211%.
- PV debt/budget revenue threshold ranging between 151% and 288%.
- PV debt/GDP threshold between 37% and 56%
- Debt service/export threshold between 9% and 15%
- Debt service/revenue threshold between 10% and 13%.

There are many methodological differences between the various studies, including the selection of countries studied and the means of judging when debt is unsustainable. In particular, many studies, such as that by Kraay and Nehru, focused on levels of debt when countries went into debt crisis, which are clearly above those at which each country debt could be considered to have first become unsustainable.

TABLE 1: ESTIMATES OF SUSTAINABLE DEBT THRESHOLDS (%)					
	Present Value Debt/Exports	***Present Value Debt/ Budget Revenue***	***Present Value Debt/GDP***	***Debt Service/ Exports***	***Debt Service/ Budget Revenue***
EMPIRICAL THRESHOLDS					
Cohen (2001)	211	n/a	n/a	n/a	n/a
DRI (Johnson 2000, Martin 1999, Vaugeois 1999)	140	151	n/a	12	13
Elbadawi, Ndung'u and Ndulu (1997)	n/a	n/a	n/a	9	10
Hjertholm (1999)	200	280	56	n/a	n/a
IMF (in IMF/World Bank 2004a)	192	288	43	15	13
Pattillo (IMF) 2002*	165	n/a	37	n/a	n/a
Underwood (1990)	200	n/a	n/a	n/a	n/a
World Bank (Kraay and Nehru 2004)**	79-300	142-235	21-49	n/a	n/a
INITIATIVE THRESHOLDS					
Original HIPC Initiative (1997)	200-250	280	n/a	n/a	n/a
HIPC Initiative (2004)	150	250	n/a	15-20	n/a
Long-Term Debt Sustainability (2005)	150	250	40	20	30
* = mid-point of estimated ranges ** = ranges across the spectrum of policy quality					

Finally, there has been a growing literature suggesting that individual thresholds should be set for each country, based on the level at which its debt became unsustainable (Hjertholm 1999), or the level of its MDG spending needs (CAFOD et al., 1998; Jubilee Debt Campaign et al., 2005). IMF (2002) also suggested that debt/GDP thresholds vary depending on the levels of the ratios for exports/GDP and budget revenue/GDP. Most recently (IMF/World Bank, 2004), the Bretton Woods institutions have endorsed variable thresholds by saying that target thresholds should depend on 3 factors:

1. Policy performance (countries with better policies can afford more debt),
2. External shocks (countries with lower risks of shocks can afford more debt), and
3. Debt management (countries with better debt management can afford more debt).

All of this seems entirely logical – the key issue is how to apply such principles. One might conclude, in other words, that there is as much art as science in deriving practical guidance for policy making from the literature on debt sustainability.

4) IMPLEMENTING DEBT SUSTAINABILITY?

Even if we are clear about the definitions and thresholds to use to measure debt sustainability, it is not simple to apply these in ways which ensure that developing countries attain debt sustainability in the short term, and maintain it over the long term. This section looks at lessons of recent attempts to reach sustainability.

4.1. Debt Sustainability and the HIPC Initiative

The main practical lessons of international efforts to reduce debt to a "sustainable" level come from the experience in implementing the HIPC Initiative. This has taken only limited notice of actual debt sustainability as discussed in previous sections. The access to relief under the HIPC Initiative has been determined by eligibility thresholds, which combined objective analysis and political compromises among major creditor countries, balancing the need to include strategic allies and the desire to keep costs down. This was above all true of the "HIPC I" (or the original HIPC Initiative). It included a PV debt/export threshold which according to most empirical analyses was set too high at 200-250%, and a PV debt/budget revenue threshold of 280% (just low enough to include Côte d'Ivoire, and accompanied by empirically unjustified sub-criteria to keep down costs by excluding other countries, and therefore known as the "Côte d'Ivoire" criterion – see also Hjertholm, 1999).

The "Enhanced HIPC Initiative" (HIPC II) brought down the ratios to 150% PV debt/exports and 250% PV debt/budget revenue, leaving the latter still well above analytically-based sustainable levels. HIPC II also aimed to bring debt service/exports ratios down to a guideline level of 15-20%, which was still higher than the sustainable levels according to most studies. In addition – and in spite of the fact that all HIPCs would regard this as the key debt burden indicator if the aim were to free resources for poverty reduction spending – HIPC II continued to avoid giving systematic attention to setting maximum thresholds for debt service/budget revenue ratios. It aimed only for a debt service/revenue ratio that was "low and declining". Neither of those terms was defined, leaving a large leeway for subjective viewpoints about the priority of boosting poverty reduction spending versus further budget deficit reduction.

Another fundamental principle of the Enhanced HIPC Initiative was that, in order to provide an apparently equitable – and politically acceptable – basis for treatment of debtors and participation of creditors, it aimed to reduce the debt ratios of all HIPCs to the same standard threshold levels, thereby ruling out differentiated ratios. The Original HIPC Initiative had allowed for some variation of target ratios depending on a set of "vulnerability criteria", but these had proved complex to administer and were dropped in HIPC II.

Besides adopting the imperfect relief targets noted above, the HIPC Initiative also undermined the attainment of sustainable debt in three other ways:

- It based debt reduction on the unwarranted assumption that all creditors would provide the scheduled debt relief;[16]

[16] For individual HIPCs and at the margin, non-participation of some creditors has been a key barrier to reducing debt to envisaged levels. As a result, 18 HIPCs calculated in their national debt strategy analyses that they would have been unsustainable at completion point without the MDRI, if creditor non-participation was taken into account.

- Delivery of relief was delayed by several years due to excessive conditionality;[17]
- Insufficient liquidity was provided in the early years of debt relief in that debt service obligations were not sufficiently reduced to maximize savings for spending on the MDGs.[18]

The impact of the restrictions on reaching sustainability under the HIPC Initiative is clear. Before the introduction of the MDRI (see below), taking into account creditor non-participation, delay in completion points and high debt-service ratios, only 9 HIPCs assessed themselves to have reached sustainability as a result of the HIPC Initiative.[19] This was out of 18 countries (out of 41 HIPCs in all) that had reached completion point and 2 that were judged to be sustainable after having received debt relief outside the HIPC Initiative.

4.2. Long-Term Debt Sustainability

The application of HIPC and other relief thus largely failed to deliver debt sustainability after countries reached their completion point. Indeed, of the first 18 countries to reach the HIPC completion point, 12 either required more relief at completion point than originally programmed, or saw their debt become unsustainable again after the completion point. Prospects were also bleak that post-completion point HIPCs would have "sustainable" debt levels in the long term with existing policies on the delivery of so much of official development assistance as loans. The solution would have to include provision of a greater share of assistance as grant financing, or restricting the inflow of assistance, which would violate donor commitments to raise aid levels to help countries achieve the MDGs. The policy question was how to decide how much foreign credit these countries could safely absorb.

As a result, the World Bank and IMF made new proposals with the aim of assessing long-term debt sustainability (IMF/World Bank, 2004a, 2004b and 2005a). In the process, they identified "long-term debt sustainability" (LTDS) as depending on four factors:

- The quality of developing country policies and their influence on denominators of the debt ratios, and on the availability of budget revenue;
- The types of external financing provided to the country;
- The quality of debt management by the country;
- Unexpected events ("exogenous shocks") which could derail development.

Ideally, therefore, Bank and IMF assessment of LTDS would take all four of these into account in the two methods they used to analyze long-term debt sustainability:

- Individual country-specific debt sustainability thresholds;
- A forward-looking long-term analysis of debt and debt service dynamics.

[17] There has been a lengthy average delay in HIPC "completion points" (at which full relief is delivered) compared to initial projections, largely due to onerous conditionality (see Martin and Bargawi, 2004).

[18] Under HIPC, 18 of 27 countries had debt service ratios in the year after decision point higher than the warranted thresholds identified by Debt Relief International (Martin, 2004b).

[19] Ghana, Honduras, Kenya, Madagascar, Mali, Rwanda, Senegal, Viet Nam and Zambia (based on national debt strategy analyses conducted by country authorities). The impact of "shocks" on debt sustainability is excluded here and discussed in the next section.

4.2.1. Definitions and Thresholds

The new long-term debt sustainability analysis framework uses a more comprehensive range of indicators to assess sustainability – with PV debt stock and debt service as numerators compared to GDP, exports and budget revenue as denominators. This is a welcome step forward, but the key to its success in measuring sustainability will be how it judges the relative priority of the different indicators. As of end-2006, in its practical application to the decisions on providing funds from the International Development Association (IDA) of the World Bank and the African Development Fund (ADF) of the African Development Bank in the form of grants or loans, it has focused primarily on the ratios of the PV of debt to GDP and exports, secondarily on debt service to exports, and not at all on ratios related to budget revenue.

The mid-point levels of the thresholds for the grant/loan decisions (see below) are broadly compatible with those of the HIPC Initiative in terms of PV debt/exports and PV debt/revenue ratios (150% and 250%) and debt service to export levels (20%). In fact, they were reduced from initially proposed levels based on Kraay and Nehru, 2004 in order to be more compatible with HIPC completion point thresholds. However, they are still much higher in both cases than the recommendations of the HIPC CBP, especially in regard to debt service to revenue where the mid-point is 30% compared to 13% identified by the HIPC CBP (see Martin, 1999a).

The new framework also acknowledges that many low-income countries may have high domestic debt and private sector debt, which should be taken into account in analyzing long-term debt sustainability. Their trends will thus now be monitored in the templates prepared by the Bank and Fund for undertaking the analysis under the new framework, tracing total public debt to GDP and external debt to exports as among the monitored variables. However, the new framework makes no attempt to define thresholds for excessive levels of these variables, therefore relegating them to a secondary position, and giving LICs no guidance as to levels which have proven unsustainable in the past and might therefore signal future debt problems.

In setting the LTDS thresholds, the Fund and Bank adopted as a principle that the thresholds could be different for countries in different situations, depending on the policy performance of the countries (on the basis that better policies could make higher debt levels sustainable), their access to financing (more concessional financing making their current debt more sustainable), their debt management (better debt management making higher current debt levels sustainable), and their vulnerability to exogenous shocks (higher vulnerability reducing the thresholds).

Yet, as adopted by the Bank and Fund Boards, the framework varies the thresholds based only on the scores countries achieve in the Country Policy and Institutional Assessment (CPIA), conducted internally by World Bank management and staff. Countries are grouped into three bands and those with weak policy performance have lower thresholds (e.g., 100% PV debt/exports), whereas those with strong performance have higher thresholds (e.g., 200% PV debt/exports). Such a variation in thresholds emerged initially as strong suggestions from econometric analysis (Kraay and Nehru, 2004). However, as indicated by Board members, the scale of the variation was reduced from initial suggestions due to Board concerns (including those of low-income country representatives) about potential risks of excessive borrowing if policymakers were told they could afford much more debt after completion point.

Low-income countries are also concerned about the validity of using the CPIA scoring system to assess their policy (see HIPC Capacity-Building Program Finance Ministers Network, 2005-2007), for four reasons:

- Its methodology has little detailed relationship to the attainment of the MDGs;
- The details of the methodology (which has been made public) are highly controversial and allow considerable room for subjectivity in the assessments;
- The assessment is conducted confidentially by World Bank management, with no country participation or ownership of the results; and
- While the summary results for individual LICs have been published since 2005, detailed explanations of these results remain confidential, leaving most stakeholders in the countries ignorant of their basis**.**

Finally, after the dynamics of a LIC's debt indicators are analyzed against the thresholds determined by the CPIA classification, the results are used to divide multilateral institution funds for the country into loans and grants according to inflexible thresholds (known in IDA as "red light" (100% grants), "yellow light" (50% grants), and "green light" (zero grants) conditions).

4.2.2. Long-Term Analysis of Debt Dynamics

The LTDS analysis is to be conducted through long-term projections of the economy and debt accumulation. The projections examine trends in all the above debt indicators under baseline and alternative scenarios and stress tests that to varying degrees take three of the four influences cited above into account, as follows:

- ***Quality of policies*** is projected and taken to influence the denominators of debt ratios (including budget revenue) over time. However:
  - As discussed already in Section 2.4 of this paper, the baseline projections do not make adequate room for the government spending needed to attain the MDGs.
  - Unless additional fiscal space is provided to policy makers to accelerate growth, it is unlikely that the poverty reduction MDG can be met (Martin and Bargawi, 2004).
  - Baseline projections need to be realistic (i.e., cautious) about country prospects. This means taking account of likely variability in aid flows, commodity prices and weather, based on past volatility and trends, as well as the expected impact of the HIV-AIDS pandemic on growth and debt sustainability. While the new framework seeks to address some of these concerns through a standard "historical trend" scenario, it does not trace the effects of such factors beyond their direct impact on individual line items.

- ***External financing*** possibilities to be provided to a country are taken into account through alternative scenarios and "stress tests" of different financing terms. However, financing terms are only one financing-related factor contributing to unsustainable borrowing. Policy makers also need to examine scenarios for:
  - Increasing grant aid flows in line with recent G8, EU and other pledges and testing their impact on growth, aid absorption and risks of Dutch Disease.
  - Shortfalls of aid compared to expectations, which have been frequent.
  - Improvements in the quality and effectiveness of aid flows, which can provide greater scope for growth and poverty reduction at lower costs.

- ***"Exogenous shocks"*** are sometimes included in alternative scenarios to estimate their impact on debt sustainability, but more often simulated in stress tests which adjust only a few line items of the balance of payments, GDP or budget. In addition, vulnerability to exogenous shocks is not used as a basis for varying the thresholds for countries. Severe, lengthy and frequent shocks are the key factors regularly undermining debt sustainability of low-income countries (IMF, 2003; Martin and Alami, 2001; Martin and Bargawi, 2004; World Bank, 2003). Shocks have been responsible for all the cases of renewed HIPC debt unsustainability after completion points.[20] It is therefore vital that shock scenarios:
  - Are MDG compatible, and include accelerated growth in post-shock years to offset the negative effects of shocks.
  - Are significant enough to reflect recent country experience.
  - Focus on the shocks' impact on the budget, GDP growth and poverty.
  - Include comprehensive analysis of the impact on all sectors, not just on a few line items or one sector.

The fourth element, debt management, is not separately factored into the projections. In practice conditionality, as in requiring that fiscal deficits be kept at low levels to avoid excessive debt growth, or placing limits on borrowing, may well keep up pressure for responsible debt management, though this is hardly desirable for country leadership of improved debt management. Such policy conditions will need to be interpreted flexibly, for example by allowing countries to borrow above thresholds over medium-term periods, if insufficient grants are available to fund the MDGs.

Moreover, the templates on which the scenarios are constructed for LIC debt sustainability analysis (as well as those used for other developing countries in IMF Article IV analysis) remain highly sensitive to the values of input variables, especially for countries that have a relatively high debt burden. As judgment is required in selecting the values for the input variables, the analysis is subject to the quality of the subjective judgments of those managing them. This risk of poor judgment would be reduced in using the templates if the results were analyzed and the policy implications discussed with representatives of the low-income countries themselves, so as to produce a fully tripartite analysis. Though this was the welcome focus in the "DSF2" paper presented to the IMF and World Bank Executive Boards (IMF/World Bank, 2006), it is not clear that it is occurring in most LICs. Such involvement could improve the usefulness of the templates as a framework for helping LICs to design debt management policies – though problems will remain owing to the lack of consultation of LICs when the new framework was first designed. Indeed, the lack of consultation in setting the thresholds and their dependence on the CPIA are undermining the credibility of the framework in guiding debtor decisions.

4.3. The MDRI: Beyond Debt Sustainability?

At the same time that the Bretton Woods institutions were developing the LTDS analysis with a view to establishing criteria for deciding how much post-completion point aid to provide as grants instead of loans, political pressure was building to revisit how much of the debt that the HIPCs owed to the multilateral creditors should

[20] This includes shocks with direct economic impact on HIPCs and such shocks as international interest rate changes that affect the official valuation of the PV of debt (see again, section 2.1).

be reduced. The outcome is that in 2005-06 the international community introduced the Multilateral Debt Relief Initiative (MDRI), which cancels almost all of the stock of debt remaining that HIPCs owe to ADF, IDA and the IMF after they reach their completion points.[21] Though some early proposals within the G8 tried to link further cancellation more explicitly to debt sustainability thresholds, by cancelling only enough debt to reach the LTDS threshold for each country, this was dropped in favor of 100% cancellation regardless of the effect on debt sustainability, due to a high degree of pressure for this from civil society.

There were also tough negotiations revolving around whether the multilateral organizations would be fully compensated by donor governments (or have to use their own institutional income) in providing this relief. This eventually resulted in an uneasy compromise whereby each institution maintains its overall concessional lending capacity as a result of different combinations of bilateral and own-resources financing. However, the ADF and IDA are deploying the resources provided by donors to offset the debt service foregone in a way that does not necessarily benefit the countries receiving the relief. That is, first, countries receiving MDRI relief give up an equivalent amount of new program finance. Then, they receive an addition to their "performance-based" allocations from the new donor funds, which is to say that the new funds are shared with all eligible countries according to assessments of policy effectiveness in each country, based largely on the CPIA. From the point of view of LICs, this has two major disadvantages: i) it reinforces the role of the CPIA and the comparable index in the African Development Bank in skewing allocations to "good performers" based on systems in which the LICs have no say; and ii) it means that the degree to which the MDRI relief provides additional resources for each country's MDG spending varies from under 10% to 200% (HIPC CBP, 2006), immensely complicating practical application of relief at the country level.

This agreement therefore has three major implications for debt sustainability discussions:

- Most important, it goes way beyond all debt relief measures which would be needed to provide "debt sustainability" under the narrow macroeconomic view that has been the focus of the policies discussed in this paper. It reduces the debt overhang dramatically in order to promote investment, and to ensure the provision of more financing to support national development goals and the MDGs. However, the detaching of MDRI debt relief from the debt sustainability framework means that debt relief takes no notice of the framework and creates problems of how to design "borrowing paths" which keep debt sustainable (see last bullet).
- At the same time, it maintains the "performance-based allocation" mechanism for distributing the resulting resources, which does not take any detailed account of MDG need or national development plans in allocating the additional resources

[21] The initial pledge in June 2005 of the G8 of 100% relief from HIPC obligations to the three institutions was not quite fully realized, as the Bank interpreted the cut-off date for eligible debt as end-2003, whereas IMF and ADF set the cut-off as of end-2004. The Inter-American Development Bank (IDB) joined the MDRI in 2007, extending the relief to HIPCs in Latin America and the Caribbean using the end-2003 cut-off. However, this institution provided NO additionality, as the relief was funded mainly by reducing future concessional flows from IDB to the same countries and making future borrowings more costly). A parallel UK initiative provides 10% multilateral debt service reduction for selected non-HIPCs, in a way that provides 100% additionality for each beneficiary.

mobilized. Countries will also have their access to IDA and ADF grants as opposed to loan financing changed once again, because their debts have become much more sustainable after the MDRI relief, so that they will move back to receiving concessional loans rather than grants.[22]

- As a result of MDRI, countries receiving the debt cancellation will have debt levels way below the LTDS thresholds. They could therefore in theory borrow more if necessary to attain the MDGs, which some might regard as a positive extra margin for financing the MDGs without falling into renewed debt unsustainability. However, the predominant current of opinion in 2005-06 has been that there is a major risk of irresponsibility by debtor countries and of so-called "free rider" creditors arriving to lend more money to countries which have received relief, thereby undermining the positive effects of debt relief. This has resulted in agreements that IMF conditionality on the concessionality of new borrowing will be maintained and if necessary strengthened (and new IDA disbursements reduced if conditions are breached) in order to keep borrowing down and debts sustainable – but that no strict conditions will be set on nominal or PV debt ceilings for borrowing (though of course budget deficit targets will imply them), or "paths back to borrowing" on less concessional or market-based terms defined, as this might excessively reduce country flexibility to fund the MDGs. It has also led to more discussion of how to apply "moral suasion" to avoid creditor "irresponsibility", which is gradually filtering through the donor community into criteria to keep new lending to post-completion point HIPCs concessional.

[22] On the plus side, they will also have their funding amounts increased by 20% when they switch back to loans, reversing the penalty imposed on countries to the extent they earlier received their funds as grants instead of loans (the argument for the penalty was to compensate IDA for future debt service losses and avoid supposedly encouraging a moral hazard that countries might try to aim for high debt levels in order to obtain access to grants).

5) CONCLUSIONS

In sum, in trying to apply debt sustainability, provide debt relief and allocate new financing, the international community is now applying three sets of measures (HIPC, the LTDS framework, and the MDRI) to countries in an immensely complex framework which is extremely difficult for all sides to apply. This largely reflects political compromises among donor countries. Debt relief and the debt sustainability framework (as with IDA replenishments) are becoming Christmas trees onto which countries hang conditions reflecting potentially conflicting objectives (debt sustainability, performance-based ODA allocation, conditionality, assuring future ADF and IDA funds, funding the MDGs), leaving the multilateral creditors and the LICs themselves to overcome the contradictions when applying them.

What then is the role of a debt sustainability concept in development? The preceding analysis leads to the conclusion that too much is being expected of the concept, which is not an end in itself but only one of many means to reach national development goals and the MDGs. It is currently expected to provide 1) a policy framework for LICs to analyze future debt burdens; 2) a rule to define terms on which some international organizations should provide financing and conditions on which LICs should be allowed to borrow, and 3) a target for using debt relief to achieve development goals. Can it achieve all of these goals?

5.1. LIC Policy Framework and Analysis

The most useful contribution debt sustainability can make is as one of many analytical tools for LICs to help define future policy goals and development financing paths. However, to maximize its utility it needs some fundamental changes:

1. In analyzing debt burdens, stock and service have the advantage of being transparent and easily understood as the key indicators. As “present value” will continue to be used, creditors and investors – not to mention debtors – need to be educated about what is actually being measured. It might also be more appropriate to set discount rates at interest-earning instead of interest-paying levels for countries without access to private credit, matching rates in different currencies to the obligations, or applying a standard average rate matched to the currency composition of the obligations as a whole, equal to the amount the debtor country could earn on reserve funds.
2. In terms of debt coverage, debt sustainability analysis should examine total public and publicly-guaranteed (domestic plus external) debt, including contingent liabilities. It should also analyze total national (including private sector) debt.
3. In assessing payment capacity, budget revenue should be the key denominator of ratios used to assess government debt sustainability, and exports for total national external debt. Both should be calculated using averages tailored to the measured volatility of national budget revenue or export earnings, and re-estimated on an annual basis.
4. Identifying indicative sustainability thresholds at which debts have proven unsustainable remains a key guideline for policy, and thresholds should also be established for domestic and private sector debt. However, independent analysis indicates that currently-used thresholds are too high, particularly in relation to budget revenue indicators. Thresholds could vary for individual countries (or groups) based on their policy performance, vulnerability to external shocks, and debt management capacity. However, all of these aspects should be given equal

prominence, and the systems for assessing them should be designed in a participatory way with a prominent role for LIC governments, in order to ensure their full ownership.[23]

5. Models and their templates projecting debt dynamics are also useful for judging possible alternative scenarios, but give no clear idea of when debt might be sustainable. It is essential that their baseline projections be based on:
   - A detailed costing analysis of the spending needed to attain those national development goals and MDGs which are "costable", including an explanation of the basis for the costing.
   - GDP growth rates compatible with national long-term growth and poverty reduction goals (including the MDG of halving poverty), and resulting needed investment levels (with necessary growth based at least on the national growth-poverty elasticity, and detailed analysis of factors/sectors and their productivity).
   - External financing forecasts, including increased concessionality in line with recent G8 pledges, and improved aid quality, but also possible aid disbursement shortfalls based on country experience.
   - Alternative "shock" scenarios, which should be based on recent experience, and maintain compatibility with national development goals (i.e., which show the costs of compensating for shocks and maintaining the national development path).
6. Debt sustainability analyses need to be used as broad guidelines rather than straitjackets, and supplemented with judgments by policy makers on the wider effectiveness of financing and intended investments in attaining national development goals.

5.2. Determining Future Borrowing and Lending

The most difficult question is whether debt sustainability could be used to guide future borrowing by debtors and lending by creditors. This has proven very tempting in the light of past "irresponsible" borrowing by LICs and lending by creditors. However, it is not desirable to use it mechanically to set rigid concessionality levels – as unfortunately has become the recent practice – or restrictive borrowing limits as the concessionality and amount of debt are only relatively minor factors in whether all sources of development financing produce sufficient returns to make debt and (more importantly) development sustainable.

Instead all LICs need to design their own national development financing strategies, by undertaking realistic assessments of possible debt relief (net of likely non-participating creditors), expected domestic private sector investment, budget revenue generation and domestic debt burdens, and realistic projections of external and domestic new financing disbursements, and to identify remaining financing gaps. These should be seen as an integral part of national development strategies, and agreed as realistic with national parliaments and the international community. In designing such strategies:

[23] The HIPC CBP has assisted HIPCs to design such a system for assessing their own debt management capacity, which could be the basis for variation on grounds of debt management (HIPC CBP, 2005c). Shocks vulnerability indices (Commonwealth, UN) could be a basis for variation on grounds of shocks.

1. Priority should be given to financing the MDGs rather than to attaining very conservative debt ratios, provided that it can be shown ratios will return to broadly sustainable levels over the long term.
2. It is urgent to assess how to increase country absorptive capacity, overcome any potential Dutch Disease effects, and increase program aid grant flows.

All other interventions by the international community should then spring from this agreed analysis. In particular:

- Policy conditionality in IMF programs should be flexible to give primacy to funding development goals, allowing lower grant elements or higher fiscal deficits where such measures will cause debt ratios to only temporarily exceed the debt sustainability benchmarks.
- Decisions on whether multilateral institutions provide loans or grants should be based on the availability of complementary financing for reaching national goals including the MDGs, not on rigid ratios, and should not affect the quantity of aid.
- Far more account needs to be taken of country development financing needs (rather than dubious measurements of country performance) in allocating aid;
- There should be more rigorous moves to ensure that at least official (even if not commercial) financing for development is compatible in its concessionality with national strategies and dramatically improves its effectiveness.
- Accelerated measures are needed to enhance debt (and development finance) management capacity in LICs, especially in the areas of debt strategy and analysis, and the promotion of more transparent procedures for approval and monitoring of development financing strategies by national parliaments.

5.3. Debt Relief Target?

On the other hand, as acknowledged by the MDRI, it is highly unlikely that a debt sustainability target threshold will be related in any clear way to having sufficient funding for the MDGs. As a result, the MDRI took the right decision in basing debt relief on an assumption that LICs needed more development financing from debt relief, and not on a debt sustainability target, though it has undermined this logic by not linking the relief to country financing needs.

Future debt relief decisions would be much better based on the amount of additional financing they will provide for national development goals, and the amount each country will need. These would come generally as part of a much wider financing package: the role of debt sustainability assessments would be to identify heavily indebted countries for which debt relief might be a priority source of financing, while non-debt distressed countries would instead receive extra grants or concessional loans. This would also involve delivering debt relief:

- Rapidly, avoiding delays to MDG attainment due to conditionality;[24]
- In a frontloaded way so as to provide immediate liquidity and free funds for spending on national development goals including the MDGs; and
- In ways which maximize additional flows to developing country budgets rather than accounting transfers among creditors.

Ultimately, LIC debt sustainability will depend not on analysis but on whether the international community delivers on its pledges of extra grants and greater aid

[24] For far more detailed recommendations on IMF conditionality, see Martin and Bargawi, 2004.

effectiveness made in 2005, whether growth and poverty reduction conditionalities and their financing are genuinely aligned behind national development strategies, and whether low-income countries are more effectively protected against shocks. More fundamentally, the LTDS framework is not surrounded by a comprehensive international financial architecture to protect low-income countries against shocks. In spite of recent improvements, including the IMF Exogenous Shocks Facility, the scale and timeliness of financing available remains well short of country requirements, and a comprehensive grant-based conditionality-free contingency anti-shock financing facility is still needed (see Martin, Johnson and Bargawi, 2005). Without such a facility, shocks will continue to undermine debt sustainability and the attainment of the MDGs, whether or not they are projected accurately in debt sustainability templates.

5.4. National Ownership

Overall, ministers and senior officials of low-income countries have expressed their preference for seeing debt sustainability as one important tool for analysis and policy frameworks, one element of a national development financing strategy, and only one factor in making decisions on debt relief (HIPC Ministers Network, 2006-07).

Most importantly, long run success will depend on LIC leadership and national ownership in designing and implementing their own national development financing strategies to attain the MDGs and other national goals – during which they will assess any indicators, thresholds or long-term scenario results in the light of country circumstances. In this context, we should redefine debt sustainability as "the level of debt that allows a country to achieve its national development goals (including the MDGs) **while meeting its own national debt strategy objectives."**

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