The Impact of Cash Budgets on Poverty Reduction in Zambia

A Case Study of the Conflict between
Well-Intentioned Macroeconomic Policy
and Service Delivery to the Poor

Hinh T. Dinh

Abebe Adugna

Bernard Myers

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Abstract

Facing runaway inflation and budget discipline problems in the early 1990s, the Zambian government introduced the so-called *cash budget* in which government domestic spending is limited to domestic revenue, leaving no room for excess spending. Dinh, Adugna, and Myers review Zambia's experience during the past decade, focusing on the impact of the cash budget on poverty reduction.

They conclude that after some initial success in reducing hyperinflation, the cash budget has largely failed to keep inflation at low levels, created a false sense of fiscal security, and distracted policymakers from addressing the fundamental issue of fiscal discipline.

More important, it has had a deeply pernicious effect on the quality of service delivery to the poor. Features inherent to the cash budgeting system facilitated a substantial redirection of resources away from the intended targets, such as agencies and ministries that provide social and economic services. The cash budget also eliminated the predictability of cash releases, making effective planning by line ministries difficult. Going forward, Zambia must adopt measures that over time will restore the commitment to budget discipline and shelter budget execution decisions from the pressures of purely short-term exigencies.

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The Impact of Cash Budgets on Poverty Reduction in Zambia: A Case Study of the Conflict between Well-Intentioned Macroeconomic Policy and Service Delivery to the Poor

Hinh T. Dinh, Abebe Adugna, and Bernard Myers¹

The cash budget in Zambia is a clear example of a well-intentioned macroeconomic policy that has had an adverse impact on poverty outcomes over the years. The cash budget was supposed to bring down inflation, restore fiscal discipline, and contribute to economic growth. Instead, after some initial success in reducing hyperinflation, it has contributed to keeping inflation at high levels, misallocated resources, and exacerbated the inefficiencies and inequity in the delivery of social services. More important, the cash budget has created a false sense of fiscal security and distracted policymakers from addressing the fundamental budget problem, the lack of fiscal discipline. Zambia's long dependency on the cash budget means that any move away from it needs to be gradual and accompanied by measures to address budget discipline.

Section I reviews the rationale for the cash budget, describes the law and the regulations governing the Zambian budget, and describes the working of the cash budget system in practice in Zambia. The macroeconomic effects of the cash budget are

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examined in Section II. Section III details the adverse microeconomic effects of the cash budget, focusing on the reallocation of resources and reduced efficiency of government operations. The effect of cash budgeting on over commitments and arrears is explored in Section IV. Section V highlights the impact of cash budgeting as distinct from poor budget management generally. Section VI looks at cross-country comparisons of the impact of cash budgeting, briefly examining the experience in Tanzania and Uganda. Section VII looks at ways in which the deleterious effects of cash budgeting can be reduced. Conclusions are drawn in Section VIII.

I. THE CASH BUDGET SYSTEM IN ZAMBIA

The cash budget was introduced in Zambia in the early 1990s, against a backdrop of runaway inflation and macroeconomic instability. Repeated attempts at stabilization in the late 1980s having failed, the newly formed Movement for Multiparty Democracy, which came to power in 1991, faced a huge external debt overhang, depleted foreign exchange reserves, and high and accelerating inflation. GDP declined by 2% in 1992, the debt to GDP ratio reached 210 percent of GDP, and foreign exchange reserves fell to less than one week's worth of imports. Inflation averaged 189 percent between 1991 and 1993, and the overall budget deficit (before grants) averaged more than 10 percent of GDP (Annex Table 1).

On the advice of foreign advisors, the cash budget was introduced in late 1993 as a way of reducing the budget deficit and restoring fiscal discipline to a new liberal regime. The rationale was simple: if spending could be kept within the hard constraint of earned revenue, the deficit would be zero and inflation would disappear.

Legal Basis for the Cash Budget

The legal basis for the cash budget is provided by the Financial Regulations and Finance (Control and Management Act, Cap. 600) of the laws of Zambia. The so-called Yellow Book (or approved budget) empowers the Permanent Secretary of the Ministry of Finance and National Planning to "impose a restriction on expenditure under any sub-head or item appearing in the estimates."² Under the cash budget system, this authority was broadly interpreted to mean that the executive arm of government (the Ministry of Finance and National Planning) could decide which activities were to be funded among those initially approved by Parliament. As a result, under the cash budget system, Parliament's approved budget estimates, assented to by the President through the Appropriations Act, no longer formed the basis for actual funding of government operations, providing neither the floor nor the ceiling for government expenditures.

² According to Bolnick (1995), the cash budget was introduced administratively without enactment of new statutes or amendments to the existing ones. He argues that this was appropriate, as Zambia had never had a good record of implementing Acts of Parliament.

Implementation of the Cash Budget

Implementation of the cash budget begins with the Permanent Secretary of the Ministry of Finance and National Planning issuing a letter of instruction to the central bank (the Bank of Zambia) to the effect that funding requests from the Treasury should not be honored and debit transactions not be posted to the Treasury account unless the Treasury has sufficient cash in the bank to cover the expenses. "Cash in the bank" is defined as the net credit balance in the Treasury's "composite position," which includes the consolidated balance in specified accounts. The Treasury is enjoined from borrowing from the Bank of Zambia or running a net overdraft for the year at the Bank, except in a few special circumstances (allowing payment of personal emoluments mid-month, to be repaid before the end of the month, for example). The rules, however, still permit a deficit at any point during the budget year if cash is raised in advance by borrowing from outside the Bank of Zambia (by selling Treasury bills, for example, which would not entail an increase in money circulation and would have no inflationary effect).

Despite extreme budget exigencies caused by the adoption of the cash budget, few major breaches were observed in the beginning, largely because of the strong support from the Cabinet, Parliament, and the public at large (Bolnick 1995). The policy was endorsed by the Cabinet, trumpeted publicly in the 1993 Budget Address, and approved by Parliament as part of the budget program. The new government wanted to demonstrate credibility, which was essential for reviving the economy and sustaining donor support. Announcing the cash budget as a foundation of its stabilization policy created a situation in which the government could not violate the rules without incurring a heavy cost, both economically and politically. The cash budget also provided the Budget Office with a welcome tool for turning down the constant barrage of spending requests. Finally, there was widespread public consensus that the government needed to stop printing money. This consensus—based on the bitter lessons learned from the previous decade of stabilization failures—was reinforced by the fact that in 1993 the economy was on the verge of hyperinflation. It could be argued that the heart of the reform was not so much the changes in the rules but the political commitment to implementing the new rules.

Operation of the Cash Budget in Practice

To implement the cash budget system, a Joint Data Monitoring Committee was created, comprising officials and advisors from the Budget Office and the External Resource Mobilization Department of the Ministry of Finance and National Planning and from the Bank of Zambia. The committee is responsible for daily monitoring of cash budget execution, proper management of reserve money, and overall adherence of macroeconomic policy to program targets. The committee meets daily to scrutinize fiscal and monetary data, analyze near-term prospects, identify substantive problems, discuss alternative solutions, and recommend appropriate remedies. It submits weekly reports to the Minister of Finance, the Governor of the Bank of Zambia, an interministerial technical group on economic policy, and other top officials. In this way, critical issues are promptly reported to the top economic policymakers.

The aggregate amount that can be released each month is the difference between the revenue projection of the Zambia Revenue Authority (called the "revenue profile")

and the monthly surplus necessary to meet the IMF's quarterly Enhanced Structural Adjustment Facility (ESAF) benchmark. The decision on how much each ministry and other budget head can spend each month in each expenditure category is made ad hoc by a small committee within the Ministry of Finance and National Planning, comprising the Permanent Secretary (Budget and Economic Affairs), the Director of the Budget, the Chief and Principal Budget Analysts, the Chief Revenue Analyst, and the Accountant-General (or a representative).

The committee applies a general set of criteria in its decision making. First priority is given to domestic debt service, contingency-set-aside for unexpected revenue shortfalls, and personal emoluments, based on the payroll for the previous month. Servicing of foreign debt is financed overwhelmingly by foreign non-project aid and as such remains largely outside the cash budget process, which deals with the domestic budget.³ Second priority is given to social sector expenditure. Funding of the remaining expenditures—recurrent departmental charges (known as “operations and maintenance” in other countries), grants and other current expenditures, and capital expenditure—is decided last, as a residual, with the small amount of domestically financed capital expenditures usually receiving the lowest priority. In consequence, recurrent departmental charges and capital expenditures for low-priority budget heads often receive no funding during a given month if revenue is particularly low or if new, higher-priority funding requests are introduced that were not included in the Yellow Book.

As the committee progresses in determining cash releases for the month, cash is gradually released and ministries and other budget heads are informed of their monthly resource envelopes. The actual timing of releases varies by type of expenditure. Domestic debt service is strictly paid at the due dates, and cash releases are structured accordingly. Personnel emoluments are generally paid by the middle of the month. However, if at that time there is insufficient cash available in the government's account with the Bank of Zambia, the Budget Office can draw on its interest-free overdraft there, repaying the overdraft at the end of the month.

Cash releases for other expenditure categories are usually determined and executed late in the month, when revenues are at their peak and the risk of an unexpected revenue shortfall is at a minimum. This means that, de facto, cash releases for purposes other than debt service and personnel emoluments are not based on the monthly revenue profile but depend largely on revenue already collected and “in the bank” before the release takes place. It also means that most of the funds released in a given month are spent the following month. The May cash release for recurrent departmental charges to the Ministry of Education, for example, is received by the ministry during the last few days of May and used largely to cover expenditures during June.

³ In 2002, the firewall between the domestic budget and the budget for servicing foreign debt was eliminated.

II. MACROECONOMIC EFFECTS OF THE CASH BUDGET

Initially, the cash budget seemed to have a positive macroeconomic impact. A year after it was introduced, annual inflation fell from 187 to 53 percent (figure 1 and Annex Table 1). The domestic balance dropped from a deficit of about 4 percent of GDP in 1992 to a small surplus in 1995/1996.

Several factors cast doubts on whether the cash budget was truly responsible for these improvements, however. First, at the time the cash budget was introduced, Zambia also adopted a strict stabilization program in order to restore good standing with the IMF. Second, following the initial decline, both the budget deficit and inflation have remained more or less constant. In fact, evidence shows that the overall budget deficit increased because of quasi-fiscal activities and that these activities were hidden by the false sense of security provided by the cash budget. Third, and most important, the cash budget was supposed to have worked on the domestic budget, not on the entire budget, which affects inflation. This turns out to be an important distinction, as explained below.

Until 2002, the cash budget applied to the domestic budget only. If the external budget was not self-financing as assumed because donor balance of payments support fell short of the high external debt service payment, maintaining the cash budget was not sufficient to stabilize the growth of reserve money arising from the claims on the government (because of bridge loans from the central bank). Because of the lack of fiscal flexibility—the ability to temporarily change the fiscal balance, for example—the targeting of the supply of base money through the cash budget made it difficult to offset, even moderately, the balance of payments impact of external shocks and to target or maintain a nominal exchange rate simultaneously. As the recent Public Expenditure Review noted, during adverse external shocks—such as those that occurred in 1995, 1997–98, and 2000 as a result of copper production problems, declines in the price of copper, aid shortfall, oil price shocks, and other factors—the private sector anticipated

devaluation during the run-down of reserves and moved out of domestic assets into foreign assets, exacerbating the effects of the original shocks.

Since 2002, the cash budget has continued to operate, but in a broader scheme where external resources (foreign grants and credits) and debt service payments are included. Preliminary results indicate that the fluctuations in cash releases have worsened as external resources have proved to be much more volatile than domestic revenues.

At this point, we need to clarify the impact of cash budgeting from poor budget management. It could be argued that by and of itself, the cash budgeting system is not responsible for the distortions created. After all, in a crisis situation, cuts are often made, even in countries without cash budgeting systems. So to what degree is the problem worse in Zambia and to what degree it is caused by cash budgeting as opposed to unrealistic budgeting? The point to make here is that the problem in Zambia exists every year, often when the actual overall level of expenditures exceeded the planned amounts, indicating that the problem is not one of shortage of resources relative to what was planned, but rather a reshuffling of priorities within the year, facilitated by the cash budgeting procedures. Of course, this may happen in the absence of a cash budget. But a discretion based system is certainly more liable to ad-hoc requests, especially from the highest authorities. Overspending beyond the voted budget is no more part of a cash budget than of any budget system. But it destroys the *raison d'être* of the cash budget in the first place.

III. MICROECONOMIC EFFECTS OF THE CASH BUDGET

While the program of fiscal adjustment may have had a positive effect on overall fiscal and monetary stability, it had a clearly negative effect on the quality of fiscal management, as became increasingly apparent over time. Budget preparation continued to suffer from unrealistic budgeting, poorly trained staff, and lack of accountability. Facilitated by the mechanics of the cash budget process, these problems led to a marked deterioration in budget discipline. Monthly (even weekly) cash releases determined ad hoc by a small committee in the Ministry of Finance and National Planning very rapidly replaced the formally approved annual budget as the key instrument for determining and controlling the allocation and use of budgetary resources. In the process, the system of laws and rules was replaced by improvisation and muddling through, and transparent spending decisions endorsed by Parliament based on well thought-out long-term priorities were replaced by ad hoc decisions made without publicity, dictated by the needs of the day.

The current cash budget system affects the quality of government operations in three major ways:

- It hampers the efficient use of budgetary resources by creating large fluctuations and great unpredictability in the monthly cash releases to ministries, making it virtually impossible for managers to plan their activities more than a few weeks ahead or to

undertake major tasks, programs, or campaigns at the most appropriate time of the year.

- It results in a suboptimal allocation of resources by encouraging and facilitating the systematic shift in resources from economically and socially relevant ministries to general public administration and from recurrent departmental charges to wages.
- It leads to higher prices charged by government suppliers as a result of growing overcommitments, arrears, and payment delays.

Before we discuss these consequences, we will present evidence on and causes of unpredictability in cash releases.

Evidence of Unpredictable Fluctuations in Cash Releases

The extent and frequency of the fluctuations in cash releases is glaring, as examination of the monthly cash releases for selected expenditure categories received by four ministries (Health, Education, Agriculture, and Works and Supply) in 1998 reveals (Table 1). At the time, two of these ministries, Health and Agriculture, had Sector Investment Programs that required the properly timed release of counterpart funding. The Ministry of Health, for example, required stable and predictable monthly recurrent expenditure funding to plan and implement its primary, clinical, and public health programs.

Table 1. Cash Releases to Selected Ministries for Key Expenditure Categories, 1998 (billions of kwacha)

<i>Month</i>	<i>Ministry of Health</i>			<i>Ministry of Education</i>			<i>Ministry of Agriculture</i>	<i>Ministry of Works and Supply</i>
	<i>Personal emoluments</i>	<i>RDCs</i>	<i>Grants</i>	<i>Personal emoluments</i>	<i>RDCs</i>	<i>Grants</i>	<i>RDCs</i>	<i>Capital expenditures</i>
January	3.1	1.3	4.4	7.3	2.1	2.0	1.6	0
February	2.4	1.2	4.9	7.3	2.0	2.0	1.2	3.1
March	3.8	2.2	3.9	7.3	1.6	2.0	0.6	0.2
April	2.0	2.0	5.2	7.3	4.1	2.1	0.8	5.2
May	2.0	1.1	4.2	7.3	2.4	1.5	2.1	0.2
June	2.0	0	2.0	7.3	0.3	0.7	0	3.7
July	2.0	1.2	9.3	7.5	2.2	1.8	0	5.8
August	2.0	0.9	4.0	7.8	1.5	2.1	0.8	5.1
September	2.0	0.4	3.1	8.8	2.6	1.1	0.5	6.1
October	2.0	4.6	5.0	10.8	3.0	1.8	2.8	9.9
November	2.0	0.7	5.1	7.8	4.8	2.1	2.0	4.4
December	2.0	2.4	7.1	7.8	1.9	3.8	0.3	7.2
Budget ^a	2.0	1.5	4.8	7.9	2.4	1.9	1.0	4.2
Std Dev	0.58	1.21	1.87	1.02	1.18	0.74	0.89	3.02

Note: RDCs: Recurrent Departmental Charges. a. One-twelfth of total original budget appropriation. Standard deviations are relative to the average budget.

Source: Republic of Zambia Financial Report for the Year Ended 31st December 1998.

Personal emoluments and recurrent departmental charges. Monthly cash releases for personal emoluments fluctuated relatively little for the Ministries of Health and Education, with the exception of a sudden decline in April of nearly 50 percent for the Ministry of Health and an unexplained 30 percent jump in October for the Ministry of Education (table 1). Cash releases for recurrent departmental charges, however, fluctuated widely and erratically for the Ministries of Health, Education, and Agriculture. In the most extreme case, the Ministry of Agriculture received virtually no cash releases during June and July. These shortfalls were at least partially compensated for by two to three months of very large cash releases, exceeding 150 percent of original budget appropriations.

Recurrent departmental charges being the “bread and butter” of government operations, it is easy to imagine the havoc these large, erratic, and unpredictable fluctuations create in line ministries and other government agencies. Without a steady and reliable supply of goods and services, it is difficult to run an administration efficiently. The timely and predictable availability of many different inputs is vital for any public administration to produce services reliably and cost-efficiently; sudden interruptions in their supply will inevitably damage service delivery, often with grave consequences. In Zambia, for example, rural health administrators had to interrupt inoculation programs, which they restarted later at much higher costs. Schools had to suddenly stop meal programs. Agricultural extension service agents had to interrupt farm visits at critical times of the year for lack of vehicle spare parts, only to resume at much less opportune times. And the Accountant General’s Office had to postpone long-planned controls of government offices in the hinterland to a much less propitious time for lack of gasoline.

Monthly recurrent departmental charge releases for the government as a whole also fluctuated widely, not only in 1998 but also in 1996 and 1997. Such cash releases fluctuated by more than 50 percent during nearly half of these 36 months. Total monthly cash releases to the Ministry of Education also fluctuated widely during 1996, 1997, and 1998, varying almost as widely as cash releases for recurrent departmental charge alone.

Grants and other payments. For grants and other payments, fluctuations in monthly cash releases have been less pronounced, albeit still substantial. The coefficient of variation reached 0.23 for the Ministry of Education and 0.26 for the Ministry of Health. The affected institutions (universities and hospitals) suffered badly from the delayed receipt of vital funding and complained loudly about it.

Capital expenditures. For the Ministry of Works and Supply, capital expenditures in its Roads Department for road maintenance and rehabilitation constitute by far the most important expenditure item, accounting for well over 90 percent of its total budget. This kind of work needs to be planned more than a few weeks ahead; it is disrupted by abrupt cash release fluctuations, which are also costly.

Cash release fluctuations to this department were among the worst, with a coefficient of variation of 0.55 and monthly cash releases that ranged from zero in January to K9.9 billion in October. These figures do not refer to expenditure commitments that could be expected to fluctuate widely when major new projects come

on stream but to authorizations for actual payments, which should be fairly smooth in tune with the gradual progress in project implementation. These findings are consistent with the account circulating in the Ministry of Finance and National Planning about the road project aborted for lack of funds at a critical junction even though the total amount of cash eventually released would have been sufficient to complete it. According to these accounts, the money was not there when it was needed; when it finally arrived, the project had already died.

Capital expenditures in most other budget heads also fluctuated widely. Since these expenditures are financed largely by foreign aid, however, these fluctuations are less a result of cash budget mechanisms than of the unpredictability of foreign aid.

Causes of Unpredictable Fluctuations in Monthly Cash Releases

The existence of large and unpredictable fluctuations in monthly cash releases is indisputable. The underlying causes are less obvious. Are the fluctuations the result of fluctuations in revenues, or are other factors at work?

Fluctuations in revenues. Given the close link between monthly government revenues and monthly cash releases established by the cash budget system, one would expect cash release fluctuations to be caused primarily by fluctuations in revenue. However, Government revenues actually fluctuated less than cash releases, particularly for recurrent departmental charges.

Revenue fluctuations were also more predictable than fluctuations in cash releases. These fluctuations followed a clear seasonal trend, remaining low during the first quarter (in all four years February showed the lowest revenue collection of the year), rising during the next three quarters, and peaking in December (in three of the four years, revenue collection was highest in December) (figure 2).

Fiscal statistics also indicate that the government has been very successful in projecting

Figure 2. Quarterly Revenue and Expenditure in Zambia, 1995–98

annual revenues at the time the budget is prepared. During 1995–97, actual revenues slightly exceeded budget projections; in 1998 the actual shortfall was less than 0.5 percent. Even if the outcome for 1999 is not as striking, this is an impressive track record (figure 3).

During 1995–98 mean monthly revenues were K74.5 billion and mean expenditures were

K66.7 billion. The correlation between monthly revenues and expenditure was about 67.6 percent (figure 4).

Many economic time series based on monthly or quarterly data, such as revenue and expenditure, exhibit seasonal patterns. A test for seasonality in the revenue and expenditure data was therefore carried out to remove the seasonal factor and concentrate

Figure 4. Monthly Revenue and Expenditure in Zambia, 1995–98

on the other components, particularly the trend. To investigate seasonality in the data, we use one of the simplest methods—the dummy variable approach. If seasonality is present

in the data, we would expect the estimated coefficients on the dummy variables to be statistically significant. The base quarter against which possible seasonality in other quarters is compared is the first quarter (sometimes known as the omitted dummy).

To investigate seasonality in the monthly data, we run the following regression:

$$EXP_t = \alpha_0 + \alpha_1 REV_t + \alpha_3 D_{2t} + \alpha_4 D_{3t} + \alpha_5 D_{4t} + \dots + \alpha_{13} D_{12t} + u_t$$

where EXP_t = expenditure in period t , REV_t = revenue in period t , and

$D_{it} = 1$ for it h month

= 0 otherwise

The base month for the dummy variables is January. We do not detect any seasonality in the monthly revenue data: none of the dummy variables that capture monthly variations in revenue is statistically significant. Since there is no evidence for seasonality in Zambia's monthly domestic revenue, the regression could be rerun without the dummy variables:

$$EXP_t = 24.10 + 0.57 REV_t$$

(3.39) (6.22)

$$R^2 = 0.46 \qquad Adj. R^2 = 0.44$$

The following points should be noted. First, an increase in revenue by 1 Kwacha leads to an increase in expenditure by 0.57 Kwacha. This is lower by 0.20 Kwacha for every quarterly Kwacha earned. Second, only 44 percent of monthly variations in expenditures are explained by variations in revenue—much less than the 89 percent for the quarterly data.

As the regression equation shows, the aggregate budget envelope does not hold well on a monthly basis (in the sense that the proportion of variation in expenditure explained by variation in revenue is not close to one). Indeed, less than half the variation in monthly expenditure is explained by variations in revenue on a monthly basis. In other words, the implication that variations in expenditure should be fully matched by variations in revenue does not hold for Zambia on a monthly basis. The cash budget system is characterized by large fluctuations and a high level of unpredictability in the monthly release of resources to line ministries than what could be explained by revenue variations.

Clearly, factors other than monthly revenues must have had a major bearing on monthly cash releases.⁴ Three key factors which account for these fluctuations are the quarterly ESAF target, ad hoc allocations to particular budget heads, and shortshifting of “low priority” budget heads. In fact, these other factors were so dominant that in more than half the months over the period 1995-1998 (55 percent), they more than offset revenue fluctuations, causing expenditures and revenues to move in opposite directions. Taking account of the time lag only slightly reduced the frequency of this “perverse” behavior to 48 percent, still a very high share.

Need to meet quarterly targets. Zambia’s budget must reach the quarterly targets on net bank claims on the government and on the domestic budget balance of the government, as agreed with the IMF under various ESAFs. This requirement has caused a clearly recognizable pattern in monthly expenditures, characterized by relatively high expenditures during the first two months of each quarter—often exceeding revenues—followed by sharp cutbacks in the last months, in order to achieve the budget surplus necessary to meet the IMF targets.

A typical case was the first quarter of 1998: expenditures were high in January and February, exceeding revenues in both months and resulting in an accumulated deficit of more than K7 bill (more than 4 percent of revenues) at the end of February. In March expenditures were cut sharply by more than 16 percent, producing a surplus of nearly K14 billion for the month, wiping out the deficit, and creating an overall surplus for the quarter of nearly K7 billion.

When personnel is excluded, the cutbacks for line ministries become even more apparent. For the government as a whole, recurrent departmental charges were cut by a third, with charges for the Ministry of Agriculture cut by half. The cash release for road maintenance and rehabilitation in the Ministry of Works and Supply was cut by nearly 95 percent. The IMF targets were thus met but at a huge cost to some line ministries. The problem, of course, was not with the targets per se, but rather MFNP’s lack of a disciplined approach to achieving them.

The events in the first quarter of 1998 were not unusual. Similar scenarios took place in the second quarter of 1995, the first and last quarter of 1996, and the first and second quarters of 1997. The “ESAF trough” was particularly pronounced during the first three quarters of every year and somewhat less in the fourth quarter, when exceptionally high December revenues (in three of the four years, December revenues were the highest of the year) made it possible to maintain relatively high expenditures and achieve IMF targets at the same time. During 1995–98, in two-thirds of the first three quarters, the last month of the quarter had the lowest level of expenditures (including payment of arrears), in many cases by far the lowest level. In 8 percent of the

⁴ Even if for purposes of the above analyses expenditures would include the payment of arrears, the results would not improve: 49 percent of monthly variations would be categorized as large, and 45 percent of monthly correlations would be perverse based on a time-lag analysis.

months it shared that position with another month; only 25 percent of the time was there another month with lower expenditures.⁵

The disruptive impact of the ESAF trough was tempered somewhat by its predictability; indeed, it should not have taken long for an experienced public administrator to realize that it was not a good idea to plan a major program or campaign in March, June, or September, as the risks of the necessary cash release not coming forward were very high. But what if for technical reasons March, June, or September happened to be the best time to undertake a program or campaign? Work may have been shifted to a less than optimal time, resulting in a loss of efficiency in the form of higher costs, lower quality and relevance of the planned work, or both. The current cash budget system indeed raises the danger of work being undertaken not when it should be but when money becomes available.

Alternatively, work may still have been undertaken at the optimal time (funded by overcommitments), in the hope that the needed cash release would be forthcoming during one of the following months. As discussed below, this practice results in widespread arrears throughout the administration. A cash budget system that smoothed out systematic fluctuations in cash releases within each quarter would go a long way toward solving this problem.

Ad hoc allocations to particular budget heads. While the budget discipline imposed by ESAF on a quarterly basis explains much of the frequent, sharp cuts in cash releases in March, April, and September, it does not explain the exceptionally high cash releases often observed during the first two months of each quarter that necessitate these sharp corrections. If the cash budget rules were strictly applied, these excessive cash releases would not occur.

Lack of detailed information makes it difficult to fully explain this phenomenon. Ample evidence suggests, however, that the problem is caused by increases in monthly cash releases to particular budget heads, submitted to and accepted ad hoc by the cash release committee, often in complete disregard of original budget estimates.

The root cause of the practice is the virtual collapse of budget discipline and transparency following introduction of the cash budget system. Adoption of that system led to the nearly complete demise of the annual budget as the determinant of government expenditures and guardian of financial discipline and its replacement by monthly cash releases determined largely on an ad hoc basis with a minimum of transparency.

During the first two months of the quarter, these ad hoc increases are often simply added to the regular stream of cash releases, explaining the frequent overshooting of expenditure targets during this period. During the last month of the quarter, with ESAF targets looming, these additions have to be compensated for by massive cuts elsewhere.

⁵ This significant intraquarterly seasonality was confirmed by a two tailed *t*-test run by Stasavage and Mayo (1999).

The result is sharp fluctuations in cash releases to individual budget heads and even greater fluctuations in particular expenditure categories within individual budget heads. Cash releases to individual budget heads fluctuate far more than cash releases to the government as a whole, which rarely vary by more than 30 percent from month to month and, of course, are never cut to zero.

Monthly cash releases for capital expenditures by the Ministry of Works and Supply in 1998 fluctuated by more than 30 percent in four-fifths of the months between 1995-98. At the Ministry of Health, cash releases for recurrent departmental charges fluctuated at least 30 percent in three-quarters of the months; at the Ministries of Agriculture and Education, these releases fluctuated at least 30 percent in 16 of the 48 months. Together the four ministries experienced four months of zero cash release in one expenditure category or another.

Under the cash budget system, significant increases in the monthly cash release to a particular budget head must be compensated for by corresponding decreases in cash releases to other budget heads, either immediately or at the latest during the third month of the quarter, when ESAF targets have to be met. The result is large and unpredictable swings in monthly cash releases to individual budget heads.

Shortshifting of “low-priority” budget heads. A third important factor explaining the sharp monthly fluctuations in cash releases is the differences in priority assigned to different expenditure categories. Statistical analysis of the four most important discretionary expenditure categories shows a coefficient variation of 0.29 for personnel emoluments, very close to that for expenditures as a whole (0.26). The coefficient variation increases to 0.37 for grants, 0.48 for recurrent departmental charges, and 0.73 for capital expenditures .

Once the fiscal discipline imposed by the budget was abandoned, the floodgates opened for requests for urgent increases in cash releases. Most of these requests were motivated by short-term political considerations and immediate needs, rather than vital long-term needs.

Discretionary expenditures classified as first priority (personal emoluments) are little affected by the floodgate phenomenon, as they usually have first claim on available resources, even ahead of the new, ad hoc requests. Non-discretionary expenditures, such as domestic debt service, are even less affected.

Second-priority budget heads (social services) suffer more, while budget heads and expenditure categories classified as lowest priority suffer most. These budget heads are fully exposed to the floodgate phenomenon and usually range well behind the powerful and politically well-connected budget heads receiving urgent, ad hoc cash releases over and above their budget estimates. As the “receivers of last resort,” these budget heads suffer badly even from relatively minor fluctuations in government monthly revenues. This shortshifting of third-priority budget heads explains the severe fluctuations in recurrent departmental charges in the Ministry of Agriculture and in capital expenditures in the Ministry of Works and Supply.

Impact on Service Delivery and Poverty Reduction

Reallocation of Government Resources. The replacement of the voted budget by the monthly cash rationing system as the main determinant of government expenditures triggered substantial reallocations of resources during budget implementation. Some reallocations of budgetary appropriations are common in most countries as the year progresses and situations change. In Zambia, however, these reallocations are unusually large and regularly benefit certain spending categories over others. Comparison of original budget estimates with actual, audited expenditures for 1997 reveals massive and systematic changes in expenditure priorities during the year (table 2).

In general, these changes are away from ministries and other budget heads that deal directly with economic and social matters toward general public services (such as defense, police, and home affairs), away from recurrent departmental charges and grants toward personal emoluments. This change in focus was reinforced by sharp cuts in capital expenditures financed by domestic resources.⁶ As a result, actual public expenditures turned out to be substantially less oriented toward development than the budget enacted at the beginning of the year, ignoring vital long-term actions, such as stimulating economic diversification, in favor of dealing with more immediate, but much less vital, issues.

The changes in budget priorities had nothing to do with lack of resources. In fact, government revenue estimates, as presented in the budget, turned out to be remarkably accurate. In consequence, total cash releases for the year 1997 came very close to total original budget estimates, with total actual domestic expenditures (recurrent and capital) ending up just 8 percent below total original budget appropriations.

The following analysis focuses on two aspects of resource reallocation: reallocations across groups of ministries and reallocations across expenditure categories within groups of ministries. Such a cross-analysis is a novelty for Zambia, where regular fiscal statistics do not lend themselves easily to this kind of assessment. The budget heads have been divided into three groups: general public services (ministries such as State House, Defense, Police, and Judiciary); economic services (ministries such as Energy/Water, Agriculture, and Works and Supply); and social services (ministries such as Education and Health).

⁶ Most capital expenditures in Zambia are financed by foreign aid and not channeled through the budget. They are excluded from this analysis.

Table 2. Differences between Budgeted and Actual Expenditures, Excluding Foreign Project Aid, 1997

<i>Item</i>	<i>General public services</i>	<i>Economic services</i>	<i>Social services</i>	<i>Total</i>
Original budget (billions of kwacha)				
<i>Recurrent expenditures</i>				
Wages	162.0	28.1	79.0	269.1
Recurrent departmental charges	79.4	57.0	40.7	177.1
Grants	55.6	18.6	79.8	154.0
Total current expenditures	297.0	103.7	199.5	600.2
<i>Capital expenditures</i>				
Movable assets	6.8	19.1	0.7	26.6
Projects	10.6	62.0	24.2	96.8
Total capital expenditure	17.4	81.1	24.9	123.4
Grand total	314.4	184.8	224.4	1,130.3
Actual expenditures (billions of kwacha)				
<i>Recurrent expenditures</i>				
Wages	182.1	29.7	134.7	346.5
Recurrent departmental charge	140.1	36.7	38.9	215.7
Grants	65.4	9.9	74.8	150.1
Total current expenditures	387.6	76.3	248.4	712.3
<i>Capital expenditures</i>				
Movable assets	6.0	17.9	0.3	24.2
Projects	10.2	32.1	5.4	47.7
Total capital expenditures	16.2	50.0	5.7	71.9
Grand total	403.8	126.3	254.1	784.2
Deviation (actual expenditures as percentage of original budget)				
<i>Recurrent expenditures</i>				
Wages	112	106	170	129
Recurrent departmental charges	177	64	96	123
Grants	118	53	94	97
Total current expenditures	131	74	125	119
<i>Capital expenditures</i>				
Movable assets	88	94	36	91
Projects	96	52	22	49
Total capital expenditures	93	62	23	55

Note: Grand total figures include "other expenditures", which in turn include miscellaneous expenditure, debt service and contingencies.

Source: Republic of Zambia Financial Report for the Year Ended 31st December 1997.

Reallocations across Groups of Ministries. The analysis reveals a strikingly clear picture: general public services as a whole were allowed to overspend their budget estimates by 28 percent, while economic services saw their spending cut by nearly one

third below budget. In order to comply with agreements with the World Bank, social service ministries overspent their budgets by 13 percent. As a result, the share of general public services in total expenditures increased substantially, from 34 percent of budgeted spending to 50 percent of actual spending. Spending on social services rose from 25 to 31 percent. In contrast, spending on economic services declined from 20 percent to 16 percent⁷.

As development issues, by their very nature, are always long term and rarely of immediate urgency, they usually lose out in the daily battle for funds once budget priorities are no longer respected. It is indeed difficult to argue convincingly that rehabilitation of a rural access road cannot possibly be postponed another month so that the funds can be used to cover the travel costs of an important diplomatic delegation abroad. In the kind of ad hoc budget implementation system practiced in Zambia today, there is a danger that the rural road in question will never be rehabilitated because the funds are instead used to cover “urgent” needs—items not included in the original budget estimates.

The result is that immediate funding needs are satisfied, while the country’s long-term development is jeopardized. In a country in urgent need of diversifying its economy beyond mining, deep cuts in funding for agriculture, tourism, and manufacturing industries, may seem incomprehensible—and certainly not in the longer-term interests of development. But such shifts in spending have become a seemingly inevitable outcome of a process in which ad hoc requests from more powerful ministries tend to take precedence.

A well-known procedure used by some powerful line ministries to avoid the negative impact of cash budgeting is to budget for lower-priority expenditures in the original budget (the Yellow Book), later in the year requesting supplementary estimates for high-priority spending that the cash release committee would find difficult to turn down. In this way, regularly allocated cash is used for lower-priority purposes, while high-priority expenditures are financed through ad hoc special requests that result in reduced cash releases to some other budget head.

From the point of view of economic and social development, it would be of little concern, if the shifting of resources were limited to reallocations within each group (that is, an urgent funding request by a general public service ministry, such as the Ministry of Home Affairs, would be accommodated by cutting the cash release of another general service ministry, such as the Ministry of Legal Affairs, for instance). The problem is that economically and socially important ministries are systematically discriminated against in favor of general public services.

⁷ For details, see Dinh et al. (2000).

Reallocations across Categories within Groups of Ministries. Reallocation of budget priorities affected not only the distribution of budgetary resources among ministries. Of equal importance was the shift in priorities among different categories of expenditures—more precisely, the systematic shift in priorities among different expenditure categories within certain groups of ministries.

Recurrent departmental charges. At first sight, Table 2 suggests that during implementation of the 1997 budget, personal emoluments and recurrent departmental charges received nearly equal priority, with both expenditure categories overspending their budgets by similar magnitudes. A closer look, however, reveals major differences. Overspending on personal emoluments was a widespread phenomenon—resulting from the unplanned and unforeseen 40 percent wage increase during the course of the year—that benefited all three groups of public services. In all three, the majority of important budget heads (that is, the 14 ministries with expenditures of K9 billion or more) overspent on wages and salaries. In contrast, overspending on recurrent departmental charges was limited largely to general public services: seven out of the nine important ministries were allowed to overspend, and the group as a whole overspent by a staggering 77 percent. At the same time, the important economic ministries saw their cash releases for recurrent departmental charges cut by 30–46 percent below budget. Among social services, the Ministry of Health received a slight increase (5 percent), but spending by the Ministry of Education was more than 16 percent below budget.

Clearly, original budget estimates were largely and systematically ignored when determining the monthly cash releases for recurrent departmental charges. Nearly half of such cash releases differed from the original budget estimate by more than 30 percent (on average by 132 percent); only about one-fifth were within 10 percent of the original budget.

One unfortunate result of this reallocation of recurrent departmental charges among groups of ministries was a significant deterioration in the relation between wages/salaries and materials/supplies for the economically and socially important ministries. At the time the budget was put together, it was felt that, to operate efficiently, economic services should be allocated about K2 of recurrent departmental charge for every K1 of personal emoluments. As a result of the massive budget cuts for recurrent departmental charges to these ministries during the course of the budget year, this ratio declined to just 1.2:1. For social services, the ratio declined in about the same proportion. Except in the unlikely case that these ratios had been badly overestimated during the budget process, such serious cuts could not but hamper the activities of these two groups of ministries, which are of key importance to the country's long-term economic and social development. These cuts explain the shortage of drugs in rural health clinics and major hospitals, the lack of funds for school meals, the small number of Accountant Generals' Office staff in the provinces, and the decline in the number of agricultural extension service agents visiting farms.⁸ Public services cannot function

⁸ Actual wage and salary payments by the Ministry of Agriculture were 43 percent above budget, while actual spending on recurrent departmental charges was 46 percent below budget.

properly and efficiently and provide the services they were set up to provide without a guaranteed minimum supply of goods and services.

From an economic and social point of view, the main concern is not the sharp increase in spending on recurrent departmental charges by several general public service departments. The key issue is where the money came from. Total actual recurrent departmental charges by general public services were K61 billion over budget, not a trivial sum, accounting for 7.5 percent of total discretionary domestic expenditures in 1997. At the same time, recurrent departmental charges for economical and social ministries were cut by K20 billion. Domestically financed capital expenditures for projects in these two groups of ministries were cut by nearly K49 billion. Although there may not be a direct, ironclad link between these two phenomena, this shift of resources is difficult to justify from a long-term development perspective.

Grants. A similar phenomenon has affected grants. For the government as a whole, actual cash releases came very close to the original budget estimate (97 percent). The total figure was the result of two diametrically opposed trends, however: substantial overspending by general public services, compensated for by massive (47 percent) cuts in economic services and minor cuts in social services. Payments to universities and hospitals, by far the largest grant recipients, were largely in line with original budget estimates. Major cuts in grants affected drought relief, small industries development, the tourism board, district councils, and district health boards.

At a time when the economy ought to be diversifying into tourism and small industries, among other sectors, and focusing more on the hinterland (agriculture, tourism), many of these cuts are difficult to justify from a long-term development perspective. While the reshuffling of priorities for grants affected a smaller number of budget heads⁹ than did the changes in recurrent departmental charges, the effect was nevertheless massive, demonstrating the complete disregard of the original budget as the main determinant of expenditure priorities.

Domestically financed capital expenditures. Domestically financed capital expenditures were cut by nearly half in 1997, with cuts of just 9 percent in movable assets (cars, computers) and cuts of 51 percents in investment projects. The way these cuts were made shows that the same phenomenon determining recurrent departmental charges and grants is at work, albeit to a slightly lesser extent. Cash releases to the group of general public services were left largely intact, while social services were cut to the bone, falling 77 percent, and economic services were cut 38 percent. As a result, the relative importance of the three groups changed significantly. In the original budget, general services as a whole were scheduled to receive slightly more than 14 percent of total cash releases for capital expenditures; in the event, they received more than 22 percent. In contrast, the

⁹ For more than 40 percent of the budget heads concerned, actual cash release for grants deviated by less than 10 percent from original estimates, about the same number as those experiencing deviations of more than 30 percent.

Box 1. Impact of the cash budget on service delivery

Example 1: Payment for Civil Works Contract

Due to the cash budget system, many spending departments in Zambia operate under unpredictable and fluctuating cash constraints. In many cases, orders are placed for goods and services and payment vouchers are prepared and kept, often unrecorded, until availability of cash. Once funds become available, a selected number of vouchers are sent for payment, just enough to exhaust the cash. Other vouchers, ready for payment, remain pending for next release of fund.

The above practice has led to: (i) late payment penalties charged by suppliers and incidence on costs; and, (ii) rent seeking opportunity due to lack of transparency in the selection of vouchers for payment. Although the small size of economy and limited market for suppliers can be the reasons for availability of suppliers' credits to the Government, evidence indicates that the latter has an impact on the price and/or quality of goods and services, particularly when the commercial rate of interest is as high as 40%. With respect to the civil works contracts and other competitive based contracts, the late payment charges are added to the invoices; but these charges are implicit in other invoices. A recent examination of invoices in selected government agencies indicates that the late payment interest and other additions resulted in almost 100% increase in the payment for the works done. This has been the case in the road sector, for example. Furthermore, when controls are weak, late payment charges could also be used as means for financing kick-backs by pre-dating invoices (submitting invoice before the work is done). Furthermore, the lack of transparency in the way vouchers are selected for payment has created a rent seeking opportunity. The adverse implications for costs of service delivery and government operations on the ground has been enormous.

Example 2: Purchase of Ndeke House by Ministry of Health

In order to reduce costs, the Ministry of Health decided to acquire a building which would accommodate the Ministry Headquarters and all its departments within Lusaka. In this regard the Ministry identified a building situated along Cairo Road in Lusaka and on 19th January, 1995, the Zambia National Tender Board authorised the Ministry of Health to purchase the building at a cost of K2 billion. However, due to delays in effecting the payment, the building was sold to other interested parties. The Ministry then identified Ndeke House and on 15th November, 1996 entered into an agreement with Liquidators of the former Zambia Airways Corporation for the purchase of the building. According to the agreement, the price of Ndeke House was US \$3,000,000 of which US \$1,500,000 was to be paid on 31st October, 1996 and the balance by 31st December, 1996 failure to which interest at the rate of 10% per annum would be charged on the outstanding balance. The agreement also provided that the Ministry would be entitled to 50% of the rents of the building soon after the first payment of US \$1,500,000.

A scrutiny of records pertaining to the purchase and occupation of Ndeke House revealed the following: (a) Contrary to the terms of the agreement which required that the building be paid for by December, 1996, the payments were only effected between December, 1996 and January, 1998. The funds for purchase of the building came from the District Basket funding of US \$3,061,832; (b) Due to delays in paying the purchase price, amounts of US \$55,208 and US \$16,952 in respect of interest on the outstanding balance of purchase price and loss of exchange earnings were paid for which no loss reports had been raised; (c) No rent had been collected from the tenants of the building and as of May, 1998 a total amount of US \$67,500 at the monthly rate of US \$2,250 was due for the period from December, 1996 to May, 1998; (d) Contrary to the purpose for which the building was purchased, as of May, 1998 only the Central Board of Health was accommodated in the building while the Ministry Headquarters and its Departments were still in rented accommodation. In this regard amounts totalling K245,748,276 paid as rent between December, 1996 and February, 1998 and K61,684,500 arrears which had not been paid are wasteful expenditure for which a loss report should be raised.

Source: Informal World Bank Reports by Iraj Talai and Mushiba Nyamazana; and, Republic of Zambia: Auditor-General's 1997 Report.

share of spending allocated to social services plummeted from more than 20 percent in the budget to a negligible 8 percent. Economic services, which were cut somewhat less than the average, saw their share increase slightly, from 66 to 70 percent.

As a result of these massive cuts in investment projects, the share of domestically financed capital expenditures in total domestic government expenditures fell from nearly 11 percent in the original budget to less than 7 percent during implementation. While this may be regrettable from a long-term development perspective, it is of limited practical significance, given that more than 75 percent of government investments are financed by

foreign donors. As such they are realized outside regular budget procedures and are not recorded in the budget accounts, even though they are included in the original budget.

Reduced Efficiency of Government Operations. The productive efficiency of government operations is severely hampered by the large and highly unpredictable fluctuations in the resources released by the cash budget committee to budget heads every month. It is the combination of the above factors—replacement of the voted budget by the monthly cash rationing system, reallocations across groups of ministries, reallocations across categories within groups of ministries, and above all fluctuation and unpredictability—that makes the system so damaging. If budget cuts could be anticipated, plans could be adjusted accordingly and damage could be limited. But cuts appear to be largely random, making it virtually impossible for ministries to plan their activities more than a few weeks ahead. Over the years, line ministries and other budget heads have devised strategies for surviving in this very hostile environment—some more legal than others, some more costly than others. All of these strategies further undermine budget discipline, making this an inefficient and costly way of running a ministry or any other public administration.

IV. EFFECT OF CASH BUDGETING ON OVERCOMMITMENTS AND ARREARS

The primary justification for the cash budget is improvement in fiscal control, but overcommitment and arrears have continued to be a serious problem in Zambia. Over the past several years, an increasing amount of funding has gone to pay for these arrears. Despite this spending, the stock of arrears does not seem to have declined significantly, as new arrears are created as old arrears are paid off. By detaching cash releases from the implicit spending ceilings in the Yellow Book, cash budgeting created a context in which new arrears were virtually inevitable.

In 1995, K22.2 billion, or 3.7 percent of total domestic budget outlays, was spent on arrears. Since then the amounts have increased annually, reaching K116.8 billion, or 10.3 percent of total domestic budget outlays, in 1998 and K121 billion (8.8 percent of total domestic budget outlays) in 1999. This means that in 1999, nearly 9 percent of budget resources was spent to pay for expenditures made in violation of budget regulations. Other, regular budget expenditures had to be reduced accordingly.

Published fiscal statistics do not indicate who made those overcommitments or for what purpose. The process is not transparent, and there is no way of knowing if the 9 percent of budget resources spent on paying arrears in 1999 was not an additional means of changing budget priorities in the undesirable direction discussed above.

The statistics also fail to reveal whether these overcommitments were overcommitments only with respect to the cash budget (that is, goods were purchased in a given month over and above the cash release but within the original budget estimate) or if even the original budget estimate did not provide for the purchase of these goods. In the second case, the overcommitment has little, if anything, to do with the cash budget,

representing instead an extreme case of lack of budget discipline that ought to be sanctioned rapidly and severely.

Where money is spent in violation of the cash budget release but respecting the original budget estimate, the situation is less clear legally, morally, and financially. In certain circumstances, overcommitments could well be the lesser of two evils, with the main culprit the cash budget system itself. What, after all, is a ministry supposed to do if it receives no allocation for recurrent departmental charges during two consecutive months?

If overcommitments do, in fact, represent funds originally included in the budget, they could be expected to decline significantly once the cash budget process is improved and the sharp, monthly fluctuations in cash releases for recurrent departmental charges have become a thing of the past. As long as this defect in the cash budget system persists, however, some overcommitments will continue to be made. Since overcommitments can provide an important safety net when insufficient cash for a service is provided in a given month—making sure that poor children receive their school meals, for example—it may make sense to tolerate them as long as they respect the limits imposed by the original budget.

V. DISENTANGLING THE IMPACT OF CASH BUDGETING FROM POOR BUDGET MANAGEMENT

A valid question to ask is whether the deviations observed between budget and actual expenditure are really due to the cash budgeting process and not due to more generic problems in budget management. Three important points should be noted in this regard. First, one might argue that a cross-country analysis can shed light on this issue. This is essentially an argument for the counter-factual. Yet it is nearly impossible to find two or more countries with different budget management systems (one with a cash budget and others without) *but the same level of efficiency in budget management* to be able to distinguish the impact on budget outcome arising from the system versus that which results from poor management. The difficulty is compounded by the unlikelihood of being able to control such a comprehensive notion as “efficiency of budget management” in cross-country analysis.

Second, usually the management and implementation aspects of a budget system are inextricably linked, so that the question of separating the two is generally an academic exercise. Indeed, in the case of Zambia, there are inherent features in cash budgeting that directly contribute to a weakening of budget discipline and budget implementation, so that disentangling them becomes very difficult. These characteristics include the following: (1) the fact that the cash budget system replaces rules-based procedures with a discretion-based system. Although the budget would normally provide a framework or set of parameter in which normal cash management occurs, cash budgeting in Zambia gives decision-makers wide latitude to respond to “emergency” needs and to authorize supplemental spending at will. Instead of merely managing the timing of releases, cash budgeting has permitted MFNP to change the overall allocation; (2) transparency in cash release decisions is generally missing. Because decisions are made by a small committee, without clear criteria it has been impossible for line

ministries to know financing may have been cut, and virtually impossible to anticipate future funding levels. This lack of transparency in the decisionmaking process also opens it up to lobbying by individual ministries; and (3) in Zambia the delay in reporting on expenditures compounds the lack of transparency. Furthermore, it reduces the ability to incorporate changes into the next year's budget.

Third, in its simplest sense, a cash budget system implies that the government (or its agencies) cannot spend more than its (their) revenue. A perfect implementation of this system should then result, in the aggregate, in a zero budget deficit for the government. In a perfect cash budgeting world, the problems encountered by the budget system should be limited to those of revenue projection and the difficulty of smoothing-out revenues across periods. Its benefits, on the other hand, should be in eliminating large deficits. In the case of Zambia, while the introduction of the cash budget system has carried with it the known risk of poor revenue projection, which has led to rigidities in cash releases, it has not been able to eliminate or even significantly reduce the public sector deficit. The only accomplishment of cash budget system thus far has been to introduce a false sense of security, thereby to serve as an instrument to postpone hard fiscal choices and reforms. Needless to say, this is yet another example of how a budget system may not only have implications for management, but also for policy choices.

It must be acknowledged that poor budget formulation is also a problem in Zambia and contributes to some of the variances observed between budget and actual expenditure. However, this paper takes as an underlying assumption that the budget approved by Parliament – whether well designed or not – fundamentally represents the public spending priorities of the nation and should be implemented as such. It follows that budget execution procedures should be designed to encourage faithful execution of the budget law, and not undermine it. Yet, the lottery that essentially results from implementation of the cash budget, undermines the credibility of the Yellow Book that would normally come from enforcement of hard budget constraints, and it perpetuates an ineffectual prioritization during budget preparation. In short, the cash budget has facilitated poor budget planning by enabling important decisions to be deferred until budget execution, and beyond the immediate view of Parliament.

Even if some component of social and/or economic sector spending is relatively unproductive, its inclusion in the budget implies that Parliament intended for the program or activity to be carried out – resources levels not being an issue. It is in budget preparation that those programs should be reviewed and national priorities debated, and that by Cabinet and Parliament, but not during budget execution by a small committee of MFNP. Obviously, revenue shortfalls or national emergencies can lead to some shifting in spending priorities during the year. In those circumstances, it is wholly appropriate for Government and Parliament to amend the budget so that the highest priority activities are protected. This is not what occurs with cash budgeting in Zambia.

VI. CROSS-COUNTRY COMPARISONS OF THE IMPACT OF CASH BUDGETING

The negative impact of cash budgeting on poverty reduction is not unique to Zambia. At one time or another, cash budget systems have been used by countries as diverse as Bosnia-Herzegovina, Guinea, Peru, the Russian Federation, Tanzania, and Uganda.

Uganda and Tanzania have budgeting traditions similar to Zambia's (due to the British influence), and both have used a cash release system for years. Their experiences with cash budgeting are instructive and help demonstrate that Zambia is not an isolated case.

The analysis and assessment of the experience in these two countries shows some amazingly close similarities with the situation in Zambia in five key respects

- Introduction of cash budgeting coincided with achievement of some macro-economic stabilization. A major factor was improved expenditure controls as a result of better information and changes in payments systems;
- Implementation of the cash budget had the same damaging side-effects on the efficient use and allocation of government resources; i.e creating large, unpredictable monthly fluctuations in expenditures and a shift in expenditures from socially and economically important ministries to relatively un-productive activities;
- The large monthly fluctuations in cash releases, particularly for RDC, stimulated over-commitments and arrears;
- The extent to which damages caused by the cash budget can be minimized or maximized depends on personal powers of officials in charge of the budget. Because these officials can change, for example, when there is a cabinet shuffle, the effects of the cash budget can also vary from year to year; and
- For different reasons, once the cash budget is adopted, it is likely to stay.

Given these similarities, it is not surprising that many statements in reports dealing with the budget situation in these two countries apply equally well to Zambia. One example may suffice. Overall, in each year, a large share of the original budget did not get implemented – many ministries facing arbitrary cuts – while considerable sums were spent despite not having been part of the original budget. The bulk of the increases between estimates and revised budget are geared towards relatively 'un-productive' expenditures: allowances, travel, transfers, board and legal expenses. The costs of additional unbudgeted expenditures are large. They disrupt the budgeted expenditure

programme, undermine the institution of the budget as a means for allocating public resources and add volatility to aggregate expenditure through the year”¹⁰

The similarities abound, even though the systems in place in the three countries are not exactly the same. The Ugandan system, introduced in 1992, is the most flexible. It is not rule-based, i.e. there is no strict, formal link between monthly revenues and expenditures as in Zambia, and it allows borrowing from the Central Bank within prudent limits. The joint Central Bank/Ministry of Finance Cash Flow Committee meets monthly to discuss and assess the overall financial situation, based on the “cashflow” a set of monthly fiscal tabulations of resources and expenditures taking into account recent and expected revenues. The Central Bank plays an important role in this Committee. However, its recommendations are not binding and the final decision on the next cash release is that of the Ministry of Finance’s (MOF) alone. As could be expected, this increased flexibility resulted in somewhat less monthly fluctuations as experienced in Zambia, but the difference is not striking. While more flexibility also provides more possibilities for abuse, the MOF pursued decidedly restrictive expenditure policies and Central Bank borrowing remained limited. In this endeavor it received strong support from the highest authorities, with the President consistently backing up MOF in disputes with line ministries about additional spending requests.

An important means of controlling expenditures in Uganda is the regulation that individual line ministries can not print their own checks. This is done exclusively by Uganda Computer Services, which is under the administrative control of MOF. Similar to the rules in Zambia in order for payments to be made, line ministries first have to submit a list of payments they plan to make, except that in the Ugandan system that list is sent to MOF rather than the Central Bank. MOF then conducts a pre-audit to verify that the ministry has sufficient funds to cover the expenditure.

The Tanzanian system, introduced in May 1994, strengthened in early 1996, is set up more like the Zambian one with a strict link between cash releases and expenditures. Monthly cash releases are largely determined by the amount of revenues collected during previous months¹¹, thus avoiding the need for any overdraft from the central bank. The main difference is that monthly cash releases are based on three-month moving averages of revenues to smooth-out the monthly flow of cash released to line ministries.

Both systems suffer from large volatilities in monthly cash releases that affect the efficiency of resource use, i.e. the ability of expenditure programs to be delivered in a timely and cost-effective manner. Opinions differ to what extent these volatilities were created by the cash system or reflect more fundamental problems of lacking budget discipline, predating the cash-budget period (see below). Volatility appears to be somewhat less pronounced in Uganda than in Zambia. Like in Zambia, in the Tanzania

¹⁰ “Macroeconomic Management in Uganda” IMF Working Paper by Mark Henstridge, September 1998

¹¹ as is the case, de facto, also for a large part of Zambia’s cash releases.

system different priorities are attached to different expenditure categories for determining monthly cash releases with the highest accorded to debt service, followed by personal emoluments and ending with other charges(OC), including recurrent developmental charges (RDC), transfers and counterpart funds for development projects. As a result, RDCs and capital expenditures bear the brunt of any month to month squeeze and, thus, fluctuate the most. Frequent disruptions in cash allocations for OC disrupt the efficiency of public services in a damaging way. The MOF decides allocations of OC among budget heads with little transparency and predictability and without consultation with the line ministries. Some ministries, however, appear to be particularly successful in securing a high share. Uganda also prioritizes expenditures by category, protecting debt service and personal emoluments from most monthly fluctuations. In addition critical social programs, as decided by the President, also enjoy first priority status.

In both systems heavy re-allocations of expenditures during the course of budget implementation are the rule, leading to skewed and distorted expenditure composition compared to original budget estimates. Monthly cash releases are decided with little attention paid to original budget estimates, constantly overriding the budget as set out in the annual appropriations. Thus, like in Zambia, the annual budgets in Uganda and Tanzania have largely been replaced by the monthly cash release with the same negative consequences. As pointed out in one assessment, too many “irresistible” new expenditure policies (including large salary increases) are approved on an ad hoc basis during the course of the year in ways that seem neither transparent nor consistent with Government’s expressed policy priorities; many for relatively un-productive activities. To compensate, line ministries for which adequate funding is a priority for future growth – such as education and agriculture - have not been authorized to spend the full amount of their original estimates. As a consequence, long-term delivery of public services in the social and economic sectors is affected, levels and standards of public services suffer, and productive efficiency is damaged. Further distortions are introduced by the accumulation of arrears, caused by unauthorized expenditures often in contradiction with long-term government priorities. Again, opinions differ about the extent this phenomenon is the result of the cash budget, has only been facilitated by the cash budget, or is due entirely to pre-existing factors, such as the easy way supplementary budgets are introduced with little concern for set long-term priorities.

In both systems, over-commitments and arrears are serious problems. Arrears are used as a de facto financing mechanism when monthly cash releases prove insufficient. Their emergence are reflections of cash rationing and cash release fluctuations under the present systems. To reduce over-commitments, a regulation was introduced in Uganda in 1997 stipulating that no commitment was valid unless approved by MOF who has to ensure that it can be paid for. In Tanzania, a measure was proposed in 1998 under which prior recording of a commitment with MOF would be a precondition to entertaining a payment claim. To be honored by the Government, all local purchasing orders (LPOs) above a certain threshold would need to be countersigned by an Account Examiner outside the treasury system; these measures to be widely publicized to forewarn private suppliers. The possibility to repay arrears within the same year by reducing the culprits’ monthly cash releases was rejected as it would only exacerbate the budget problem and old arrears would simply be liquidated at the cost of accumulating new ones. However, it was recognized that there is no satisfactory answer to the problem. Within the context of

a cash budget system, where the level of total expenditures is given, any repayment of arrears in a given month or year will reduce the amount of resources available for regular cash releases and, hence, potentially will stimulate the creation of new arrears¹² There simply is no way of repaying arrears without taking money from someone or hurting someone, irrespective of whether the repayment is made in the year the arrears were created or at any later time.

As in Zambia, the introduction of cash budgeting in Uganda and Tanzania coincided with achievement of some macroeconomic stabilization. Although there are minor differences in the way the systems were implemented, their impact on poverty reduction activities was similar. The magnitude of the impact, of course, depends on the quality of the decisionmakers who make the ad hoc decisions, as a common feature of the cash budget is that it gives wide discretion to those who administer it. As noted above, fiscal control benefits—which had been the justification for cash budgeting—were undermined by the fact that arrears were used as a de facto financing mechanism when monthly cash releases proved insufficient.

VII. REDUCING THE HARMFUL EFFECTS OF CASH BUDGETING

Although the macroeconomic crisis that spurred the introduction of the cash budgeting system in Zambia in 1993 has long since subsided, the system remains in place. Fiscal control and accumulation of arrears persist, but Zambia has clearly achieved some stability relative to the period before the cash budget. To some, the continued fragility of the country's economic and financial situation is a prime reason not to replace the cash budget altogether. In addition, they argue, debt burdens remain high and the capacity to design and implement a strategic framework for budget execution is weak. Although these arguments are valid, as the negative effects of cash budgeting become more obvious, it has become increasingly doubtful whether the macroeconomic advantages continue to be worth their price.

By its very nature the cash budget helped encourage a weakening in budget discipline. Decisions debated and approved by Parliament were reopened for consideration by a small committee within the Ministry of Finance and National Planning. As a result, expenditure decisions could be driven by immediate, short-term needs rather than by long-term, strategic considerations. The absence of clear guidelines on how monthly cash releases were to be determined made it difficult for committee members to resist such requests.

Restoring the budget's focus on public service delivery to the poor ultimately requires reestablishing budget discipline. This is a long-term process that starts with introducing a transparent and rule-based cash allocation system based on the budget and reflecting its long-term priorities. Four measures could help achieve this change:

¹² This likely was the case in Zambia in 1998 and 1999 when regular budget expenditures had to be reduced by 9-10 percent because of the need to repay arrears accumulated during earlier years, increasing the temptation to create new arrears (para. 4.47)

- To improve efficiency in the use of government resources, the time period covered by each cash release could be gradually extended from one to three and eventually six months, allowing line ministries to expand their planning horizons. The cash release operation could be split into two separate steps: publication of a cash release plan and execution of the actual release each month according to the plan.
- To improve the allocation of resources, cash releases could be linked much more closely to the budget, replacing the present ad hoc system by a rule-based system that maintains long-term government priorities even when overall expenditures have to be reduced. If the budget itself needs to change to adopt to new circumstances, it should be done in a fully transparent and formal way.
- To make overcommitments less attractive, the Ministry of Finance and National Planning should strictly enforce its mandate to cut back new cash releases to overcommitted budget heads and use these funds to repay the corresponding arrears. Doing so would also reduce any expectation ministries may have about obtaining additional resources through the cash budget.
- To improve the transparency of the system, the Ministry of Finance and National Planning could publish more detailed statistics on quarterly expenditures, linking actual expenditures by ministry (budget head) and major expenditure category to original budget estimates. Doing so would reinforce the commitment to execute the budget as planned.

The key to an improvement of the existing budget management system in Zambia is realistic budgeting and fiscal discipline to execute the budget. In the longer term, the current cash rationing system has to be replaced by a more conventional budget system, based on a strategic policy and expenditure framework in which line ministries are provided with greater responsibility for decisions about the allocation and use of resources. An important objective of this framework is to increase the predictability of both policy and funding, so that ministries can plan ahead and programs can be sustained, while providing line agencies with a hard budget constraint and increased autonomy. Moving to such a system would increase incentives for the efficient and effective use of funds.

There is general agreement that this new system should take the form of a Medium-Term Expenditure Framework. Such a system links government priorities and the budget within a sustainable spending envelope, highlighting the tradeoffs between competing objectives and increasing transparency and predictability during budget implementation. At the line ministry/agency level, this system would link strategy, activities, budget, and progress indicators in a meaningful way. While it is difficult to provide a realistic timetable for introducing the new budget system, through the Bank's support under an existing adjustment credit, Zambia has begun to take concrete steps to do so.

VIII. CONCLUSIONS

As shown here, there can be very real conflicts between the macroeconomic stabilization strategies pursued by a country and the overarching goals of improving service delivery to the poor and reducing poverty. To restore fiscal discipline quickly, Zambia and other countries have adopted a cash rationing system. While the form the system takes may vary from country to country, all cash budgeting systems have inherent features that weaken budget discipline and open up the normal budget process to ad hoc decision making that has nothing to do with the long-term strategic priorities of the government. Moreover, even after some degree of stabilization has taken place, the cash rationing system continues to remain, along with the deleterious practices it introduced.

In Zambia the record clearly and unequivocally shows the deleterious impact of cash rationing on ministries that promote economic growth and social development. As the fiscal statistics show, social services and economic services ministries found their cash releases substantially reduced relative to the amounts in the budget, and cash releases were subject to very significant monthly volatility.

The impact on service delivery is apparent. Under-funding exacerbates an already strong bias toward personnel inputs at the expense of operating goods and services. In addition, work plans that may have been predicated upon a certain level of funding and service delivery are suddenly destabilized. The lack of predictability as to what the new funding level will be makes it extremely difficult for managers to plan appropriate modifications to their service delivery model.

The greatest problem facing line ministries and budget heads is the unpredictable monthly volatility of cash releases. Where cash rationing decisions are made on a monthly basis, line ministries have too short an horizon over which to plan. The shortage of key inputs can force ministries to engage in unproductive activity or to obtain resources on credit, thereby accumulating arrears.

Not only does cash budgeting fail to encourage a focus on poverty reduction and service delivery, it fails to achieve fiscal discipline as well. While actual cash payments are more tightly controlled under the cash budget system, the underlying commitments of the government can easily escape scrutiny. Zambia, like Uganda and Tanzania, has shown that arrears build-up remains a challenge for the government well after the imposition of cash budgeting.

Thus, while the original noble intentions of a cash rationing system is to bring spending in line with resources, in practice, the system fails to achieve both the desired level and composition of public spending because it cannot replace fiscal discipline and because it brings ad-hoc, discretionary policy decisions into the public expenditure management arena. The case of Zambia shows that countries must carefully consider the tools they choose to achieve macroeconomic stabilization, assessing their likely impact on service delivery to the poor. Cash budgeting strategies present a potentially high risk to poverty reduction when the practice encourages decision making that takes place outside of a clear framework of rules that carefully link decisions back to the budget and to long-term development priorities, when decisions are made on an ad hoc basis each

month without an adequate planning horizon for line ministries to respond and adjust, when there are few sanctions on powerful ministries for using overcommitments as leverage to gain funding, and where there is little transparency in the resulting cash release decisions.

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ANNEX TABLE 1

Zambia: Selected Macroeconomic Indicators

	1992	1993	1994	1995	1996	1997	1998	1999	2000
Real GDP Growth, %	-1.7	6.8	-8.6	-2.5	6.6	3.3	-1.9	2.0	3.5
Inflation (end-of-period), %	191.1	143.3	34.2	46.0	35.2	18.6	30.6	20.6	30.1
Inflation (period average), %	191.4	187.1	53.3	34.9	43.1	24.4	24.5	26.8	26.1
Domestic Budget Balance, cash, % of GDP	(4.0)	(4.2)	(1.3)	0.3	1.3	1.1	0.4	0.4	(3.7)
Overall Budget Surplus/(Deficit), cash, % of GDP	(1.7)	(5.6)	(6.8)	(3.8)	(5.4)	(4.1)	(8.0)	(7.7)	(7.8)
GRANTS, % of GDP	10.2	8.0	5.3	5.2	6.1	5.1	6.6	8.1	6.4
Overall Budget Surplus/(Deficit), before grants, cash, % of GDP	(11.9)	(13.6)	(12.2)	(9.0)	(11.5)	(9.2)	(14.6)	(15.7)	(14.2)

Source: World Bank Data Base

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