

Domestic Resource Mobilization, Fiscal Space, and the Millennium Development Goals: Implications for Debt Sustainability

Paper for UNDP's project on *MDG Achievement and Debt Sustainability in HIPC and other critically indebted Developing countries*¹

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1. Introduction: Debt Sustainability Analysis - some neglected issues

This paper is a contribution to the UNDP's project on Millennium Development Goal (MDG) achievement and debt sustainability in HIPC and other critically indebted developing countries. The project seeks to challenge the currently accepted view of debt sustainability, which is based on the notion of the ability to service debt obligations, or the "ability to pay". However, the debt sustainability indicators chosen (variants of the debt/GNI ratio and debt servicing to export earnings ratio) do not reflect the strong possibility that, notwithstanding the notional "ability to pay" from growing GNI and/or export earnings, there still may be significant opportunity costs to fully servicing external debt obligations. In particular, full servicing of what is defined as "sustainable" debt may nonetheless impair the ability of debtor countries to meet their *development* obligations, for example achieving and going beyond the Millennium Development Goals.

There is an obvious alternative to seeking resources for development through external borrowing, notably domestic resource mobilization, or DRM³. In this paper we examine this alternative (specifically, through greater tax revenues and through domestic borrowing by the government) to limit the accumulation of external debt liabilities and to help maintain such obligations at a "sustainable" level. Greater recourse to DRM, we believe, would help developing countries meet their external debt servicing obligations as well as achieve and go beyond the MDGs.

We would, however, like to issue some caveats up front. First, we focus only on two specific channels of DRM (taxation or government revenues, and government domestic borrowing), both in the public sector. A more comprehensive treatment of DRM would

¹ The paper has been drafted for a joint UNDP / UNDESA initiative on defining a more MDG-consistent debt sustainability framework. The views expressed in the paper are those of the author. They do not represent the views or official policy of the UNDP or any UN agency.

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³ The other obvious alternative for avoiding external debt liabilities is to seek external grants. However, grant aid will typically be limited in supply. Moreover chronic reliance on this option may be criticized on the grounds of aid dependence.

also encompass domestic savings and investment in the private sector. Second, even within such a more comprehensive framework, DRM would not address foreign exchange (or foreign savings) constraints facing the economy. Such constraints can be relieved through growth in net export earnings, which typically requires changes in the structure of production, the volume and composition of imports and exports, and the level of net foreign investment. Third, as we point out below, even within our restricted framework of analysis, domestic taxation and borrowing point in two different directions. While taxation may limit the accumulation of debt obligations, domestic borrowing obviously does not. Indeed, we conclude that the notion of MDG-compatible debt sustainability must incorporate domestic debt along with external debt obligations. Doing so necessarily lowers the threshold for external debt that is sustainable, particularly for countries with high levels of domestic debt.

The following section presents some background to issues treated in the paper, touching on salient points arising from the literature on DRM. The third section develops an analytic framework within which to consider interrelationships between key variables, and their implications for achieving the MDGs and debt sustainability. The fourth section focuses particularly on issues of domestic debt accumulation as a form of DRM, while the fifth section deals with taxation and government revenue. The concluding section brings together key findings and policy implications.

2. Background

Our starting point is to question the assumption, prevalent both in the economics literature and in the practice of development policy, that poor countries face rigid limitations in mobilizing their own domestic resources for investment. According to this assumption, if poor countries are to meet fully their development objectives (such as the MDGs) they must seek external resources to complement insufficient domestic savings.

We take issue with the assumption that DRM is rigidly limited in poor countries. Our argument leads to the conclusion that debt levels can be made compatible with achieving and going beyond the MDGs by greater recourse to DRM rather than external borrowing. However, we also point out that some forms of DRM - notably, domestic borrowing - are in substance no different than foreign borrowing. Therefore if debt levels are to remain compatible with the MDGs, it is essential that poor countries engage in forms of DRM (such as government taxation) that do not lead to debt accumulation.

The literature. Development economists have traditionally posited growth models in which savings propensities determine growth outcomes. For example, in the Harrod-Domar growth model for a closed economy, the savings ratio ($s = S/Y$, where S is total savings and Y is total income) is a critical determinant of the growth rate g , along with the incremental capital-output ratio k ($g = s/k$). In this model, if technological possibilities (k) are fixed, the only way of increasing growth rates is through higher savings efforts, if those are possible. Although in the Harrod-Domar model the savings ratio is the critical variable for increasing growth rates, it was assumed (perhaps in the light of Soviet experience) that efforts to increase savings in poor countries would entail huge sacrifices, implementation of which would require authoritarian or repressive regimes.

Thus it was assumed that much of the savings required to enhance growth would have to come from external sources. Moreover, it was apparent some resources are also required to import capital goods for investment which are unavailable domestically. Accordingly, the two-gap open economy model (which refers to a domestic savings gap and a foreign exchange earnings gap) for developing countries presumes that domestic resources for investment are supplemented by foreign borrowing or grants, some of which would be used to import capital goods. In the longer run, the foreign exchange earnings gap must be closed through net export growth and net inward foreign investment.

In its simplest form, this model also assumes that domestic savings are a fixed proportion of income. If domestic and imported capital goods have different productivity levels and are required in fixed proportions, the two-gap model suggests that growth is limited either by the domestic savings level or by the foreign resources available (via grants, borrowing or net export earnings). Indeed, one can regard the two-gap model as a rationalization of the need for poor countries to seek external resources in order to achieve their growth and development objectives.

Subsequently, neoclassical growth purists challenged some of the rigidities of the two-gap model, assuming instead long-run flexibility in import propensities and export capabilities, and also long-run substitutability between imported and domestic capital goods. However, in Solow's (1956) neoclassical growth model, neither savings nor investment determine growth in the long run; rather, growth results from technological innovation and the growth of the labour force. In later variants of this model (e.g. endogenous growth models of Roemer (1986) and Lucas (1988)), technological innovation could be viewed as embodied in the capital equipment associated with investment, so the level of investment embodying technical progress is a key driver of economic growth. The point in common among these neoclassical models is that savings is not a key variable.

However, other traditions in economic theorizing put greater emphasis on the domestic savings constraint. These include the Marxian tradition, and subsequent structuralist two-sector growth models such as that of Arthur Lewis. These models differentiate between capitalists in the high-productivity "modern" sector, who are the principal source of savings, and peasants and workers (in the "traditional" sector), who wholly consume their income. In these models the savings and growth rate are enhanced by transferring underemployed labour from the traditional to the modern sector, augmenting capitalists' incomes and thereby aggregate savings. Thus in the Marxian and structuralist models, DRM can be enhanced through the allocation of resources to the modern sector which becomes the growth dynamo for the economy.

In addition Keynes and Schumpeter separately anticipated later versions of the neoclassical model (Roemer (1986) and Lucas (1988)) by arguing that savings is determined by investment rather than vice-versa. In this tradition, the "animal spirits" of entrepreneurs drive the level and the distribution of investment; and the level of savings adjusts to the level of investment accordingly⁴.

⁴ East Asian experience - most recently China - has given support to the Keynesian/Schumpeterian view with the additional twist that the "traditional" sector, notably agriculture, can also be a growth dynamo, generating productivity increases and a source of additional savings for investment. In poor countries,

More recently the literature has focused on the vast difference in savings rates across developing countries. In sub-Saharan Africa, savings rates have been much lower than in “high-performing” Asian countries such as China, Hong Kong, Indonesia, Korea, Malaysia, Singapore, Taiwan and Thailand. Moreover, savings rates fell significantly in Africa from the 1970s to the late 1990s, while Asian savings increased (Table 1). As the Asian countries also experienced dramatically higher growth rates than sub-Saharan Africa, the interesting question is whether their better growth performance was due to (i.e. caused by) their higher savings rate, or whether the causality flowed in the other direction (higher growth leads to higher savings). A World Bank project on “Saving across the world” commissioned a number of studies on this issue most of which suggest that higher growth leads to higher saving, rather than the reverse (Loayza et al, 2000, Rodrik 2000).

Table 1
Saving in sub-Saharan Africa and High-Performing Asian Economies
(Ratio of gross domestic savings to gross domestic product)

<u>Years</u>	<u>sub-Saharan Africa</u>	<u>High-performing Asian economies^a</u>
1970-79	11.72	29.17
1980-89	6.66	33.24
1990-95	6.24	35.65

^aChina, Hong Kong, Indonesia, Korea, Malaysia, Singapore, Taiwan and Thailand

Source: Elbadawi and Mwega (2000), 417.

However, even if the causality runs from higher growth to higher savings, the long-term and significant decline in savings rates in Africa is closely related to the focus of this paper. Elbadawi and Mwega (2000) refer to the “collapse” in African savings rates. They argue that policies for promoting savings are important for three reasons: sustaining high growth rates will require substantial capital accumulation; given the constraints on lending to Africa (or, in the terms of this paper, the incompatibility of excessive borrowing with MDG achievement) savings will drive aggregate investment; and high national savings will help to avoid financial volatility and economic crises.

Most of the world’s low-income countries and HIPCs are in Africa. Can the savings decline be reversed through deliberate policy choices - to mobilize domestic resources - that have the effect not only of stimulating growth, but also accelerating domestic savings? If such policy choices are feasible, they would not only expedite the achievement of the MDGs, but also constrain the buildup of unsustainable debt. We return to this question below.

agriculture is typically a mainstay of the economy employing well over 50 percent of the population and most of the poor. In such circumstances, investing in agricultural productivity and growth may have a much greater and more immediate pro-poor impact than investing in industry.

3. Analytic Framework

In this paper we take a broad approach in considering savings and DRM. We utilize these terms interchangeably, the key difference being that “DRM” implies a policy of actively encouraging and harnessing savings. As mentioned, the theoretical and empirical literature makes it clear that the causal links between growth, savings and investment are complex, and there is much evidence to suggest that higher savings follow growth, rather than vice-versa⁵. However, the fact that saving has declined significantly, or even collapsed, in some of the poorest countries is cause enough to justify a much more active role for DRM.

There is no question that, for obvious reasons, increasing savings in poor countries is a huge challenge. But we do not find useful (or historically accurate) notions that DRM is rigidly constrained, even in poor countries.

Rather, a combination of factors seem important in determining DRM: institutional factors, such as the depth of financial markets, which serve to intermediate between household savings and business investment; distributional factors, particularly the savings and investment propensities of relatively high-income households; policy factors, particularly fiscal and monetary policy, determined by the government; administrative factors, including the efficiency and effectiveness of government revenue agencies; and the investment climate (or the “enabling environment for business”) relative to that in offshore markets.

We argue that developing countries, even extremely poor ones, can mobilize domestic resources to a much greater extent than they typically do. The donor community should encourage and reinforce such efforts. This is not to say that poor countries can or should forego borrowing (much less external grants) altogether: these are likely to continue to play a crucial role in the development strategies of most poor countries. Rather, the issue is one of tilting the balance in the direction of DRM.

While external grants may in some respects be the first-best option, their availability is highly constrained by donors’ willingness to commit and ability to deliver aid. Moreover, aid grants typically come with policy strings attached, so while they are “free” in the financial sense they may constrain a government’s degrees of freedom in designing and implementing its development strategy. Moreover, the availability of grants may discourage recipient governments from making a greater effort to collect taxes and other revenues. Although external borrowing may be more available than grants (but constrained by the lack of creditworthiness of many poor countries), we assume it should be constrained to a “sustainable” level, that is, compatible with the achievement and/or maintenance of the MDGs⁶, which we assume should have a prior claim on resources.

⁵ Rodrik (2000:505) goes so far as to say that “...policies geared toward raising domestic saving do not deserve priority...the key to generating virtuous cycles of high growth-high investment-high saving is to kindle the animal spirits of entrepreneurs by increasing the expected profitability of their activities.” However, only one of Rodrik’s three case-studies pertains to Africa - Mauritius - the others are Korea and Taiwan. And it is noteworthy that a savings spurt resulting from a sugar boom in 1971 played a crucial role in Mauritius by stimulating a jump in investment.

⁶ It is worth differentiating short-term investment to achieve the MDGs from future recurrent-cost funding to maintain or go beyond the MDGs. While external resources may be expected to fund a significant

Achieving development goals (here represented by the MDGs) requires a minimal level of both public and private-sector investment. MDG-1, which aims at the reduction of extreme poverty and hunger - requires investment in the productive economy to stimulate pro-poor growth, by creating or enhancing incomes, employment, and food availability. The private sector has an obvious role through investment in productive facilities, whether in agriculture, industry, or services. The public sector may also invest in productive facilities where there are state-owned enterprises, or in infrastructure.

External resources may play a significant role in financing productive investment and infrastructure and are increasingly doing so. Typically, for the poorest countries, these come from private sector sources in the form of foreign direct investment. Portfolio equity investment is less significant in the poorest countries, although many have established stock markets which permit foreign investors to purchase a limited number of local share issues. Finally, private external borrowing (not publicly guaranteed) is uncommon in the poorest countries because of their lack of creditworthiness. However, it is important to bear in mind that much foreign direct investment is financed through borrowing rather than infusions of pure equity, so there is typically more private unguaranteed (“PNG”) foreign debt associated with poor countries’ foreign direct investments than official data indicate.

MDGs 2 through 7 are the primary responsibility of the public sector, since they relate to education, health and the environment goals. Through its budget, the government allocates social and environmental expenditures. It also allocates resources to productive and infrastructural investment (towards achieving MDG-1). If domestic revenues are inadequate, the government may seek to supplement these through foreign aid grants for projects or budgetary support (or other forms of program-based aid). If grants are inadequate, the government may seek to fill the resource gap through loans.

The two key policy tools governments have at their disposal are first, an enabling environment for private business investment; included here are not only policies to encourage investment, but also the deepening of the financial sector to attract household and corporate (i.e. private) savings. More generally, governments must design and implement policies that trigger a process of capital accumulation involving the mobilization of domestic (human and financial) resources. These policies would aim to increase the “fiscal space” available to governments, comprising concrete actions for enhancing DRM, including governance, institutional and economic policy reforms for these actions to be effective (Roy and Heuty, 2005). Such policies are likely to be crucial, in the longer term, even in the poorest countries. Space does not permit a full examination here of this first set of policy tools, but we emphasize that they are key to meeting MDG-1⁷.

portion of the up-front costs of achieving the MDGs, in the longer term it will be crucial for developing countries to fund most or all of the recurrent costs themselves to avoid chronic aid dependence.

⁷ The logic in our approach is that private savings are likely more endogenous, following rather than leading growth. This puts greater onus on a policy of mobilizing public savings through taxes and other revenues, in order to finance social and physical infrastructure which will then stimulate private investment. Roy and Heuty (2005) also emphasize the catalytic approach that ODA can play in the Millennium Development Campaign, by triggering a process of domestic capital accumulation.

The second set of policy tools, which is the focus of this paper, come together in the budget, through its mobilization of public sector revenues (i.e. public savings) and allocation of expenditures. These tools help governments to achieve all the MDGs, including MDG-1. (However, as noted above, MDG-1 also requires measures to encourage private investment in the productive sectors.) We consider two options for greater public-sector DRM. The first option is additional taxation and revenue-generation by the government. These are likely to yield the greatest dividends in terms of achieving and maintaining the MDGs, thereby ensuring that external debt is kept at or below a sustainable level. Moreover, there are other advantages inherent in greater domestic taxation. However, there are also limits and drawbacks to taxation. Poorly designed or administered tax policies can tax growth, discourage business investment, or precipitate capital flight. Clearly, taxes need to be neither too low (thereby undermining DRM) nor too high or damaging to economic incentives (thereby undermining growth).

The second option within the envelope of public-sector DRM alternatives is domestic borrowing. Unlike taxation, however, domestic borrowing contains drawbacks that essentially are no different from foreign borrowing. Indeed, we argue in the following section that domestic borrowing should be included along with foreign borrowing in ascertaining sustainable debt levels. If that were done more systematically, the upshot would likely be to increase even further the yields of increasing DRM through taxation. On the other hand, as domestic borrowing is denominated in domestic currency, this makes it less risky to government, and eliminates perverse incentives to maintain an overvalued exchange rate. However, domestic borrowing is constrained by the shallowness of financial markets in poor countries (e.g. there are typically no bond markets).

In its Millennium Project, the UN (2005) provided some estimates on the total financing required to achieve the MDGs in low-income countries between 2006 and 2015, and how much of the total could be expected from DRM. The remainder (the “financing gap”) is assumed to come from external sources (Table 2):

Table 2
Financing the MDGs in Low-Income Countries
 (2003 US\$ billions)

	<u>2006</u>	<u>2010</u>	<u>2015</u>
MDG investment needs	253	348	529
DRM	180	259	394
MDG financing gap	73	89	135

Source: UN (2005), Table 17.2, 249

These projections reflect assumptions about the DRM capacity of governments in countries at different levels of development (Table 3):

Table 3
Estimated Government Resource Mobilization
(Government expenditures on the MDGs as a share of GDP, percent)

	<u>2006</u>	<u>2015</u>
Least developed countries (< \$450 per capita)	5	9
Low-income countries (\$450-\$734)	7	11
Lower middle income countries (\$735-\$2,935)	9	13
Higher income countries (> \$2,935)	10	14

Source: UN (2005), Table A3.2, 296

The projections clearly assume that the lion's share of financing for the MDGs must come from DRM, and that the share is expected to rise over time. By 2015, almost three-quarters of the resources required for MDG investment are assumed to come, under the scenario of the Millennium Project, from domestic sources.

These can be seen as very ambitious targets for DRM. Unless intensive efforts are made in the next few years to intensify government revenue mobilization, given the unpromising trends (see section 5 below), it seems unlikely that such targets will be met.

4. Domestic Debt Sustainability⁸

Debt Sustainability Analyses (DSAs) use thresholds for judging the sustainability of public and publicly guaranteed external debt. The thresholds for indicators based on total external debt that include private non-guaranteed (PNG) debt and on total public debt that include domestic borrowing of the public sector could deviate significantly from these levels. High levels of domestic debt are more prevalent than high levels of PNG external debt in low income countries and it is recognized that public domestic debt is significant in some of these countries. This poses a risk for external debt due to competing claims for government resources that are needed to convert to foreign exchange to make debt service payments. Further, domestic debt carries risks brought about by higher interest rates and shorter maturities than concessional external debt. Raising domestic resources for the government could assist in the development of the domestic capital market leading to the setting of more competitive interest rates. However, this is a benefit that could be realized in the medium to long-term.

It is not possible to incorporate public domestic debt into the existing thresholds adopted for public and publicly guaranteed external debt at the present stage of development of the methodology. Until that is done, DSAs done for low income countries should also include a separate assessment on domestic public debt to draw the attention of policy makers to situations where its inclusion in the analysis could lead to a different classification of debt distress. Among the indicators that are available for undertaking these analyses are:

⁸ Key Issues for Analyzing Domestic Debt Sustainability, Alison Johnson, Debt Relief International, 2001.

- Debt Service/Government Revenue which measures the ability to make current debt service payments on the domestic debt of the government from government revenue;
- Net present value (NPV) of debt service/Government Revenue which measures the present value of debt service payments on the government's domestic debt relative to its capacity to repay;
- Interest Payments/Government Revenue which measures the proportion of government revenue required to make interest payments on the domestic debt of the government;
- Disbursed Outstanding Debt/GNI which measures the level of the government's domestic debt stock relative to GNI on the assumption that it is available for repaying it; and
- Disbursed Outstanding Debt/Government Revenue which measures the level of the government's domestic debt stock relative to its capacity to repay.

These ratios correspond to those used in the World Bank's *Global Development Finance* to assess the external indebtedness of countries with government revenue replacing export of goods and services. As stated, unlike in the case of external debt there are no internationally agreed benchmarks for assessing the sustainability of the domestic debt. The following provisional benchmarks for domestic debt are based on experience with HIPC countries⁹.

Table 4
Provisional Thresholds for Domestic Debt Sustainability

Domestic Debt Indicator	Range (%)
Debt Service/Revenue	28-63
NPV of Debt/Revenue	88-127
Interest/Government Revenue	4.6 – 6.8
Debt/GNI	20-25
Debt/Revenue	92-167

Source: Johnson (2001).

Based on these thresholds, governments with ratios above the top of the ranges face an unsustainable domestic debt burden and may have accumulated domestic payment arrears. Those with ratios below the bottom of the ranges can be assessed to have sustainable domestic debt burdens. Countries that fall within the ranges need to monitor their debt situation closely as they face the prospect of unsustainable levels of domestic debt.

⁹ These have been suggested by Debt Relief International based on its experience gained in the HIPC Capacity Building Programme.

Table 5 provides estimates of domestic debt indicators for selected HIPC countries in Africa and Latin America which are averages for the period 2002-04.¹⁰ These countries are at various stages of the HIPC process which is designed to reduce their public and publicly guaranteed external debt indicators to sustainable levels. One of the ten countries had three indicators, two had two indicators and four had one indicator above the threshold levels (noted in bold). One country had all three indicators in the threshold ranges, four had two indicators and two had one indicator. Only one country had all the indicators below the ranges and thus had sustainable levels of domestic debt. This illustrates the importance of including domestic public debt in DSAs.

Table 5
Domestic Debt Indicators For Some Selected HIPC Countries (2002-2004) (%)

	GDD/GDP	GDD/GR	INT/GR	GR/GDP
Benchmarks >	20-25	92-167	4.6-6.8	
Ghana	20	94	23.7	20.8
Kenya	25	121	13.1	20.7
Tanzania	15	120	5.3	12.9
Uganda	9	70	11.2	12.6
Malawi	26	110	40.4	23.5
Zambia	21	115	15.3	18.1
Bolivia	20	90	6.1	21.7
Guyana	32	98	9.6	32.4
Honduras	7	41	3.2	18.4
Nicaragua	44	202	17.6	16.3

GDD- Government Domestic Debt, GR- Government Revenue, INT- Interest Payments
Source: Johnson (2001).

As stated, the inclusion of domestic public debt in DSAs continues to present methodological and data problems. There is however agreement that:

- a. all DSAs should include a domestic public debt DSA done at the same time to enable a comprehensive assessment of the country's debt sustainability;
- b. domestic debt issues should receive increasing attention where domestic public debt has been increasing rapidly and is a larger share of public debt or is expected to be in the future; and
- c. the domestic public debt DSA should examine the vulnerabilities related to domestic debt using indicators such as those suggested above and identify situations where the inclusion of domestic public debt could result in a different classification of indebtedness from that obtained by reviewing external public debt and debt service alone.

¹⁰ Compiled by Alison Johnson of Debt Relief International, London from IMF and country sources.

It is important for countries in debt distress or those that are likely to be as a result of borrowing necessary to achieve the MDGs to improve their capacity for public debt management. Many developing countries have taken steps to enhance this capacity with the assistance of the IFIs and other donors. There are many issues that countries need to address to achieve the necessary improvements. A full discussion is not possible here; however, the scope for enhancing the capacity of low-income countries for public debt-management has been articulated elsewhere¹¹.

5. Government revenue and debt sustainability

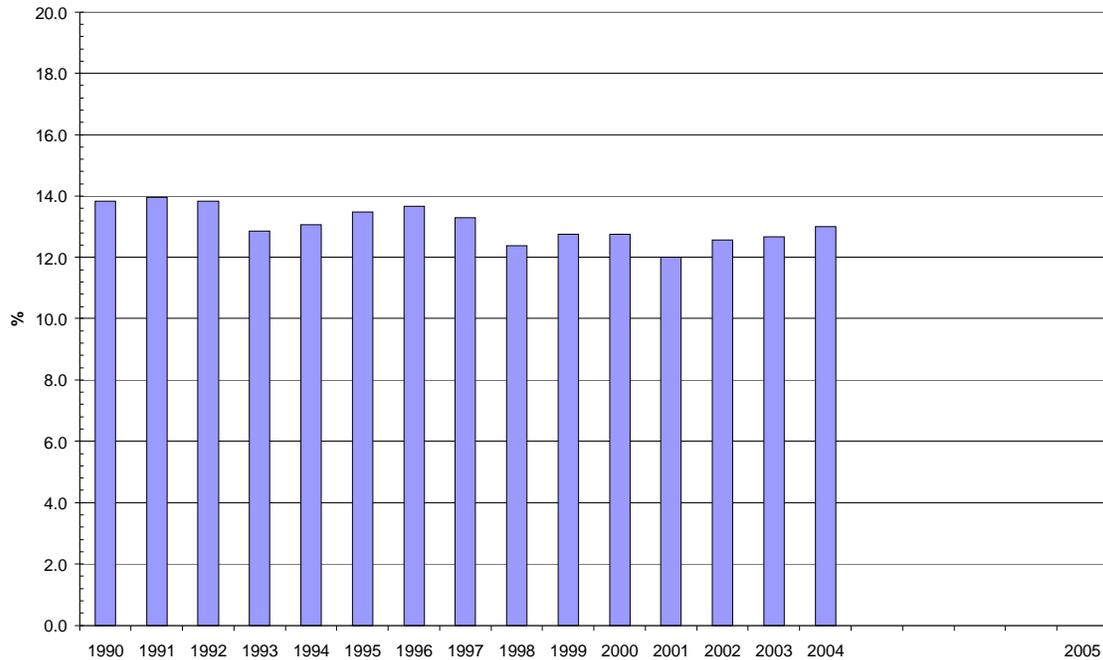
Data on official government revenue in developing countries are weak and often not comparable, due to a number of reasons including poor administrative capacity¹². Nonetheless, existing data suggest two significant facts. First, government revenues as a percentage of GDP tend to be lower in developing countries than in industrial countries. Tax revenue as a percentage of GDP averages about 17.6 percent in developing countries compared to 25.0 percent in more developed countries (Gordon and Li 2005: 31). In the poorest countries the proportion has been lower, varying between 12 and 14 percent since 1990 (see Chart 1). Second, there has been a slight *downward* trend in tax revenues in developing countries from the mid-1970s (Braütigam 2002).

¹¹Nihal Kappagoda, “Debt Sustainability Framework in Low Income Countries,” Paper presented at the UN Workshop on Debt, Finance and Emerging Issues in Financial Integration, London, March 2007.

¹² Part of the reason is that in most countries, tax jurisdictions are divided between a central (or federal) government and local, provincial or state governments. While data collection for central governments is typically available, comprehensive tax data for “general” government including the regional or local bodies (which can raise a substantial proportion of domestic taxes) are rare, particularly in developing countries. For example, according the IMF’s annual *Government Finance Statistics comprehensive* general government revenue to GDP data are available only for three countries in Africa, three in Asia, two in the Middle East, and five in the Western Hemisphere. (IMF 2004: 17-19).

Chart 1

% Government Revenue to GDP in Low Income Countries



Source: *World Development Indicators 2005*.

The first fact is not surprising. Particularly in the poorest countries, much of the population survives in subsistence agriculture in conditions of chronic poverty, outside the monetized economy and beyond the tax system. Moreover, tax collection and revenue generation is hampered by the poor administrative and institutional infrastructure, and the overall tax policy framework tends to be weaker. In addition, in developing countries significantly more transactions occur in the informal economy which is typically not subject to taxation. According to one source, the informal economy represents 15 percent of GDP in OECD countries compared to a median of 37 percent in all developing countries (Gordon and Li 2005:3).

The second fact (a declining trend in tax revenues since the 1970s) is somewhat more surprising. Over time, with economic growth, poverty reduction and institutional development, there is a presumption that the informal economy will shrink relative to the formal sector, and that an enhanced tax policy framework and administrative machinery will increase tax collection. Moreover, the tax base is presumed to widen as employment and incomes grow and as new productive enterprises are established and expand their operations. In other words, one would expect government revenues in developing countries to rise over time as the economy grows.

However, government revenues may stagnate or fall with low or negative economic growth or as a result of economic, political or natural shocks - all of which characterize

poorer developing countries. Civil strife and instability can significantly undermine government revenues; indeed a number of conflicts in Africa have involved struggles between government forces and insurgents, or among government factions, over natural resource revenues. Thus a certain amount of volatility in the level of government revenues is not uncommon particularly in low-income countries.

In addition, globalization - specifically, increasing openness to the global economy - has eroded government revenues as trade liberalization has led to decreased tariffs, which have traditionally been a major source of revenues in developing countries. To compensate, developing countries have shifted their tax structures away from tariffs toward value-added and income taxes, but the latter are relatively difficult to administer and collect. Accordingly there has been a slight drop in total tax revenues, according to one source, amounting to 2 percent of GDP; thus globalization can be associated with a “fiscal shock” in developing countries (Aizenman and Jinjarak 2006)¹³.

There is also evidence that long-term aid dependence (e.g. when aid constitutes over 10 percent of GDP) lowers the tax base by creating tax-free enclaves and exempting aid-financed imports from duties. It may also reduce tax effort, particularly in sub-Saharan Africa (Braütigam 2000)¹⁴, although one recent study of tax performance found that foreign aid neither crowds in nor crowds out taxation (Teera and Hudson 2004)¹⁵.

In other words, there are a number of factors that conspire to limit the growth of tax revenues in low-income developing countries. Some factors are unavoidable - they stem from exogenous shocks, and from the deep and chronic poverty of the majority of the population, who cannot be regarded as significant sources of taxation until they leave the subsistence sector and enter the monetized economy. Even then a large number of activities remain in the “informal” sector, i.e. beyond the reach of the tax authorities. In the long term these factors will recede with economic growth, and with the spread of the formal economy through the growth of business enterprises and employment. Such factors would imply that there is little scope for an active policy to accelerate tax generation. If these were the only factors at play, emphasis must be placed on macroeconomic policies that ensure growth and poverty reduction, that, over time, will generate a growing tax base and revenue stream.

Other factors explaining these trends however, are more a result of discretionary action, or more accurately, the lack of it - on the part of government. These relate both to the international tax policy framework and institutional capacity to administer tax revenues. In the poorest countries, particularly those that are heavily aid-dependent, such issues are typically swept into the broader economic policy dialogue with donors (including the World Bank and IMF).

¹³ Tanzi (2000) argues that the erosion of the tax base due to globalization is universal, affecting developed as well as developing countries.

¹⁴ In other regions of the developing world there is evidence that aid decreases taxation revenue, for example Pakistan (Franco-Rodriguez et al (1998), cited in Teera and Hudson (2004:788)).

¹⁵ Research findings are mixed on this issue. Kelly and Mavrotas (2003) report evidence from sub-Saharan Africa supporting the hypothesis of Ricardian equivalence - i.e. an increase in government savings (via taxation) is offset by a decrease in private savings, whereas Loayza et al (2000) report that “...most international empirical evidence rejects full Ricardian equivalence, finding that the offset is only partial.”

The importance of increasing tax revenues can become subordinated or lost among economic reforms that emphasize downsizing the public sector and maintaining taxes at a low level to encourage business investment or trade liberalization. Indeed, as Cobham (2007) has recently argued, a universal tax consensus that has come to prevail over the past decade has served to reduce the level of direct taxation, to aim for tax neutrality in order to reduce allocative distortions in the economy, and to not to pursue redistributive goals via the tax system. International tax havens have alone led to a massive leakage of taxes by individuals estimated by one source at \$255 billion annually (Tax Justice Network 2007). Cobham (2007) estimates that potentially retrievable tax losses to developing countries amount to at least \$150 billion per year, or 50 percent more than current ODA flows. The Tax Justice Network (2007) concludes that the sums of recoverable taxes could more than cover the cost of the MDGs.

The question is whether developing countries, particularly the poorest, can feasibly raise their tax and revenue generation. In its report the Commission for Africa (2005:305-7) stated that “given relatively low incomes, the tax effort in Africa is relatively strong,” although for the poorest countries of sub-Saharan Africa, “tax revenues generated are not high because of the structure of African economies.” The report goes on to say that a large proportion of tax revenue is based on international trade, a sector in which taxes are at high levels. With trade liberalization, these taxes are expected to fall, and the report says that the gap in revenues will have to be filled by other sources—“aid and/or other taxes”.

While it may be possible to increase taxation, it is important to bear in mind that there are also drawbacks. As the report of the Commission for Africa put it, “...it is always feasible to raise tax revenue, but it is not always wise to do so.” If taxes are too high, they can adversely impact on incentives and damage economic activity.

Such issues can only be sorted out on a case-by-case basis, by examining country evidence on tax incidence and actual (versus potential) tax collection. However, for the purposes of this paper, two points can be made. First, it is entirely possible that even without increasing current tax rates, low-income countries could increase tax collections through administrative improvements thereby making a greater contribution toward development expenditures.

For example, according to the Millennium Project’s assumptions, developing countries (specifically, the least-developed and low income countries) are expected to contribute between 5 percent and 11 percent of GDP toward MDG investments, as the share of DRM (Table 3, p. 7 above). The remainder (the MDG financing gap) is to come from external sources. Given that central government revenues in low income countries have amounted to between 12 and 14 percent of GDP since 1990, and some of these governments’ expenditures is already allocated to MDG investments, a higher contribution from existing government revenues is entirely conceivable.

Second, dramatic improvements in tax collection in developing countries can come about through reforms in tax administration. For example, a successful tax reform project in Tanzania brought about a 47 percent real increase in revenues between 1998 and 2003. What is more, even in such instances there appears to be room to augment tax collection further through greater compliance. For Tanzania the tax gap (the difference between

actual and potential collection) amounted to 4.9 percent of GDP, reflecting a compliance rate of only 63 percent on the value-added tax (Mann 2004: 21-24).

Furthermore, recent research suggests that in addition to Tanzania, a majority of low-income countries face a tax gap, i.e. their actual tax collection falls below their potential (Teera and Hudson 2004). It follows that such countries could generate a significantly greater percentage of MDG investment through DRM than is currently acknowledged.

If such low-income countries were to close some or all of the tax gap, the MDG financing gap needed to be filled by external resources (grants and borrowing) would fall. To the extent that a significant proportion of the external resources would only be available on non-grant terms, this would reduce the level of indebtedness associated with reaching the MDGs.

The above considerations relate primarily to “domestic” taxes, i.e. taxes levied on domestic corporations and individuals who are resident in the country. An additional consideration relates to taxes levied on non-residents through trade and investment activities¹⁶. Policy advice on economic reforms from the Bretton Woods institutions, in addition to pressures generated by multilateral, regional and bilateral trade negotiations, have led many low-income countries to liberalize their trade and investment regimes. The aim has been to stimulate domestic competitiveness, export orientation and inward foreign investment—all important objectives. But in practical terms this has meant the reduction of tariff levels on imports and the provision of tax incentives (for example, in the form of tax holidays) to encourage foreign direct investment (see Akabzaa, 2004 on the reduction of tax liabilities and royalties in Ghana’s mining sector). Moreover, research indicates that such incentives as tax holidays are rarely critical determinants in deciding whether or not an investment will take place in a particular tax jurisdiction (Martin and Rose-Innes, 2004).

Last but not least, it is also an obvious point that enhanced domestic resource *mobilization* will not, by itself, guarantee that the resources so mobilized through taxation will be allocated efficiently or effectively. Development programs aimed at achieving the MDGs may be poorly designed or implemented, or may be compromised by widespread corruption. More problematically, the government may allocate a significant proportion of resources mobilized to non-development or unproductive purposes, such as the military. Therefore, any initiative to enhance DRM must be put into the broader context of the public sector expenditure program, and indeed the overall quality of domestic governance. If enhanced DRM can provide greater fiscal and policy space for developing countries to pursue autonomous and heterodox strategies, those strategies do not guarantee sustainable and equitable development, or the achievement of the MDGs, as outcomes. But those outcomes will be the result of domestic policy choices, rather than policies imposed by external agents through the leverage of conditionality.

If public-sector DRM is to be enhanced in low-income countries, external agents must play a different role than hitherto:

¹⁶ However, the burden of such taxes is typically shared between foreign suppliers or investors, on the one hand, and domestic residents, on the other hand.

- Multilateral and bilateral donors must give the issue greater priority. First, they can provide greater assistance to developing countries to reform their tax policies and administration. In resource-rich countries donors should assist recipients in designing policies to deal with the repercussions of price volatility (e.g. the oil price boom at the time of writing), such as Dutch disease. Second, they must factor DRM into the broader policy dialogue with developing countries. In particular, the importance of enhanced DRM should be incorporated into economic reform and liberalization programs. At the very least, if there are tradeoffs between DRM and economic reforms, these should be explicitly recognized with the minimal objective of ensuring that government revenues are not eroded, and preferably, that they are augmented. Third, they should assist developing countries in their trade and investment negotiations to prevent the erosion of their tax base (see below). Finally, donors can help recipients improve systems for data collection to make government revenue statistics more dependable for macroeconomic management purposes. However, donors should be aware that tax and revenue issues are often sensitive political matters (as they are in donor countries) into which developing countries may resist what they feel is excessive donor “prying”.
- Northern officials involved in multilateral or bilateral trade negotiations should recognize the negative impact that lower duties and tariffs may have on developing countries. While it is entirely feasible for lower duties and tariffs to be more than offset by a higher volume of imports (thus increasing total revenues from this source), this is essentially an empirical question that requires more attention on a case-by-case basis. This should lead to greater acceptance of lower demands on, and trade concessions by, developing countries, particularly the poorest.
- Private sector agents, particularly those representing transnational corporations, should not demand or seek excessively deep or long-lasting tax concessions when negotiating FDI.

6. A Brief Conclusion

This paper has addressed the question, “How can low-income countries’ debt obligations be made sustainable in the specific sense of being compatible with the achievement of the MDGs?” It makes two basic points.

- First, enhancing DRM would help to reduce the external resources (in the form of grants and loans) required to achieve the MDGs. Each additional \$100 million-equivalent raised through domestic taxation potentially reduces external debt liabilities up to an equivalent amount, thereby helping to constrain the growth of debt to sustainable (MDG-compatible) levels.
- Second, existing definitions and indicators of debt sustainability are inadequate in that they are restricted to external debt and exclude domestic public debt. Since these indicators understate total (external plus domestic) debt liabilities, they overstate the actual sustainability (MDG-compatibility) of those liabilities.

Available data indicate that many low-income countries have significant levels of domestic debt. Therefore it is critical that domestic public debt be included for more comprehensive and meaningful assessments of debt sustainability.

Developing countries should take steps to ensure that fiscal and monetary policies will enable DRM to be increased and undertake improvements in tax administration to enhance the efficiency and effectiveness of revenue agencies. They should also consider measures that go beyond the scope of this paper to improve DRM in the private sector. These include promoting institutional development to deepen financial markets as they serve to intermediate between household savings and business investment, and increasing the savings and investment propensities of relatively high-income households.

Donors can assist low income countries' improvement of DRM in a number of ways, through technical assistance and by ensuring that economic reform policies are compatible with enhanced DRM. To the same end, donors can also work with trade officials and foreign direct investors in their countries to sensitize them to the impacts on DRM of trade and investment liberalization and to help shape their negotiating objectives accordingly.

It is important that research be conducted to estimate threshold values that will enable countries to determine sustainable levels of total public debt and total public and publicly guaranteed external debt. The present methodology cannot assess the sustainability of total public debt. This needs to be rectified to assess macroeconomic stability taking into account both the domestic and external borrowings of the public sector. Until then, the analysis is partial though the sustainability of external and domestic borrowings of the public sector can be assessed separately. Further, government revenue should be used in the analysis to estimate sustainable levels of public debt as it is a critical variable affecting payments of public debt service.

The capacity for public debt management should be improved with the assistance of the international financial institutions and other technical assistance agencies. These encompass institutional strengthening including the establishment of an appropriate institutional framework for public debt management and staff training; strengthening the legal and regulatory framework for public debt management; establishing a debt information system for recording, retrieving and analyzing data on public debt; the formulation of policy on public debt; and a risk management framework for the loan portfolio of the public sector.

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