

INTERNATIONAL MONETARY FUND

**Review of PRGF Program Design—Overview**

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In consultation with the other Departments

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## I. INTRODUCTION

1. This review of PRGF-supported programs forms part of the Fund's periodic reviews of its policy advice to member countries, and responds to calls by Executive Directors for further staff analysis on improving the design of such programs.<sup>1</sup> In the context of the recent discussions on the design of the broad range of Fund-supported programs, Directors also requested more in-depth analytical studies of disaggregated and homogenous groups, as well as a closer look at how progress towards external viability in low-income countries (LICs) can be improved.<sup>2</sup> The review also seeks to address these requests.

2. **The scope of the review has been influenced by three further considerations.**

- Macroeconomic outcomes in LICs have improved markedly in recent years, with an increasing number of LICs registering higher growth, lower inflation rates, smaller fiscal deficits, and increased foreign exchange adequacy.<sup>3</sup> With macroeconomic imbalances receding, an increasing number of LICs face a wider range of viable policy options. For example, should they use any fiscal space to cut excessive tax burdens, reduce high levels of domestic debt, or raise public spending to improve the provision of public services?
- Second, recent reviews of Fund-supported programs in LICs have broadly affirmed their effectiveness in helping countries reduce macroeconomic imbalances and raise growth rates even beyond the program period.<sup>4</sup> The durability of the recent pick-up in growth rates, however, remains unclear.
- Third, larger and more widespread increases in aid to LICs as well as debt relief for HIPC are in prospect, as part of the concerted effort towards the achievement of the Millennium Development Goals (MDGs). This requires the design of programs in LICs to give greater weight to the macroeconomic implications of large resource transfers.<sup>5</sup>

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<sup>1</sup> See, for instance, the Acting Chair's Summing-Up on *Evaluation Report of Poverty Reduction Strategy Papers (PRSPs) and the Poverty Reduction Growth Facility (PRGF) by the Independent Evaluation Office*, (Executive Board Meeting 04/71).

<sup>2</sup> The Acting Chair's Summing Up on *The Design of Fund-Supported Programs*, (Executive Board Meeting 04/114).

<sup>3</sup> See IMF (2003), IMF (2005a), and IMF (2005e).

<sup>4</sup> IMF, Independent Evaluation Office (2004). See also IMF (2004b).

<sup>5</sup> The implications of the recent proposal by the G8 to provide further multilateral debt relief to the countries that have been part of the enhanced HIPC Initiative are not considered in this paper.

3. **Against this backdrop, this review focuses on policies germane to LICs that have achieved a degree of macroeconomic stability and sustained growth for a number of years.**<sup>6</sup> About 20 out of the 48 countries that have had a PRGF-supported arrangement since 1998 have these broad attributes.<sup>7</sup> Developments in this group—which will be referred to as *mature stabilizers*—are explored in three background papers. The first paper looks at monetary and fiscal policy design issues for a group of countries with PRGF-supported programs during 2000-03—*Monetary and Fiscal Policy Design Issues in Low-Income Countries*. A second paper focuses on the policy issues related to managing increased aid inflows, drawing on the experience of five countries during 2000-03—*The Macroeconomics of Managing Aid Inflows: Experiences of Low-Income Countries and Policy Implications*. But while addressing these immediate macroeconomic policy issues that policy makers and Fund teams grapple with on a day-to-day basis are crucial for economic expansion, improvements in the quality of institutions in LICs are as necessary to sustain rapid economic growth. The third paper—*Can PRGF Policy Levers Improve Institutions and Lead to Sustained Growth?*—focuses on this.

4. **The review highlights two important challenges:**

- First, the durability of the recent pick-up in economic growth in the mature stabilizers remains uncertain. The empirical evidence from other countries is of sustained periods of economic expansion having been underpinned by export expansion. There is, however, little evidence of a pick-up in export growth in the mature stabilizers in recent years. Beyond this, most of the reforms necessary to foster the higher private investment required to prompt increased export growth relate to improving the quality of broad institutions—an area in which the Fund has a limited role.
- Second, the increased aid inflows in prospect in the coming years will serve to relax many of the constraints that countries face, but by no means all of them—particularly, the human capital constraint. Further, as large capital inflows generally tend to induce a real exchange rate appreciation, they may well inhibit the growth of the tradables sector. Avoiding such an outcome will be critical for progress towards the MDGs.

5. **Drawing on the background studies, this overview paper identifies possible adjustments to the focus of policies and the design of Fund-supported programs in LICs.** The focus on countries with broad macroeconomic stability also makes the review

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<sup>6</sup> The improvement in economic outcome in low-income countries, and particularly in sub-Saharan Africa, is discussed extensively in the World Bank and IMF (2005).

<sup>7</sup> A relatively broad net was cast to identify this group: per capita income growth greater than 1 percent and inflation less than 10 percent. In practice, per capita income growth has on average been much higher at more than 2½ percent. See the discussion in Box 1 of *Monetary and Fiscal Policy Design Issues in Low-Income Countries*.

particularly relevant for program design in LICs that may want Fund support through nonborrowing arrangements such as the Policy Support Instrument currently being considered—see IMF (2005c).<sup>8</sup> This paper is organized as follows. The next section presents the backdrop against which program design issues raised in each of the background papers are discussed in Sections III and synthesized in Section IV. Section V lists some issues for discussion.

## II. THE CONTEXT FOR PROGRAM DESIGN

6. **The middle of this decade finds most LICs in a considerably better position than 10 years earlier when macroeconomic imbalances were more prevalent, growth anemic, and external debt levels overwhelming.** The contrast is quite striking between current economic conditions in low-income members and those that prevailed in the first half of the 1990s, which were discussed in the 1997 ESAF Review (Table 1). Per capita income growth is now at its highest levels since the 1970s. Inflation has declined to the low single-digits in most countries. External current accounts deficits have narrowed—although by no means to the point where they are in a sustainable position (see below). Fiscal deficits have also declined modestly without spending levels having to be curtailed. Some social indicators have also improved, with infant mortality declining and literacy rates raising markedly.

7. **These positive outcomes are partly due to better economic management and the reforms pursued over the last decade.** Those countries with a larger reduction in inflation and budget deficits between the early 1990s and 2000-04 have also tended to register higher output growth. Stronger structural reforms have also been tended to be associated with stronger growth. But other factors have also contributed to the improvement in economic outcomes, including debt relief from the enhanced HIPC Initiative which has ameliorated external debt burdens, higher aid inflows, and a generally benign international environment.<sup>9</sup>

8. **But notwithstanding these recent gains, much remains to be done.** In particular, per capita income levels in most of the mature stabilizers remain very low. There is thus an urgent need to improve on the recent growth record in order to deliver stronger poverty reduction and help ensure that the MDGs are met. In this regard, while macroeconomic stability is a necessary condition for sustained growth, improvements in the quality of institutions must underpin these policies. In particular, the literature on economic growth increasingly emphasizes the centrality of *broad* economic institutions—those sets of laws,

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<sup>8</sup> While the focus of the review is on the mature stabilizers, many of the issues considered here are also highly germane to other low-income countries. For example, both mature stabilizers and other countries with PRGF-supported programs face the challenge of increasing their capacity to absorb foreign aid and improving the efficiency of public spending. Beyond this, the macroeconomic policy challenges that face the broader group of countries with PRGF-support have been addressed in other recent studies, including World Bank and IMF (2005), IMF (2004a), and IMF, Independent Evaluations Office (2004).

<sup>9</sup> See World Bank and IMF (2005).

rules, and other practices that govern property rights and conditions for carrying out transactions. The intuition is relatively straightforward—if a country builds good institutions, people will invest in human capital and entrepreneurs will invest in capital goods.

Table 1. Economic and Social Indicators in PRGF and Other Developing Countries  
(In percent per annum, unless indicated otherwise)

	ESAF Countries 1/	PRGF Countries	"Mature-Stabilizers"
	1991-1995	2000-04	2000-04
Real GDP per capita growth	0.0	2.1	2.7
Inflation:	44.9	10.4	5.5
Gross national saving (% of GDP)	9.9	13.5	16.0
Gross fixed capital formation (% of GDP)	-	20.3	22.8
Central government balance (% of GDP)	-5.6	-4.5	-4.5
Export volume growth	7.9	8.4	9.0
Debt service ratio (actual; % of GDP)	25.7	16.5	14.3
External debt (face value, % of GDP)	154.2	102.2	73.3
Gross reserves (months of imports)	3.5	6.0	7.6
Population growth	2.5	2.1	2.0
Life expectancy (years at birth)	55.0	54.1	55.4
Infant mortality (per thousand live births)	87.5	84.4	77.3
Literacy (percent of population age 15+)	52.7	62.4	62.0

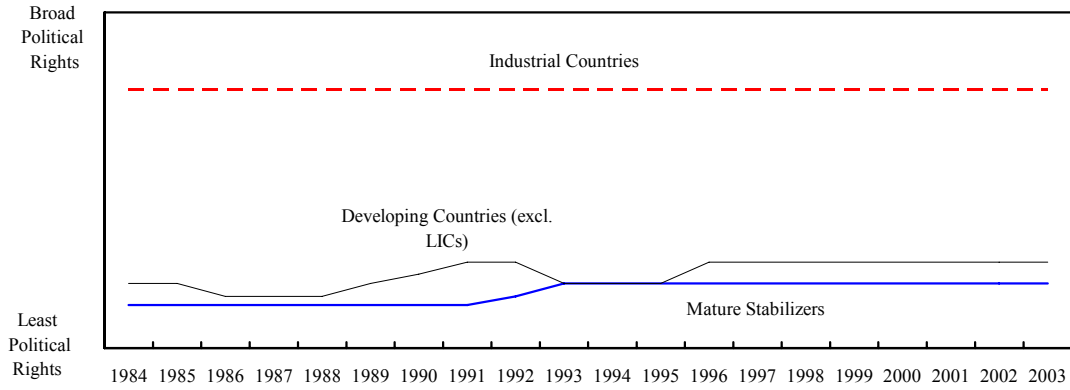
Source: WEO, IFS, WDI, and staff estimates.  
1/ IMF (1997).

9. **Political and economic institutions in most LICs have strengthened in recent years, but remain weak relative to other country groups.** On the political front, the early 1990s saw a perceptible shift towards political processes with broader public participation (Figure 1, top panel). A broad range of economic indicators also suggest that economic institutions in the mature stabilizer sample have improved—and markedly so (Figure 1, middle panel)—since around the mid-1990s. At this juncture, it is not possible to infer from the data whether the progress in macroeconomic outcomes in recent years relates to the improvement in institutions. More to the point, notwithstanding the recent developments, economic institutions remain weak in the mature stabilizers relative to other countries (Figure 1, lower panel). Empirical results from a range of authors over the past decade suggest that the magnitude of the impact from an improvement in institutions would likely be substantial. For example, as discussed in the September 2003 WEO, a change for the better in sub-Saharan Africa's level of institutional development from its current average to the mean of developing Asia could be associated with as much as an 80 percent increase in its per capita income (from \$800 to over \$1400).<sup>10</sup>

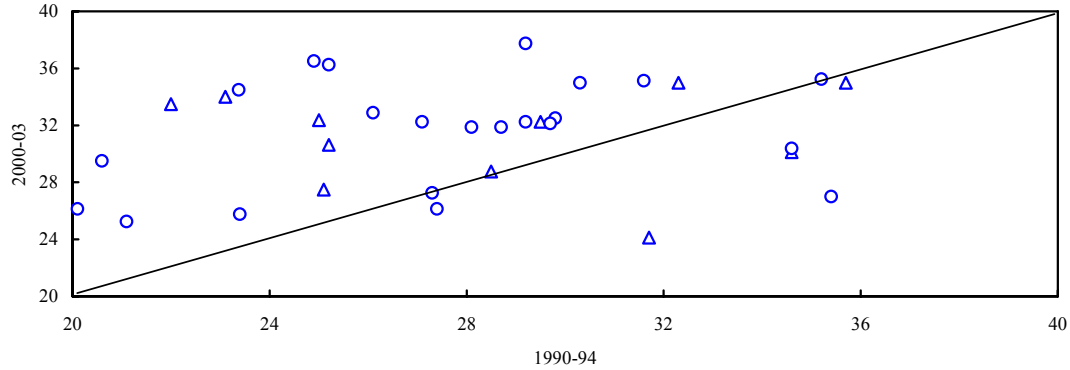
<sup>10</sup> See also Acemoglu and others (2001), and Rodrik and others (2004), for the empirical analysis that gives rise to these estimates.

Figure 1. Changes in Political and Economic Institutions

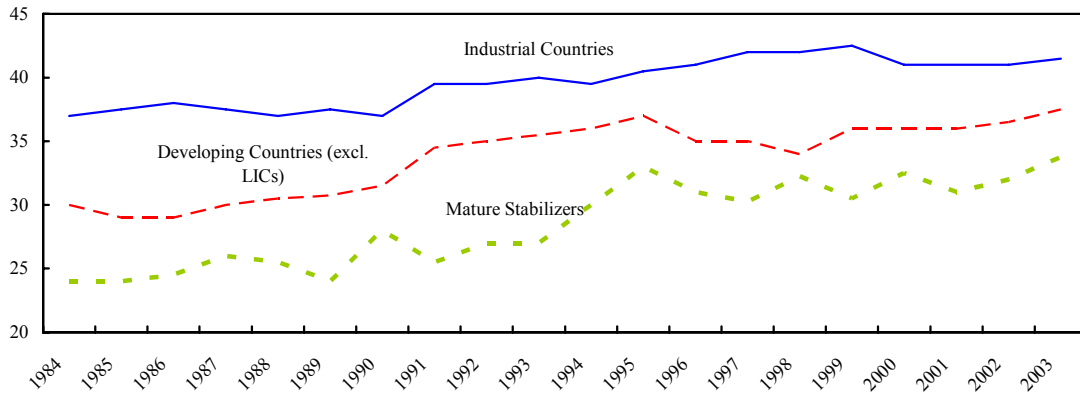
Political Institutions, 1984-2003 1/



Economic Institutions in LICs, 1990-94 vs 2000-03 2/3/



Economic Institutions, 1984-2003 3/



Source: ICRG, Freedom House, and Staff estimates.

1/ Political institutions are proxied by the "Political Rights" measure from Freedom House. This index rates countries from the least political rights to the highest political rights.

2/ Economic institutions are proxied by the ICRG's measure of Economic Risk. A higher number denotes better institutions.

3/ Triangles shows the mature stabilizers.

10. **There are many historical examples of countries with weak *broad* institutions that nonetheless managed to register sustained periods of economic growth.** The important question for this paper is whether there are changes to policies and/or *narrow* institutions in the Fund's areas of expertise which can help foster growth against the backdrop—at least initially—of weak broad economic institutions.<sup>11</sup> This question is addressed in *Can PRGF Policy Levers Improve Institutions and Lead to Sustained Growth?*. The study starts by identifying countries where growth accelerations have taken place (Hausmann, et al., 2004)—historically, a relatively common occurrence, with some 47 cases since 1960.<sup>12</sup> But only a small portion of these growth accelerations were sustained—largely because institutions failed to evolve. The paper splits the overall sample into two: the *sustained growth* (SG) cases (13 countries) and the *unsustained growth* (USG) cases (30 countries).<sup>13</sup> By comparing the two groups, the paper identifies several traits that were common in the SG cases, but were missing from the USG group:

- First, export growth and diversification, especially into manufactures, is a central component of the growth episodes of most SG cases. Agricultural exports were the engine of growth in some cases such as Chile.
- Second, this export growth seems related to trade liberalization. In particular, the study finds that the longer the duration of openness to trade, the higher growth performance tends to be.<sup>14</sup> While some of the SG countries did little to liberalize their trade regimes, the preponderance of the evidence points in the other direction.
- Third, the SG countries tend to avoid a real exchange rate overvaluation, while overvaluation was much more a feature of the USG countries.

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<sup>11</sup> In contrast to *broad* economic institutions, *narrow* institutions relate to those entities that are effective for implementation of policies to promote economic and financial stability—the likes of central banks, domestic revenue authorities, and regulatory agencies.

<sup>12</sup> Growth accelerations are those episodes where a country registers an increase in per capita GDP growth of, at least, 2 percentage points, sustains growth of at least 3½ percent for seven years, and achieves a higher post acceleration income level than the preacceleration peak.

<sup>13</sup> Four SG cases (Botswana, India, Mauritius, and Sri Lanka) were dropped from the sample because they had strong initial institutions. The other SG cases were: Chile, Peoples Republic of China, Dominican Republic, Egypt Arab Republic, Indonesia, Korea, Lesotho, Malaysia, Singapore, Taiwan Province of China, Thailand, Tunisia, and Vietnam.

<sup>14</sup> The importance of export growth and trade liberalization for sustaining growth points to the close link between the two. In particular, trade liberalization forces producers to be competitive, requiring them to adopt modern technologies and minimize costs. The productivity improvements that this generates in turn spurs growth.

- Finally, educational attainment seems to have been important in the SG cases.

11. **The importance of the Fund’s traditional focus on macroeconomic stability is also affirmed.** SG cases had lower levels of nominal instability than USGs. Moreover, other similar studies provide evidence that the direction of causality runs from improvement in macroeconomic conditions (proxied by declines in inflation and the parallel market exchange rate premium) to growth. Research presented in the *Global Monitoring Report* (World Bank and IMF, 2005) shows that improvements in macroeconomic indicators tend to occur early on in most growth acceleration episodes.

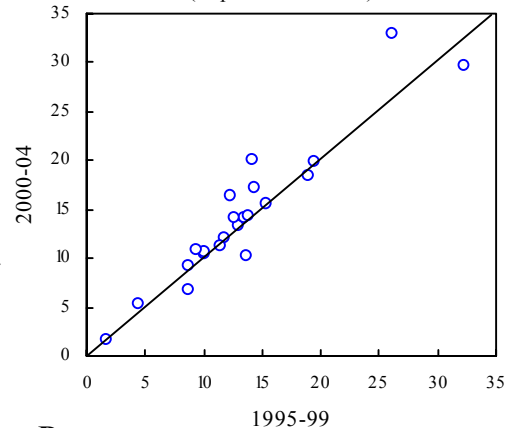
12. **The other piece of positive news is that institutions today, while not strong, are potentially good enough to sustain high growth in an increasing number of LICs.** In terms of economic institutions, measured by Economic Risk (a composite indicator that contains the leading dimensions of economic institutions, such as corruption and rule of law), the average for the mature stabilizers is about the same as the average for the SG cases in the mid-1980s. And in terms of political institutions, many mature stabilizers have a higher score than the SG cases when their growth episodes began. In short, the quality of institutions in the mature stabilizer group does not seem an insurmountable obstacle to sustaining economic growth.

13. **Given the centrality of export growth to sustained economic growth, the absence of a more robust pick-up in export growth in the mature stabilizers is worrisome.**

Annual export growth in the mature stabilizers over the last ten years has averaged some 10 percent, compared to around 25 percent in the SG cases.

Beyond this, the ratio of exports to GDP in the mature stabilizer group has remained low. One reason for this relatively weak performance may well be the limited pick-up in private investment which is necessary to underpin higher export growth. Private investment in the mature stabilizers is low—averaging 13 percent and 14 percent of GDP in 1995-99 and 2000-04, respectively—and has increased significantly in only a few countries (text figure). This raises concerns about the durability of the recent growth pick-up.

Private Investment 1995-99 vs 2000-04  
(in percent of GDP)



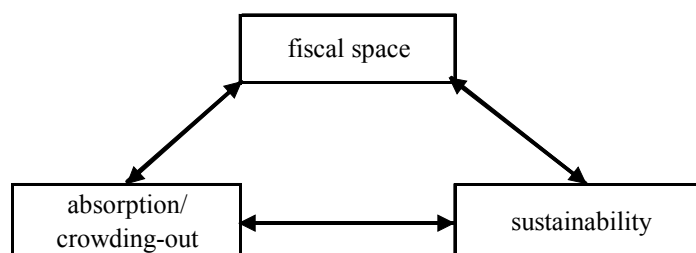
### III. LESSONS FOR THE DESIGN OF FUND-SUPPORTED PROGRAMS

14. **In the broadest terms, the main macroeconomic policy challenges for LICs relate to the appropriate balance between higher public investment (broadly defined to include human capital investment), promoting private sector development, and maintaining sustainability.** All three are important intermediate objectives for LICs, but the single-minded pursuit of one objective tends to run up against constraints posed by other policy objectives. In many respects, this constitutes a trilemma of sorts for policymakers in LICs (Figure 2). *Fiscal space* refers to room for higher poverty-reducing and growth



promoting expenditures, typically comprising both recurrent and investment spending. *Absorption/crowding-out* speaks to the constraints the government faces in its efforts to ramp-up expenditures. Higher government spending implies competition with the private sector for scarce domestic resources. Further, high spending could engender a real exchange rate appreciation due to the pressure on the price of non-tradable goods. Finally, the *sustainability* of fiscal spending depends on debt dynamics and the prospect for sustained concessional external assistance flows.

**Figure 2. A Trilemma of Their Own: Higher Government Spending, Private Sector Development, and Policy Sustainability in Low-Income Countries**



15. **The potential for trade-offs between these objectives is used as an organizing principle in this section.** The three policy objectives interact with each other as follows:

- Increased fiscal space for public expenditures can be financed by higher taxes, borrowing, and/or grants. Higher taxes and recourse to domestic financial markets would likely impinge on private sector activity more directly and more quickly given the limited domestic resources. External borrowing is an alternative, but it is subject to availability and debt sustainability constraints.<sup>15</sup> Grants do not give rise to debt, but are subject to availability and tend to be less predictable (with a number of policy implications—see Heller, 2005a). Beyond this, significantly higher public spending is likely to put upward (appreciation) pressure on the real exchange rate. And this appreciation, other things equal, could be inimical to export growth and diversification—a profoundly important part of the growth process as noted above—as spending aid on domestic goods and services requires domestic production factors to be switched from exports (and/or import substitutes) to the nontradable sector. But it is also important to bear in mind that the effect of this appreciation on competitiveness can be ameliorated by directing government spending to projects that ease supply constraints and bottlenecks that entrepreneurs face.
- If policymakers were to promote private sector development more actively—by, say, lowering taxes—this would reduce fiscal space and weaken the government’s debt-

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<sup>15</sup> Recourse to domestic borrowing is subject to the same constraints, plus the potential for crowding-out the private sector is more pronounced.

servicing capacity. For most LICs, the tension between private sector development and higher public spending manifests itself in decisions regarding the use of foreign aid.

- Finally, the pursuit of debt sustainability, by, for example, paying down domestic debt, reduces current fiscal space (though it increases future fiscal space).<sup>16</sup>

16. The next three subsections consider in turn the three policy objectives, drawing on the discussion in the background papers. A fourth subsection discusses the implications for monetary and exchange rate policies.

### A. Is There Scope for More Fiscal Space?

17. **Spending needs in LICs are very real and very large.**<sup>17</sup> As such, an important consideration is the extent to which higher public investment can be used productively and sustainably. Ultimately, such considerations about fiscal space are country specific, and require detailed assessments of a government's initial fiscal position, its revenue and expenditure structure, prospects for increased external financing and the like (Heller, 2005b). But on the basis of the analysis in the background papers, some broad inferences can be made and the three main avenues for financing significantly higher public investment—taxation, borrowing, and/or grants—are considered below.

18. **In many countries, there could also be scope for providing additional public services through better allocation of existing resources.** Public expenditure tracking surveys reveal substantial waste and leakage in some countries that could be reduced by better public expenditure management and improved project selection (Reinikka and Svensson, 2004). As such, reforms that reduce waste and leakage can enhance the efficiency of public spending.<sup>18</sup> Similarly, civil service reforms that eliminate ghost workers and redundant positions could free additional resources for high priority expenditure. Shifting resources from relatively unproductive spending such as subsidies to highly-productive ones (e.g., preventive health outlays for immunization that have significant externalities) would also be helpful in this regard.

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<sup>16</sup> This intertemporal choice is at the core of debt sustainability analysis.

<sup>17</sup> For Ethiopia, the World Bank estimates that the goals of universal primary enrollment (by 2015), and modest increases in secondary enrollment (to 23 percent at the junior secondary level, and 14 percent at the senior level) would require an increase in expenditures to the tune of 9 percent of current GDP. In Ghana, the government would have to spend about 4½ percent of GDP annually over 2004-08 to address maintenance and new infrastructure investment needs in the road sector alone.

<sup>18</sup> There may also be scope to ease fiscal constraints on infrastructure investment and increase efficiency through the use of public-private partnerships.

## Taxation

19. **Collected in a transparent, equitable, and efficient manner, higher taxation is the most dependable and sustainable source of additional public resources to finance poverty-reducing expenditures.**<sup>19</sup> Spending financed by taxes (like that financed by foreign grants) does not affect debt dynamics. The tax to GDP ratio varies widely across LICs with a tendency to rise with per capita income (text table). In the mature stabilizers, the tax ratio ranges from 8-10 percent (Bangladesh, Madagascar, Rwanda, and Uganda) to some 30 percent of GDP (Guyana and Mongolia).<sup>20, 21</sup> The level of taxation should reflect country-specific institutional structures, but experience suggests that a tax to the GDP ratio of at least 15 percent is a realistic objective for most LICs. Countries where the tax ratio is already above 15 percent, of course, should maintain their tax efforts, if not aim higher. A higher tax ratio, provided it is collected without coercion or much distortion, can generally be maintained without hurting growth. Countries with tax ratios well above 15 percent may also reasonably prefer to give higher priority to revenue-neutral reforms that will widen the tax base, thus facilitating collections and reducing opportunities for evasion, while allowing marginal reductions in rates. For example, countries could consider substantially lower tax rates in some areas in an attempt to spur economic activity. A lower corporate tax rate (with an appropriately wide base) would be one such option.

GDP per capita	Tax to GDP Ratio 1997-2001
< US\$1,000	14.5
US\$1,000 - 5,000	21.3
US\$5,000 - 10,000	22.8
> US\$10,000	32.4

### *Seigniorage*

20. **Lower inflation in PRGF-eligible countries over the last decade has meant a reduction in the inflation tax or seigniorage income.** With inflation at its current average level (some 6 percent), the average seigniorage income in the mature stabilizers is about 1 percent of GDP. Higher inflation could generate more seigniorage income—assuming somewhat optimistically that it is not offset by lower money demand. For example, allowing inflation to rise to 15 percent would allow the government to generate an additional 0.4 percentage point of GDP—a non-trivial amount given the challenges of mobilizing such

<sup>19</sup> Taxation is less volatile than aid (Bulir and Hamann, 2001 and 2005). It is also one of the key junctures where the government and the public interact, and the better the manner in which the taxes are collected and the more willing citizens are likely to pay their taxes, the stronger indication that it provides of strength of institutions in the country.

<sup>20</sup> The discussion in this subsection (III.A) focuses on the 15 mature stabilizers covered by *Monetary and Fiscal Policy Design Issues in Low-Income Countries*.

<sup>21</sup> The high tax ratios in the latter likely reflects the possible underestimation of GDP in Guyana and the legacy of socialism in Mongolia.

amounts through the formal tax system.<sup>22</sup> However, the benefits derived from this additional revenue need to be weighed against the costs, which include the regressive nature of the inflation tax (hurting the poor most). The increased macroeconomic uncertainty that a higher inflation tax rate engenders is also likely to have an adverse bearing on investment and growth. Moreover, it takes time to bring higher inflation rates down once they are ingrained. For these reasons, the scope for creating more fiscal space through a higher inflation tax is likely limited, if it exists at all.

## **Borrowing**

21. **For a country with little or no debt, borrowing—postponed taxation—can be an efficient route to finance development expenditures.** Particularly in the case of poor, but growing, countries, which can reasonably expect the next generation to be better off, borrowing would allow them to undertake investments now that future generations will benefit from (and pay for). However, most LICs already have a rather high public debt burden.<sup>23</sup> In particular:

- Debt stocks in 9 of the 15 mature stabilizers are high or have been rising rapidly. While baseline debt sustainability scenarios for these countries project gradual declines in debt ratios, these scenarios are often based on the assumption that real GDP growth will be significantly higher, and fiscal policy significantly tighter, than they have been historically. In other cases, debt is sustainable in the baseline scenario, but not in the event of modest shocks.
- In six of the countries in the sample (Azerbaijan, Benin, Mozambique, Rwanda, Senegal, and Tanzania), the NPV of public sector debt-to-GDP ratio is at more reasonable levels (well below 40 percent, Figure 3) and broadly stable.<sup>24</sup> This 40 percent threshold is the one adopted for external public debt in the low-income debt sustainability framework for countries with policies and institutions typical of the mature stabilizer sample.<sup>25</sup> Provided projects have sufficiently high rates of return, recourse to borrowing (particularly on concessional terms) would be a reasonable course of action. For countries with low debt ratios, these debt thresholds

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<sup>22</sup> See Box 4 in *Monetary and Fiscal Policy Design Issues in Low-Income Countries*.

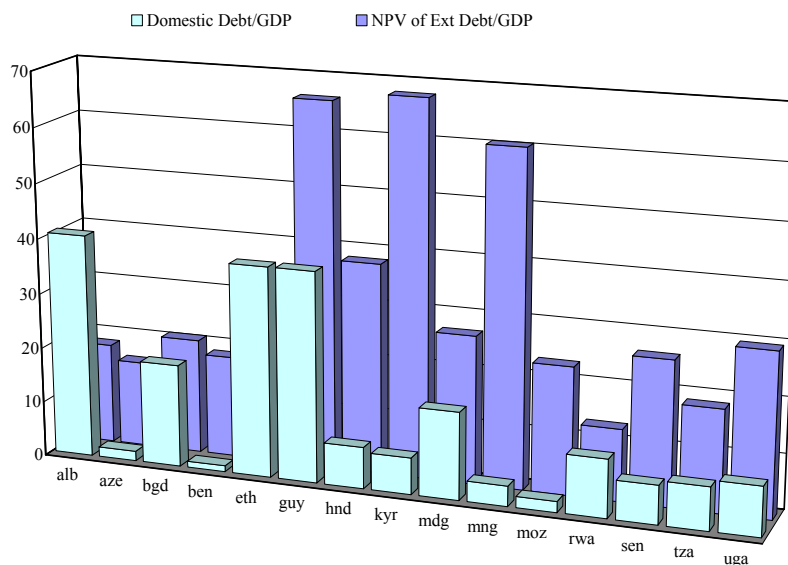
<sup>23</sup> Privatization is one option to reduce high debt burdens and make room for additional productive expenditures.

<sup>24</sup> The NPV of public debt is defined here as the sum of the NPV of public and publicly guaranteed external debt plus the nominal value of domestic public debt.

<sup>25</sup> These thresholds are used in the Debt Sustainability Assessment templates for Low-Income Countries (see IMF, 2005d) and apply to external debt.

should not be seen as targets to aim for, but rather as the edge of the precipice, proximity to which is to be avoided.

Figure 3. Ratios to GDP of the NPV of External Debt and (nominal) Domestic Debt



## Grants

22. **This leaves external grants—like domestic taxes and better use of existing resources—as the other solution for significant increases in poverty-reducing expenditures.** Grants do not give rise to debt sustainability concerns and avoid higher taxes on the private sector. Grants have been a significant source of financing in the mature stabilizers, averaging some 5 percent of GDP per year. In about a third of the sample (Madagascar, Mozambique, Rwanda, Tanzania, and Uganda), external grants contributed to the financing of more than 25 percent of public expenditures.

23. **Grants, however, are not free from problems.** They are subject to uncertainties related to availability, timing, and duration which are to some extent beyond the control of recipient governments.<sup>26</sup> The volatility of grant flows makes governments reluctant to scale-up expenditures (to, say, add to the payroll large numbers of health workers on the promise

<sup>26</sup> Grants, too, have potential private sector crowding out effects, but this is not unique to grants and also applies to loans (see discussion below).

of budgetary support for a year or two) or could undermine effective multiyear planning; for example, after expenditures have been scaled up, they could prove ineffective (the nurses are hired but they don't have the medicines to dispense). Grants may also weaken governments' incentives to collect domestic taxes. If grants are readily available, they could make governments more complacent about mobilizing tax revenues—some empirical evidence supports this thesis (Gupta, et al., 2004).

## B. Absorbing Higher Aid Inflows

24. **Increases in aid inflows to LICs are in prospect and effective management of these resources will be critical for the achievement of the MDGs.** As noted above, these inflows will ease many of the constraints that governments in LICs now face in their efforts to increase infrastructure investment and poverty reducing social spending. There is, however, also a need to ensure that these potentially large inflows do not jeopardize hard-won macroeconomic stability. As such, the effective management of aid inflows represents one of the main challenges for the next generation of Fund-supported programs in LICs.

25. **Central to managing a surge in aid inflows is the coordination of fiscal policy with exchange rate and monetary policy.** To highlight this interaction, it is useful to consider two distinct but related concepts: spending and absorption.<sup>27</sup>

- **Spending** is defined as the increase in government expenditures accompanying an increment in aid: if this increase exceeds the amount of the aid that comes in the form of grants, then it would lead to an increase in the fiscal deficit (excluding aid).
- **Absorption** is defined as the widening of the current account deficit (excluding aid) due to incremental aid. It measures the extent to which aid engenders a real resource transfer through higher imports or through a reduction in the domestic resources devoted to producing exports.

26. **The macroeconomic impact of aid depends on the combination of spending and absorption.** Spending depends on fiscal policy, while for a given fiscal policy, absorption depends on exchange rate and monetary policy. If the government receives aid-in-kind, or uses aid directly to finance imports, spending and absorption are equivalent. More typically, aid also finances government spending on domestic goods and services for which the government obtains domestic currency by selling aid dollars to the central bank. Absorption depends on the response of the central bank, with foreign exchange sales influencing the exchange rate and interest rate policy shaping aggregate demand.

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<sup>27</sup> These distinctions are discussed extensively in *The Macroeconomics of Managing Aid Inflows: Experiences of Low-Income Countries and Policy Implications*.

27. **To spend and absorb is the textbook response to increased aid; the government increases spending, and aid finances the resulting rise in net imports.**<sup>28</sup> Even if the government spending is on domestic goods, the aid allows the resulting higher aggregate demand and spending to spill over into net imports without creating a balance of payments problem. Some real exchange rate appreciation may be necessary to enable this reallocation of resources. The degree of appreciation will, in general, depend on a number of factors, including how much of the aid is spent directly on imports, and the extent to which the aid-related spending generates a supply response.

28. **In a review of country experiences with large increases in aid inflows, a one-to-one correspondence between increased spending and absorption was found to be rare.**<sup>29</sup> Typically, policies limited aid absorption—and the consequent real appreciation—perhaps related to concerns about competitiveness or aid volatility. In the sample of countries surveyed, incremental aid was found either to have been mostly saved (in other words, neither spent nor absorbed) or to have been spent but not absorbed. In particular:

- In two of the countries—Ethiopia and Ghana—spending and absorption were both very low. This response reflected a desire to build-up international reserves from a precariously low level or to smooth volatile aid flows. In Ethiopia, reserves were accumulated to bolster the de facto exchange rate peg against the dollar. In Ghana, a buffer against extremely volatile aid inflows was built.
- To spend but not absorb was the other response observed, sometimes reflecting inadequate coordination of monetary and fiscal policies. In Mozambique, Tanzania, and Uganda, spending exceeded absorption, creating a surge in domestic liquidity. In Mozambique, this led to high inflation. In Uganda and (initially) Tanzania, treasury bill sales were used to contain inflationary pressure, leading to a rise in interest rates and the domestic debt burden.<sup>30</sup> This monetary response is similar to that called for by a fiscal stimulus in the *absence* of aid. The lion's share of the aid goes to reserves, so the increase in government spending must be financed by printing money or government borrowing from the domestic private sector. There is no real external resource transfer given the absence of an increase in net imports.

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<sup>28</sup> In the short run, to the extent the marginal propensity to import is less than 1, some increase in international reserves could be observed. In addition, given aid volatility, the country authorities may want to spend and absorb over several years.

<sup>29</sup> See *The Macroeconomics of Managing Aid Inflows: Experiences of Low-Income Countries and Policy Implications*.

<sup>30</sup> Prati and Tressel (2005) note that the practice of sterilizing aid inflows is quite common—over the 1960-1998 period, sterilization (proxied by a decline in net domestic assets of the central bank) was evident in more than a third of the close to 2000 episodes of annual increases in foreign aid of more than 2 percent of GDP.

29. **In general, targets in PRGF-supported programs appear to have been compatible with a spend-and-absorb response, but the consistency of monetary and exchange rate policy with fiscal policy needed greater attention.** Fiscal targets accommodated surges in aid, and reserve targets have been broadly consistent with an (aid-financed) increase in the current account deficit. However, where countries pursue a spend-but-not-absorb strategy—perhaps in order to safeguard competitiveness—more care needs to be taken that an appropriate outcome is achieved. Where the goal is to smooth absorption in the face of short-lived aid surges or as a holding operation while tackling supply-side constraints, a better approach would generally be to smooth spending as well as absorption, thereby avoiding a surge in government spending that is effectively domestically financed.

### C. Sustainability

30. **The third key policy challenge for LICs is maintaining debt sustainability.** External grants are and will remain in short supply—a constraint that is likely to persist even after the much anticipated increase in aid in support of the MDGs materializes. Even if higher grant resources are available, given the high level of needs, countries will be likely to want to borrow to finance additional expenditures. While external borrowing by most LICs in recent years has almost entirely been on concessional terms, this is no guarantee of debt sustainability. As in the past, even concessional borrowing can lead to an excessive build-up of debt—because the envisaged pick-up in exports and growth fails to materialize, or because capturing the rates of return to projects remain difficult or, indeed, because the amounts borrowed are excessive.

31. **In this context, the challenge for program design will be to set fiscal positions that are consistent with debt sustainability while accommodating productive public spending.** As noted in *Monetary and Fiscal Policy Design Issues in Low-Income Countries*, debt sustainability analysis is the first step in assessing the optimal path of the fiscal balance. Absent sustainability, debt will rise to high levels that hinder growth and precipitate macroeconomic imbalances. One argument that has been made for utilizing as much concessional borrowing as is available is the presumption that such borrowing is unlikely to give rise to a liquidity crisis because official creditors can be relied upon to reschedule or provide new financing in excess of sums falling due. Moreover, amortization on most such loans does not fall due for another 20 or so years. But as noted above, it was borrowing on largely concessional terms that gave rise to the debt that had to be written off in the context of the enhanced HIPC Initiative and also why external viability remains beyond reach in some countries.

32. **The recently-operationalized framework for debt sustainability analysis (DSA) in LICs should be the main vehicle for assessing the appropriate fiscal path.** This framework takes a comprehensive view of debt sustainability, looking at not just the evolution of debt ratios in NPV terms, but also debt-service ratios and gross financing needs under a variety of alternative scenarios. For those countries with debt burdens close to or above the agreed policy-dependent debt thresholds, a tighter fiscal stance and/or higher levels of concessionality in foreign financing need to be targeted. In these cases, fiscal policy



should target deficits that are sufficiently low and debt-management policies should ensure that borrowing terms are sufficiently concessional to avoid future debt sustainability problems, including in the event of modest shocks. In many cases, this is likely to require an increase in grant resources to meet the twin objectives of debt sustainability and providing sufficient funding for MDG-related spending. It may also entail using grants in a way that preserves flexibility to reduce expenditures if grants were to not materialize in the future.

33. **In countries with moderate debt burdens, the pace at which countries accumulate new debt will need to be monitored carefully in order to avoid the emergence of debt problems.** In these countries, the benefits of further fiscal consolidation are less clear. Spending decisions will instead need to pay heed to considerations such as the productivity of additional outlays relative to their financing cost. In countries with poor governance, the low productivity of outlays may be such that higher spending has a limited effect on growth and social indicators. Countries with limited absorptive capacity may also not be in a position to increase spending, while ensuring that these outlays are productive. The scope for fiscal expansion would also need to take into account fiscal vulnerabilities in the face of exogenous shocks, including those due to aid variability. Furthermore, given the rigidity of spending commitments, especially for current outlays, the fiscal risks associated with increases in spending would also need to be assessed.

#### **D. Monetary and Exchange Rate Policies**

34. **The challenges for monetary policy in the next generation of Fund-supported programs in LICs are threefold:** determining the appropriate target range for inflation; accommodating on-going monetary deepening; and allowing greater exchange rate flexibility.

35. **Fund-supported programs need to continue targeting single-digit inflation rates.** While PRGF-supported programs have on average aimed to limit inflation to 4 percent by the end of the program period, inflation outcomes tended to be somewhat higher at around 6 percent. The case for continuing to target single-digit inflation targets is strong—low and moderate inflation levels tend to be associated with higher economic growth. Further, high inflation tends to hurt the poor disproportionately and inhibit financial deepening. By the same token, the precise threshold where inflation becomes harmful is less clear and could be outweighed by costs (which could include a loss of output). On balance, a 5-10 percent target range (with a bias towards falling) would seem to address the need to keep inflation low, but not excessively so.<sup>31</sup> Critically, LICs tend to be prone to adverse exogenous price shocks, which raises the risk of an unduly restrictive monetary policy stance if headline inflation is targeted. Programs have responded by allowing higher outcomes for headline inflation. More

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<sup>31</sup> See *Monetary and Fiscal Policy Design Issues in Low-Income Countries* for a fuller discussion of the merits of such a target range; countries with fixed exchange rate regimes would likely need to consider a lower inflation range.

generally, PRGF-supported programs should accommodate the first-round price effect of exogenous shocks by targeting an inflation range—rather than a point target—with the mid-point being used for operational purposes or by focusing on core inflation where this concept is feasible and acceptable.

36. **Second, monetary growth targets in the mature stabilizers have been exceeded without a significant overshooting of inflation targets.** Inflation deviations have been moderated by higher-than-expected money demand and lower velocity. Higher-than-programmed money growth has mainly reflected a larger-than-programmed accumulation of international reserves by the central bank. This benign experience of the mature stabilizers contrasts with the findings of the broader 2004 review of the design of Fund-supported programs, which found that in many cases overruns in reserve and money growth were reflected in significantly higher inflation.<sup>32</sup> The main implication is that with the attainment of price stability, monetary projections should allow for a trend decline in velocity for a period of several years. For the mature stabilizers that do not have a fixed exchange rate regime, the standard NDA/NFA framework provides a useful safety valve that allows money supply to respond to unforeseen changes in money demand. However, the framework does not have a nominal anchor and close monitoring of reserve money growth remains warranted. In order to support such monitoring, indicative targets for reserve money growth should continue to be employed.

37. **The third consideration concerns the interaction among monetary policy, the exchange rate, and aid inflows.** Many mature stabilizers actively seek to stabilize the nominal exchange rate (in particular relative to the U.S. dollar) through interventions in the exchange market.<sup>33</sup> In this context, the larger-than-programmed foreign reserve expansion noted above likely reflects not just the accommodation of higher money demand, but also a strong desire to avoid nominal appreciation pressures in the face of external inflows. At the same time, in order to resist real appreciation that would occur through inflation, the implications of increased reserve accumulation for money growth have been offset through treasury bill sales. This results in the spend-and-do-not-absorb response to aid inflows described above: aid dollars flow into reserves while the associated fiscal expansion is effectively financed domestically.

38. **Over a longer time frame, some real exchange rate appreciation in the face of large increases in aid is unavoidable, with the amount of appreciation depending *inter alia* on the supply response and import content of the aid-related spending.** In a floating exchange rate regime, this appreciation would imply that the central bank retains fewer aid dollars, allowing a nominal exchange rate to appreciate. In a fixed exchange rate regime, this implies that the monetary expansion associated with aid-related fiscal spending should

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<sup>32</sup> That review—IMF (2004c)—considered a much broader set of PRGF countries and over an earlier period.

<sup>33</sup> Evidence to this effect is presented in *Monetary and Fiscal Policy Design Issues in Low-Income Countries*.

not necessarily be sterilized through treasury bill sales—in such a regime, the only way to achieve the real appreciation required to absorb aid inflows may be through a period of temporarily higher inflation. The risk that inflation expectations would be reignited argues for a greater degree of nominal exchange rate flexibility, particularly in countries with a recent history of high inflation. Fixed exchange rate regimes have other merits, however, and in these cases, in particular, caution about aggressive sterilization is warranted.<sup>34</sup>

#### IV. SYNTHESIS

39. **Three questions emerge from the foregoing discussion.** First, how should policies address constraints that might jeopardize sustained growth? Second, how should policies respond to large volumes of aid inflows? Third, what steps are required to ensure coordination between monetary and fiscal policies?

##### **Sustaining growth**

40. **While strong *broad* institutions are central for sustained growth, the Fund’s mandate and expertise in this area is limited.** In the main, the Fund advises on economic policies and/or *narrow* economic institutions—e.g., central banks, fiscal authorities, and regulatory bodies. And while these policies and institutions have a bearing on growth, broad institutions, which are typically embedded in domestic political structures, probably matter as much if not more for achieving and sustaining rapid economic growth. This poses two challenges for the Fund. First, changing broad institutions—say, access to property rights—is a deeply political process; outside institutions like the Fund have a limited impact. Second, successful broad institutions tend to be country and context specific and need to emanate from domestic processes. (For example, much of the growth in “private” investment in China during the 1980s and early 1990s came from township village enterprises, which embodied a unique system of property rights.)

41. **The Fund is better placed to support macroeconomic policies which also play a large role in sustaining growth.** As discussed in Section II, the sustained growth cases direct attention towards the importance of policies related to trade liberalization, avoiding exchange rate misalignment and macroeconomic stability. The results presented in *Can PRGF Policy Levers Improve Institutions and Lead to Sustained Growth* show that these policies seem to play a role in accelerating growth even when broad economic institutions are weak.

42. **But this emphasis on macroeconomic policies is not to suggest that Fund-supported programs should eschew structural reforms; such reforms should be strengthened in countries where investment and export growth are found to be anemic.**

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<sup>34</sup> See Rogoff, et al. (2004).

Drawing on the expertise of other development partners, including on the World Bank, Fund-supported programs should, in particular, take the following into consideration.

- Where private investment or export growth is lackluster, a stronger focus on the factors impeding such activities is necessary in Fund-supported programs—particularly if policy-induced distortions are responsible. The recent review of *Design of Fund-supported Programs* shows that while it is difficult to establish the impact of individual structural reforms, there is a positive association between economic efficiency-enhancing measures in programs and improved medium-term growth performance. Against this backdrop, it will be important to monitor the recent shift in conditionality away from reforms that promote growth and efficiency in PRGF-supported programs.<sup>35</sup>
- Second, programs need to recognize the limitations on the Fund’s ability to influence broad institutions. For changes in such institutions to be meaningful requires extensive domestic ownership. Fund-supported programs can still make a useful contribution to the environment in which broad institutions can change by enhancing fiscal transparency and governance. This enhancement not only plays a role in relation to macroeconomic stability, but can also contribute to reducing corruption as well as greater efficiency and productivity.

### Managing aid inflows

43. **All in all, the picture that emerges is of most LICs needing to rely on appropriate concessional financing for increased fiscal space, but that extensive recourse to such financing can have adverse implications for the tradables sector.** In other words, higher aid inflows do not by themselves resolve all of the constraints that poor countries face. With the welcome prospect of higher aid inflows, the first consideration is how best to utilize these additional resources and manage the trilemma.

44. **A *spend and absorb* strategy would be appropriate where the benefits of increased public spending outweigh the possible adverse effects on the tradables sector.** This determination can only be made on a country-by-country basis, and there are a number of indicators, including: adequate absorption capacity—for example, in the ability to design and implement projects; high rate of return on public investment; and strong growth in private investment, including in the tradables sector. Helping to increase absorptive capacity and ensure that spending is productive are thus important program objectives. When these conditions are broadly in place:

- The extent to which programs automatically save unanticipated aid inflows should be minimized, particularly where contingent spending plans are already in place. Most

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<sup>35</sup> See the discussion in IMF (2005b).

PRGF-supported programs currently have adjusters that require higher aid inflows than anticipated to be saved for later use, but this would delay both spending and absorption and should be avoided—particularly when countries have finance-constrained plans for productive spending.

- When countries are following such a spend-and-absorb strategy, programs should assess competitiveness issues very closely. In this regard, some real appreciation is inevitable—indeed, necessary—as part of the process of shifting resources from the tradables to the non-tradables sector. The key challenge will be identifying the point beyond which a real appreciation is likely to become problematic. In making such competitiveness assessments, a broad range of indicators should be employed. But among the most telling indicators will be trends in private investment and exports.

**45. If, however, higher government spending confronts constraints on absorptive capacity, tension between aid volatility and spending rigidities, and a real exchange rate appreciation that would give rise to an unacceptable erosion of competitiveness then:**

- Consideration should be given to limiting spending increases, because the overall rate of return to such spending is likely to be low. Such a strategy, coupled with reserve accumulation, would effectively save the aid resources for later use—once absorptive capacity has been increased.
- The adverse implications of a real exchange rate appreciation for competitiveness can be dampened or even reversed by using the aid for productivity-enhancing projects and/or initiatives that remove domestic supply constraints (for example, increased electricity generation capacity to minimize energy shortages). Relatedly, aid could be used to directly purchase tradable goods (for example, machinery for building infrastructure or antiretroviral drugs), thereby reducing the impact on the exchange rate.
- Monetary policy action to sterilize the liquidity effects of increased aid-financed public spending (for example, through treasury bill sales) should be used judiciously. It can limit real exchange rate appreciation, but at the cost of raising interest rates and heightening the crowding-out of the private sector, while raising public domestic debt. Moreover, sterilization limits the extent to which the aid is absorbed—i.e., the extent to which real resources are transferred from donors.
- An important reason why governments intervene to limit a real exchange rate appreciation is out of concern about aid volatility, and in particular, the possibility that aid resources may not continue to be available to finance a higher trade deficit. Steps by donors to increase the fungibility of aid and its predictability are thus critical.

- Countries whose budgets are more dependent on aid could also consider maintaining a larger reserve buffer—well above the standard benchmarks such as 3 months of import cover.<sup>36</sup>
- Finally, greater leeway to draw down reserves when shortfalls in aid materialize could be considered. At present, most programs (for example, 34 out of 38 PRGF-supported arrangements in effect as of March 2004) have adjusters that allow shortfalls in external financing to be accommodated by higher domestic financing. In countries where debt sustainability is not a constraint, greater recourse to domestic financing could be considered.<sup>37</sup> Where domestic debt is high or excessively costly, this option should be used more prudently.

### **Monetary and fiscal policy coordination**

46. **The consistency of monetary and exchange rate policies with fiscal policy will likely be more acutely tested when the authorities increase government spending but keep the foreign exchange in reserves.** This response has the effect of generating liquidity in excess of the increase in aggregate demand. As noted above, sterilization is not a desirable option since it would result in raising interest rates and further squeezing the private sector. The only alternative would seem to be allowing the monetary expansion necessary to accommodate increased public spending to take place. This requires some tolerance for a period of higher inflation to achieve the required real appreciation. But even this would only be desirable in the short run—not least because of the economic costs related to higher inflation. Critically, the authorities must be willing to defend the nominal exchange rate against depreciation and, as the real appreciation increases demand for imports, sell the foreign exchange. In essence, this amounts to a spend-and-eventually-absorb scenario—it would allow the aid to be spent, some real appreciation to take place to facilitate absorption, but for further liquidity effects to be sterilized via foreign exchange sales.

## **V. ISSUES FOR DISCUSSION**

47. Directors may wish to discuss the following issues:
- Do Directors agree with the main challenges identified for Fund-supported programs in LICs?

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<sup>36</sup> Most of the mature stabilizers are effectively doing this already—with reserve cover averaging some 8 months of imports. Increasing the reserve coverage further would, of course, entail costs which would need to be taken into consideration.

<sup>37</sup> There is limited evidence of private sector crowding-out being a problem in the mature stabilizers in recent years—see *Monetary and Fiscal Policy Design Issues in Low-Income Countries*.

- Directors views on how the existence of weak broad institutions should influence the design of Fund-supported programs are welcome.
- Do Directors agree that low-income countries face a trilemma—the tension between higher government spending, private sector development, and policy sustainability—identified in this paper?
- Do Directors agree with the staff’s views on how incremental aid inflows should be managed?
- Do Directors agree that Fund-supported programs in LICs should continue targeting a single digit inflation rate that takes into account these countries susceptibility to exogenous shocks?
- Do Directors agree that fiscal stance in LICs should be anchored by debt sustainability considerations?

## VI. REFERENCES

- Acemoglu, Daron, Simon Johnson, and James A. Robinson, 2001, "The Colonial Origins of Comparative Development: An Empirical Analysis," *American Economic Review*, XCI, pp. 1369-1401.
- Buliř, Aleř and Hamann, Javier, 2001, How Volatile and Unpredictable Are Aid Flows, and What Are the Policy Implications? IMF Working Paper 01/167, (Washington: International Monetary Fund).
- Buliř, Aleř and Hamann, Javier, 2005, "Volatility of Development Aid: From the Frying Pan into the Fire?," IMF Working Paper, Preliminary draft (Washington: International Monetary Fund).
- Gupta, Sanjeev, Benedict Clements, Alexander Pivovarsky, and Erwin H. Tiongson, 2004, "Foreign Aid and Revenue Response: Does the Composition of Aid Matter?" in S. Gupta, B. Clements, and G. Inchauste, eds., *Helping Countries Develop: The Role of Fiscal Policy* (Washington: International Monetary Fund).
- Heller, Peter S., 2005a, "Understanding Fiscal Space," IMF Policy Discussion Paper No. 05/4, (Washington: International Monetary Fund).
- , 2005b, "Pity the Poor Finance Minister: Facing the Challenge of a Substantial Scaling-Up of Aid Flows," Informal Draft Paper, June.
- International Monetary Fund, 1997, "Review of Experience Under ESAF-Supported Arrangements—Summary report".
- , 2003, "Role of the Fund in Low-Income Countries Over the Medium-Term—Issues Paper for Discussion."
- , 2003, *World Economic Outlook* (Washington, D.C.), April.
- , 2004a, "Design of Fund-Supported Programs—Overview".
- , 2004b, "Fund-Supported Programs—Objectives and Outcomes".
- , 2004c, "Macroeconomic and Structural Policies in Fund-Supported Programs—Review of the Experience".
- , 2005a, "Sub Saharan Africa Regional Economic Outlook".
- , 2005b, "Review of the 2002 Conditionality Guidelines".
- , 2005c, "Policy Support and Signaling in Low-Income Countries".



- , 2005d, “Operational Framework for Debt Sustainability Assessments in Low-Income Countries—Further Considerations”.
- , 2005e, *World Economic Outlook* (Washington, D.C.), April.
- International Monetary Fund, Independent Evaluation Office, 2004 *Report on the Evaluation of Poverty Reduction Strategy Papers (PRSPs) and the Poverty Reduction and Growth Facility (PRGF)*.
- Prati, Alessandro and Tresselt, Thierry, 2005, “What Monetary Policy for Aid-Receiving Countries?” paper prepared for DESAA Development Forum on ‘Integrating Economic and Social Policies to Achieve the United Nations Development Agenda,’ March 14-15, 2005.
- Reinikka, Ritva and Jakob Svensson, 2004, “Local Capture: Evidence from a Central Government Transfer Program in Uganda,” *Quarterly Journal of Economics*, Vol. 119 (May), pp. 679-705.
- Rodrik, Dani, Arvind Subramanian and Francesco Trebbi, 2004, "Institutions Rule: The Primacy of Institutions over Geography and Integration in Economic Development," *Journal of Economic Growth*, 9(2), June, pp. 131-165.
- Rogoff, Kenneth, et al., 2004, *Evolution and Performance of Exchange Rate Regimes*, IMF Occasional Paper No. 229, (Washington: International Monetary Fund).
- World Bank and International Monetary Fund, 2005, *Global Monitoring Report 2005—Millennium Development Goals: From Consensus to Momentum* (Washington, D.C.: World Bank).