

Some Determinants of Debt Service Sustainability in Low-Income Aid-Dependent Countries

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*His speech is of mortgaged bedding
On his kine he borrows yet,
At his heart is his daughter's wedding,
In his eye foreknowledge of debt.*

Rudyard Kipling, The Masque of Plenty

SUMMARY

i. Despite persistent analysis and debate, many debt-related issues are still not well understood. Mistakes are made even in the simple world of firms, where borrowing should depend only on financial costs and investment opportunities. Households and States face more complex decisions, which also affect the phasing of their consumptions. Though borrowers' and profit-motivated lenders' behaviours influence one another, this interaction is less relevant for aid-dependent poor countries, the main subject of this paper, and will only be discussed for the better analysis of the conditions under which low-income countries' borrowing and consequent debt servicing leave adequate room for development. A related issue is also discussed briefly, that of the forms and terms of financing appropriate when the lender's motive is the promotion of development.

RECALLING SOME BASIC PRINCIPLES

ii. Though uncertainty and agency problems complicate its application, the principle guiding borrowing by profit-seeking firms is simple: they should borrow if borrowed funds cost less than the returns from the investments they finance. Households and States must not only decide whether or not to invest and borrow, but also whether and how much to save instead of consuming. The assumption that this decision is guided by positive time preference is a linchpin of economics, yet households and States prefer ascending consumption paths and resist reducing consumption, even as a counterpart of benefits enjoyed earlier. It is particularly difficult to reduce borrowing and to service debts when such acts would cause an actual fall in consumption.

iii. The two-way flows between borrowers and lenders include both capital payments, like disbursements and repayments of principal and purchases and sales of portfolio and other equity investment, and current payments like interest and profit remittances. The sum total of this cash flow constitutes net transfers. Positive net transfers raise, and negative ones lower, the sum of consumption plus investment allowed by a given domestic product and, mutatis mutandis, Government (or household) revenue. The future impacts of such flows depend on their composition and financial terms, and **should** influence present policy, but only present net transfers impose hard limits on present behaviour.

iv. Reducing net transfers is never painless. As no precise rule establishes when to do so, nor to what level, Governments often postpone adjustment measures and recur to ever more undesirable forms of borrowing, until even those become impossible. A "debt crisis" then follows and imposes even more sharply reduced net transfers.

v. Credit transactions have one golden rule: In the long run, debt servicing ability and creditworthiness will be compromised if the present value of debt¹ grows faster than the economy. From this follows a corollary: In the long run, if net transfers are nonnegative, creditworthiness will be compromised if the interest rate on debt exceeds the growth rates of the economy.

vi. Profit-motivated lenders lend as long as creditworthiness appears solid and withdraw when it appears impaired. To preserve creditworthiness, the golden rule requires debtors sometimes to reduce, perhaps even below zero, the net transfers they receive. When they need to do so is ill-defined, and as long as their capacity to do so is generally trusted, they remain creditworthy and do not actually have to implement such cuts. When doubts arise about their capacity to reduce net transfers, they lose their creditworthiness. Net transfers then fall, and often become negative. It is usually difficult to adjust domestic consumption, exports and imports to such a shift, development suffers and even political stability may be compromised. Debt servicing then shows itself to be unsustainable.

FUNGIBILITY: USING NEW INFLOWS TO SERVICE DEBTS

vii. Except for some syndicated lending, bond issues and similar financial operations, borrowed money and aid must usually be allocated to specific uses; they are rarely completely fungible. Even if plentiful loans and other aid are available to finance many needs, other needs may exceed what is left over from export earnings after deducting debt service and related payments. Thus even beneficiaries of large net transfers may have to leave unmet either important budget and import needs (some of them complementary to those financed by foreign funds) or some debt service obligations. Such difficulties are most likely when aid mostly finances activities that would not have been undertaken without it. Conversely, when aid facilitates debt servicing, it may not effectively promote its ostensible developmental purposes.

BEYOND THE GOLDEN RULE: IS THERE AN EQUILIBRIUM LEVEL OF DEBT?

viii. The golden rule relates to relative growth rates. It can be compatible with any set of relative sizes of debt and the economy, yet it is intuitively obvious that a tiny economy growing at the same rate as its huge debt are not in true equilibrium. A relationship is sustainable only if it can resist minor variations and possesses endogenous forces capable of returning it to equilibrium. A borrowing economy must be able to adjust to changes in its own growth rates and other characteristics, and in the volumes and conditions of new inflows.

ix. One cannot define a priori the conditions of such adaptability (who would have thought that Indonesia could adjust to a three-year decline in net transfers equivalent to 16% of its Gross National Income (GNI)?). However, it is clear that fast growth of per capita

¹ The appropriately discounted present value of future debt service obligations. "Appropriately discounted" opens another vast issue. Raising the discount rate reduces the present value of future debt service, yet if nothing else changes this clearly does not make future debt any easier to service. Whatever the chosen discount rate (nowadays, it is conventionally 10%), a single discount rate should be used to measure the growth rate of debt.

consumption facilitates adaptability, and that stagnation or, worse, decline, render it much more difficult. Public debt service must be extracted by taxes from households and producers, who must first earn its equivalent and then hand it over to Government. Even private debt service presents similar though milder difficulties when the laws governing it are not deeply ingrained. Cutting expenditures on development and public services often appears easier. So does default.

COUNTRY EXAMPLES

x. One can rarely be certain that debt service constitutes a major obstacle to development, and that debt relief would substantially help development prospects. For many countries, one can be certain that it would not. From Afghanistan and Burundi through Zaire and Zimbabwe, unsustainable debt service is an epiphenomenon of the generalized failure of development, rather than its cause.

xi. Côte D'ivoire is different. Its debt, mostly to private lenders (and equity inflows) grew much faster than its GDP in the 1970s, though GDP growth was also fast and the terms of trade favourable. Growth slowed down sharply and private inflows turned into outflows around 1980. Though public lending rose, net transfers were negative throughout most of the 1980s, amplifying the decline of the economy and enhancing the difficulty of adjusting to it. Meanwhile, debt continued to rise, and to be transferred from private to public creditors. True debt relief eased the situation for a time early in the 1990s, but later net transfers again turned negative. Recent political turmoil and civil strife have joined economic stagnation to render the debt burden quite unsustainable. Had there been genuine debt relief in the 1980s, it might have helped adjustment; by now, it is doubtful that it would by itself put the country back on a development path.

xii. Not so in Indonesia, where a debt crisis is clearly what has derailed development. A heavy burden remains, and is in a sense sustained. Negative net transfers amount to almost 13% of GNI, a record, and debt service accounts for 40% of the central government budget. Adjustment and a return to development are nevertheless stirring, but they could be consolidated by a sharp reduction in negative net transfers through a combination of concerted new inflows and long-term rescheduling at market interest rates.

xiii. Uganda, a large aid recipient for two decades, receives net transfers equivalent to 10% of GNI. After taking care of debt service and profit remittances, remaining export earnings finance barely 20% of imports. In the past decade, private direct investment has complemented aid. GDP has grown, even per capita, but the slow growth of agriculture and the stagnation of exports seem to signal that this growth is not self-sustaining. By financing local currency expenditures, aid also meets needs directly unrelated to its aims. As long as net transfers remain high and aid remains broadly usable, it should not be too difficult to meet the debt service costs of aid, whose terms are highly concessional. However, one may wonder about the future stability of development aid receipts that do not seem to generate much development, and adjustment to even a small decline would be difficult. As for private direct investment inflows, unless growth deepens and quickens, they will fall. Servicing established capital would then also become burdensome.

DEVELOPMENT LENDING OPTIONS

xiv. Profit-motivated lenders reduce risk by applying compulsion, and cover risks by charging higher fees to riskier prospects. Through a credible threat to break defaulting debtor's legs (or gunboats), muscular creditors can enhance their debtor's creditworthiness. By demanding higher interest payments from riskier debtors, they cover expected losses. When such coverage is impossible, they abstain from lending. Many of these options are not really available to development lenders: they perhaps could, but do not want to, squeeze debt service out of failing borrowers. Nor can they charge high rates to poor borrowing countries with weak prospects, lest this further reduces the probability of successful development.

xv. Yet they should recognize that the development process itself is at risk in many borrowing countries, in some of which it will fail; loans to such countries, however, soft, cannot be repaid without imposing further hardship. Development lenders could switch from uniformly soft loans to contingent terms, varying from no repayment if development fails to IBRD-terms in case of high success. However, this is unlikely greatly to augment development finance resources. It may be just as well to formalize existing mechanisms for debt cancellation. In either case, however, financial planning must recognise that the development process will fail in some countries. Development lending must accept this risk, lest by withholding, it transforms the risk of failure into certainty.

FINAL CONSIDERATIONS WITHOUT CONCLUSION

xvi. Some debt problems truly relate to excessive that weighs down or crushes development. Others are merely epiphenomena of development that failed for other reasons. The tendency to confuse the two types of problems and to apply to them universal remedies of debt relief should be resisted. When development aid is applied for humanitarian, bankruptcy or purely political reasons, this harms future capacity to apply effectively and to mobilize either type of aid.

xvii. When foreign liabilities have recently been increasing faster than real economic indicators, one should watch for signs that the equilibrium point is near or has been passed. Successful widespread economic growth is no guarantee of debt sustainability, but large inflows combined with little growth usually signal unsustainability. Few past debt crises were not announced by mounting net transfers of private origin, often, in the latter stages, with a predominance of short-term loans and other volatile funds. high net transfers produce euphoria, and reducing them produces pain, so the reduction is often postponed, rendering it even more painful. When the debt is mostly public, the Government must squeeze debt service out of resident households through taxes, and this puts especially high strains on political and social stability.

xviii. No mechanical formula captures all the conditions of debt sustainability, but it is important to view the right formulae. net transfers must be brought into the core set, as well as the composition, maturity, and evolution of inflows. Better than the debt service to exports ratio, the ratio of export earnings minus debt service and profit outflows to imports, would be more revealing. The nominal value of debt as numerator has little significance for aid-dependent countries. Far better to consider the discounted value of future debt service, the

Present Value of debt, shown in WDI but not in GDF. This value is much influenced by the choice of the conventional 10% discount rate. A rate of, say 5% would be more appropriate nowadays, and it would reveal a more unfavourable situation for many aid-dependent countries, absolutely and relative to commercial debtors.

xix. In the end, everything comes down to judgment informed by country experience and understanding of aid processes and of international capital markets. Ratios and other indicators of debt-servicing ability should be used actively but carefully, not as substitutes for judgment but as supports to it. Debt and debt servicing should always be viewed within their broader economic, social and political contexts, not as separate problems nor as chief culprits, but as constituents of the overall domestic development processes and of international support to them.

1. INTRODUCTION

1.1 From Hammurabi's Tables and Solon's Laws through the Arthashastra, Biblical injunctions and, as ever, Shakespeare, debt has long preoccupied ethics and economics. Yet, despite persistent analysis and debate, many debt-related issues are still not well understood. Even the hard-headed world of business often vastly misunderstands the relatively simple borrowing rules applicable to it. Shareholders and workers of many powerful firms are now paying for such errors, and occasionally even some of their decision-makers. For States and households, how much to borrow and when, at what cost and for what objects, raise immensely more complicated issues, because they, unlike businesses, are both consumers and producers.

1.2 Optimal borrowing policies have many determinants. These include the availability and cost of funds and what in turn determines them now and in future; the economic value, including possible future returns, of the use made of borrowed funds; the variability and the uncertainty of the future... Not least, they also include the penalties of default: when, like for the Israelites before the Exodus, default carries no penalty, optimal borrowing is maximal borrowing. For borrowing countries and firms and for lenders to them, default rarely goes without penalties. The persons actually responsible for the borrowing and lending decisions may, however, reasonably hope to escape the penalties, which may therefore not much influence their decisions. However weak our knowledge of optimal borrowing and lending rules, the incentives for following them are weaker still.

1.3 The main thrust of this paper is analysing what constitutes reasonable borrowing and debt servicing for low-income aid-dependent countries. Other types of debtors and of debt will only be discussed as much as is required for the better understanding of this main topic. "Reasonable" can be defined in greater detail but equal imprecision as leaving adequate room for national consumption and investment, present and future, public and private, without undue fiscal pressures that might compromise social aims, political stability or economic efficiency.

1.4 The paper begins with a brief review of some main characteristics of debt and debt servicing in general. Firms should decide on borrowing only by comparing its costs to the expected returns from the investment it finances. Other entities also have the option of modulating their own consumption. The characteristics and relationships identified in this review are recalled in the later consideration of the debt-servicing abilities of poor heavily indebted countries dependent on concessional financing. Then the concept of Net Transfers is analysed and related to Balance of Payments, national accounting and budget terminology, to show how positive net transfers make life generally easier, and how their decline can drag down domestic absorption and render difficult economic management.

1.5 The Paper then moves on to recall the golden rule of Finance, i.e. that changes in debt should not be disproportionate to changes in the borrowing economy. It then tries to determine the level at which the rule becomes applicable in practice. In the course of these

discussions, special consideration is given to the borrower's ability to apply borrowed resources directly to debt service.

1.6 Questions are also raised about lending policies and modalities. While profit-motivated lending and investment know an infinity of forms that seek adaptation to types and risks of borrowers, development lending follows just a few preset patterns that may not always suit its objectives.

1.7 The paper reaches no sharp conclusion, defines no precise numerical guidelines to borrowing and debt servicing ability. Rather, it tries to highlight the trends, indicators and behaviour to be watched in the light of experience. The main conclusion that seems to emerge is that great attention needs to be paid to borrowing itself, and not just to the consequent debt service, if emerging debt service difficulties are to be caught in time and avoided.

2. BASIC PRINCIPLES RECALLED

A. PURE PRODUCERS AND CONSUMERS

2.1 The first principles of optimal borrowing for profit-seeking enterprises are quite simple. Naturally, their practical application is complicated by many factors, most notably the variability and uncertainties that affect both the yields of investment projects and the availability, interest costs and other conditions of future financing. The disharmony of interests between borrowing firms and their decision-makers (*the agency problem*) also complicates the application of simple principles, and occasionally prevents it. Nevertheless, the fundamental rule holds: a firm's borrowing should be decided in light of present interest costs and expectations about future refinancing opportunities, weighed against the expected returns to their investments.

2.2 Lending rarely finances specific projects, large infrastructure projects like the Suez Canal and the Channel Tunnel constituting the occasional exceptions. More frequently, lending to established firms finances parts of their overall needs. It is not enough for lenders to have confidence in the profitability of any new investment project; they depend on the whole firm (or on adequate security). Lending for a bad project to a financially secure firm is preferable to lending for an excellent project to a financially weak firm. Unlike pure firms, households do not simply face the alternative of [borrowing and investing], or [not borrowing and not investing]. Household-producers could also finance part or all of an investment project by reducing their present consumption, saving more at present in order to earn higher benefits later.

2.3 The complexity of the decision is shared by the potential lender. Leaving aside security (given adequate security the lender is not interested in the borrower's debt servicing capacity, and may even wish debt servicing to fail), it is not enough to be satisfied that the project is sound. The lender also needs to know if the borrowing household will be able and

willing to save enough of the additional income yielded by the investment project to service its debt.

2.4 Thus households' investment-related borrowing decisions differ fundamentally from those of pure firms, because firms' borrowing decisions are (at least, they should be) related to production and income-maximisation only, while even households that also engage in production also influence the time-path of their consumption through borrowing. They can always borrow less and consume less now (and expect to consume more later); they can sometimes borrow more now, and thus either produce more or consume less later.

2.5 Consumer debt – at annual interest rates often exceeding 20% - seems to confirm a strong positive time-preference. It signals that for many households, raising consumption by 100 today is worth depressing it by 120 in a year's time, or by 20 annually as long as they keep refinancing their debts. Yet many households, including some of the same, also save for the future at low returns, thus apparently signalling that it is worth depressing today's consumption by 100 in order not to depress it by a similar or marginally higher amount in the far-away future.

2.6 When past borrowing must finally be serviced without recourse to further borrowing, and thus truly reduces consumers' purchasing power, such reductions are rarely accepted with full equanimity. Those who achieve prosperous old age by working and saving hard in their youth are generally deemed happier (and not only in morality tales!) than those who decline into a miserable old age following a carefree youth of high consumption and profligate borrowing or devouring the family fortune. The "good life" is normally inconsistent with a life-time decline of consumption at a rate corresponding to prevailing real market interest rates. A decline in consumption, even to a still-high plateau, is generally perceived as less desirable than a rise to that same plateau from a much lower level, even if this latter course yields lower life-time consumption than the first one². Debt relief and personal bankruptcy procedures often recognise the objective reality of such difficulties. Society is often willing to provide customary or judicial relief from debt service to households at consumption levels that much exceed the welfare support provided to the non-indebted needy. At least in part, such willingness reflects recognition of the real difficulty to adjust consumption downwards.

2.7 One may affirm, and support the affirmation only through an appeal to common experience, that the time-path of consumption is more important than its absolute level in determining the burdensomeness of debt service. The debt service burden will rarely appear unbearable when fast-rising resources allow consumption also to increase markedly. Vice versa, even relatively high but declining consumption levels will cause the debt-servicing burden to be strongly resented, and perhaps rejected.

2.8 States, countries and Governments are, like farming households, involved in production and consumption both. Also, they are only partially (or, depending on one's

² On this and related issues, I know of no better guide than Tibor Scitovsky's *The joyless Economy*, Oxford University Press 1976.

political philosophy, not at all) the ultimate beneficiaries of either consumption or investment, and they are never the ultimate sources of the resources that pay for debt service. States generate little of their own incomes (except through royalties for natural resources and other properties). Most of their incomes originate in taxes, i.e. compulsory transfer payments from households and firms under their jurisdiction. This enhances the difficulty of obtaining resources for debt service when doing so reduces consumption below earlier levels.

B. Accounting, Terminology, and Economic Implications

2.9 Let us recall the simplified accounting and vocabulary of foreign debt³ and debt service, and their relationships to other macroeconomic aggregates.

- a. Disbursements of foreign loans increase available domestic and national resources. Repayments of foreign loans constitute a use of resources, in particular of national savings. Whatever serves for such repayment cannot finance domestic consumption nor investment. Repayments increase net foreign assets and constitute a decrease in foreign liabilities.
- b. New disbursements of foreign loans minus repayments of principal constitute net disbursements (or net flows).

2.10 In the Balance of Payments, loan disbursements constitute capital flows. They are not reported in the current account.

- c. Conventionally, the sum total of net loan disbursements minus interest payments on foreign loans has been called net transfers on debt⁴. Adding to this net foreign direct investment, private portfolio flows and most official grants⁵ yields “Aggregate net transfers”.

2.11 Strictly speaking, capital flows require counterparts in the form of changes in foreign assets and liabilities. For that reason, most Balance of Payments presentations do not include grants in capital flows. However, the true difference between a grant and a loan with very favourable terms is minimal. In other contexts, it is said that such favourable or soft loans contain a high “grant element”. It is somewhat arbitrary to place into one category all loans, those containing zero grant element as well as those containing 99.9%, and pure 100 % grants into a quite different category. In most of the following discussion, the term “loans” will exclude grants only when that is explicitly stated or quite clear from the context.

³ See also Global Development Finance (GDF) 2002, Volume II, p. XIII-XXII. Note, however, that these GDF definitions show the relationships to the Balance of Payments, but not those to National Accounts nor to the Budget. The latter are key to the discussions of sustainability in the present paper.

⁴ The term «_Net transfers » unfortunately lends itself to confusion with the national accounting and balance of payments concepts of “transfer payments”. The latter are usually (but not rigorously) applied to “unrequited transfers”, payments made without direct contemporary counterparts either in goods and services or in ownership. To avoid any confusion, throughout this paper “net transfers” as defined in this box will be underlined and capitalized.

⁵ Usually excluding those financing technical assistance. The term “official” is important; the accounting for these grants usually excludes those of non-governmental organizations.

2.12 Most loans command interest payments. In the Balance of Payments, these constitute a current account item. In the National Accounts, interest payments, together with profit remittances and other net factor payments to non-residents, are deducted from Domestic Product and Income to arrive at the income of residents, National Income. Net loan and grant disbursements, on the other hand, are not part of either domestic or national income. However, positive net disbursements allow the sum of national consumption (the consumption of residents) plus investment to exceed national income. When they are negative (when loan repayments exceed new disbursements), this increase in net foreign assets constitutes a use of national savings, and correspondingly reduces domestic investment, or requires an increase in national savings, and a corresponding reduction in national consumption.

2.13 Thus interest payments and profit remittances constitute current account items from the point of view of the Balance of Payments, and are deducted from Domestic Income to arrive at National Income, while net loan disbursements (and also direct and portfolio investments) do not directly affect National or Domestic Income, and constitute capital account items in the Balance of Payments. Grants also do not directly affect National or Domestic Income, but they are conventionally treated as Unrequited Transfers, current account items in the Balance of Payments. Yet, all constituents of net transfers have the same immediate impact on domestic investment and on the consumption of residents. Hence the legitimacy and analytical interest of considering jointly the sum of these two items, net loan disbursements minus interest payments, i.e. net transfers on loans and their broader counterpart, including equity capital flows and grants, Aggregate net transfers.

With a given Domestic Product, positive aggregate net transfers raise the sum of consumption plus investment, and negative aggregate net transfers lower it.

2.14 National income, net foreign assets and economic prospects are very different with a given net transfer composed of a modest net loan disbursement and a negligible interest payment, and with the SAME net transfer made up of a huge net loan disbursement and a large interest payment abroad. They also differ according to the maturity structure and interest costs of the loans.

2.15 This paper's main interest is public debt, because little private capital flows to most low-income highly indebted countries. The National Accounts and Balance of Payments concepts discussed above adapt themselves remarkably well to the public accounts. Interest payments constitute a current expenditure, to be deducted from the budget surplus (or added to the budget deficit). Net disbursements of public borrowing and grants constitute immediate additions to public resources that allow increased public expenditures on consumption, transfer payments or domestic investments, or reduced taxes and other revenues. Budget surpluses and deficits before interest payments are called "primary"; the primary deficit is roughly what is financed by net transfers.

2.16 Negative net transfers may not affect the current budgetary deficit (in case of net repayments of interest-free debt), or they may, on the contrary, account for a large part of it, if they consist of large interest payments. In the first case, the current burden leads to future

improvements – the Government is building up its external capital – while in the second the net foreign capital position continues to worsen as large interest payments abroad more than offset continued positive net disbursements. Thus, it is reasonable for the policy-determined mix of present public current and capital expenditures and of taxes to be different in each case. It is reasonable, for instance, to invest less, (or perhaps to tax less and borrow more) domestically while building up the external capital position through debt repayments, than while also borrowing heavily abroad

2.17 Like for National Income, the longer-term impact of a given net transfer to the Budget has sharply different long-term impacts according to whether it is composed of high net lending and high interest payments or small interest payments and comparably lower net lending. The service terms of new loans influence future outcomes and should therefore influence present policy. It is all the more necessary to underline this, as the immediate budgetary possibilities opened up by a given net transfer are independent of its composition. In other words, the composition of net transfers should influence present policy, but only their direction and size do so unavoidably.

2.18 Positive net transfers thus raise imports and National Expenditure (consumption plus investment) for a given Gross Domestic Product (GDP). When they go to the public sector, they allow higher public expenditures or lower taxes. They generally make life easier, easiest when they are rising, particularly in underemployed economies. This is the case even when the bulk of aggregate net transfers is composed of private capital flows to the private sector, like in the boom years preceding the Asian financial crisis. When net transfers decline, even if they remain positive, public expenditures must decline (or taxes and other public revenues rise) by an equivalent amount, the multiplier plays in reverse and National Income contracts by a multiple of the decline in net transfers.

2.19 Following the pure rationale of time preference, this may not matter too much: all concerned had a good time first, and pay for it later. In fact, they do not even pay for it yet, because in the simple tale just told net transfers are still positive, and consumption, investment and national income need not fall below their earlier levels. The reckoning, if it can be called that, is still very light. Indeed, one might think that Government and the public at large should be glad of the easier taxes or higher public expenditures enjoyed for some time, and adjust easily to a partial or full return to the earlier situation.

2.20 They rarely do. Public finances always find it much easier to adjust to higher expenditures and lower taxes than to the reverse. Hence, the reluctance of Governments to reduce domestic absorption and with it, net transfers levels. Because reducing the deficit and the associated net transfers is painful, Governments often postpone this. Postponement is all the easier as, witness the abundant commentary over past financial bubbles, when and how much net transfers should be reduced cannot be determined with precision. Governments that display greater financial prudence than the markets are often derided⁶.

⁶ Many in the World Bank had criticized India's and Indonesia's financial prudence in the 1970s.

2.21 Mexico in the 1970s and early 1980s provides a good illustration of prudence postponed. Its shift from a fiscally prudent to a more expansionary budget stance was at first fully justified. New petroleum sources were being developed, and it was reasonable to anticipate the corresponding revenues by borrowing to develop physical and human infrastructure. Net transfers from borrowing, mostly for the Budget, rose from next to nothing in 1970 to \$ 2 to 3 billions annually throughout most of the 1970s. When the enhanced oil revenue started flowing, far from starting to repay the debt, the primary budget deficit and the concomitant need for net transfers from abroad did not abate. By the end of the decade, the overall budget deficit reached new record highs, as the primary budget deficit, very roughly corresponding to net transfers from abroad (domestic borrowing was then low) was augmented by the rising interest payments.

2.22 Stable net transfers meant fast rising new borrowing needs, as interest and repayments on earlier debt also had to be refinanced. By the end of the decade, despite sharply rising oil export prices, even the traditionally sanguine herd of commercial bankers were becoming reluctant to lend such ever-rising amounts on stable terms. Still, instead of trying to tackle its budget deficit (as Brazil did at the time, with some temporary success), Mexico maintained high net transfers with ever-rising public foreign borrowing, perforce on ever-shorter terms. From more than 70% throughout most of the 1970s, the contribution of long-term debt to net transfers on debt fell to less than 30% by 1981⁷— the year before the debt crisis.

2.23 When even short-term loans could no longer be obtained in the fast-rising required amounts, Mexico, earlier unwilling even to reduce its use of positive net transfers, suddenly had to switch to unbearably high negative amounts *ex ante* and (despite reschedulings and “concerted” new lending), painfully high ones even *ex post*. The multiplier fully played out its role. Instead of merely moderating growth, the belated forced sharp adjustment turned the 1980s into Mexico’s lost decade.

2.24 Governments do sometimes moderate their borrowing when it tends to get excessive, gradually reduce their budget deficits and move smoothly to a different and improved growth path. However, the Mexican pattern is much more usual: reluctance to make the budgetary adjustments needed to reduce net transfers, recourse to ever more undesirable forms of borrowing, and then a “debt crisis”.

3. THE SIZE & USABILITY OF NEW INFLOWS

A. The Golden Rule of Finance

3.1 Governments that rely on too much foreign borrowing for too long are not wholly irresponsible. If some borrow too much, that is because reducing net transfers can be painful, but also because they may not know how much is actually “too much”, how long and under

⁷ Three-year moving averages of line 88 over line 87, Country Table, Mexico, GDF 2002, *op. cit.*

what conditions net transfers can prudently remain positive. For States (as for households) the rules governing optimal borrowing are uncertain and fuzzy.

3.2 Some have argued that net transfers to any borrower must ultimately unavoidably turn negative, because lenders and investors ultimately want to get a return on their loans and investments, i.e. positive net transfers for themselves, augmenting their own resources and thus diminishing those of the borrowers and beneficiaries of their investments. This paradigm indeed resembles the stories of classical rentier individuals and countries⁸. However, it is fallacious on several levels. All individual holders may not necessarily want to obtain net transfers, i.e. cash flows, from all their assets. There are, as every student of elementary theory knows, other reasons for holding assets: precaution, security, speculation, and desire to leave them to one's heirs...

3.3 More importantly, even those investors who wish to get a back-flow of net transfers need not get it from the original borrower⁹. Hoarders of gold do not expect ever to sell it back to the gold mine, nor hoarders of \$ 100 bills to the Federal Reserve, just to other hoarders. The same goes for other assets. Individual asset holders who want to obtain a cash flow of net transfers can do so by selling valuable assets to new investors through financial markets. "Valuable" is the operative word.

Box 1: Default and Compulsion

In the 1930s, the independent developing countries of Eastern Europe and Latin America (except Argentina) defaulted on their international public debts. No colonial government defaulted, because the necessary tax collections could be enforced independently of the consent of the governed. The resulting negative Net transfers compounded the misery caused by deteriorating terms of trade and did much to enhance the unpopularity of colonial governments.

3.4 For profit-motivated financial flows, the real issue is the attractiveness of the assets to other potential investors, which in turn depends on their putative profitability and the creditworthiness of the debtors backing them. In the short run, these depend on fluctuating expectations and animal spirits. These, however, often bear some relationship to reality in the long run. Even though an individual borrower (firm, country, Government) need not ever generate negative net transfers, it should be seen to be able to do so – otherwise financial investors lose confidence. As Ogden Nash proclaimed in early versions of Samuelson's best-selling handbook

⁸ The argument that Net Transfers must turn negative was developed with some sophistication and much fallacy in GDF a few years ago. Unfortunately, I cannot find the exact reference now, and have little time to look for it.

⁹ For the sake of editorial simplicity, I speak mostly of «lenders» and «borrowers», though the argument also applies to portfolio and direct investment and other forms of financial flows.

“One rule, and woe betide the banker who don’t heed it,

“Never lend any money to anybody unless they don’t need it!”

In prose: Those whose ability to service their debts is beyond any doubt can borrow more than enough to finance their debt service, and thus receive continued positive net transfers. Those whose ability to service their debts becomes subject to doubt cannot borrow enough, and must either generate the negative net transfers needed for debt service, or default. Let us call this primordial principle the Ogden Nash rule of finance.

3.5 The perceived ability to service debt without excessive further borrowing is a function of the relationship of debt and debt service obligations to various indicators of capacity. For a firm, the latter include the overall size of assets, profits, and the cash flow. For a household, they relate to present and prospective incomes and needs. For a Government, the key indicators are those of the country’s economy, in particular its GNI and exports, and the Government’s own finances, its tax revenues, current and overall expenditures, and deficit. How these are viewed also depends on less concrete criteria, willpower for the individual, adaptability, social cohesion, respect for contracts... Yet debt will always lose its credibility and financial attractiveness, and the country and Government their creditworthiness, if debt grows faster than these indicators in the long run.

In the long run, debt servicing ability and creditworthiness will be compromised if the present value of debt¹⁰ grows faster than the economy.

This is the Golden Rule of financial stability.

3.6 If net transfers are zero, new additions to debt exactly compensate for debt service. Net disbursements then exactly cover interest payments on pre-existing debt. Therefore, with zero net transfers, the growth rate of debt exactly corresponds to the average interest rate it bears. A corollary of the Golden Rule is that

In the long run, if net transfers are nonnegative, creditworthiness will be compromised if the interest rate on debt exceeds the growth rates of the economy.

3.7 All elements of the golden Rule and its corollary must be kept in mind.

d. With nonnegative net transfers: Even a slow-growing economy may remain creditworthy with negative net transfers that cause its debt to remain stable or fall in relation to its economy. Conversely, debt obviously grows at a rate higher than the interest rate, as long as net transfers are positive. Creditworthiness may therefore be compromised even if the growth rate exceeds the interest rate.

¹⁰ The appropriately discounted present value of future debt service obligations. “Appropriately discounted” opens another vast issue. Raising the discount rate reduces the present value of future debt service, yet if nothing else changes this clearly does not make future debt any easier to service. Whatever the chosen discount rate (nowadays, it is conventionally 10%%), a single discount rate should be used to measure the growth rate of debt.

e. In the long run: In the short run, anything is possible. In particular, expectations change. Notably, when economic growth accelerates, debt may suddenly appear too low. It may then be allowed to grow for a time at a rate higher than the interest rate. net transfers may rise for a time – but for a time only.

f. The growth rates: no single element of the economy is dominant; many count. The immediate constraint, the immediate alarm of lenders, may be caused by faltering exports, sluggish tax revenues, declining savings, lagging investments, or a looming recession of National Income. In the long run, none of these indicators can be allowed to grow slower than the debt.

g. Only the Golden Rule is valid, its reciprocal does not hold. No matter what other relationships hold, creditworthiness may always be compromised by a shift in expectations.

3.8 The Golden Rule and its corollary are incontrovertible, but of little help to immediate policy decisions. They show that sooner or later, adjustments must be made, but they do not say how soon, how high debt can grow, how long is the long run. The Rule says that debt service ratios cannot grow forever – but it does not define the ratios that can be tolerated forever. Yet, the Golden Rule at least provides a firm starting point for further investigations.

3.9 Ability to continue attracting adequate new flows is usually one of the conditions of debt service sustainability, and it depends (at least for profit-motivated lenders) on confidence in the borrower's debt servicing ability¹¹. Such confidence in turn depends in large part on the borrower's perceived ability to adapt to shocks that increase its needs for new funds or reduce its ability to attract them. While such confidence exists, new flows are likely to be forthcoming, and a sharp decrease in net transfers is unlikely to occur. The perceived adjustment capacity is important by itself, an indicator of ability to continue debt servicing in the face of shocks. It is also important as a signal that other lenders are also reassured, lending will continue and shocks thus avoided or cushioned.

B. Fungibility: Using New Inflows to Service Debts

3.10 The concepts of “Net Lending” and “net transfers” seem to assume that debt repayments can somehow be directly deducted from new loans. This is rarely the case, borrowed money is rarely completely fungible. The limits of sustainable debt service also depend on constraints on what new loans can finance and how they can be used.

3.11 Following the 1964-65 Bell mission and 1966 devaluation in India, the World Bank helped mobilise large amounts of aid. High net transfers were then financing well over 50% of imports. Much aid, including the World Bank group's, , took non-project forms unrelated to specific investment activities. Thus IDA Industrial Import Credits financed imports of various current inputs for use by specified manufacturing firms; so did bilateral aid, though

¹¹ Mutatis mutandis, this is also true of portfolio and direct equity investments. They will continue, thus obviating or lightening the needed servicing flows only if investors believe in the target firm's and its surrounding economy's ability to generate such flows.

tied to procurement in the donor country. The United States was also financing annual imports of up to 10 million tons of wheat under PL 480. Yet, India's development was felt to require debt relief, which the World Bank undertook to obtain from Aid India Consortium members. The rationale for debt relief was centred on the limited usability of aid. Non-project and food aid notwithstanding, it left uncovered some essential needs that had to be financed by convertible free foreign exchange earned through exports. For this, they competed with debt service.

3.12 Important purposes for which no significant aid was granted included some raw material imports, notably petroleum and fertilisers; other basic chemicals; non-ferrous metals; raw cashews (for processing and re-export); some military imports.... Additionally, aid could also not finance most services, in particular freight and insurance, even for most aid-financed imports; commercial travel and diplomatic expenses; royalties, license fees and other remuneration of intellectual property; authorised profit remittances; and debt service.

3.13 Even excluding debt service, such needs absorbed a large share of present and prospective export earnings. The Government of India never questioned its absolute obligation to maintain debt service, but it argued, with World Bank support, that if debt service obligations were met without specific assistance, the remaining free foreign exchange earnings would not suffice to meet minimal other development needs. Food imports would be held up for inability to finance freight on them, industries would be paralysed for lack of key raw materials, transport for lack of petroleum, agriculture would suffer for lack of fertilizer. Without abandoning requests for large and increased volumes of traditional aid, the World Bank and India argued that it was equally vital to give some aid in forms that made it usable to finance debt service¹².

3.14 It would perhaps have been equally convincing to plead for more flexible bilateral non-project aid, enabled to finance the procurement of previously non-aided goods and services, thus leaving more free foreign exchange for debt service. The choice to argue for debt relief instead was political. Debt-relief provides an initial reference for burden-sharing among creditors that is quite different from the initial burden-sharing reference for new aid.

3.15 Debt relief could take many forms. Simple cancellation or adequate postponement of payment obligations and new loans usable for debt service (or other difficult payment needs) were equally acceptable. The World Bank even successfully argued that its own Industrial Import Credits were so usefully meeting needs unmet by other aid sources, that it would not need to make any other contribution to debt relief.

3.16 Public debt service was, of course, also a charge against public expenditures, mostly the Union Budget. However, in those days budget resources and public savings did not seem to present a substantial problem. It was generally held that the public sector would mobilise through the Budget whatever domestic resources it could effectively use for development.

¹² This was undoubtedly true in the short run. For the long run, the World Bank did not share India's export pessimism, and as early as 1966 argued passionately for policies capable of promoting much faster growth of non-traditional, essentially manufactures exports.

The difficulty was thought to lie only with foreign resources, a version of the Keynesian transfer problem. It was thought, (probably correctly in the short run!), that reducing domestic absorption through the budget would yield excessively small foreign exchange savings or additional earnings.

3.17 So much for the “what for” and “how” parts of the argument for debt relief which, in the circumstances, were quite easily accepted. The greatest difficulty concerned “how much”. Given the then normal (relative to imports, very high) receipts of regular aid, how much debt service could India assume without further specific help? Unfortunately for our ability to learn from that old lesson, the calculation was quite simple. The various needs for “free foreign exchange” other than debt service were added up and matched against earnings, essentially from merchandise exports (bilateral agreements, mostly with the Soviet Union and its satellites, accounting for about 20 % of trade, were an additional complication but need not detain us here). The conclusion was that if domestic resources and regular aid were to be effectively used, the value of other goods and services imports with which they had to be complemented would absorb at least 80 percent of projected export earnings¹³. In other words, even under deliberately optimistic (high) projections of future export earnings, deliberately low projections of import needs (other than those financed by conventional aid) could not be met if debt service absorbed more than 20 percent of export earnings. Hence the need for specific measures to relieve the debt service burden. These calculations were subsequently transformed into a rule of thumb that debt service should not absorb more than 20% of export earnings, lest other essential development needs remain unmet.

3.18 Accordingly, the World Bank asked Consortium members to provide sufficient debt relief to reduce the total debt service burden to less than 20% of exports. Most of the debate centred, not on the principles, which were largely accepted, but on the burden sharing among Consortium members and on the nature of acceptable contributions to debt relief.

3.19 During these discussions, it had been clearly assumed, though perhaps not always clearly spelled out, that “free foreign exchange” – free for the Government to allocate as it wanted – was more valuable than project or country-tied aid. This was no doubt partly true. Even the best procedures for country-tying raised the cost of goods relative to those obtained through open procurement; some countries pressed India to use their tied aid to import marginally (or sub-marginally) useful goods; also, the greater abundance of funds to finance, say, machinery imports, raised the relative value of those that could be used to import, say, copper and tin. Also, in those days of fixed parity overvalued dollar (at 1/35 oz of gold) and generous bilateral American aid, a dollar worth of tied US aid was less sought after by importers than a dollar worth of Japanese or some European aid.

3.20 On the other hand, “free” foreign exchange was allocated through the Indian licensing system, according to criteria with limited economic rationality (e.g. “clearance from the

¹³ Export earnings were projected in a deliberately optimistic fashion, just as the needs for free foreign exchange were deliberately underestimated. The aim was to concentrate Consortium discussions on mobilizing resources and on burden-sharing among creditors, and to avoid having to define the figures against accusations of exaggerating needs.

indigenous availability angle”) that were sometimes by-passed in aid projects and even in favour of using non-project aid. A dollar of country-tied aid used for importing, e.g. fancy bottle-stoppers did not, with hindsight and for those familiar with the Indian import licensing system, necessarily make less valuable a development contribution than a dollar used for importing copper allocated to a plethora of inefficient processing firms kept alive only by the licensing system itself.

3.21 Implicit in the Indian case’s concentration on “free foreign exchange” and exports, and the neglect of budgetary issues, was the double assumption that the Government had the will and the power to raise whatever domestic resources were needed, but that it was difficult to transform these into exports or import-savings. The second of these assumptions, that of a binding Keynesian transfer problem, was partly linked to inappropriate exchange rate and trade policies. These were then and later much analysed and criticised by the World Bank, and the reforms then suggested would broadly be endorsed even today. Also, by the late 1960s there had been much weakening of the assumption that the budget formed no constraint, as improved accounting for aid following devaluation and better analysis showed that it indeed did. Further, with reduced need for food imports and associated freight brought by the “green revolution”, and continued heavy reliance on aid and on import restrictions, the specific need for debt relief gradually disappeared from Indian preoccupations.

3.22 In the 1970s the rise of syndicated commercial bank loans appeared to render obsolete the 20% of exports rule of thumb. Brazil and others easily met debt service payments of 50 percent and more of their exports, through positive net transfers composed of untied financial credits that could be freely used for debt service. The resulting apparent ease of debt servicing impelled many lenders and borrowers, and also many observing economists (including some in the World Bank) to conclude that the old rules had been artificial or were no longer valid, which was true, and that no new rules of restraint needed to apply, which was woefully wrong.

Box 2: New Loans and Debt Service

Law’s Mississippi scheme in the early 18th Century and the assignats in the late 18th Century gave France a great distrust of all credit schemes. When he created the Banque de France in the early 19th Century Napoleon essentially restricted its private lending to discounting trade bills already bearing three signatures (the seller’s, buyer’s and banker’s). In effect, all three had to vouch that the credit supported a genuine new commercial transaction, not the refinancing of an old one. More recently, one of the hurdles to be overcome by negotiated concerted lending related to the prudential rules that forbid commercial banks to lend directly to finance interest payments. Indirect lending for that purpose is perfectly legal, but it offers no guarantee that the payment will go to the lender; as soon as such a guarantee is demanded, the lending becomes illegal or constitutes a recognition that the original loan’s value is impaired and must be balanced by appropriate provisioning.

3.23 The usability of commercial bank credits (and of bond issuance and inflows into domestic financial markets that were the hallmark of the 1990s) is limited only indirectly, by creditworthiness considerations; when markets awaken to the reality that new inflows are mostly used to service old loans, doubts about creditworthiness arise and new inflows loans dwindle. However, much lending to the public sector is more directly constrained, usable only to finance the direct import content of public spending, with perhaps some associated domestic spending (export and buyers' credits), or investment projects and other development programs (World Bank and other aid). Limitations apply even to financing for the private sector. A few ongoing profitable concerns may issue bonds or shares in favour of their general cash flows, and thus refinance part of their debt service. When times are good, particularly while speculative bubbles are inflating, existing assets can be sold at high prices and shares and bonds issued with little detail and less firm commitment on the uses to be made of the funds so raised. Asset holders, including the public sector through privatisation, can sell existing corporations and other assets and use some of the proceeds to service external debts. Generally, though, a large share of profit-motivated fund movements is reserved to the financing of capital formation.

3.24 The restrictions applied to aid funds are particularly strict. Only aid specifically labelled as debt relief can be directly used to service debt. Most aid disbursements are assigned specific other uses. Aid may nevertheless alleviate debt problems. Old-timers will remember the story of the Marshall Plan's refusal to finance the reconstruction of the Vienna Opera House. The Austrian Government reacted by switching the Opera for a dam earlier intended for construction out of domestic budget funds.

3.25 Thus even project or program-related aid may bring some relief to the general budget, and through it to debt servicing, in inverse proportions to program responsiveness to aid. If the Government would have undertaken the project anyway, or undertaken another project with similar costs, foreign aid would make it indirectly easier to finance other objects. If a given development activity is fully aid-financed, and if it would have been fully undertaken even without aid, then 100% of the aid to it constitutes relief for the general budget, and thus helps public debt service. If without this "tied" aid the Government had not undertaken any similar activity (for lack of funds or other reasons), the project aid does not at all alleviate the difficulty of servicing past debt. A Government determined to use the opportunities offered by such financing may have to stretch its resources to finance the local expenditure counterparts (e.g. local labour, cement, and all else it takes to build the dam). Far from easing debt servicing, foreign financing of specific development projects or programmes may make it more difficult. It is a truism, but one worth spelling out, that the more aid truly serves its ostensible purpose by actually promoting the activities for which it is intended, the less it helps finance debt service. All these considerations mean that simply maintaining or even raising positive net transfers does not guarantee the sustainability of debt service. This complicates, but does not reduce, the need to examine net transfers and adaptability to their variation.

3.26 Keynes's focus on the transfer problem in connection with the war reparations owed by Germany related essentially to the domestic difficulty of generating the corresponding net transfers, and to the international economic difficulty of generating the corresponding trade

surplus in the face of protectionism. Even in today's much more open world, the argument retains validity, particularly in the short term and for specialized primary commodity exporters. Such economies may have to reduce domestic absorption by a high multiple of the needed additional exports or import reduction.

4. BEYOND THE GOLDEN RULE: IS THERE AN EQUILIBRIUM LEVEL OF DEBT?

4.1 The golden rule establishes that debt cannot forever grow faster than the economy, and its corollary establishes that with nonnegative net transfers growth rates cannot forever be lower than interest rates. However, the rule and its corollary apply only in the long run, and to growth relationships. They say nothing about size relationships nor duration. What stable debt service ratios are sustainable? At what point must the growth rate of debt service cease exceeding the growth rates of the economy? How much indebtedness can be handled in long-term equilibrium, with net transfers at last constrained to zero?

4.2 To circumscribe the issue, let us start with the absurd, with a number that is patently too high. Assume National Income is 1000 and primary budget expenditures (excluding interest) as well as exports (and imports) are 200. Assume further a growth rate of 5 percent and the same interest rate on debt outstanding. Finally, assume that net transfers are at zero. Note that these assumptions are compatible with an infinite range of debt service and borrowing figures. Public debt could amount to zero as well as a billion, in full respect of the Golden Rule.

4.3 Under these assumptions, would annual net public borrowing of 1000 be sustainable? This would involve debt outstanding of 20 000 and interest payments of 1000¹⁴. The golden rule and its corollary are satisfied – net transfers are zero and debt grows at the same rate as the economy. Yet, one instinctively feels that debt is much too large relative to the budget and the economy.

4.4 Instinct sometimes misleads. If all these numbers were solid, dependable, permanent, their relationship could continue forever. Domestic taxes of 200, growing at an annual rate of 5%, take up 20% of an economy growing at the same rate, while the external debt, though its size dwarfs all things domestic, does not actually weigh on them because it is continually and fully refinanced.

4.5 Yet, the instinctive reaction is correct. The relationship itself, as described, is sustainable – just as sustainable as debt of 100 000 or a hundred million, under the same assumptions. The reason we know instinctively that such high debt ratios are unsustainable is that we know that nothing is fully “dependable and permanent”, the relationship cannot remain exactly as it was, and any departure from it may cause its unstable equilibrium to collapse immediately. A relationship is truly sustainable only if it can resist minor variations and possess endogenous forces that would correct minor deviations from equilibrium. A

¹⁴ Net transfers being zero, net borrowing refinances interest; if total interest, at a rate of 5%, amounts to 1000, debt amounts to 20 000.

pyramid of any size can rest on its point, but we know that it will continue to do so only if it offers some resistance to forces that would push it away from equilibrium and possesses some forces that push it back towards equilibrium.

4.6 In our example, as long as everything continues with the postulated numbers, and no impediment hinders the use of borrowed monies directly for debt service, everything is fine. However, the least proportionate shortfall in a net inflow of 1000 (and a much smaller proportionate shortfall in the corresponding gross borrowing) would cause an insurmountable problem to a primary budget of 200. The same is true of the least shortfall in the annual growth rate, or in tax-collection capacity. Profit-motivated capital flows would never risk flowing to such an economy. Even if all new borrowing is official, and does not falter, something else is sure to vary and to overthrow such a fragile equilibrium. Naturally, the least limitation on the ability to use newly borrowed funds directly for debt service also ends the issue. The visibly sole object of new inflows is financing debt service – not encouraging over the long run for any lender, and forbidden by regulators for many.

4.7 This example, with an absurdly large figure, serves to show that there are indeed limits to the size of sustainable debt. They are related to the stability of financial flows (an additional dimension relates to their usability for debt service payments), to the stability and sustainability of the borrower's growth rates in every relevant dimension, and to its capacity to deal with financial and other shocks. When the flow is so large, or its composition so unstable, or the borrower's adjustment capacity is so weak, as to preclude the borrower's dealing with likely shortfalls, the situation is not sustainable. Nor is the flow likely to materialize, because potential creditors and investors, seeing the obvious unsustainability of the situation, will abstain.

4.8 Let us move down in scale. With the same economy, what about annual net long-term borrowing of 100? Corresponding to this, interest payments are then also 100 and total debt stands at $100/0.05 = 2000$. Net flows, equal to ten percent of GNI, correspond to maybe one third to one half of all investments, and to one half of primary (non-interest) budget expenditures. We do not know how much gross borrowing is involved, but we could estimate it. If the debt were mainly short term, refinancing 2000 plus an increase of 100 would involve annual gross borrowing of at least 2100: again, a very tenuous and therefore unsustainable equilibrium relative to a budget of 200. If the debt is long term, say an average ten years' maturity, 300 annual gross borrowing is still needed. It still seems very high in comparison to the budget and trade flows, but perhaps not quite impossible if the steadily growing inflows are dependable. At one time in the 1980s the public debt to GDP ratio exceeded 400% in Israel – with low-interest official support not dependent on creditworthiness at about the same time, Israel's budget deficit for a time exceeded 25% of GDP. However, there are few if any other examples of such high ratios outside of bankrupt States.

4.9 Even then, equilibrium can be maintained only if it is possible to curtail the growth of debt in reaction to a possible slow-down in the growth of GNI. A slow-down in growth from 5 to 4% annually would reduce the acceptable growth of debt from 100 to 80, thus impelling (if interest rates on the old debt do not budge) negative net transfers of 20, and a

corresponding reduction in primary budget expenditures (or equivalent increase in taxes. Daunting enough, particularly in the face of a slowdown in growth.

4.10 There remains the issue of fungibility. Under the original assumption (i.e. 5% growth), net transfers are equal to 50% of primary budget expenditures and exports (and imports), and gross borrowing to at least 100%, probably more. Some of this gross borrowing may be used to finance the primary budget, but clearly much of it must be used to finance debt service. Thus, debt service under the latest set of assumptions could be sustainable only under further restrictive assumptions; capital flows quite irresponsive to the danger of default and high domestic adjustment capacity to shocks would not suffice. New inflows also must be at least partially usable to refinance debt service. Debt service is sustainable only with the help of what, by the old Indian definition, constitutes debt relief.

4.11 Let us take another tack, view a country and a budget that still receive positive net transfers. Under what conditions could debt ratios be stabilized before debt becomes excessive? One obvious condition relates to growth, which helps in two ways. The higher the growth rate, the higher the net transfers on debt consistent with the desired stable debt ratio. With 5% growth, a 5% interest rate required zero net transfers. Had the growth rate been 6%, positive net transfers would have been required to stabilize the debt ratios. Out of the 16 moderately indebted and 33 highly-indebted poor countries listed by the World Bank¹⁵, it is striking that over the period 1990-2000 only two moderately indebted countries exceeded the arbitrary 5% growth rate of our example, and only about a dozen countries in all had average growth rates of more than 3.5%. True, these growth rates refer to GDP in constant prices, and the interest rate was stipulated in current prices. However, inflation was low over the past decade and commodity prices mostly did not rise (many fell). Even without further research, one can be confident that at least one of the relevant indicators (exports, the budget...) had a lower current dollar growth rate than the growth rate of GDP in constant prices. If the average interest rate on their debts exceeded such growth rates, most of the 49 countries would have needed negative net transfers to bring the growth of debt in conformity with the Golden Rule.

4.12 The other dimension of economic growth relates to ability to adjust to lower net transfers and to slow-downs in growth. As we noted earlier, however eager consumers and citizens may be to enjoy early and pay late, they are much less keen when the time to pay comes. They strongly dislike declining consumption, and this generally makes it difficult for Governments to bring about orderly adjustment to it. High growth rates are obviously favourable to rising consumption paths; they allow consumption to continue rising, albeit more slowly, despite reduced net transfers.

4.13 The Golden Rule relates to economic aggregates. Consumers' and citizens' welfare mostly depends on per capita numbers. A stagnating economy combined with stagnating debt does not violate the golden rule. However, if meanwhile population is growing, per capita incomes must fall and, presumably, per capita consumption and with it perceived welfare too.

¹⁵ The list of moderately and highly indebted low-income countries is reproduced annex 1. Growth rates are from WDI 2002 Table 4.10. A few very small highly indebted countries (Comorros, Sao Tome) are missing.

4.14 Data on consumption are notoriously among the least reliable statistics, and data on the growth of consumption are even weaker. It is nevertheless significant that while the average growth rate of per capita consumption in low-income countries is estimated at 1.6% over the 1990-2000 period, again only about a dozen of the 49 highly and moderately indebted low-income countries met this average. Quite a few highly indebted countries have suffered declining per capita consumption for a decade or longer; yet the countries, and many people in them, survive. In that sense, declining incomes and consumption have been “sustainable”. Why is then declining consumption unsustainable if induced by policies aiming at generating the net transfers (low positive or negative) compatible with debt service obligations?

4.15 Indeed, it may be sustainable for a time. In Romania, policies clearly aimed at servicing past debt without incurring new debt caused aggregate negative net transfers to reach a trough of 9% of GNI in 1988. In 2000, Indonesia generated negative aggregate net transfers equivalent to 12.7% of GNI (a reversal of about 16% on GNI from their peak in 1996), despite a 5% decline of per capita household consumption from the peak reached in 1997.

4.16 Yet, neither of these two examples are entirely encouraging. In both cases, household consumption suffered enough to contribute to political tensions and the difficulties of governance, yet it absorbed only part of the necessary decline in domestic absorption. Investment and other development expenditures also had to be depleted, and civil services run down.

4.17 The ratchet-like resistance of every polity to declining consumption is well known. Nevertheless, the consumption of some fraction of individual households often declines, and not always with catastrophic social or political consequences. What makes the servicing of public debt different from other constraints, like crop failures or falling terms of trade? Why cannot Governments preserve development expenditures by squeezing consumption even more?

4.18 When crops fail, Nature is her own tax collector. The lost income never reaches the producer; the fields themselves keep it, effortlessly. Similarly, the income that producers lose through falling international (or, for that matter, national) prices never reaches them. The loss may be acutely felt and tempers strained; in managed markets, producers will clamour for compensation; but on the whole, the subtraction of the lost income takes place effortlessly.

4.19 Public debt service is different. Its proceeds must first be earned and then extracted from households and producers through the tax system and handed over to Government. Even with tax systems that are fair, mild, free from corruption, and seen to be so, this is never easy. It is infinitely more difficult with tax systems that are unfair, corrupt and inefficient – as is the case in the majority of poor countries. Anti-tax revolts were a major cause of banditry and economic decline in the later Roman Empire (Bagaudes), of jacqueries and other rural revolts throughout Europe during the Middle Ages and well into the 17th Century, and of the American War of Independence. Violent local protests in the villages of Tonkin

and Annam during the 1930s first aimed at excessive taxation and its local representatives, and laid the bases for the broader struggles that followed. The weight of taxes was felt all the more heavily as much of it went to debt service and to the administration itself, with little left over for services appreciated by villagers, like schools and local roads.

Box 3: Servicing the Debt of Popular Wars

In 1871, the victorious Germans had imposed an enormous war indemnity on France, with the right to occupy key fortresses until it had been paid in full. Paid in full it was, much earlier than had been expected, as household savings poured into Government bonds in a huge patriotic wave. Service of this debt and other necessary expenditures raised the need for taxes, but those who would have had to pay them effectively resisted all income taxes – “l’atroce impôt”, the atrocious tax, as Thiers called it. Not so different was the reaction of the American colonists asked to pay for the cost of the wars that had freed them from the French and Indian threats.

4.20 Paying taxes is rarely pleasant, but it is particularly resented when the object is as far removed from the people as the service of public debt. As discontent grows, tax administration requires additional resources and tax evasion additional punishments – thus leading to a vicious circle of greater discontent. If even debt clearly related to clear achievements overwhelmingly endorsed by long-established Nations (like the French and Indian wars of America and the liberation of national territory of the French IIIrd Republic) create discontent and doubts about the legitimacy of taxes, how much greater these are when the debt-servicing and taxing Government possess little legitimacy, and the general perception is that what the powerful do not steal they mostly use to protect their power. Cutting development expenditures, immiserating public services, reducing real public remuneration to administrators and letting them find their own pay appear easier alternatives. Often, so does default.

5. COUNTRY EXAMPLES

5.1 The few short country stories in this section rely essentially on published, and therefore old, statistics, from World Development Indicators (WDI) 2002 and Global Development Finance (GDF) 2002. They do not aim at establishing whether the debt situations of the countries discussed is sustainable now, in mid-2003, nor at delivering universal recipes for the identification of different debt situations, but at showing a few analytical methods that can help when complemented by more current data and country knowledge.

5.2 As usual, it is useful to begin with extreme rather than borderline cases. Afghanistan and Iraq are not even listed in GDF, for lack of data. The former had borrowed on concessional terms until the mid-1970s and suspended service payments in the midst of war. The second borrowed heavily on commercial terms, mostly through export and buyers’

credits. It suspended most debt service following the sanctions consequent to its invasion of Kuwait (none had followed its earlier invasion of Iran; the years between the two invasions saw the heaviest debt accumulation). No one expects these countries to be able to service those debts today, and not ever fully. No one believes that debt is a key, or even an important element in their present difficulties. There is no shortage of almost equally extreme examples, from the democratic and the other Congo through Somalia and Sudan, to Haiti and perhaps Myanmar.

A. Burundi

5.3 Burundi is one of many similarly extreme cases. Poor, landlocked and overcrowded to begin with, it has had to contend with unstable internal government and endemic civil war. Its GNI per capita rose from \$60 in 1962 to \$110 in 1975, and after further rise and fall, it was still \$ 110 in 2000 (current dollars, World Bank Atlas method). In the 1990s, Burundi's constant price GDP declined and its population rose, both by about 20%. Over the past forty years, its constant price GDP increased at about the same average rate as its population. National income in constant prices rose rather less (and fell rather more per capita) because of deteriorating terms of trade. The current dollar value of exports of goods and services rose by only about 150% in forty years, a significant fall in their purchasing power, much more so per capita. The woeful tale could continue. World GNI meanwhile rose elevenfold, from \$480 to \$ 5170, and world exports 50-fold. By way of further comparison, per capita income in Bangla Desh rose from \$ 200 in post-independence 1975 to \$ 370 today.

5.4 Burundi's debt service burden is clearly not bearable, let alone sustainable. Total debt service accounts for about 40% of exports, thus reducing to a trickle disposable export earnings that would be patently inadequate even without this. The Government Budget spends more on debt service than on public education. Not surprisingly, there is no sign of capacity to adjust. Aggregate net transfers (essentially from aid) were equivalent to 14% of GNI in 2000; the least shortfall is capable of further devastating the humanitarian situation, if not a non-existent development process.

5.5 Debt service is heavy relative to the economy's capacities, even though its terms are light. For many years now, new commitments have carried average interest rates of less than 2%. Grants make up about two thirds of net transfers, and net transfers on debt also remain positive. It is difficult to visualise any improvement in performance that would allow Burundi to grow out of the present debt, yet one cannot really place on debt service much of the responsibility for the country's problems. Even taking into account the lack of fungibility of new aid, debt service's weight in the budget is tiny compared to military expenditures (27 percent) and the depredations of the civil war. There is no hope that new debt will truly ever be serviced, except through fungible future aid, but even if all debts were to be cancelled today without any implication for future aid receipts, by itself this would barely improve development prospects.

5.6 Nor is there any indication that past debt much contributed to present problems. Though debt increased six-fold in the 1980s, it came largely from official creditors (almost

half from IDA), and on concessional terms. This is not one of those situations where present debt is the result of a past splurge.

Box 4: Triage

Following the independence of Bangla Desh, in 1971, associates of Dr. Kissinger developed a theory of “triage”, adapted to economics from the practice of World War I field surgeons, who set aside those unlikely to survive even if given immediate first aid, and those likely to survive even if left temporarily alone, concentrating on those likely to be saved by the immediate administration of first aid. In the adapted version, no economic aid was to be given to countries deemed unlikely to develop even if they received aid. Bangla Desh was supposed to be one such country, a view that may, however, have been coloured by Dr. Kissinger’s “tilting for Pakistan” in the earlier conflict.

It is not desirable nor even feasible just to stand by while poor people in poor countries die, even if aid merely alleviates the consequences of the lack of development, without in any way curing its causes. However, public funds for humanitarian needs are even scarcer than funds deemed to finance development. Hence much funding from sources that are, in principle, geared to the financing of development, is used merely to alleviate misery and delay death. The financial terms of such funds, however easy, still presuppose some growth, some development, on the part of the beneficiaries. Countries that do not grow cannot envisage servicing their debts, nor even adjusting to the reduction of the Net Transfers upon which they have come to rely. Some of the clamour for debt relief is misdirected away from mobilizing funds for humanitarian purposes.

5.7 If new aid is still to be granted in such a situation, what form should it take? Why does Burundi continue to draw significant new loans, notably from IDA? It cannot be that creditors sincerely believe that the country will become capable of servicing the newly acquired debt. Creditors must fully well know that future debt service will, at best, come indirectly out of future resource transfers, and most likely, directly too. They know, in other words, that debt will only be serviced if future aid pays for debt service. The likeliest answer to this apparent paradox is that aid sources are not fully equipped to deal with such situations. They deal with the most urgent and provide in whichever way and whatever forms they can, the funds they want to provide today, in the hope that tomorrow’s aid managers will take care of tomorrow’s debt service needs.

5.8 Whether IDA should make grants only or loans was recently much debated. It would be wrong to conclude from the above that grants should constitute the answer in cases like Burundi’s. The real issue is not the form to be taken by development financing – there is no development process, however halting, that could not assume a burden as light as IDA terms. One real issue is whether development financing is compatible with the absence of development, and what other resources can finance real humanitarian needs in such situations. An even more challenging issue concerns the appropriate terms of development

financing in situations where development is quite likely to fail despite financing, but much more likely still to fail in its absence.

B. Côte D'Ivoire

5.9 Côte D'Ivoire is in high contrast to Burundi. Debt service weighs somewhat less heavily on exports (a DSR just over the traditional 20% in 2000, following substantial restructuring). Such rough conformity with this conventional limit is due largely to the openness of the economy, at least until the recent coups d'Etat, revolts and civil war. Service on public debt absorbed over 40% of the budget in 1999, over ten times the share of military expenditures, and more than twice as much as education. Despite considerable past rescheduling and other debt relief, in 2000 aggregate net transfers were negative, equivalent to over ten percent of exports of goods and services and about 4 % of GNI. They absorbed fully one fourth of gross domestic savings.

5.10 One cannot see an early end to the problem. Debt outstanding is high relative to GNI. It includes about 40% owed to private creditors, on relatively hard terms despite past relief (about 7% interest paid in 2000 on private source debt outstanding). New aid commitments have been quite soft (less than 1% average interest in recent years, and much in grants) but public debt still carried an average interest rate of 3.8% in 2000.

5.11 As witness the substantial share of private creditors, Côte d'Ivoire did not follow the same road as Burundi to the present situation. In the early years after independence, it grew remarkably well. Per capita GDP in constant prices doubled from 1962 to 1978, a performance equalled by few developing countries during that period. Contrary to most African and many other developing countries, it had favoured foreign investment and the private sector in general; not many commentators then had drawn attention to much of the private sector's being in the hands of public figures.

5.12 A modest borrower in the 1960s, Côte d'Ivoire borrowed heavily in the 1970s, complementing the combined terms of trade and production booms with large positive net transfers. It was then a middle-income country, reliant on private much more than public financing, the latter (including the World Bank group's) on market-related rather than concessional terms. New loans and net transfers soared, peaking in absolute value and as percentages of GNI in the years around 1977 when GNI itself was peaking, but still amounting to about 4% of GNI in 1980.

5.13 In ten years, total debt stock rose twenty-fold, from \$ 374 in 1970 to \$ 7 462 millions in 1980. Annual gross disbursements had risen almost as fast, from \$ 124 million in 1970 to \$ 1.9 billion in 1980. Meanwhile, GNI, exports and other economic aggregates were also rising fast, but much less fast than borrowing, about seven-fold in current dollar prices from 1970 to 1980. Ominously, the current dollar value of exports peaked in 1980. Clearly, the Golden Rule called for the growth of debt to slow down at some point – probably at a point already well past.

5.14 The absolute amount of short-term debt, as well as its share in total debt and its ratio to imports, still appeared reasonable in 1980. However, increasing shares of new debt had been coming on short terms. In 1980 net short-term borrowing accounted for two thirds of net transfers, which themselves had already begun to contract sharply. These falling net transfers had begun to impose an adjustment effort that was all the more painful as it had to be exerted after so many years of rising incomes and net transfers and in the context of declining GNI and peaking exports. Yet, even this took gross disbursements of almost \$ 1.8 billions of long-term debt, plus a net increase of \$ 200 million in short-term debt (about 25%) in a single year. Merely to stabilize the value of short-term debt outstanding at the end of 1980, about \$1 billion of short-term debt would have had to be rolled over at least once every year.

5.15 By 1980, debt service had risen to 38% of exports. This did not cause immediate difficulties, because high net transfers were largely composed of fungible private credits to the Government, easily used for debt service. Nevertheless, danger signals were plentiful: the value of debt had risen much faster than the economy, the share of short-term debt in net transfers had increased sharply, the debt service ratio was high... All these danger signals had started to glow while Côte d'Ivoire was still enjoying good economic times. Even if the growth rate of production and the terms of trade had both held up, net transfers could not have long persisted at such high ratios to National Income and exports, let alone rising ones. It was time for the growth rate of debt to decline at least to the same rate as the growth rate of GNI. That would have imposed a sharp adjustment, even if GNI had continued to grow as fast as it had been growing until the late 1970s.

5.16 As it turned out, the peak of Net transfers coincided with the peak of GNI. This was not a coincidence. As this note has repeatedly stressed, the availability of fresh private loans depends on highly changeable perceptions. As long as everything is thought to go well, everyone thinks that everyone is willing to lend, therefore everyone thinks that debt service presents no problem, and everyone is indeed willing to lend. As long as everyone lends and net transfers are increasing, debt servicing is painless, thus apparently justifying all those borrowing and lending decisions. Then expectations change, often prompted by a slow-down in growth or other similar shocks. Lenders become concerned that their own new loans will just bail out other lenders, and new lending dries up, thus again apparently justifying all such non-lending decisions. Commercial creditors rarely impose prudent limits to borrowing. They swing between too much and not enough. Côte d'Ivoire and its advisers should have seen that its overall borrowing policy was unsustainable.

Table 1: Côte d'Ivoire, Net Transfers / GNI 1970-2000

1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	
0.023	0.018	0.013	0.065	0.016	0.061	0.035	0.086	0.074	0.044	
1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	
0.037	-0.006	0.029	-0.035	-0.050	-0.089	-0.082	-0.031	-0.010	0.009	
1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
0.038	0.009	-0.017	0.015	0.116	0.047	0.032	-0.033	-0.001	-0.049	-0.055

5.17 Economic growth turned into decline around 1980. Then the decline was turned into a rout by international interest rates that soared to the mid-teens on new private loans and high single digits on official ones, contagion from the Latin American debt crisis, falling commodity prices and deteriorating the terms of trade, the 1980-85 dollar appreciation episode which temporarily amplified the rise in the debt to GNI ratio... New private lending dried up. In 1980, Net transfers from the private sector had amounted to almost two thirds of the total, about 2 percent of GNI. Three years later, they had become highly negative.

5.18 Official creditors took the relay, at interest rates that averaged 9 % on new official commitments in several years, and never fell below 5% throughout the 1980s. Meanwhile, the dollar value of GNI was declining. An already unsustainable situation was being made ever more unsustainable. New lending continued only because it was mostly official. This, at best, cushioned the decline in incomes. At worst, or perhaps just realistically, public lending shifted some of the costs of the early bad lending decisions to official creditors from the private ones that had made them. The burden on the borrower – the past's bad investments and the present's negative Net transfers – remained.

5.19 This Paper cannot pretend to any eburnean expertise. Much had seemed to go right in Côte d'Ivoire in the 1970s, and much must have been going wrong even then. However, not all alternatives may have been feasible. The comparison with other primary commodity exporters like Malaysia and Indonesia, made in Table 2, shows the differences that occurred, but does not tell us whether there had ever been real potential for similarities. Not having tried, we cannot know how Côte d'Ivoire would have responded to the education and other policies that turned Malaysia, and to a lesser extent even Indonesia, into advanced industrial exporters. One difference stands out, however: Indonesia and Malaysia avoided extreme debt difficulties in the 1970s. Whatever would have been possible, one can wistfully look at what happened, summarised by the evolution of per capita GNI.

5.20 Since 1997, net transfers have again turned negative. They no longer allay the shortage of national savings and of budget resources. Public education expenditures have fallen from about 7% of GDP in 1980 to 4% of a much lower per capita GDP twenty years later; military expenditures are estimated to have fallen from 1.6% of GDP in 1990 to half that share in 2000. Unfortunately, Côte d'Ivoire is not the only country to have found it costly to save money on these budgets. Yet, with service on public debt absorbing 40% of the budget, saving money was imperative.

5.21 Little can ever be fully proven in such fields, but it seems likely that debt servicing problems and the remaining debt overhang enhanced the difficulties of Côte d'Ivoire's adjustment. In the 1980s, official flows, instead of helping raise investment and other forms of domestic adjustment, mainly served to cushion the impact of private creditors' and equity holders' earlier bad lending and investment decisions. The debt restructuring of the 1990s at last tried to tackle the problem, but did not sufficiently ease the debt burden. Combined with continued private withdrawals and lower new public inflows, Net Transfers declined further and became persistently negative, thus further depleting national and budgetary resources already made scarce by slow-growing production and generally unfavourable terms of trade.

Table 2: Côte d'Ivoire, Debt Indicators

	1970	1980	1990	1994	1995	1996	1997	1998	1999	2000
Debt outstanding	374	7 462	17 251	17 395	18 899	19 524	15 609	14 852	13 170	12 138
Of which, IMF + short-term, ratio	0.29	0.15	0.23	0.20	0.23	0.32	0.20	0.15	0.14	0.13
Gross inflows	124	1 861	1 353	2 003	1 412	1 672	973	1 344	945	498
Repayments	31	722	498	711	539	812	816	670	823	442
Interest	12	590	443	426	390	473	413	615	544	462
Private investors + creditors, LT	128	1 696	861	924	725	482	-162	218	-184	-188
Profit remittances	41	125	611	979	392	123	-109	179	-239	-86
Net flow from ST debt incl. IMF	0	240	668	-1 526	731	2 053	992	-839	-327	-323
Aggregate net transfers, net transfers from private sources	33	361	349	801	420	320	-324	-16	-503	-476
	-9	235	-262	-178	28	197	-215	-195	-264	-390
GNI, current dollar millions	1 413	9 680	9 209	6 892	9 005	9 930	9 870	10 690	10 288	8 615
GDP per capita in constant 1995 dollars	928.53	1045.34	779.45	694.28	719.91	746.63	768.51	790.17	780.80	742.52
GNI per capita, dollars, ATLAS method	280	1140	780	660	650	660	710	700	670	600
GNI per capita, PPP, estimate	..	1230	1320	1300	1390	1460	1500	1520	1540	1500
Gross capital formation	325.88	2699.95	722.13	961.82	1351.90	1687.61	1688.75	1888.20	1780.90	1156.77
Imports GSF	421.66	4760.52	4594.06	3435.40	4782.15	5002.22	4966.17	5286.53	5144.56	4192.70
Exports GFS	518.17	3639.73	3560.87	3537.43	4526.31	5182.46	5191.98	5389.93	5409.95	4549.45
Imports/GDP	0.29	0.47	0.43	0.45	0.48	0.46	0.46	0.46	0.46	0.45
Exports/GDP	0.36	0.36	0.33	0.46	0.45	0.48	0.49	0.47	0.49	0.49
GDI/GDP	#####	0.12	0.12	0.17	0.14	0.13	0.14	0.13	0.14	0.16
Interest payments/debt outstanding	3.24	7.91	2.57	2.45	2.06	2.42	2.65	4.14	4.13	3.81
Imports financed by exports	434	2202	2009	1421	3206	3774	4072	3925	4281	3732
Share of Imports financed by exports	1.03	0.46	0.44	0.41	0.67	0.75	0.82	0.74	0.83	0.89
Net flows on debt/Debt outstanding	0.137	0.136	0.030	0.030	0.011	0.003	-0.037	-0.015	-0.044	-0.024
Aggregate Net Transfers/GNI	0.023	0.037	0.038	0.116	0.047	0.032	-0.033	-0.001	-0.049	-0.055
Net flow short-term debt/net transfers net transfers/GDI	0.000	0.665	1.915	-1.905	1.739	6.407	-3.061	52.973	0.651	0.678
	#####	0.293	0.264	0.616	0.302	0.219	-0.216	-0.010	-0.326	-0.317
Gross inflows as/GDI	#####	1.513	1.025	1.541	1.016	1.145	0.649	0.884	0.614	0.332
Private (LT) inflows/GDI	#####	1.379	0.652	0.711	0.521	0.330	-0.108	0.143	-0.119	-0.125
Sort-term debt excl IMF/Imports	0.254	0.223	0.783	0.936	0.818	1.161	0.536	0.298	0.244	0.249
Public education exp/GDP	0.052	0.069	#####	0.052	0.047	0.045	0.044	0.042	#####	#####
Military expenditure/GNI	#####	#####	0.016	0.012	0.011	0.010	0.010	0.009	0.008	#####
Total budget expenditure/GDP	..	0.317	0.245	0.274	0.266	0.250	0.240	0.230	0.224	..
Public debt service (LT debt)/GDP	0.028	0.086	0.049	0.090	0.077	0.078	0.074	0.077	0.089	0.072
Public interest payments /GDP	0.008	0.035	0.019	0.039	0.026	0.030	0.025	0.044	0.041	0.036
DEBT INDICATORS IN WDI										
Present value of debt/ exports	..	..	..	..	..	..	..	..	..	2.53607
Present value of debt/ GNI	..	..	..	..	..	..	..	..	..	1.3393
DEBT INDICATORS IN GDF										
EDT / XGS (%)	..	205.03	484.46	491.75	417.53	376.72	300.63	275.55	243.44	266.8
EDT / GNI (%)	26.43	77.09	187.32	252.4	209.87	196.61	158.14	138.93	128.02	140.9
TDS / XGS (%)	..	38.66	35.44	35.17	23.11	26.53	26.19	25.67	26.79	22.43
INT / XGS (%)	..	18.82	17.99	12.92	9.3	9.93	10.04	13.24	11.42	11.85
INT / GNI (%)	0.86	7.08	6.95	6.63	4.68	5.18	5.28	6.67	6	6.26
RES / EDT (%)	31.82	0.62	0.12	1.27	2.89	3.19	4.04	5.85	4.88	5.5
RES / MGS (months)	..	0.12	0.06	0.77	1.37	1.49	1.53	1.97	1.5	1.91
Short-term / EDT (%)	28.65	14.2	20.85	18.48	20.69	29.74	17.05	10.61	9.54	8.59
Concessional / EDT (%)	32.48	5.87	17.95	22.32	24.15	24.62	28.85	33.28	33.55	33.99
Multilateral / EDT (%)	3.8	7.01	20.78	21.36	20.64	18.77	21.15	23.5	23.9	24.37

US\$ million, unless otherwise indicated

For explanations, see Annex 2.

5.22 One cannot be assured that more radical and earlier debt restructuring, say in the early 1980s, would have led to more radical reforms and an earlier return to growth. One cannot be certain that better economic performance would have spared the country the political turmoil it has been undergoing in recent years. Yet, it could have hardly turned out worse for the country and collectively for its creditors, though of course the early and most imprudent private creditors may then not have been partially refinanced by public ones. Even with more prudent borrowing but similar other policies, Côte d'Ivoire's development would have suffered, because solid development cannot be built on the continued exploitation of a natural resource only (in this case land), with heavy reliance on imported labour and limited and misguided efforts at diversification. Yet it is also clear that the borrowing policies of the 1970s were wholly unsustainable and sure to lead to a crisis; and that the substitution of public to private creditors on marginally better terms, combined with heavy negative Net transfers, did little to ameliorate the situation in the 1980s. On the contrary, the combination of the immediate burden placed on savings by negative Net transfers with the mounting debt overhang was a good way to frustrate reform efforts.

Table 3: Per Capita GNI Comparisons

	1965	1970	1975	1980	1985	1990	1995	2000
Current Dollars, World Bank Atlas Method								
Côte d'Ivoire	200	280	570	1,140	640	780	650	600
Indonesia		80	230	500	520	620	1000	570
Malaysia	330	400	910	1830	1940	2380	4030	3380
PPP estimates^(a) international dollars								
Côte d'Ivoire			870	1230	1210	1320	1390	1500
Indonesia			460	830	1170	1860	2840	2830
Malaysia			1240	2320	3060	4540	7170	8330

Source: WDI 2000

a) Towards historical PPP estimates a healthy scepticism would border on incredulity. The figures are nevertheless showed here because the Atlas Method's three-year averaging is impotent in the face of major currency parity changes like the devaluation of the CFA Franc and real depreciation of the Indonesian rupiah (and, to a lesser extent, the Malaysian ringit) following the East Asian financial crisis of 1997.

5.23 Debt reduction and rescheduling, eased terms on most official loans, declines of market interest rates and increasing grant receipts eased the situation for a time in the 1990s, and even managed to provide positive aggregate Net transfers in most years from 1990 through 1996. The debt overhang eased little, however, and a sustainable debt situation was never truly restored. Debt outstanding still carries average interest of more than 4%. This is not a high interest rate, but as the value of GNI in current dollars has actually fallen between 1995 and 2000, the Golden Rule would have required negative Net transfers through debt repayments or debt cancellations. Substantial debt cancellation has at last reduced the ratio of debt to GNI, but it is still substantially higher than it was when the crisis began more than twenty years ago. More significant than these nominal values, the ratio of the present value of debt (the discounted value of future debt service) to GNI was about 1.34 in 2000, one of the highest on record – almost three times higher than the same ratio for Argentina. The ratio of the present value of debt to exports was not quite as bad in comparison (because of Côte d’Ivoire’s more open economy and more realistic exchange rate), but still not many countries have worse. Such ratios need not be daunting at the beginning of a debt restructuring or adjustment process, but Côte d’Ivoire is now two decades into a debt crisis, and several years into negative net transfers. Also, as will be argued later, the conventional 10% discount rate used for such comparisons is much too high. The comparison with countries that have more conventional debt structures, say Argentina, would appear much more unfavourable to Côte d’Ivoire if a more realistic (and lower) discount rate gave more appropriate, and higher, present values to debt service obligations falling due in the remote future.

5.24 With hindsight (but it would not have required exceptionally acute foresight to arrive at the same judgment in time!), Côte d’Ivoire would have been much better off if it had borrowed much less in the 1970s. It would also have fared much better if in the 1980s it had not substituted public creditors for private ones, but conducted instead an orderly combination of faster reduced net transfers through budgetary and exchange rate adjustment, and faster reduced debt through concessional rescheduling. In the 1990s, the negative net transfers imposed on the country were bound to frustrate adjustment efforts, even if they had been more energetic; though this argument may not have weighed heavily with aid sources that had seen earlier positive net transfers also failing to help lead to adequate adjustment.

5.25 Recent political turmoil has all but destroyed the already slim prospects of Côte d’Ivoire ever working its way out of debt without further radical reduction. Nor is there much hope that desirable forms of private capital will return soon. Even with further radical debt reduction combined with radical new aid policies, the country’s orderly return to a development path seems extraordinarily difficult. Without them, it would be impossible. The greatest challenge for aid sources and lenders will be to institute such new policies when they are most likely to help rebuild a viable State and a developing economy, without waiting so long as to frustrate national reform efforts nor yet merely allowing debt reductions and economic aid to be turned into wasted opportunities. Once again, we touch upon the forms of lending adapted to the needs of uncertain development.

C. Indonesia

5.26 Indonesia entered the 1970s with very low debt and debt service ratios, thanks to earlier drastic debt relief. Alarmed by the borrowing spree of the public sector oil company, Pertamina, the Government imposed thorough controls on all public sector borrowing and behaved with great financial prudence throughout the 1970s¹⁶. The various debt and debt service ratios fell further. In the early 1980s, the Government of Indonesia momentarily succumbed to the lure of a few loan-financed mega-projects, but fortunately it was overtaken by the debt crisis and wisely saved the essential by paying high cancellation fees.

5.27 While actively developing primary commodity exports (and taking market share from African countries, including Côte d'Ivoire), economic policies favoured the development of export-oriented labour-intensive manufacturing, prepared by continued and well-spread high investment in human capital formation. Financial policy remained generally prudent and effective until well into the 1990s, though debt increased and by 1990 service on public and publicly guaranteed debt amounted to more than a third of the budget; but this was on the whole balanced by a large and not unprofitable public sector (including large primary producers).

5.28 Since the reforms of the late 1960s, Indonesia had practiced absolute freedom of foreign payments, including capital movements. In the 1990s, the very success of its development provoked a large influx of private capital to its private sector. In addition to portfolio equity and direct investment and some loans to the financial sector, these included dollar-denominated foreign lending directly to the non-financial sector. The instability of such flows should not have come as a surprise. Already, the devaluation of the rupiah in 1978 had turned into an outflow the previous inflow of private funds, causing aggregate net transfers to become negative for thirteen successive years until the end of the 1980s.

5.29 That was far from the order of the day in the early 1990s. From about \$ one billion in 1990, foreign direct investment rose to over \$ 4 billions in 1995 and over \$ 6 billions in 1996. Portfolio investment and loans followed. Private net transfers soared from – \$785 millions in 1990 to + \$3 billions in 1994, \$6 billions the following year and \$10 billions in 1996, 5 percent of GNI. Net resource flows (i.e. deducting from new inflows only capital repatriation and debt repayment, but not profit remittances and interest payments) amounted to \$16 billions in the same year. Gross domestic capital formation then has been estimated at \$ 69 billions: almost one quarter of total investment (and, at a guess, perhaps one half of private sector investment, and a higher ratio still of corporate private investment) was then financed from abroad.

5.30 The role of short-term debt should have been particularly perturbing. Conventional debt service burden calculations disregard the repayment of principal on short-term debt. Simply adding it to debt service may indeed be sometimes misleading. It also may sometimes

¹⁶ The most vigorously negotiated part of World Bank economic reports on Indonesia from 1975 through 1979 was always a single sentence to the effect that “Next year,, Indonesia should be creditworthy for total borrowing of X millions”.

be misleading simply to add up new short-term and long-term borrowing. Yet it is the key feature of short-term debt to be, well, short term. By conventional definition, that means less than one year's duration. While long-term debt is repaid in fractions, the totality of short-term debt must be repaid in one year, often several times (twice, if the average duration of short-term debt is six months).

5.31 When short-term debt is stable, or rising only slowly, in line with whatever conventional objects it finances, it can usually be easily refinanced, and the conventional calculation of debt-service ratio may be acceptable. Only "may", because even then, variations in the object financed by short-term debt may impede easy rollover. For instance, short-term debt frequently finances imports. When export earnings fall, eventually the value of imports also must fall. If the debt to imports relationship remains constant, this entails a fall in the amount of short-term debt outstanding. Thus for a time, reduced export earnings must service the old, larger debt while imports are financed by the new, reduced debt. If it remains stable in relation to imports, short-term debt thus amplifies the variations imposed on imports by changing export earnings; it plays a role similar to that of the Keynesian accelerator. Alternatively, short-term debt can also play the role of a shock-absorber, by expanding and financing a higher share of imports when exports contract. This is fine if export earnings subsequently expand again, and then debt contracts to restore the earlier relationship to trade. However, frequently the reverse happens. At some point creditors come to believe that the earlier level or growth rate of exports will not return, and reduce new loans. This frequently happens following an extended period of slow-growing or falling export earnings, and when these are combined with the net repayment of short-term loans the shock is particularly severe.

5.32 High dependence on short-term loans does not merely build up potential liquidity problems that can be resolved through a Paris-Club type rescheduling and consolidation. The issue is that Net transfers become highly dependent on short-term debt. They are likely to cease or turn negative suddenly, when the outstanding amount of short-term debt must at last stabilize. More difficult still is the scenario most frequently played out in the past and most likely in the future, in which a period of expanding short-term debt is followed by sudden contraction, leading to a sudden and major reversal of net transfers.

5.33 Indonesia's short-term debt had risen from about 18% of imports in 1980 to a rather high but still reasonable 40% in 1990. It then continued to rise, to 48% of imports by 1995 and 54% by 1996, high ratios by international standards. More ominous still was the contribution these rising short-term credits made to rising net transfers, accounting for more than their totality over the two years 1995 and 1996 (quite a bit less than 100% in 1995, quite a bit more in 1996). Further positive net transfers through such means would have rapidly caused short-term debt to explode. Conversely, stabilising short-term debt was bound mechanically to reduce net transfers from high to zero, a difficult transition for any economy, yet one rendered unavoidable by the Golden Rule, considering that short-term debt had been rising much faster than exports, GNI and the budget.

5.34 Yet, stabilization rarely happens, because of the well-known interactions of events and expectations. Given the place taken by short-term credits in the mid-1990s, it was

becoming very difficult to prevent the unavoidable slow-down in their growth from affecting other private inflows, if only by contributing to deflating the bubble. This was likely to cause Net transfers desired by lenders to become ex ante negative. There were bound to be attendant disorders if the shift could be carried out; and a different but no less serious set of attendant disorders if, as proved the case, the full desired shift could not be immediately implemented. As short-term debt tends to stabilize, net transfers fall, thus revealing adjustment problems that further discourage new short-term lending, cause a further decline in net transfers, and amplify adjustment problems and their sequels.

Table 4: Indonesia Debt Indicators

	1970	1980	1990	1994	1995	1996	1997	1998	1999	2000
Debt outstanding (including IMF)	4 989	24 080	80 132	132 265	157 522	165 631	180 630	205 964	198 109	180 972
Of which, IMF + short-term, ratio	0.12	0.13	0.13	0.18	0.21	0.22	0.26	0.31	0.29	0.28
Gross flows (FDI is net)	844	3 534	11 712	18 545	23 098	30 456	27 628	16 555	8 408	3 262
Principal repayments	123	1 633	5 969	8 951	10 197	14 896	13 011	11 203	11 711	11 296
Interest payments	46	1 452	3 978	5 316	6 219	6 647	6 726	7 107	6 192	7 476
Gross private loan & portfolio dbmts + Net FDI	1 037	2 748	7 838	9 845	10 569	15 390	13 690	1 853	-3 258	-8 786
Profit remittances	46	1 182	3 413	4 174	4 935	5 114	5 116	5 601	4 837	5 793
Net flow from short-term debt	551	2 280	7 216	5 066	9 941	12 341	10 078	-4 561	-3 834	-2 753
Aggregate net transfers	513	-2 514	296	2 620	4 966	7 046	3 172	-8 821	-13 122	-18 150
net transfers from private sources	92	-3 117	-785	3 253	6 253	10 054	4 534	-9 736	-14 469	-17 607
GNI	9 698	74 806	109 209	172 149	196 188	221 276	209 440	90 063	131 262	142 657
GDP per capita in constant 1995 dollars	298	503	777	977	1042	1104	1137	972	964	994
GNI per capita, dollars, ATLAS method	80	500	620	890	1000	1110	1110	660	580	570
GNI per capita, PPP, estimate	#####	830	1860	2580	2840	3040	3120	2650	2690	2830
Imports GSF	1446	15767	27511	43738	54461	59379	62830	43903	42151	55377
Exports GFS	1299	26664	29295	45020	52923	56787	63239	54850	55821	70619
Gross capital formation	1 529	18 776	35 093	54 938	64 537	69 783	68 503	16 011	17 219	27 381
Imports/GDP	0.15	0.20	0.24	0.25	0.28	0.26	0.28	0.43	0.27	0.31
Exports/GDP	0.13	0.34	0.25	0.27	0.26	0.26	0.28	0.53	0.35	0.39
Average interest payments on debt outstanding, %	0.91	6.03	4.96	4.02	3.95	4.01	3.72	3.45	3.13	4.13
Import financed from exports	1085	22398	15936	26579	31572	30130	38386	30939	33081	46054
Share of Imports financed by exports	0.75	1.42	0.58	0.61	0.58	0.51	0.61	0.70	0.78	0.83
Net flows on debt/Debt outstanding (year/end-year)	0.122	0.109	0.103	0.047	0.080	0.096	0.074	-0.030	-0.025	-0.019
NET TRANSFERS/GNI	0.0529	-0.0336	0.0027	0.0152	0.0253	0.0318	0.0151	-0.0979	-0.1000	-0.1272
Net flow from short-term debt/NET TRANSFERS	0.12	0.11	0.10	0.05	0.08	0.10	0.07	-0.03	-0.03	-0.02
NET TRANSFERS/GDI	0.3355	-0.1339	0.0084	0.0477	0.0770	0.1010	0.0463	-0.5509	-0.7620	-0.6629
Gross inflows as/GDI	0.55	0.19	0.33	0.34	0.36	0.44	0.40	1.03	0.49	0.12
Private (LT) inflows/GDI	1	0.15	0.22	0.18	0.16	0.22	0.20	0.12	-0.19	-0.32
Sort-term debt/Imports	0.24	0.18	0.40	0.44	0.48	0.54	0.52	0.46	0.48	0.41
Public education exp/GDP	0.03	0.0165	0.0099	0.0137	0.0133	0.0134	#####	0.0143	#####	#####
Military expenditure/GNI	#####	#####	1.50	1.30	1.30	1.40	1.50	1.00	1.10	#####
Total budget expenditure/GDP	#####	0.2213	0.1836	0.1619	0.1468	0.1464	0.1799	0.1822	0.2013	#####
Public debt service (LT debt)/GDP	0.0086	0.0226	0.0646	0.0497	0.0469	0.0517	0.0413	0.0747	0.0654	0.0500
Public interest payments /GDP	0.00	0.0106	0.0245	0.0184	0.0187	0.0159	0.0149	0.0311	0.0267	0.0245
DEBT INDICATORS IN WDI										
Present value of debt/ exports GS	#####	#####	#####	#####	#####	#####	#####	#####	#####	1.82
Present value of debt/ of GNI	#####	#####	#####	#####	#####	#####	#####	#####	#####	0.95
DEBT INDICATORS IN GDF										
EDT / XGS (%)	..	..	233.9	231.8	226.7	219.3	206.9	262.0	256.5	190.9
EDT / GNI (%)	46.7	28.0	64.0	62.6	63.4	58.3	65.0	167.9	114.9	99.4
TDS / XGS (%)	..	..	33.3	30.7	29.9	36.6	30.0	31.7	30.4	25.3
INT / XGS (%)	..	..	13.3	11.4	11.3	11.3	10.2	12.3	10.5	10.1
INT / GNI (%)	0.5	1.9	3.6	3.1	3.2	3.0	3.2	7.9	4.7	5.2
RES / EDT (%)	3.5	32.5	12.4	12.4	12.0	15.0	12.8	15.6	18.1	20.7
RES / MGS (months)	..	..	3.1	3.2	2.9	3.5	3.0	5.3	6.1	5.3
Short-term / EDT (%)	7.7	13.3	15.9	18.1	20.9	25.0	24.1	13.3	13.3	16.0
Concessional / EDT (%)	62.2	36.4	26.4	25.8	22.5	20.3	17.7	18.4	21.3	21.3
Multilateral / EDT (%)	0.1	8.8	20.4	17.8	16.1	13.4	11.6	11.8	13.1	14.0

US\$ million, unless otherwise indicated. For explanations, see Annex 2.

5.35 When crisis struck in 1997, spreading from Korea and Thailand, foreign financing had been so pervasive, and so much of it had been in relatively liquid forms, that the economy was quite unable to confront an attempted withdrawal. What happened was, in a sense, the Keynesian transfer problem recreated to a shortened time-scale. The problem was also more widespread outside the financial sector than in Thailand and Korea, and therefore more difficult to manage through conventional means. Most of the economy was fundamentally sound. However, the attempt to convert into foreign exchange all the domestic resources corresponding to the attempted reversal of net transfers (servicing debt and profit remittances without new inflows) depressed the exchange rate to impossibly low levels. As it fell to a fourth of its previous level in less than a year, all those indebted in foreign currencies, pretty much the whole formal sector, went technically bankrupt. Unable then to service even their rupiah debts, bankrupt firms spread bankruptcy even to the smaller firms and the few large ones indebted in rupiahs only. The financial crisis became general.

5.36 A general moratorium and widespread bankruptcy prevented all the ex ante desired outflows from materializing. Even so, short-term debt fell by \$ 12 billion in 1998 (to \$ 20 billions), while new disbursements of long-term debt fell by \$6 billions in one year, to 16.4 billions in 1998 and \$9 billions only by \$ 2000. Despite its reputation for greater stability, even foreign direct investment became negative in reaction to the general crisis, as had also happened in Côte d'Ivoire. The financial crisis became economic. It compounded and complicated a political crisis that also had enough independent causes, and which then in turn fed and amplified the economic and financial turmoil, in continued mutual self-reinforcement. Yet the country has shown extraordinary resiliency; though some debt was officially restructured and much more privately rescheduled, all in all, negative aggregate Net transfers reached 12.7 % of GNI in 2000, one of the highest ratios on record¹⁷. The political crisis further added to the problem by generating ill known but large outflows of national private capital. There are nevertheless tentative indications that the economy is recovering.

5.37 While political transformation was overdue, it might well have been less excruciating with easier economic circumstances, had Indonesia been spared its financial crisis. Without going into details, let me posit that much of the debate on how the crisis should have been handled is irrelevant. It should not have been handled. It should have been avoided¹⁸!

5.38 The high capital inflows, easy financing, and inflated asset prices – many indices had indicated a bubble. Even the sudden cessation of inflows would have been troublesome. Their attempted reversal should have been actively anticipated. It could only have been prevented by preventing the inflows from ever reaching their high levels and ratios to national income and investment. Direct foreign investment can stop cold (and it did), but at

¹⁷ Negative aggregate Net transfers never reached 6 percent of GNI during the Mexican and Brazilian debt crises.

¹⁸ I usually prefaced my lectures on development finance by quoting from a sailing manual (here quoted from memory):

“One of the worst positions in which a vessel can find itself is to be caught by a storm on a lee shore. When a vessel you command is caught in such a position, the following rules should apply: Never allow a vessel you command to be caught in such a position!”.

least the potential for reversal is limited (though, as the numbers show, by no means nil). Not so with the growing portfolio equity flows. The rise in short-term foreign debt and their increasing contribution to Net transfers (like in pre-crisis Mexico) should have been particularly worrisome. It provided the clearest possible danger signal.

5.39 Since the crisis, Indonesia has been devoting about 40% of central Government revenues to debt servicing. Only a handful of countries have ever matched this ratio. The greatest danger is that inability to provide adequate salaries to civil servants and armed personnel will reinforce already strong tendencies for each to levy his own fees, and frustrate improved governance and administrative modernisation. Only slightly less worrisome is the possible reversal of the great progress in human development achieved during the earlier period.

5.40 Indonesia has, in some sense, already adjusted to debt service requirements much heavier than those judged clearly unsustainable for most other countries. Yet, it has adjusted in some sense only. Growth continues to be halting, putting additional strains on an already fraught political system, which in turn further deters investment and growth. This seems a clear case where debt servicing is sustainable only at substantial cost to development; and where, conversely, well-engineered debt rescheduling or relief would greatly boost development.

5.41 How much would be needed? How much debt servicing would be sustainable? GNI reached \$142 billion in 2000. Assume, hopefully, that in current dollar prices it can grow at an annual average rate of 6%. If then overall debt and other foreign liabilities (including the value of invested equity) grew at an annual rate of, say, 2%, the debt ratios would still be falling by a confidence-boosting 4% annually. Given an apparent average interest rate of 5%¹⁹ on debt outstanding, this adjustment would require negative annual net transfers equal to 3 percent of debt outstanding, fortuitously also roughly equal to 3% of 2000 GNI.

5.42 This is still a very high ratio, as high as that deemed impossible for Mexico, which led to the Brady Plan. It is nevertheless substantially lower than recent and present negative net transfers. Such easing, from almost 13% of GNI in 2000 to about 3%, should in turn go a long way towards enabling the country to achieve the postulated growth rate. It is worth noting that none of this would require debt cancellations or reductions, only rescheduling of principal repayments, combined with some additional rescheduling of interest payments or concerted new lending at market-related interest rates.

5.43 Perhaps one third of Indonesia's public debt service directly results from the socialisation of failed private debt. Domestic mechanisms now exist for dealing with illiquid or insolvent private debtors, through debt consolidation or bankruptcy, or further socialisation of their liabilities and assets. The most urgent need bears on the public sector, particularly if it is to have the resources to reduce corruption in the civil and armed services

¹⁹ GDF does not provide this directly; the number was derived by dividing 2000 interest payments, \$7.5 billions, by debt outstanding at the end of the previous year, \$ 151.2 billions, and rounding. Interest paid in 2000 equals 4.13% of debt at the end of that year.

and professionalize them further, without further reducing already bare-bones security and development expenditures. The debt rescheduling described above would reduce by roughly two thirds public debt service, and free the equivalent of more than one fourth of current revenues for other urgent expenditures. It could safeguard Indonesia's development and, incidentally, also improve the prospects of its foreign creditors and investors.

5.44 Indonesia might return to a development path even without further debt relief. True, most of its debt service indicators are quite high by international standards, and the present value of debt in relation to GNI is exceptionally high, , 0.95 in 2000, almost three times higher than, e.g. Brazil's. However, even such a high ratio would be fast eroded by continuing negative net transfers in excess of 12 percent of GNI. By generating such net transfers, Indonesia is in a sense demonstrating that its debt service burden is sustainable by actually sustaining it.

5.45 Yet the price is a severely constrained budget, curtailed development expenditures, a strained population, eroding administrative capacities, limited capacity either to placate ethnic, religious and regional groups through economic concessions or to deter them through security measures. The recovery may well abort, crushed by many inherited problems, prominently including the debt burden. One can also not be certain that even serious debt relief would lead to renewed fast development. However, it would certainly constitute a major contributing factor, a gamble well worth taking.

D. Uganda

5.46 Uganda like in Burundi, did not get into debt servicing difficulties because of excessive reliance on short-term debt to generate huge net transfers, or prima facie excessively hard long term borrowing. The country was rarely in a position to tempt profit-motivated lenders. net transfers have become substantial since the 1980s, often exceeding 10% of GNI, among the highest sustained ratios on record, and they have very largely been composed of grants and very soft loans. Even before recent debt relief, only the debt service to export ratio had appeared mildly excessive, a symptom of very weak exports rather than of too much debt. Following interest forgiveness in the early 1990s, it has been hovering around 20% while, in relation to the budget, debt service absorbs about 20% of public revenues. Though the nominal ratios of debt to GNI and to exports appear high, they have little relevance, as much of the debt is on quasi-grant terms. Discounted future debt service obligations, the so-called Net Present Value of debt, amounted to 16% of GNI in 2000, quite low by international standards (similar to India's, a financially prudent giant economy; half of Korea's)²⁰. Its ratio to exports was 146%, exceptionally high (second only to Sao Tome's)²¹, in keeping with the egregiously low share of Uganda's exports in GDP, 10% in 2000.

²⁰ A good illustration why GDF should eschew these ratios, or at least complement them with indicators related to the Present Value of future debt service, of the sort shown in WDI.

²¹ Source : WDI 2000.

5.47 Actually, all these ratios are only modestly relevant, because there is no point in pretending that Uganda is actually servicing debt on its own, out of its own National Income, public revenues and exports. In 2000, it received net transfers equivalent to 60 percent of imports, which financed most of the difference between exports of 10% of GDI (down to 6% according to the preliminary figures of 2001) and imports of 26%. Deducting debt service payments and profit remittances, remaining export earnings could have financed only 22 percent of imports, a lower ratio than the one that had been deemed impossible for India in the late 1960s.

5.48 Part of the difference between the two countries lies in the simpler nature of the Ugandan economy and the lesser need for imported industrial inputs. The bigger difference, however, lies in the nature of aid. Far from financing only imports and occasionally small shares of the domestic costs of investment projects, gross inflows of aid and foreign direct investments almost match domestic investment. Aid unavoidably finances a high proportion of broadly defined investment activities and development programmes, including their local costs. By paying for local costs, such inflows generate foreign exchange receipts that do not sharply differ from export earnings. This foreign exchange can then be bought and used abroad by private importers of ordinary supplies as well as private or public depositors in foreign bank accounts. It can also be bought and used abroad by the Government for public sector imports not financed directly by aid, from fuel to military goods; for foreign services; and, of course, for debt service.

5.49 As long as net transfers keep their recent high ratio to GDP, acute debt servicing problems are unlikely to emerge unless the rules of aid change. Possible troublesome changes may lower the share of aid financing of development programs and thus leave fewer resources to assist the general budget. They may also promote programs with higher direct import contents, thus reducing the amounts of foreign exchange released by aid programmes for general use. Unfortunately, some such changes may enhance the effectiveness of development programmes. It is paradoxical, but perhaps not entirely surprising, that aid facilitates debt servicing to an extent inversely related to its direct development effectiveness.

5.50 Technical difficulties linked to the fungibility of aid and other inflows may well arise, but the future sustainability of debt service depends essentially on the sustainability of net transfers and of economic growth. These two are presumably somewhat related even in the case of aid, as it is not always possible fully to detach the ultimate justification of development aid from development. They are even more closely related, though perhaps only in the long run, in the case of direct private investment.

5.51 To an observer whose information about Uganda is entirely dependent on published statistics, the situation does not look reassuring. In 2000, net transfers were composed of 77% aid (much of it in grant form) and 23% private direct investment. Their aggregate financed the difference between imports of \$ 1.9 billions and exports of \$ 680 millions. This is an exceptionally high imbalance. Even small variations in aid will produce substantial impacts. A 10 percent shortfall in net transfers would curtail import financing by more than 6 percent, and a 10 percent shortfall in gross inflows, assuming continued servicing of debt, would curtail imports by almost 8 percent.

5.52 In such an aid-dependent economy, aid effectively plays the vital role played elsewhere by exports. Its variations increase or reduce the level, and presumably the profitability, of activity throughout the economy. Far from cushioning variations in aid, private inflows seem more likely to amplify them, at least until such time as the economy develops alternatives sources of stimulus and dynamism.

5.53 The process of reducing dependence on aid does not seem to have much advanced. Domestic savings, though they have recovered from their negative troughs of a few years ago, have peaked in 1997. In 2000, at \$ 161 million in current prices, they were barely higher than in 1963 (\$ 149 millions). Deducting interest payments and profit remittances, National Savings are even lower; foreign financing of investment dwarfs national financing.

5.54 The solidity of the decade's growth is also subject to doubt. Agricultural production barely kept ahead of population growth, despite a huge increase in fertilizer imports. Most of the seemingly satisfactory increase in GDP over the 1990s came in manufacturing and services, without any associated growth in manufactures exports. After an initial surge, overall export values peaked in 1995.

Table 5: Uganda Debt Indicators

	1970	1980	1990	1994	1995	1996	1997	1998	1999	2000
Debt outstanding	152	689	2 583	3 372	3 573	3 675	3 914	4 005	3 454	3 409
Of which, IMF + short-term, ratio	0.00	0.22	0.16	0.15	0.14	0.14	0.13	0.13	0.14	0.12
Gross flows	32	222	629	727	808	747	870	969	811	1 012
Repayments	5	45	109	111	98	106	116	125	125	113
Interest payments	5	12	36	38	38	43	43	37	47	46
Profit remittances	13	0	0	13	12	14	20	22	33	30
Net flow from short-term debt (incl. IMF)	0	79	42	41	23	37	13	-9	-10	-43
AGGREGATE net transfers	10	109	466	542	636	574	694	803	629	866
<u>NET TRANSFER</u> from private sources	-4	43	15	59	98	100	153	184	187	201
GNI	..	1 240	4 227	3 936	5 698	6 004	6 281	6 769	6 392	6 156
GDP per capita in constant 1995 dollars	#####	#####	251.2	277	299.5	316.9	322	330.1	345.4	348
GNI per capita, dollars, ATLAS method	#####	#####	340	190	250	290	320	310	310	300
GNI per capita, PPP, estimate	#####	#####	730	890	990	1060	1080	1090	1170	1210
Gross capital formation (GDI)	..	77	547	587	945	972	1 011	1 017	1 052	1 123
Imports GSF	253	441	676	841	1383	1601	1651	1871	1834	1985
Exports GFS	294	329	246	333	667	726	825	634	726	626
Imports/GDP	#####	0.35	0.16	0.21	0.24	0.26	0.26	0.28	0.29	0.32
Exports/GDP	#####	0.26	0.06	0.08	0.12	0.12	0.13	0.09	0.11	0.10
GDI/GDP	#####	0.06	0.13	0.15	0.16	0.16	0.16	0.15	0.16	0.18
Average interest payments on debt outstanding, %	2.97	1.76	1.39	1.13	1.07	1.17	1.10	0.92	1.36	1.35
Import financed by export earnings	272	272	101	171	519	562	646	449	522	437
Share of Imports financed by export earnings	1.07	0.62	0.15	0.20	0.38	0.35	0.39	0.24	0.28	0.22
Net flows on debt/Debt outstanding (year/end-year)	0.144	0.188	0.104	0.066	0.052	0.056	0.063	0.026	0.026	0.043
<u>NET TRANSFERS</u> /GNI	#####	0.09	0.11	0.14	0.11	0.10	0.11	0.12	0.10	0.14
Net flow from short-term debt/ <u>NET TRANSFERS</u>	0.00	0.73	0.09	0.08	0.04	0.06	0.02	-0.01	-0.02	-0.05
<u>NET TRANSFERS</u> /GDI	#####	1.42	0.85	0.92	0.67	0.59	0.69	0.79	0.60	0.77
Gross inflows as/GDI	#####	2.90	1.15	1.24	0.85	0.77	0.86	0.95	0.77	0.90
Net private transfers /GDI	#####	0.56	0.03	0.10	0.10	0.10	0.15	0.18	0.18	0.18
Short-term debt exc. IMF/Imports	0.00	0.34	0.62	0.60	0.37	0.33	0.31	0.29	0.26	0.21
Public education exp/GDP	4.02	1.24	1.47	2.20	2.54	#####	#####	1.55	#####	#####
Military expenditure/GNI	#####	3.40	1.90	1.70	2.30	2.40	2.30	2.30	#####	#####
Total budget expenditure/GDP	..	0.00	..	..	..	..	..	0.00	0.00	0.00
Public debt service (LT debt)/GNI	#####	0.0288	0.0198	0.0305	0.0182	0.0158	0.0153	0.0139	0.0178	0.0170
Public interest payments /GNI	#####	0.003	0.004	0.009	0.006	0.006	0.006	0.005	0.006	0.007
DEBT INDICATORS IN WDI										
Present value of debt/ exports GS	#####	#####	#####	#####	#####	#####	#####	#####	#####	1.46
Present value of debt/ of GNI	#####	#####	#####	#####	#####	#####	#####	#####	#####	0.16
DEBT INDICATORS SHOWN IN GDF										
EDT / XGS (%)	51.1	208.3	#####	980.3	523.3	491.9	453.4	592.2	445.1	506.1
EDT / GNI (%)	..	55.6	61.1	85.7	62.7	61.2	62.3	59.2	54.0	55.4
TDS / XGS (%)	3.0	17.3	58.9	43.2	20.0	20.0	18.5	24.0	22.1	23.7
INT / XGS (%)	1.5	3.7	14.6	11.1	5.6	5.8	5.0	5.5	6.0	6.8
INT / GNI (%)	..	1.0	0.9	1.0	0.7	0.7	0.7	0.6	0.7	0.8
RES / EDT (%)	37.3	0.4	1.7	9.5	12.8	14.4	16.2	18.1	22.1	23.7
RES / MGS (months)	2.5	0.1	0.7	4.2	3.8	3.8	4.5	4.5	4.8	4.7
Short-term / EDT (%)	0.0	9.1	5.4	3.5	2.6	2.9	3.0	3.4	3.0	2.8
Concessional / EDT (%)	71.3	36.9	56.2	72.9	77.5	78.3	76.0	79.7	81.4	83.4
Multilateral / EDT (%)	12.6	11.5	49.2	59.7	61.8	62.2	61.6	61.0	74.1	77.6

US\$ million, unless otherwise indicated. For explanations, see Annex 2.

5.55 Such a pattern is not unusual during periods when exceptionally high and growing net transfers ease budget and foreign exchange shortages and stimulate domestic activities. Under-employed resources go to work, overall production and incomes rise. Sometimes, as in Uganda, this apparent boom also attracts foreign investments, which further stimulate the boom during their inflow and maturation phase. The symptoms and origins of such developments are closely related to what has been called the Dutch Disease.

5.56 Even if foreign investments go into import-substituting, service and infrastructure sectors, they can be prepare the ground for export-oriented growth that had been deterred by the lack of infrastructure and other facilities. However, such growth does not unavoidably follow, and Ugandan statistics show no sign that it does. There is no sign of new internal impulses that would make growth self-sustaining, and unless such forces appear shortly or net transfers from aid increase still further, the apparent growth may well peter out.

5.57 Even if aid remains just stable, additional opportunities for profitable foreign investment are likely to be ever-more difficult to find. Foreign private capital invested in Uganda seems to have grown at rates well exceeding the growth rates of the economy, particularly of exports. Recalling the Golden Rule, if exports continue showing no sign of picking up, private capital inflows must taper off. One cannot forecast when, but it is unlikely to be in the remote future unless export growth accelerates soon.

5.58 Foreign direct investment finances a large share of domestic investment and imports. Even a mild decline would affect GDP and its growth. Along the lines described earlier, this would further reduce new investment just when old ones start generating repatriated profits. The turnaround of such flows is often sharp. If economic growth in Uganda does not accelerate soon and become more broad-based (extending, in particular, to exports), such a sharp turnaround of private flows seems quite likely, and would substantially reduce aggregate net transfers unless compensated by growing aid. Yet, why would development aid increase in such circumstances, when development appears to be lacking, and aid resources have indirectly contributed to financing foreign military adventures?

5.59 The financial terms of official_net transfers to Uganda are very light. Very modest but broad-based economic growth would allow most economic aggregates to keep up with the corresponding debt service. Many of the country's economic indicators appear to have performed quite well. However, some have not, and the Golden Rule applies to every relevant indicator, suffering no exception. Thus, except in years of actual debt reduction, even public debt has been increasing faster than allowed in the long run by the Golden Rule. Uganda has also been receiving quite substantial net transfers from private sources, mostly as direct investment. These expect all the more substantial remuneration as political and economic risks remain high. If growth does not accelerate very substantially, investors may not find the remunerations they had expected. It is also possible that they will find them, as there are some profitable niches in most economies, and large aid inflows must have helped create many in an economy that is far from free from distortions. However, once the easily available opportunities are exhausted, these profits will be repatriated instead of being reinvested, and the desired outflow may well severely tax the rest of the Ugandan economy. In either case, aggregate _net transfers are likely to fall, with further negative interactions on

development and on private capital flows. The fragile edifice of growth built upon high aid and other foreign capital receipts may well collapse then.

6. DEVELOPMENT LENDING OPTIONS

A. Risks, Compulsion, Loan Charges.

6.1 Profit-motivated lenders and investors dealing with productive firms can choose among many investment modalities. A first choice is between loans and equity, but there is such a variety within both categories that this distinction, fundamental at first blush, actually blurs. Loans can be on fixed or variable interest rates, short or long-term, or take the form of bonds convertible into shares under certain conditions. They can be indexed to general inflation or to specific prices. The lender can remain at arm's length or obtain strong influence on the borrower's policy, informally or through formal covenants... Equity can give title to a standard share of risks, profits and decision-making influence, or can consist of preferred shares, intermediate in some respect to bonds. Shares can be non-voting or possess multiple weighted votes...

6.2 One dimension of the differences among financial instruments aims at matching risks and potential returns. Formally, households and Governments can only receive loans and grants. These too vary widely, and again, one aim is to match risks to returns. This (abstracting from high administrative costs) is why credit card balances carry interest rates of 20% and more when well-secured first mortgages can be had for less than a fourth of that (and why those who ask automobile dealers to advance and help them obtain their tax refunds pay upwards of 100 percent annual rates for the privilege²²). It is also why Brazilian dollar bonds pay twice as much as those of the US Government.

6.3 Formal profit-sharing is excluded from such loans, but not informal variants. Traditional village money-lenders often do not truly expect debt to be serviced on its formal contractual terms, but rather to take a share of the borrowers' and their children's future incomes. The real motivation behind export credits is the export, not the credit. Private loans to Governments may be linked, more or less formally, to mining concessions or commercial advantages. Government to Government loans, and Government facilitation of private loans, are also often linked to a real or imagined economic and political advantages.

6.4 The nature and extent of the risk depends partly on the lender's security and remedies. Even a poor family without a credit history can arrange a first mortgage loan on reasonable terms, and always borrow in a pawn-shop. They can also borrow from a loan-shark, whose security lies in credible threats to break, for a start, the defaulter's leg... The security of sovereign lending has had its ups and downs. Creditors had little recourse against repeatedly bankrupt public borrowers (like France and Spain until the 19th Century), so they charged high interest, while England, a scrupulous debtor since Tudor times, borrowed cheaply. Loans flowed abundantly to developing countries in the 19th Century, with the

²² The Wall Street Journal, May 29 2003, p. A4.

security either of colonial governments already in place or potential intervention by the Powers: thus originated British occupation in Egypt, and the international administration of key revenues in the Turkish, Persian and Chinese Empires. Then, Anglo-American confrontation over Venezuela undermined the assumption that financial contracts with failing States could be externally enforced, even before Russia's repudiation of its pre-revolutionary debt, followed by the world-wide wave of sovereign defaults in the 1930s, destroyed it altogether. External sovereign lending dried up.

6.5 The International Bank for Reconstruction and Development (IBRD) was meant to provide a remedy. The interposition of the collective sovereign guarantee of all member Governments was a substitute for the Powers' fleets. It has even worked out that way to a large extent, no doubt assisted by the indirect refinancing of debt service by the IBRD itself and, more attractively, sometimes by the International Development Association (IDA).

6.6 Higher interest rates are the normal compensation for riskier loans, but good powers of enforcement tend to make all borrowers equal. Behind the ill-defined but apparently strong shield provided by the collective backing of its members, the World Bank has rejected even the possibility of default or rescheduling, and accordingly treated all its loans as equally risk-free, charging no true risk premium. Later, IDA further reduced default risks by greatly lowering financial costs: surely, no State could be so failed as to be unable or unwilling to exchange the ultra-light burden of servicing IDA credits against the reprobation, or worst, of the whole world community! The long debate about UNFED, SUNFED and ultimately UNDP and IDA had never quite spelled out the criteria for acceding to IDA terms, though they were known to relate to a mixture of poverty and lack of creditworthiness. There was little weighing of risk, except for excluding IBRD lending more easily than IDA in a few visibly risky situations (more tried-and-true methods had rarely been used; in the days before IDA, the first IBRD loan to Iran had been specifically secured by Iran's gold reserves held in New York).

6.7 Ten percent in real terms was the minimum expected rate of return of IBRD and IDA loans alike. If these were really obtained, there could be little doubt that Bank projects would generate enough repayment capacity for debt service. No matter how grotesquely exaggerated this expected rate of return²³, debt servicing difficulties have continued to be treated as unforeseeable accidents, to be overcome through a combination of pressure and third-party financial help, or through supposedly once-and-for-all exceptional facilities.

6.8 One could argue that development lenders share in the windfall from upside risk, from better than expected performance. Poverty alleviation, development, OECD membership do not just benefit, say, Korea, they are a large part of development lending agencies' self-justification and institutional welfare. Successful developing countries' expected contributions to IDA also bring a more concrete, though still informal, contingent

²³ See *Selecting development projects for the World Bank*, Jean Baneth, World Bank Discussion Paper 1996.

financial benefit, a partial substitute to the *bisque*²⁴ clause of some rescheduling agreements. Though partially, informally and indirectly, the windfalls of realized upside risk, unexpectedly successful development, are thus shared with development lenders.

6.9 In contrast, there is no mechanisms for dealing with the downside risks of development lending. Profit-motivated lenders and investors deal with downside risk in ways that ultimately boil down to compulsion and profit-sharing. The former is multi-faceted, and it can be taken to include asset backing and other forms of security. To the home-owner the threat is to lose his mortgaged house, to the driver, repossession of his car... These fears (with attendant homelessness or inability to drive to work) are not all that different from the physical fear of the loan-shark breaking the defaulter's legs, of the rural money-lender taking part of his payment in kind from the debtor's wife or daughter, or of earlier legal practices like debtor's prison and debt bondage. Such threats enhance the debtors' creditworthiness, and thus allow him to borrow. They can only be deterred by alternative credit facilities, not legal bans; not by usury laws but by the aptly-named "Mounts of Piety", charitable pawnshops established in the Middle Ages.

6.10 Mortgages and bankruptcy provide equivalent threats to borrowing firms: if they do not pay, shareholders lose their assets. In principle (and occasionally in practice) dissatisfied shareholders can similarly threaten and remove incompetent or dishonest managers. As for States, economic and financial threats and measures have served as unequally effective substitutes for the now unfashionable enforcement *manu militari*.

B. Risk and the Development Financier's Dilemma

6.11 The development financier, acting as it does in the interests of the borrower, is handicapped in using such measures. The extra income it extracts from the exceptionally successful borrower is mostly psychic. Development institutions are capable of menacing defaulters of breaking their financial legs, but they do not like actually to do so; further increasing misery in a bankrupt country seems to conflict with their development mission. Nor can they charge higher interest for risky loans, as (absent the threat) this would merely enhance the probabilities both of the failure of development and default.

6.12 Accordingly, development institutions and agencies do not take default in their stride. In recent years, they have, very occasionally, given formal debt relief. More frequently, they have granted loans and credits whose true main objective was not to promote development, but to avoid default. However, all such operations are still considered exceptional – unlike the venture capitalist or even the loan shark, they have not incorporated the likelihood of defaulting borrowers and consequent losses into their normal operations.

6.13 This would be fine if development were not risky. It is. Borrowing on IBRD terms can provide the boost in net transfers that will impel a reconstructing or restructuring country on a higher growth path. As for IDA terms, even the slightest true development will enable a

²⁴ The so-called "bisque" clause in some debt agreements provides for higher repayment terms in case some pre-established economic markers are reached. The post-Soekarno Indonesian debt rescheduling is an outstanding example.

country to service them. What is not provided for, however, is the failure of restructuring or of development – of debt service having to be met out of incomes, or exports, or budgets, or all of the above and other indicators still, all standing lower (at least per capita) than when the loans were made.

6.14 The problem is big enough ex post, when the failure has become apparent, but that dimension has been much discussed in recent years. The more difficult question raised here is ex ante: not how to deal with failed development, but how to finance development when the risks are high that it will fail, in the face of quasi-certainty that withholding financing will transform the risk of failure into certainty.

6.15 This paper has repeatedly referred to humanitarian aid and debt refinancing disguised as development finance. The issue raised here is different, but the first requirement for solving it is also truthful and explicit confrontation. We know that development is a risky process that may fail in a region or a country. We know that this failure compromises the service of even the most concessional loan. We know that it may extend over many years; we do not yet know if such processes of failure necessarily possess a terminus ad quem. Yet we also know, or at least suspect, that in many situations true development can be facilitated by appropriate financing, the probability of failure thus reduced. So the issue is, how should development lending proceed in situations where it has a reasonable chance actually to help promote development, yet also a substantial chance that it will not do so; when financing may help, but is not certain to do so, while in the absence of financing failure is certain.

6.16 Without fully defining the problem, development financiers have long tried to deal with it in practice, through tâtonnements. IDA conditions may have been one such solution, as no development was thought to be capable of failing badly enough to be unable to service fifty-year quasi interest-free credits. The lightening of bilateral terms since the onset of the 1980s' debt crisis, including the increasing prevalence of grant financing for poor countries, has been another. Bilateral and organized debt relief to poor countries has been part of the same process.

6.17 For the development lender, pressure on failed countries does not work, not because debt service cannot be collected from them (witness the debt-servicing success of colonial governments), but because collecting it just adds to the subject people's misery, a condition development lenders reject in principle. Debt service can then be financed by supposedly humanitarian relief or pretend development aid. One needs more straightforward mechanisms to determine what payment should actually be collected, how much is compatible with the actual advance of development. One also needs financial mechanisms that allow generous financing of risky cases in the full knowledge that they are risky.

C. Possible Technical Solutions – But Are They Worth the Effort?

6.18 Several technical solutions are possible, adaptations of the “bisque” clauses of traditional debt rescheduling agreements. One could merely formalize and ameliorate the present arrangements, recognize ex ante that development will fail and default will occur in a proportion of countries, and create more formal mechanisms, preferably independent of the

lenders, to establish bankruptcy. The main advantage of formal bankruptcy is that it actually exists, and is now widely recognized to be unavoidable in some cases. Its main drawback is its binary nature: few things are wholly either – or, and development is not one of them. One can easily identify the absence of development, but the borderlines of actual development are usually fuzzy. Borderline decisions would be very difficult, and may well leave truly but slowly developing countries with excessive debt services, while imposing inordinately light burdens on very successful cases. Unless today’s rich countries are overtaken by unexpected generosity, such a mechanism – a combination of IDA terms and ex post grants – is likely to do little to relieve development finance’s penurious state.

6.19 Alternatively, somewhat along the lines of equity financing to risky private prospects, one could render more formal the traditional informal understanding that successful IDA borrowers will turn into IDA contributors. Lending terms could vary, from pure grant to IBRD-like, with actual payments terms determined ex post by the degree of success achieved. Defining “success” for such purposes should not be too difficult. The definition would have to encompass the whole array of debt-servicing ability indicators, in terms of growth rates achieved in the period before the debt service falls due, rather than in terms of levels (because of the ratchet effects discussed earlier). To be credible, the determination would have to be the responsibility of an independent entity rather than just the lender’s. Such a formula would avoid the oversimplification of either-or choices. It could also somewhat strengthen future development financing mechanisms.

6.20 “Moral hazard” is a traditional objection to such arrangements. However, the idea that a country or Government would deliberately retard growth and its manifestations on a broad front, in order to avoid reasonable debt servicing charges, does not stand examination. There may, at worst, be some danger of this happening to a few specific indicators, particularly if they are just nearing a threshold. Deliberate retardation of overall growth is highly unlikely; a deliberate slight lowering of taxes to reduce budget growth below a threshold level is not unimaginable. Occasional chicanery concerning the key numbers, or even deliberate cooking, are quite likely. While these are real problems, they are not beyond solution by the suggested independent debt arbitrage body; nor are they really more complex than those that arise in debt rescheduling nowadays.

6.21 Within his general broad advocacy of global risk-reduction through better and more generalized financial engineering, Robert J. Shiller²⁵ devotes a few lines to developing country debts. He notes that “In a path breaking new development in 1994, Citibank N. A. arranged a loan (in the form of a bond) of US \$1.865 Billion to Bulgaria with an interest rate tied to the growth rate of the economy”²⁶. This, however, was in reality part of a classical debt rescheduling *bisque* clause²⁷.

²⁵ The New Financial Order – Risk in the 21st Century, Robert J. Shiller, Princeton University Press 2003, ISBN 0-691-09172-2

²⁶ Robert J. Shiller, op. Cit., pp. 124.

²⁷ Footnote 3: “The securities are warrants attached to collateralised thirty-year discount bonds, a US \$ 1.865 billion issue, underwritten by Citibank N.A. They were created after Bulgaria sought a restructuring on their

“Shiller also advocates similar loans as a general and preferable solution to the sort of problems now treated through debt relief:

“Cancelling [their] debts, at this point, at the expense of lenders, raises questions about the future. What effect would such a policy have on the willingness to lend to such countries, if they expect that such debts will be cancelled by international agreements in the future?”

In the future, it would be better to prevent such dilemmas from arising by including such policies in the initial debt contracts. Countries that experience difficulties would automatically find their debt substantially forgiven, but this would mean linking their debt payments to some measure of their own GDP, just as Bulgaria has already done for a small portion of its national debt. This is one of the functions macro-markets would secure.

Such a plan is not welfare – it is risk management. The market would put the risk of a bad outcome in the prices seen in the macro markets. Investors around the world are perfectly capable of handling the risks of Bulgaria, or of any other country, by putting it into a diversified portfolio. In effect, the macro markets would be creating the same kind of humanitarian relief that the Jubilee Debt Campaign called for. Moreover, it would have worked. In contrast, the Jubilee Debt Campaign, despite obtaining statements of good intentions from governments, was not much of a success.

6.22 There may well be something to this argument in the case of commercial sovereign lending in general, including that to developing country governments. However, the issue now considered is that of countries at best expected to be able to service concessional terms on the average. No reasonable coverage of upside risk, expected participation in exceptionally high gains, could induce commercial lenders to take on the downside risk exceptional performance at best leads to IBRD-type terms.

6.23 Aid agencies, IDA and its regional and bilateral counterparts, would have to work out what would amount to ex ante *bisque* clauses, and continue providing concessional financing. They could split off the hedging or insurance elements, and sell them separately to private financiers, but it is unclear whether they would benefit from doing so²⁸.

6.24 A more serious question relates to the advantages of introducing new mechanisms, relative to the present situation with its de facto expectation of future debt reductions. We may well face a variant of the good old American saying “When it ain’t broke, don’t fix it”; “If it is bound to remain broke, don’t fix it either”. Risks to development are sure to prevent debt servicing by many present-day borrowers. However, one must ask whether incorporating these risks into development financing mechanisms, is likely to improve them.

foreign debt, and were issued to their lenders as part of refinancing. The warrants pay out, as additional interest each year, one half of the growth rate of real GDP if Bulgarian real GDP, as reported by the World Bank, rises more than 25 percent above the 1993 level”.

²⁸ Such a split off would not ease the immediate financial burden; it would merely guarantee the development financiers against default, at the cost of depriving it from the higher returns paid by successful borrowers. It is difficult to see why such transfers of risk should be of long-term benefit to development lenders.

6.25 Improvement could come if two conditions are met. One is that the risks to development faced by today's aid-dependent countries should be, on the whole, mild, causing the introduction of variable debt service mechanisms justifiably to harden their average debt service terms and substantially to increase overall debt service returns. In other words, a new mechanism would allow substantially to harden the average terms of development financing, in particular of IDA, a legitimate aim now prevented merely by inability to identify *ex ante* the relatively few countries the relatively few countries unable to meet such harder terms. The second condition is that these enhanced debt service payments should be recycled into development financing, without negatively affecting contributions by today's donors. Under these conditions, the proposed new mechanism would augment the resources available for future development financing.

6.26 Unfortunately, the second condition is uncertain: for every donor encouraged by healthy re-flows to increase its contribution, there may well be another prompted to lower its contribution by the existence of an apparently viable financial mechanism. The first condition is unlikely. Today's aid recipients show much more downside risk of development failures (inability to service even IDA terms) than upside risk of likelihood to move up to IBRD-type service conditions. This is not to gainsay the usefulness of the described modified financing mechanisms, just to note that the usefulness will be limited. Political capital expended to create it should be correspondingly limited too.

6.27 The alternative, then, is to recognise that even development lending proper will at times fail; indeed, when there is failed development, if development lending never failed, this would signal opportunities wasted through excessive prudence. Yet countries at particularly high risk that their development might fail (and that their future debt service will therefore have to be reduced or cancelled) should not be condemned to certain failure by being deprived of financing. Mechanisms already exist for dealing with such failures *ex post*, through debt reductions. They have been used in the past, even by IDA. Institutional financial planning should recognise that they will again need to be used in future, and perhaps more abundantly than in the past. The implications of such wholly appropriate risk-taking should be fully built into institutional financial projections, providing adequate provisions for the implications of future development failures.

6.28 Truth in lending remains an urgent financial need. Humanitarian aid, aid to avoid debt default and aid intended to recompense political friends should be clearly distinguished from development lending, if only to avoid feeding with funds that were never truly intended for development the stereotype of wasted development financing. Such clear distinctions may well make some humanitarian situations more desperate, some political situations more untenable, and some debts more default-prone. Unless appropriate funding increases, it may well remain necessary to use development funds in the pursuit of other purposes. However, in true and explicit analysis lies the only hope of raising the appropriate funds on terms appropriate to each aim.

7. FINAL CONSIDERATIONS WITHOUT CONCLUSION

A. Debt Not Always the Main Problem

7.1 All happy families, it has been said, are the same, while all unhappy families are different. Beyond poetic reasons, one might say that happiness requires that N conditions be all satisfied; there is then only one such combination. If unhappiness results from one or more of, say, five conditions being unsatisfied, then thirty-one different combinations all produce unhappiness.

7.2 Similarly, when a situation is sustainable, so are necessarily all its elements. One unsustainable component suffices to render unsustainable the whole. Recalling our definition of sustainable, that which leaves “adequate room for national consumption and investment, present and future, public and private, without undue fiscal pressures that might compromise social aims, political stability or economic efficiency”, one finds many situations where adequate room for national consumption and investment does not exist and social aims, political stability or economic efficiency, indeed often all three, are compromised. Many such situations coexist with substantial debt service obligations, fulfilled or not. However, so much has gone wrong for so long in many such countries that one can no more attribute these ills to debt servicing than to one or several of many other causes.

7.3 In recent years, debt service has often been treated as the proverbial feather that breaks the camel’s back. Yet in that parable, the blame, whatever its legitimacy, rests squarely on chronology. The feather came last on to the overloaded camel. No matter how useful and necessary its transport, no matter how useless the previously loaded baskets of stone, there was some rationale in blaming the feather for the harm wrought by the full load. Not so, in the many cases where debt service became unsustainable only because of the rise of other difficulties. The issue is not just metaphysical or semantic, because in such cases even the full cancellation of the debt burden may well fail to ameliorate conditions for development.

7.4 One must therefore strive to distinguish situations where capital is helpful and debt service (and profits) can be generated without undue strain, situations where development would proceed markedly better with a much lightened debt service burden, and situations where obstacles other than debt servicing most impede development. Debt relief may also be unavoidable in such situations, because debt cannot be serviced, but this should not be expected to bolster development.

B. The Golden Rule

7.5 The Golden Rule of finance holds that foreign liabilities cannot forever increase faster than real economic indicators. In the long run, a host of indicators are equally important, incomes, consumption, exports, the budget, more. Debt should outgrow none. Successful widespread growth in the borrowing economy is no guarantee of debt servicing sustainability, but large inflows combined with slow growth in one or several important indicator usually signal unsustainability. The first signs of unsustainable debt service are

displayed by new inflows, the amounts, direction and composition of net transfers. When they have been increasing faster recently, one should carefully watch for signs that the equilibrium point is near or has been passed. Increasingly liquid liabilities often signal that the end is nigh.

7.6 High, and particularly rising, net transfers produce euphoria. A sharp reduction in them produces pain. Economic pain in turn increases rigidity in adjustment mechanisms, and thus contributes to increased unemployment of resources, falling investment, deprived budgets. Private inflows are also sensitive to economic pain and fall in reaction to it, thus amplifying involuntary declines in net transfers. Post-bubble pain is well-known, but the earlier euphoria makes preventive measures difficult, and promotes the hope that this time what went up will not need to come down.

7.7 The Golden Rule related debt to the absolute size of the economy. When population grows, even if debt ratios remain stable, per capita incomes may fall and they (and even slowly growing ones) create problems. Other things being equal, rising per capita incomes raise the equilibrium level of debt; stagnant and falling incomes depress it.

7.8 All debt is important, witness the East Asian crisis, but public debt has particular importance. Private debt requires public intervention, as regulator, arbiter and enforcer, to ensure respect for the rights of private creditors, of private debtors and of shareholders. However, the service of public debt must be directly levied on the economy at large, paid out of earned incomes taxed away from households and firms. Even when taxation is generally believed to be fair and earlier loan and tax receipts to have been well used, this strains political and social links; much more when, as often happens, these conditions are not fulfilled! Such strains themselves and their contributions to economic mismanagement, may well be the severest harm wrought by excessive public debt service.

C. The Fungibility of Capital Inflows and Debt Service Ratios

7.9 Comfortably positive net transfers may not preclude debt servicing difficulties. Capital and grant inflows, most particularly aid, are generally tied to financing specific imports or programs, and do not then directly contribute to debt servicing. Conversely, when aid and other inflows are capable of contributing to debt servicing, they sometimes serve less well their other, more ostensible developmental aims. The 20% of exports rule was meant to reflect this constraint. A much better reflection of it can be found in the import coverage ratio, the ratio of imports covered by exports after deduction of debt service charges.

7.10 Ratios that include the nominal value of debt often have little significance. Far better to consider the discounted value of future debt service (the Present Value of debt), but the conventional 10% discount rate grossly understates the present value of debt. As it does so more for the outer years than for the near future, it also distorts inter-country comparisons. Alternative calculations should nowadays use rates of 4 or 5%. These would vastly raise the Present Value of the debts of many aid-dependent countries, both in absolute value and relative to the Present Values of the debts of debtors more reliant on commercial capital, like Argentina.

D. Issues for Lenders

7.11 Debt sustainability raises symmetrical issues from the lenders' point of view of. Ability to repossess security or inflict pain reduces the lender's risk, while ability to share in exceptional profits enhances its ability to take risks. Lenders motivated by the wish to promote development are handicapped from both points of view. They do not wish to inflict pain through the imposed service of their claims, and they participate weakly in exceptional successes. Lenders have recognised only reluctantly and gradually that not just individual projects, but whole country development processes are at risk and can fail. Debt reductions have now sometimes made provisions for past such failures. If development lenders shunned risky countries, they would transform the risk of failure into certainty. They must then take risks, but their financial planning and projections should recognise that future defaults are likely. The rising share of development grants in bilateral aid constitutes a partial response to future risks, but it reduces even further the possibility of sharing benefits, which is important as a sorely needed potential complement to future development financing.

7.12 The optimal solution would probably involve some replica of profit-sharing, or a series of *bisque* clauses that imposed higher debt service on highly successful developer, while recognising *ex ante* that countries with failed development must also become failed debtors. The overall benefits of such schemes would be a function of the amounts lent on such terms to countries that turn out to be successful developers – Koreas of the future; and on rich countries' willingness to allow their own development financing contributions not to be reduced by growing contributions from successful developing countries. Neither of these conditions is assured, and it may not be worth expanding much political effort on such a scheme. In that case, fixed debt service obligations combined with ex post default may have to remain the mechanism of choice.

7.13 In the end, everything comes down to judgment informed by country experience and by understanding of aid processes and of international capital markets. Judgment should be bolstered by the active use of ratios and other indicators of debt-servicing ability. These must be constantly examined, their usefulness and meaning constantly queried, constantly updated. Even then, they should be used carefully, not as substitutes for judgment but as supports to it. Debt and debt servicing should always be viewed within the broader economic, social and political contexts of the debtor country and of the world at large, not as separate problems nor as chief culprits, but as constituents of the overall domestic development processes and of international support to them.

ANNEX I. HIGHLY AND MODERATELY INDEBTED POOR COUNTRIES

Highly indebted poor countries

Benin
Burundi
Cameroon
Central African Republic
Chad
Comoros
Congo, Dem. Rep.
Congo, Rep.
Cote d'Ivoire
Ethiopia
Guinea
Guinea-Bissau
Indonesia
Kyrgyz Republic
Lao PDR
Liberia
Madagascar
Malawi
Mauritania
Angola
Myanmar
Nicaragua
Niger
Nigeria
Pakistan
Rwanda
Sao Tome and Principe
Sierra Leone
Somalia
Sudan
Tajikistan
Tanzania
Zambia

Source: GDF 2002

Moderately indebted poor countries

Burkina Faso
Cambodia
Gambia, The
Ghana
Haiti
Kenya
Mali
Moldova
Mongolia
Mozambique
Senegal
Togo
Uganda
Uzbekistan
Yemen, Rep.
Zimbabwe

ANNEX II. COUNTRY DEBT TABLES

Sources are in GDF and WDI. Source, and occasional treatment, indicated in thick black characters.

Debt outstanding	GDF
Of which, IMF + short-term, ratio	GDF
Gross flows	GDF
Repayments	GDF
Interest payments	GDF
Profit remittances	GDF
Net flow from short-term debt (incl. IMF)	GDF
AGGREGATE net transfers	GDF
net transfer from private sources	GDF
GNI	GDF
GDP per capita in constant 1995 dollars	WDI
GNI per capita, dollars, ATLAS method	WDI
GNI per capita, PPP, estimate	WDI
Gross capital formation (GDI)	WDI
Imports GSF	WDI
Exports GFS	WDI
Imports/GDP	WDI
Exports/GDP	WDI
GDI/GDP	WDI
Average interest payments on debt outstanding, %	GDF
Import financed by export earnings	GDF & WDI (exports – debt service – profit remittances)
Share of Imports financed by export earnings	GDF & WDI (the above, divided by imports)
Net flows on debt/Debt outstanding (year/end-year)	GDF
<u>NET TRANSFERS</u> /GNI	GDF
Net flow from short-term debt/ <u>NET TRANSFERS</u>	GDF
<u>NET TRANSFERS</u> /GDI	GDF & WDI
Gross inflows/GDI	GDF & WDI
Net private transfers /GDI	GDF & WDI
Short-term debt exc. IMF/Imports	GDF & WDI
Public education exp/GDP	WDI
Military expenditure/GNI	WDI
Total budget expenditure/GDP	WDI
Public debt service (LT debt)/GNI	WDI
Public interest payments /GNI	WDI
Present value of debt/ exports GS	WDI
Present value of debt/ of GNI	WDI
EDT / XGS (%)	GDF
EDT / GNI (%)	GDF
TDS / XGS (%)	GDF
INT / XGS (%)	GDF
INT / GNI (%)	GDF
RES / EDT (%)	GDF
RES / MGS (months)	GDF
Short-term / EDT (%)	GDF
Concessional / EDT (%)	GDF
Multilateral / EDT (%)	GDF

US\$ million, unless otherwise indicated. For explanations, see Annex 2.

WDI = World Development Indicators 2002, the World Bank.

GDF = Global Development Finance 2002, the World Bank.