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## Choosing an Expenditure Path

The IMF's advice and program design encourage aid recipients to spend all aid fully and effectively. How much and how fast scaled-up aid should be spent over the medium term is a function of the following:

- Time profile of expected aid;
- Macroeconomic, sectoral, and administrative capacity of the country to absorb higher aid inflows;
- Likely impact of spending on growth and debt sustainability; and
- Spending efficiency.

## Time Profile of Aid

Aid flows to a country can assume different time profiles. They may be compressed over a short period, they may be volatile around a constant or rising trend, or they may rise and remain stable at that level. In the first case, a country may choose to spread higher aid-financed spending over a longer period by saving part of the initial surge in aid inflows. In the second case, the country would need to take aid volatility into account in its spending plans by smoothing fluctuations through domestic borrowing and reserve accumulation in a manner that is consistent with macroeconomic stability. In the third case, the country could have a rising spending profile depending on its absorptive capacity. The choice of a particular spending path will depend on a number of other country-specific factors, which are discussed next.

## Absorptive Capacity Constraints

Overall macroeconomic conditions determine how much aid can be spent immediately. For instance, an initially high rate of inflation and low level of foreign reserves may call for a gradual scaling up of spending. In contrast, countries that have reached a mature stage of macroeconomic stabilization are better positioned to use scaled-up aid inflows rapidly (Selassie and others, 2006). Postconflict countries that have not yet stabilized their macroeconomy and have weak institutions may need to save the initial surge in postconflict

aid until their absorptive capacity has improved over the medium term (Gupta and others, 2005). Aid provided in the context of humanitarian relief (for example, food aid) to postconflict countries would need to be spent as soon as their security situation stabilizes.

The ability to absorb aid at the sectoral level may be limited in the short term. The country may not have sufficient teachers or health workers to expand service provision. In this regard, some low-income countries are considering innovative approaches to overcome these supply-side constraints, such as Ethiopia's program to rapidly train and deploy semiskilled workers to address basic health care needs.

Limited capacity to design and administer spending programs effectively can further constrain aid spending. The share of education and health spending devolved to subnational governments is increasing, but the capacity of these governments to implement programs and to ensure that scaled-up resources reach the intended users may be limited. In some sub-Saharan African countries, subnational governments are responsible for about 70 percent of poverty-reducing expenditure (IMF, 2006a, Chapter 5). However, accountability for social and economic outcomes is often weak, and internal controls, auditing, and monitoring and evaluation are hampered by weak accounting, manual procedures, and human capital constraints.

The implication is that some aid may need to be saved in the short term. Studies of recent aid surges in sub-Saharan Africa indicate that many countries saved part of the aid (Aiyar, Berg, and Hussain, 2005; and Foster and Killick, 2006). The remainder of the higher aid flows boosted public savings, which was used in many cases to retire domestic debt. However, there are limits to the scope for saving: donors are reluctant to continually provide aid that is saved, and there are pressures in the recipient country to spend more aid in an effort to improve economic and social outcomes. Furthermore, aid tied to specific projects is difficult to save. Ultimately, the capacity of governments to utilize aid effectively needs to be strengthened over time.

Some aid might be delivered in a regional context. This could be the case for regional institutions, such as the West African Economic and Monetary Union (WAEMU).<sup>6</sup> In this instance, member countries would still channel

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<sup>6</sup>WAEMU is expecting significant resources from international donors, including the World Bank and European Union, to finance its Regional Economic Plan, which foresees investment in infrastructure, human capital, and governance.

aid through their domestic budgetary systems, but they would need to be cognizant of the convergence criteria set in the monetary union.<sup>7</sup>

A preferable approach would be to smooth spending over the medium term. A stable spending path as a share of GDP is viewed as the optimal response to an increase in anticipated resources (Barro and Sala-i-Martin, 1995). An expenditure smoothing approach would imply that spending increases to a new, higher level that is calibrated to be sustainable indefinitely, given the expected value of new aid inflows. This approach would allow for higher spending in the face of natural disasters and national emergencies. Public spending could be front-loaded if there is evidence that (1) the returns to public investment are high;<sup>8</sup> (2) investment is subject to increasing returns, for example, because of “poverty traps” that require a large boost in public spending to overcome multiple, interconnecting barriers to development at once (Azariadis and Stachurski, 2005); or (3) the benefits of government consumption are significantly higher today than in the future, for example, during a famine or health crisis (Box 1). However, both expenditure smoothing and front-loading could entail borrowing from the domestic banking system, which may not be consistent with the government’s macroeconomic and debt sustainability objectives. Poverty reduction strategies that incorporate a front-loaded approach in public spending would be most appropriate if underpinned by front-loaded aid commitments from donors to reduce fiscal risks.

## Spending and Debt Sustainability

The expenditure path chosen should also be consistent with debt sustainability. Higher aid inflows entail broad macroeconomic effects, including on the real exchange rate and interest rates. These, in turn, have consequences for debt sustainability through their effect on domestic interest rates and the exchange rate. For instance, if aid inflows are largely sterilized to prevent Dutch disease effects owing to a real exchange rate appreciation, then domestic interest rates could increase significantly, putting pressure on public debt dynamics. On the other hand, a sudden decline in aid inflows could result in a real depreciation, increasing the burden of the external debt. Moreover, the need to ensure a sustainable public debt path becomes even more essential to the extent that scaled-up aid inflows are provided as loans, even on concessional terms. Sustainability can also be affected by the impact of spending on growth, which is in turn related to its composition and efficiency.

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<sup>7</sup>WAEMU is considering proposals for alternative convergence criteria to accommodate expenditure financed by aid flows.

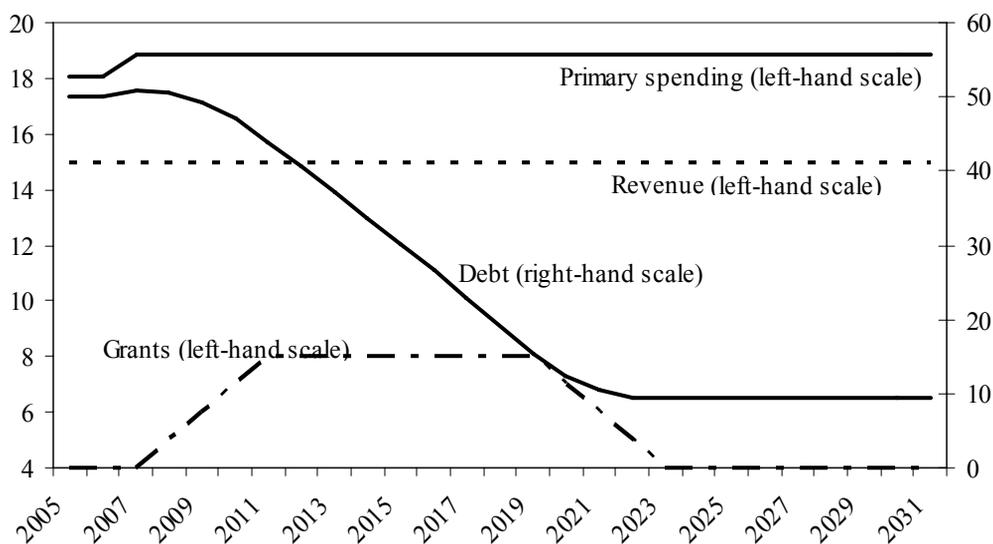
<sup>8</sup>For example, Takizawa, Gardner, and Ueda (2004) find that spending oil wealth up front can be appropriate when the initial capital stock is far below its steady-state level and the return to investment is therefore high.

### Box 1. Choosing an Expenditure Path When the Resource Envelope Is Expanding

A key decision in medium-term fiscal frameworks (MTFFs) relates to the choice of an appropriate spending path. In general, three specific stylized options are available: smoothing, front-loading, and saving.

- The expenditure smoothing approach would imply that governments keep spending fairly stable as a share of GDP. In a scenario of scaled-up aid, the smoothing approach would imply that spending increases to a new, higher level when aid is scaled up. The new spending level is calibrated to be sustainable indefinitely, given the expected present value of the new aid inflows. The figure below presents a stylized case of this approach in which aid jumps to a new, higher level for a few years and diminishes in the long run. Part of the temporary aid surge is spent, but part is saved, reducing debt. Interest savings from lower debt allow stable spending as a share of GDP even after the aid surge diminishes.

The Smoothing Approach  
(In percent of GDP)



Source: IMF staff calculations.

- The front-loaded approach would have spending increase rapidly when aid is scaled up, gradually declining thereafter as a share of GDP, either because spending is reduced in real terms (relative to the smoothing approach) or because real GDP grows faster as a result of increased public investment. Front-loading is most appropriate when absorptive capacity is not a bottleneck, government investment is subject to high or increasing returns, or the benefits of government consumption are significantly higher today than

Box 1 (*concluded*)

in the future, for example, because of a famine or a temporary medical crisis. However, front-loading also entails considerable risks. If future aid flows or the impact of government spending on economic growth turn out to be lower than expected because of poor quality of spending or waste, the approach may lead to unsustainable spending levels that may trigger debt distress or abrupt adjustments, particularly when countries already have high debt.

- The saving approach would imply that most additional aid would initially be saved, with spending rising only gradually while reserves are built up (or debt is reduced). Spending as a share of GDP would then gradually rise over time, eventually stabilizing at an even higher level than under the smoothing approach, because the higher assets (or lower debt) would increase interest income (or lower interest spending). The approach may be appropriate in situations in which macroeconomic stability is yet to be achieved or spending efficiency is low and expected to increase only over time. However, there are limits to the approach. In particular, donors may not be willing to provide aid to build up reserves rather than increase spending for achieving the Millennium Development Goals and other social or economic objectives. Therefore, a pure saving approach can be only a temporary solution while low-income countries' governments strengthen their capacity to spend aid efficiently.

## Spending and Growth

The composition of public spending can influence growth.<sup>9</sup> The higher aid-financed public spending could affect both growth and the sustainability of public debt (see above). Expenditure composition can potentially affect growth, for example, by “crowding in” private investment with increases in public infrastructure spending, but also via other channels that relate to social spending on health and education. The crowding-in effect has been identified using different data sets and approaches in the literature, and reflects complementarities between public infrastructure and private investment.<sup>10</sup> The empirical link between public investment and overall growth is sensitive to the methodology and data used.

For instance, estimates of the response of growth to higher public investment range from no impact at all to an increase of 0.7 percentage point in cross-country econometric studies (IMF, 2005c; and Gupta, Powell, and Yang, 2006). However, these studies might not shed adequate light on the

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<sup>9</sup>For a detailed discussion of these issues, see World Bank (2007b).

<sup>10</sup>Strengthened domestic financial intermediation is also important in this regard to marshal increased private savings into productive investment projects.

short-term impact of higher public investment or capture the potential impact of a substantial scaling up of public investment.<sup>11</sup> The success of higher public investment ultimately depends on introducing effective institutions to channel resources into projects that eliminate growth bottlenecks. The growth effects of education and health spending, which have a long-term impact, are more difficult to estimate. The estimates in the literature suggest that a 1 percent of GDP increase in such spending can have a long-term effect, ranging from 0.5 to 1.0 percent of GDP, provided resources are spent efficiently and fiscal institutions are strong.

Different aid-financed spending programs can have different consequences for growth. Aid flows can be broadly categorized according to whether the associated activities (1) can be reasonably expected to enhance growth over the short to medium term, (2) are focused on long-term growth, and (3) are not directly related to growth.<sup>12</sup> External project assistance for infrastructure can boost growth over the short to medium term, provided that sound capital budgeting procedures to prioritize projects with high rates of return are adopted as described above. Increased public spending to halt environmental degradation, support better governance or judicial systems, and improve health and education outcomes would act indirectly to increase long-run growth through higher labor productivity. On the other hand, spending associated with humanitarian aid sustains consumption following negative shocks. In this manner, the modality for scaling up aid can affect the allocation of public spending, and thereby growth and the sustainability of public debt. However, appropriate caution is required in projecting growth effects of spending in Debt Sustainability Analyses (DSAs),<sup>13</sup> especially in countries where fiscal institutions are weak.

## Spending Efficiency

The relative efficiency of public spending can also affect growth and debt sustainability. Inefficient spending only adds to future debt burdens without a commensurate improvement in social and economic outcomes. Furthermore, improving economic and social outcomes through scaled-up aid requires both spending more and spending more efficiently. In this context, an initial analysis of health and education spending found significant

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<sup>11</sup>Growth studies typically consider the impact of an incremental increase in public investment. See Gupta, Powell, and Yang (2006) for details.

<sup>12</sup>See Clemens, Radelet, and Bhavnani (2004), as well as Gupta, Powell, and Yang (2006).

<sup>13</sup>For a more detailed discussion, see IMF and World Bank (2006).

room for increasing efficiency in many low-income countries (Appendix 2). Three results stand out:<sup>14</sup>

- There is significant variation across countries and regions in the relative efficiency of health and education spending.
- Good governance and the quality of fiscal institutions have a strong positive correlation with the efficiency of spending.<sup>15</sup> Countries with better governance and fiscal institutions have higher relative efficiency scores.
- Volatile aid flows have not generally been passed through into public spending, contributing to relatively stable efficiency scores. This evidence suggests that as long as aid volatility does not translate into higher volatility in spending, the relative efficiency of spending is not affected.

## Expenditure Path and Fiscal Targets

The medium-term spending path should anchor the fiscal framework. Typically, medium-term fiscal planning begins with a target for the fiscal balance that is consistent with a sustainable path of public debt and macroeconomic stability. In this situation, the ceiling on public expenditure is derived residually, given the forecast for domestic revenues and a sustainable fiscal balance. Scaling up of aid increases the available resources, creating a range of spending paths that are consistent with the medium-term fiscal framework (MTFF). Countries should choose a stable medium-term spending path that is consistent with absorptive capacity constraints and debt sustainability.

Annual fiscal balance targets should be consistent with the medium-term expenditure path. The choice of the precise fiscal indicator to be targeted should be decided on a case-by-case basis (see Box 2 for a discussion on fiscal targets in IMF-supported programs). Focus on the overall balance, including external grants, would allow scaled-up aid to pass through into higher public spending without deterioration in the reported fiscal position. However, it is useful to complement this indicator with other measures of

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<sup>14</sup>The results should be interpreted with caution. First, sectoral outputs/outcomes depend on more than just sectoral spending—some factors can only be partially captured through control variables. Second, the focus on quantitative inputs and outputs/outcomes fails to account fully for qualitative factors. And third, in a cross-country analysis, efficiency is measured in relative terms. A country with a better “efficiency score” is only relatively more efficient than others—not necessarily in an absolute sense.

<sup>15</sup>This part of the analysis was limited to health spending because of data limitations.

fiscal sustainability.<sup>16</sup> For instance, the overall balance excluding grants is a key indicator of fiscal policy's effect on aggregate demand. In addition, countries should carefully monitor the debt-stabilizing primary balance to avoid incurring an unsustainable debt burden during the scaling-up process. The domestic balance is another fiscal indicator that is used in several countries to anchor the fiscal framework.<sup>17</sup> However, the domestic balance may be problematic, because scaled-up aid would result in higher domestic spending in priority areas (for example, health and education), which would in turn result in a significant deterioration of the reported domestic balance. This may indicate the extent to which the import component of spending should be increased to facilitate the absorption of scaled-up aid.

Some Poverty Reduction and Growth Facility (PRGF)-supported programs have included ceilings on government wage bills as an instrument to promote macroeconomic stability and to improve the quality of government spending, but their incidence is on the decline. The share of such programs with wage bill ceilings declined from 40 percent during 2003–05 to about 30 percent as of May 2007. Critics have argued that ceilings on the government wage bill have prevented countries from expanding employment in social sectors, even when concessional financing was available, and that this has had adverse implications for meeting the MDGs. However, a recent review indicates that the use of wage bill ceilings reflected valid concerns regarding macroeconomic stability and the need to keep critical nonwage spending, such as for medicine, books, and public investment, in line with budget priorities (Fedelino, Schwartz, and Verhoeven, 2006). Moreover, they provided sufficient flexibility to expand employment in priority sectors when external financing was available. As such, they can be and are regularly adjusted in IMF-supported programs as resource availability and priorities change.

Wage bill ceilings have typically covered the overall government. In no instances have wage bill ceilings been defined for a specific sector, such as education or health. Indeed, in some cases, priority sectors, such as education, have been excluded from the wage bill ceiling (for example, in Benin).

Wage bill ceilings should be used in IMF-supported programs only in exceptional cases. These are a second-best option for controlling wage spending. In particular, their use should be based on the following:

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<sup>16</sup>If grants are volatile and countries smooth expenditures, then the overall balance including grants could be a relatively volatile indicator. In such circumstances, it would be useful to also look at other, more stable, fiscal indicators to monitor short-term fiscal developments.

<sup>17</sup>The domestic balance excludes external grants, foreign interest payments, and externally financed project spending.

### Box 2. Fiscal Targets in IMF-Supported Programs

Fiscal targets in IMF-supported programs have been criticized for preventing faster progress toward achieving the Millennium Development Goals. In particular, some critics contend that IMF-supported programs that include targets on the fiscal deficit excluding grants have prevented countries from increasing spending when grant financing exceeds program assumptions, even though such spending would not add to the debt burden. Moreover, the use of asymmetric adjusters in IMF-supported programs has also been criticized, because they prevent spending from increasing when aid inflows exceed projections by reducing domestic financing to a certain extent, while allowing for only a partial increase in domestic financing when aid inflows are below projections, thereby requiring spending to be reduced.<sup>1</sup>

The evidence from IMF-supported programs is more varied in this regard:

- Often, program design accommodated all programmed aid flows. A recent independent review of IMF-supported programs in sub-Saharan Africa (IEO, 2007) noted that, in countries with low inflation, programs were designed flexibly to spend almost all of the anticipated aid.
- Most programs did not constrain capital spending financed by project-related grants (see table below).<sup>2</sup> However, these programs usually did not allow additional aid to be used for current spending. IMF-supported programs also included a ceiling on net credit to government, sometimes as a complement to the fiscal balance target and sometimes independently. In these programs, the degree to which additional external financing could be spent depended on the design of fiscal adjusters.

<sup>1</sup>Goldsbrough (2006) summarizes the key arguments of the IMF's critics and the IMF's response.

<sup>2</sup>Findings are based on the most recent IMF staff reports for 43 Poverty Reduction and Growth Facility (PRGF)-supported programs approved by the IMF's Executive Board during 2002–06. In 14 out of 22 PRGF arrangements with fiscal balance targets, all foreign-funded investment was excluded from the targets. For seven countries, the targeted balance included grants (and the investments financed by these grants). The various programs used a variety of deficit concepts, and only six included a ceiling on the overall fiscal deficit. Twelve countries targeted the primary balance, and four targeted the basic balance (also called the current balance, that is, excluding capital revenues and expenditures). For a review of how aid has been accommodated in PRGF programs, see IMF (2007a).

- Clear justification. The rationale for wage bill ceilings should be guided by macroeconomic considerations. Program documentation should justify their use in a transparent manner, including their consistency with the MDGs.
- Limited duration. Wage bill ceilings are a temporary device. Governments should tackle the root causes of wage-related fiscal problems, such as the need for civil service reform and strengthened payroll management.

Looking ahead, program design should continue to use fiscal balance targets and adjustors that respond best to country-specific conditions when aid is scaled up. Where macroeconomic conditions permit, fiscal targets should allow maximum flexibility for spending additional aid. Adjustors in IMF-supported programs should be designed to avoid having to cut back priority expenditures in response to aid shortfalls.

Short-Term Fiscal Targets in PRGF Countries <sup>1</sup>

	Fiscal Balance Targets						Other Targets			
	Number of countries	Overall balance	Primary balance	Basic balance	Balance including grants	Balance excluding foreign-financed investment	NCG	NDF	Adjustor <sup>2</sup>	Asymmetric adjustor <sup>3</sup>
Total	43	6	12	4	7	14	21	16	39	20
AFR	25	—	8	3	—	11	13	11	23	13
APD	4	—	1	—	—	1	1	3	4	3
EUR	2	1	—	—	1	—	1	0	2	—
MCD	6	3	1	1	3	2	4	0	5	2
WHD	6	2	2	—	3	—	2	2	5	2

Source: IMF staff reports.

<sup>1</sup>Data are based on the latest staff reports for 43 countries with Poverty Reduction and Growth Facility (PRGF) programs approved in 2002–06, and cover only performance criteria on fiscal balance, net domestic financing (NDF), or net credit to the government (NCG) from the banking sector in program conditions. Countries are grouped according to coverage by IMF departments: AFR=African Department; APD=Asia and Pacific Department; EUR=European Department; MCD=Middle East and Central Asia Department; and WHD=Western Hemisphere Department.

<sup>2</sup>Adjustors exist for excesses and/or shortfalls in external assistance relative to program baselines.

<sup>3</sup>The adjustors for excesses or shortfalls in external assistance differ.

- Sufficient flexibility. Wage bill ceilings should be sufficiently flexible to accommodate spending of scaled-up aid, particularly for sustainable donor-financed employment in priority sectors, such as education and health.
- Periodic reassessments. The need and rationale for wage bill ceilings should be reassessed at the time of program reviews.

It is expected that over time the need for wage bill ceilings will decline further. Although wage bill ceilings may still be needed on occasion, the use of medium-term frameworks (MTFs) and effective budget and payroll

systems will gradually obviate the need for them. Countries, in collaboration with donors, are putting considerable efforts into strengthening such systems.

## Updating Baseline and Alternative Scenarios

The baseline projection should be updated as new information is obtained. The medium-term fiscal policy framework (see Chapter 4) should be informed by the authorities' projections for external aid, domestic revenue, expenditure, and public debt. Small, temporary shortfalls in aid can be smoothed out through additional domestic borrowing or drawing down buffers, but a substantial aid shortfall calls for revising the expenditure path by cutting low-priority outlays. As anticipated aid inflows change, baseline expenditure projections should be updated to ensure that the medium-term expenditure path remains consistent with a sustainable public debt profile.

Countries may want to develop alternative “scaling-up scenarios” to facilitate more ambitious aid inflows compared with baseline expectations. Alternative scaling-up scenarios enable recipient countries to assess the implications of higher recurrent spending and the sustainability of the fiscal framework. They also can help countries identify the policies required to alleviate Dutch disease effects, skills shortages, and other bottlenecks.