Are Cash Budgets a Cure for Excess Fiscal Deficits (and at What Cost)?

DAVID STASAVAGE
London School of Economics, UK

and

DAMBISA MOYO *
University of Oxford, Oxford, UK

Summary. — This paper investigates the effect of recent reforms of budgetary institutions in Uganda and Zambia. We argue that cash budgeting has brought clear benefits in terms of improved expenditure control with regard to line ministries. Contrary to what is often suggested, however, adoption of a cash budget has not provided a means for top politicians in either country to “tie their hands” with respect to intervention in fiscal policy decisions. In Uganda improved fiscal policy outcomes have, in fact, been achieved as a result of (and not in spite of) discretionary interventions by top politicians. In Zambia, a strict rule imposing a balanced budget on a monthly basis has proven partially effective, due in no small part to International Monetary Fund (IMF) enforcement, but costly in terms of increased volatility of expenditures. © 2000 Elsevier Science Ltd. All rights reserved.

Key words — cash budgets, political economy, budgetary institutions, credibility, Uganda, Zambia

1. INTRODUCTION

There has been increasing recognition in recent years that in order for governments to make sustained improvements in their fiscal balances, attention needs to be devoted not just to one-off expenditure reductions or tax increases, but also to changing the procedures used for formulating and implementing budgets. Some analysts have proposed institutional reforms which include delegating substantial powers to officials more likely to place a priority on maintaining aggregate fiscal discipline. Others have called for establishing fiscal policy rules in the form of numerical limits on the accumulation of debt and deficits. So far, the literature has largely ignored a recent institutional innovation, the cash budget, which involves increased delegation in fiscal policy and in some cases the creation of fiscal policy rules. An important exception is Collier (1995). This paper asks whether and how cash budgets have contributed to recent reductions in fiscal deficits in Uganda and Zambia. In particular, have they served as a device whereby governments “tie their hands” in order to commit to a sustained reduction in fiscal deficits? The paper also investigates the potential costs of cash budgets involving increased volatility of expenditures, a skewed composition of expenditures, and the marginalization of line ministries within the budget process. The macroeconomics of cash budgeting has already been given substantial consideration in papers by Adam and Bevan (1999) and Bolnick (1997) on Zambia, and by Hens-

* We thank the Department for International Development (UK) for research assistance. We also thank the officials of the Ugandan Ministry of Finance, the Bank of Uganda, and the Zambian Ministry of Finance for facilitating this study. Discussions with Chris Adam and Mark Henstridge were extremely useful, and an anonymous referee provided valuable comments. Ifitikhar Hussain provided excellent research assistance. We alone bear responsibility for any errors made. Final revision accepted: 30 May 2000.
tridge (1997) on Uganda. In this paper, we concentrate on political economy issues, drawing on the literature on the political economy of fiscal policy and on budgetary institutions.

The list of countries which have adopted cash budget systems is diverse, including Peru, Bosnia-Herzegovina, Uganda, Zambia, and Tanzania. While the specifics of these arrangements differ from country to country, they have two general characteristics. First, monitoring of cash disbursements is the main expenditure control mechanism rather than monitoring of commitments entered into by line ministries. Second, there are provisions for planned cash disbursements to be reviewed at regular intervals in order to allow for swift fiscal policy adjustments in response to unexpected shortfalls in tax revenue or donor finance. In some cases, cash budgeting is also accompanied by a rule prohibiting any monetary financing of government deficits. Because their cash budgets have been functioning continuously for the longest time span among the African countries which have adopted this institution, we concentrate on Uganda (1992–97) and on Zambia (1993–97). One key difference which makes a comparison between the Ugandan and Zambian cash budgets particularly interesting is that while Zambia has followed a rule-based system, which prohibits any net borrowing by the Treasury from the Central Bank, Uganda’s cash budget instead delegates authority for Central Bank borrowing to top Ministry of Finance officials.

We argue that cash budgets in both countries have had a positive impact on aggregate fiscal discipline by improving the finance ministry’s capacity for expenditure control with respect to line ministries. In an environment where the capacity to operate a commitments-based budget system is limited, cash budgets provide a low-cost means of monitoring line ministry expenditures and of preventing line ministries from exceeding their allocations. Contrary to what one might think, however, cash budgets in Zambia and Uganda have not provided a means for rulers to “tie their hands,” and thus reduce their own discretion over fiscal policy.

In Uganda, successful operation of the cash budget has, in fact, depended upon continued presidential support. For Zambia, we argue that adoption of a rule prohibiting monetary financing of government deficits has been partially effective, but only in a context of International Monetary Fund (IMF) intervention. Actions by top Zambian politicians have, in fact, on several occasions led to violations of Zambia’s cash budget rule. Subsequent spending cuts to correct for these overruns have generally coincided with periods where IMF government savings targets have needed to be met.

Evidence shows that the costs of cash budgeting can be substantial, but one needs to distinguish carefully between costs which derive from the cash budget itself and those which result from other budgetary practices which pre-date the creation of a cash budget. For example, in terms of expenditure composition, in both Uganda and Zambia under cash budgeting there has been heavy reallocation of expenditures between different ministries. Some ministries have received much more than they were originally budgeted, while others have received substantially less. We present evidence that in both countries this problem pre-dates the implementation of cash budgeting and that it is attributable to the ease with which supplementary expenditure bills are approved. In both countries, the first step to improve this outcome would be to reduce possibilities for the approval of supplementary expenditures.

Another potential cost of cash budgets, as we discuss below, is that they can reduce expenditure efficiency by limiting possibilities for line ministries to provide information about the costs and benefits of different spending programs which fall within their remit. Like the situation with supplementaries, this problem existed in Uganda and Zambia before the adoption of cash budgeting. Cash budgeting may subsequently have exacerbated the tendency for line ministries to be marginalized, but it would in theory be possible to address this issue even within the constraints posed by a cash budget system.

We also consider the costs of cash budgeting in each country in terms of increased volatility of expenditures, showing that under cash budgeting, monthly deviations in expenditure have been significantly higher in Zambia than in Uganda, as one would expect given that Zambia’s cash budget is rule-based.

The remainder of the paper is as follows. Section 2 reviews the literature on political influences on fiscal policy and fiscal policy institutions. It develops the framework we will use to assess the impact of cash budgeting in our two countries. Section 3 then describes the procedures involved in the Zambian and Ugandan cash budget arrangements. The goal here is to present a before and after comparison
of budgetary institutions in our two countries in order to identify the potential impact of cash budgeting. Section 4 considers the effect cash budgeting has had on aggregate fiscal discipline in practice, first surveying developments in terms of aggregate fiscal discipline, and then assessing to what extent these outcomes are attributable to cash budgeting. Section 5 concentrates on the costs of cash budgeting in both countries in terms of increased volatility, a skewed composition of expenditures, and the marginalization of line ministries in the budgeting process. Section 6 concludes the paper.

2. POLITICS AND FISCAL POLICY

There are a number of reasons identified by the political economy literature why governments may pursue fiscal policies that depart substantially from optimal behavior. 3 We review three possibilities here which are particularly pertinent to countries such as Zambia and Uganda. We then discuss how institutions based on rules or delegation might minimize these tendencies.

(a) Political sources of excess fiscal deficits

There are three sources of excess fiscal deficits, as defined in the political economy literature, which are particularly relevant to Uganda and Zambia: (i) commitment problems, (ii) common pool problems, and (iii) problems of expenditure control.

—Commitment problems involve the incentive for a current government to spend excessively when it perceives that it may have a short tenure in office. 4 Commitment problems can also involve the incentive for a government to sway voters before elections through temporarily increased spending. 5 Rulers will logically have the greatest ability to engage in this sort of behavior in countries when political institutions tend to give a single party majority the authority to set fiscal policy.

—Common pool problems can exist in cases where the costs of public spending programs are funded through general taxation, but their benefits are concentrated on specific electoral districts or interest groups. Individual representatives in parliament have incentives to bid for greater spending for their constituents, and to the extent that members of parliament have a tendency to make reciprocal deals agreeing to approve each others bids, this can lead to general overspending (Weingast, Shepsle, & Johnsen, 1981). Common pool problems can also exist between different ministries (von Hagen & Harden, 1996; Hallerberg & von Hagen, 1997). 6

—Problems of expenditure control, as emphasized in the literature on public administration, involve a tendency whereby, regardless of what budget is agreed on by parliament, finance ministries are incapable of monitoring spending by line ministries and incapable of sanctioning expenditure overruns.

(b) Rules and delegation as solutions to excess deficits

Recent analytical work suggests that problems detailed above can be minimized by delegation of authority or by adoption of policy rules, such as a numerical limit on fiscal deficits. Cash budgeting in Uganda has primarily been delegation-based, while cash budgeting in Zambia has combined delegation with a fiscal policy rule.

Delegation in fiscal policy typically involves giving a finance minister the right to propose overall budget targets, in addition to certain strategic advantages in negotiations with line ministers. 7 This is especially effective in minimizing common pool problems, although it is perhaps less effective in minimizing commitment problems, because these involve incentives faced by the executive, and in most circumstances an executive can decide to overrule a finance ministers spending decision. Delegation can also improve expenditure control by giving the finance ministry authority to see that budgetary accords are respected by line ministries. 8 This assumes, however, that systems for transmitting information about spending from line ministries to the finance ministry are effective.

While delegation can bring benefits in terms of aggregate fiscal discipline, it can also have costs. When not only the size, but also the composition of expenditures is determined purely by central authorities (such as a finance ministry), considerable inefficiencies can result. Ideally, line ministries should provide input into spending decisions, because they are likely to have better information about the costs and benefits of individual expenditure items than
The alternative to delegation of fiscal policy decisions is for politicians to adopt a rule establishing a numerical limit on the accumulation of fiscal deficits and/or debt. In theory, rules have the potential to minimize both common pool problems and commitment problems while they should presumably have less effect on problems of expenditure control. The most common form of such limits is to adopt some form of a balanced budget rule (as is the case in 49 out of the 50 US state governments) or numerical limits on fiscal deficits as is the case for EMU states. It should be noted, however, that these rules define a “balanced budget” in many different ways. Balanced budget rules have the obvious disadvantage of reducing possibilities for states to follow countercyclical fiscal policies, excepting cases where governments succeed in running significant surpluses during “normal” times. In cases where a government has a history of accumulating excessive fiscal deficits, however, one could claim that adopting a rule may be a necessary evil in order to restore fiscal balances.

(c) When are rules and delegation effective?

The idea that rules or delegation will lead to a reduction in fiscal deficits depends crucially upon the idea that once such institutional reforms are decided upon, it is costly to reverse them. Here, we consider what domestic factors might make it costly to reverse institutional reforms. One reason it might prove difficult to reverse rules or delegation is if multiple decision makers with different preferences are required to agree to any such reversal. Keefer and Stasavage (1998) argue that when the number of actors required to reverse a decision to delegate (or to adopt a rule) is greater than the number required to make ordinary policy decisions, then delegation (or a rule) is more likely to have an impact on policy outcomes. For example, fiscal policy might normally be determined by a simple majority of the legislature but changing a fiscal policy rule might require a two-thirds majority. Bohn and Inman (1996) provide support for this hypothesis with regard to US state governments. The proposition can be readily evaluated by asking which politicians can veto standard fiscal policy decisions and which politicians can veto decisions to undo rule or delegation arrangements.

Another reason that budget rules in particular may prove costly to modify involves their informational properties. It might be easier for private sector operators to monitor respect for a balanced budget rule than it would be to monitor whether a discretionary fiscal policy is being set so as to preserve aggregate fiscal discipline. This ensures swifter punishment in the event that a government should renge on its promises. This possibility can be evaluated by examining whether adherence to Zambia’s cash budget rule has in fact been easier for the private sector to monitor than it would be to monitor adherence to optimal fiscal policy in the absence of a rule.

Another possible explanation for the effectiveness of a cash budgeting rule is that it conveys information about a policy maker’s true preferences, or “type,” following the term used in the game theory (Adam & Bevan, 1999). This would be the case if a budget rules necessitates “going overboard” by following fiscal policies which are so conservative that no government which was only mimicking reform policies would adhere to them. We can evaluate this argument about signaling by asking whether adherence to a budget rule in Zambia has involved adherence to a fiscal policy that is stricter than that which would be optimal, if this policy has been announced in a very public manner so as to send a signal, and if parallel policy actions have not contrary signals about a government’s “type.”

3. CASH BUDGETING INSTITUTIONS IN ZAMBIA AND UGANDA

In order to investigate the effect of rules and delegation, one needs to demonstrate in the first instance that commitment problems, common pool problems, or problems of expenditure control existed previous to the decision to delegate or to create a rule. Previous to their adoption of cash budgeting, Uganda and Zambia were already characterized by political and budgetary institutions which minimized common pool problems by delegating significant authority over the formulation of budgets to their ministries of finance. In contrast, they suffered from serious problems of expenditure control due to the inability of ministries of finance to monitor spending by line ministries. Because their political institutions have provided few checks and balances, Uganda and Zambia also had few safeguards against excess
deficits accumulated as a result of commitment problems. One main reason why a commitment problem in fiscal policy may have been present for both governments in recent years is that they have been obliged to campaign for reelection. As argued above, during pre-electoral periods one can expect pressures on governments to spend to be particularly high.

(a) Zambia’s cash budget

Zambia’s government has, since 1993, followed a cash budget based upon a rule that there can be no net monetary financing of government deficits. In late 1992, the permanent secretary of the Ministry of Finance issued a standing order to the Bank of Zambia that funding requests from the Treasury should not be honored unless the Treasury’s composite position on its accounts at the Central Bank was positive. As subsequently applied, it has implied that at the end of each month, Central Bank claims on the Treasury shall not show a net increase on the previous month. In order to comply with the zero monetary financing rule, the Zambian Ministry of Finance has full authority to decide what percentage of budgeted funds will be released each month. It also sets the composition of expenditure since it decides how monthly releases are divided between different ministries and different line items.

Beyond the zero monetary financing rule, the principal change brought about by cash budgeting in Zambia has been the potential for improved expenditure control due to enhanced information flows and a restructured payments system. Before 1993, the finance ministry lacked information regarding cash disbursements to individual line ministries and regarding the extent to which line ministries had entered into commitments beyond the sums they were originally budgeted. Since 1993 the Zambian government has rebuilt systems for providing the Ministry of Finance with information about cash disbursements to line ministries. In order to monitor daily movements of key indicators, such as government tax receipts, reserve money, and cash disbursements to different ministries, a Joint Data Monitoring Committee was created and staffed by officials from the Ministry of Finance and the Central Bank. Bolnick (1997) suggests that this led to a significant improvement in information flows.

Improved possibilities for expenditure control in Zambia have also involved a reformed payments system, although there remain a number of flaws in this area. On the positive side, authorizations by the finance ministry for transfer of funds from the general taxation fund to a line ministry’s account with central authorities are organized by a computer system which makes it difficult to override authorized allocations. On the downside, individual line ministries retain their own bank accounts with commercial banks in Zambia.

(b) Uganda’s cash budget

Uganda’s cash budget system is not rule-based. Instead of establishing a requirement that no deficit can be financed by the Central Bank, the Ugandan government leaves considerable discretion to the finance ministry to adjust monthly spending levels as it deems necessary and to borrow from the central bank. The finance ministry also determines the composition of expenditure by deciding how monthly releases are divided between different ministries and between different line items. As in Zambia, this delegation to the finance ministry is essentially a codification of de facto procedures which existed previous to the creation of the cash budget (Kitabire, 1996).

The major change brought about by the cash budget in Uganda has been improved possibilities for expenditure control thanks to improved transmission of information regarding cash disbursements, and due to changes in the payments system. Before 1992, systems for monitoring cash disbursements and commitments entered into by line ministries had eroded considerably. Under these conditions, the Ministry of Finance often had very little idea where it stood in terms of cash disbursements and commitments entered into by line ministries. The cash budget has helped address monitoring problems through the creation of a Cash Flow Committee composed of Bank of Uganda and Ministry of Finance officials, which meets monthly to monitor key figures such as government tax receipts, growth of reserve money, disbursements to different ministries, and underlying inflation.

Possibilities for expenditure control in Uganda have also been improved through changes in the payments system. The system is archaic in that almost all payments are made by check, but it has the potential to be effective in that individual line ministries cannot print their
own checks. This is the sole privilege of Uganda Computer Services which is under the administrative control of the Ministry of Finance. In order for payments to be made, line ministries send requests to the Ministry of Finance which conducts a pre-audit to verify that the ministry has sufficient funds to cover the expenditure. If the expenditure is cleared, then Uganda Computer Services prints a payment check, and its software will refuse to print a check if doing so will exceed a given ministry’s release for the month.

4. CASH BUDGETS AND AGGREGATE FISCAL POLICY OUTCOMES

Since the adoption of cash budgeting, both Uganda and Zambia have run significantly smaller annual fiscal deficits. To better judge the effect of cash budgeting on commitment problems and on expenditure control we need to look at monthly developments. Monthly data suggest that cash budgeting in Zambia has not been entirely effective in improving fiscal policy outcomes, because the government has, on several occasions, violated its zero monetary financing rule. Each of these violations has been followed by stabilization attempts that involved severe reductions in expenditures. We provide evidence to show that these expenditure reductions have often coincided with months where IMF spending targets need to be met. In Uganda, in contrast, there have been no lapses of fiscal discipline under the cash budget comparable to those which have occurred in Zambia. But, while expenditure control has clearly been aided by the cash budget, there is less evidence that cash budgeting has solved a commitment problem. Rather than serving as a means for Uganda’s President to “tie his hands” with regard to fiscal policy, the effectiveness of the Ugandan cash budget is largely attributable to repeated presidential interventions in favor of prudent fiscal policy.

(a) Macroeconomic developments

As shown in Table 1 and Figure 1, primary fiscal balances, overall fiscal balances, and inflation have shown a consistent improvement in Zambia and Uganda subsequent to their implementing a cash budget. Monthly data show a different picture. Figure 2 presents the primary domestic balance in Zambia for each month during 1994–97. According to Zambia’s zero monetary financing rule, no primary domestic deficit can be financed by increased liabilities to the Central Bank. While overall fiscal policy performance has undoubtedly improved in Zambia since 1993, this rule has in fact been broken on several occasions. In early 1995, the government borrowed from the Central Bank in order to help finance a primary domestic deficit which had appeared due to revenue shortfalls, increases in civil service wages, and higher than anticipated agriculture loans. The government also appears to have increased net borrowing from the Central Bank at several times during 1996. This may have been provoked in part by electoral considerations, as a large domestic deficit appeared in October 1996, one month before presidential and legislative elections. Agricultural loans for this period were higher than anticipated. In addition to the episodes where the zero monetary financing rule has clearly been violated, on other occasions the Zambian government has run sizable primary domestic deficits which have been financed by increased holdings of government securities by commercial banks. This was true of several months during 1994 due to higher than anticipated expenditures on agricultural loans, excess defense spending, and an unbudgeted increase in civil service wages. While noninflationary

| Table 1. Fiscal balances in Zambia and Uganda (%GDP) |
|---------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Uganda                         |                 |                 |                 |                 |                 |                 |                 |
| Primary balance                | −4.0            | −2.4            | −6.7            | −1.2            | −3.1            | −1.6            | −1.0            |
| Overall balance                | −4.7            | −3.5            | −10.2           | −3.1            | −4.2            | −2.7            | −1.8            |
| Zambia                         |                 |                 |                 |                 |                 |                 |                 |
| Primary balance                | −0.5            | 1.5             | 6.1             | 6.8             | 5.4             | 4.6             | 4.0             |
| Overall balance                | −8.3            | −7.2            | −2.5            | −5.6            | −6.8            | −4.6            | −3.8            |

a Source: IMF, Bank of Uganda.
b Overall balances are on an accrual basis, after grants.
and technically not a violation of the cash budget, this development has lead to a major increase in interest expenditures on domestic debt for the Zambian government. The de facto situation that interest payments on government debt are not covered by the zero monetary financing rule appears to be something of a loophole, which has been increasingly exploited. In some cases, domestic debt issues have been used by central authorities to allow purchase of goods and services off-budget (Bolnick, 1997).
Zambia's several lapses in fiscal discipline under the cash budget have invariably been followed by temporary drastic cuts in expenditure and by efforts to improve revenue collection. Nonwage recurrent expenditures and capital expenditures have suffered the largest reductions. Following the deficit month of February 1995, recurrent departmental charges were cut by over 70% in March 1995. Following the November 1996 elections, recurrent department charges were cut by 54%. These cuts helped to lead to substantial monthly surpluses for March 1995 and for December 1996. It is worth noting that the expenditure cuts in both March 1995 and December 1996 occurred during months at the end of which IMF spending targets needed to be met.

Uganda's record with respect to aggregate fiscal policy outcomes has been quite different from Zambia's. Since Uganda does not follow a rule-based cash budget, one cannot draw a sharp distinction whether the system is being adhered to or not being adhered to. Nonetheless, it is noteworthy that there is no evidence of excess government spending in the months preceding the presidential and legislative elections of May and June 1996. While it ran primary domestic deficits during several of these months, the Ugandan government was a net saver with the Bank of Uganda during the period April–June 1996, reducing its net liabilities with the Bank of Uganda by 33 billion shillings. During much of the period considered here the Ugandan government has, in fact, dramatically increased its saving with the Central Bank, in part as an effort to sterilize the effect of a growth in foreign exchange reserves. Between December 1994 and March 1997 the Ugandan government regularly exceeded IMF quarterly targets for the change in net claims of the banking system on government, and it did so by substantial amounts. (See Figure 3.)

Despite improvements in annual fiscal policy performance, in both Zambia and Uganda, it should be noted that this positive result has been accompanied by efforts to circumvent the constraints imposed by cash budgeting. In Zambia, some of these efforts have been made by central ministries, as in one notable case, where a Ministry of Finance department issued treasury bills off-tender in exchange for goods and services (Bolnick, 1997). In both countries, line ministries have used arrears as a de facto financing mechanism. Accumulation of arrears

Figure 3. Monthly overall domestic balances in Uganda. Note: Overall domestic monthly balance = (domestic expenditures – domestic revenues). (Sources: Zambia Ministry of Finance and Uganda Ministry of Finance.)
in each country has been significant but should be kept in proper perspective. In Zambia, there have been increasing accumulations in each year since the cash budget has been introduced (from 0.6% to 1.5% of GDP in 1997). In Uganda, while average annual accumulation of arrears was 0.4% of GDP during 1988–92, and during 1993–96 this average rose to 1.1% per year. The Ugandan government has established a policy of issuing promissory notes as a way of regularizing arrears once discovered, but these have on certain occasions been open to abuse, as on occasion they have been issued to cover new expenditures. Finally, in Zambia line ministries have exploited a loophole in the existing payments system in that they can run overdrafts on commercial bank accounts, and the Zambian Ministry of Finance inevitably winds up assuming responsibility for these debts.

(b) What effect have cash budgets had on aggregate fiscal discipline?

For Uganda, evidence suggests that improved monitoring of cash disbursements has been a key factor behind improvements in aggregate fiscal discipline. Failures in monitoring of cash disbursements were the principal stimulus to Uganda’s adoption of a cash budget in early 1992. This led to the development of improved structures for monitoring disbursements and for regulating payments, as noted in Section 3. By all accounts, these structures have continued to produce regular and accurate statistics, allowing Ministry of Finance officials to make more informed decisions about monthly cash releases.

The fact that the Ugandan Ministry of Finance has been able to take better informed fiscal policy decisions does not explain why in making these decisions it has been able to resist political demands for cash releases which would jeopardize macroeconomic targets. The cash budget arrangement has, in fact, come under periodic criticism by cabinet ministers dissatisfied with the releases granted to their ministries. The most frequently cited reason for the Ministry of Finance’s freedom of decision in this matter involves strong support for fiscal discipline on the part of Uganda’s President. Numerous interviewees among Ministry of Finance officials remarked that when pressured by line ministries for increased disbursements, they often had the option of suggesting that the minister plead his or her case directly with President Museveni, knowing full well that the response would usually be negative. As such, rather than imposing fiscal discipline by tying the president’s hands, Uganda’s cash budget has succeeded thanks to continued presidential support.

Presidential support for disciplined fiscal policies in Uganda has also been clear in other developments. The adoption of a cash budget in mid-1992 occurred simultaneously with several other moves by President Museveni to replace the Minister of Finance and to place blame on top ministry officials for not cutting expenditures adequately in response to shortfalls in donor import support. According to a number of officials interviewed, this sent a strong signal that future policy failures would be sanctioned in a similar manner.

In Zambia, decisions made by top political authorities have had an effect opposite of those in Uganda. Unbudgeted wage increases and increased agricultural loans are examples of expenditure decisions made by top politicians which have placed extra strains on the budget, in some cases, resulting in primary domestic deficits which have been financed by the Central Bank. Top government officials in Zambia have also failed to sanction one notable episode by a finance ministry department to circumvent the cash budget by issuing government securities in exchange for goods and services off-budget. Following discovery of these practices, the officials responsible were initially removed from office but subsequently reinstated.

While decisions taken by top politicians have led to the zero monetary financing rule occasionally being circumvented, each of these episodes has been followed by a swift fiscal adjustment. A key question is what has prompted these adjustments, or in other words, what has led to enforcement of the zero monetary financing rule? It seems unlikely that the domestic sources for enforcement of a rule identified in Section 2 have been operative.

First, it would not take the agreement of a large number of decision makers to override the zero monetary financing rule. The rule was created by an announcement made by the Minister of Finance, and presumably it could be repealed in a similar manner.

Second, while private sector actors have had an improved ability under the cash budget to monitor adherence to sound fiscal policy, information regarding adherence to the cash budget is still very imperfect. In Zambia,
there is considerable room to circumvent the cash budget without this being observed by the private sector, such as in the case where government securities were issued off-tender to fund off-budget expenditures. In other cases, the exceptions in the zero monetary financing rule for import support shortfalls for repayment of government debt have further complicated the task of private sector monitoring.

It is also unlikely that the adoption of a zero monetary financing rule has been sufficient to signal that the government is fully determined to implement reforms. It is true that the cash budget and in particular the zero monetary financing rule was introduced with a great deal of public fanfare in 1993, with parliamentary discussions and debate on television programs. This public signal of the government’s intentions was costly to the extent that zero monetary financing represented a tighter policy than that which would actually be optimal. As a consequence, it may help to explain Zambia’s initial success in dramatically reducing inflation, as private agents adjusted their demand for money balances. Subsequent actions by the Zambian government have, however, sent a very different signal. Unbudgeted wage hikes, unbudgeted retirement packages for civil servants and other spending decisions announced by the President have periodically placed strains on the cash budget. It seems likely then that even if the introduction of the cash budget prompted the Zambian private sector to believe that the government was truly committed to fiscal discipline, subsequent actions would quickly have led to a reassessment of this belief.

Ultimately, the most convincing explanation for the fiscal policy outcomes observed in Zambia may be the simple need to meet IMF government savings targets. In fact, corrective measures taken after the emergency of monthly deficits in Zambia have frequently coincided with months at the end of which IMF targets for the change in net claims of the banking sector on government need to be met. As shown in Figure 4, overall monthly domestic balances have tended to be significantly higher in Zambia in months when quarterly IMF government savings targets are due. Based on a t-test, we can reject the hypothesis that the mean values of overall domestic balances for target months and nontarget months are equal. In contrast, Figure 5 shows that in Uganda there has not been an appreciable difference between overall monthly domestic balances in target and nontarget months. A t-test confirms that in this case, we cannot reject the null hypothesis that the mean values are equal.

5. THE COSTS OF CASH BUDGETING

One of the potential costs of cash budgeting is increased volatility of expenditures. While we
lack data for our two countries on expenditure volatility during the pre-cash budget period, we are able to conclude that rule-based cash budgeting has been associated with substantially higher expenditure volatility in Zambia than in Uganda. Another potential cost of cash budgets can involve distortions in the composition of expenditure. One such distortion present in both Zambia and Uganda has been for certain ministries to receive disbursements far in excess of what they were originally budgeted, while other ministries receive significantly less than originally budgeted. For both countries, we provide evidence to show that while this problem may be exacerbated by cash budgeting, its primary cause has been frequent resort to supplementary spending bills. What’s more, it is a problem that pre-dates cash budgeting. Finally, in both countries, there is evidence that cash budgeting has been accompanied by a marginalization of line ministries with respect to the budget process, contributing to inefficiencies in expenditure. As is the case for supplementaries, however, we suggest that the marginalization of line ministries is a phenomenon which pre-dates the cash budget in both countries, and in theory it should be possible to address this issue even within the constraints of a cash budget.

(a) Excess expenditure volatility

We follow Adam and Bevan (1999) by measuring the monthly volatility of different categories of expenditure in terms of mean absolute deviations. It is clear from Table 2 that since adoption of the cash budget, the volatility of expenditures has been much higher in Zambia than in Uganda. The fact that the Zambian cash budget in theory rules out short-term monetary financing is one obvious explanation for this high volatility. The likely reason

<table>
<thead>
<tr>
<th></th>
<th>Zambia</th>
<th>Uganda</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues (%)</td>
<td>22 17 11 10</td>
<td>9 5 6</td>
</tr>
<tr>
<td>Total expenditures (%)</td>
<td>11 16 18 7</td>
<td>10 9 14</td>
</tr>
<tr>
<td>Wages (%)</td>
<td>25 23 7 9</td>
<td>10 9 3</td>
</tr>
<tr>
<td>Nonwage recurrent (%)</td>
<td>13 22 26 14</td>
<td>15 12 12</td>
</tr>
<tr>
<td>Capital (domestic) (%)</td>
<td>49 43 32 44</td>
<td>19 18 31</td>
</tr>
</tbody>
</table>

\( ^a \) Sources: Uganda Ministry of Finance and Zambia Ministry of Finance.

\( ^b \) Average deviation is the average of the absolute value of the monthly change in levels of spending for a given year.
is that on most occasions the Zambian government has set expenditures close to revenues, and what’s more, monthly levels of revenue are more volatile in Zambia than is the case in Uganda. In addition, discretionary action taken by the Zambian government in the form of rule violations has actually increased this volatility, because periodic violations of the zero monetary financing rule have taken the form of temporary increases in expenditures followed by drastic cuts in spending. As argued above, it seems likely that these drastic spending cuts have been motivated by IMF demands.

(b) Distorted expenditure composition

One way to look at expenditure composition is to compare figures for original budget estimates and actual out-turns by broad type of expenditure: wage, nonwage recurrent, and capital. In Zambia, there has been considerable reallocation in particular from capital expenditures to wage expenditures. This is due to the numerous unbudgeted wage hikes announced by the Zambian government (as referred to above), and to subsequent efforts to make adjustment efforts in order to meet overall fiscal targets. In Uganda, there has been very little deviation between original estimates and actual out-turns.

A second way to view the composition of expenditures involves examining how original budget estimates have compared with actual out-turns by ministry in each country. As can be seen in Figures 6 and 7, there has been a tremendous amount of reallocation of nonwage expenditures between different ministries in

![Figure 6. Estimates vs. out-turns by Ministry in Zambia. (Source: Zambia Ministry of Finance.)](image-url)
both countries. In Zambia, ministries and bureaus associated with the office of the President have, along with the parliament, been the principal agencies to receive budget out-turns significantly in excess of original estimates. While allocations to these offices are a small share of total spending, the effect of the overruns has been to increase pressures for cuts elsewhere. In the case of the four agencies listed here which are part of the office of the President, these overruns accounted for only 1% of total expenditures in Zambia during 1994 and 1995, but this relatively small amount can nevertheless have a significant impact. For example, the overrun by presidential offices in 1994 was roughly equal to the Ministry of Health’s 12% shortfall of 7 billion kwacha.

Interviewees in Zambia suggested that problems of reallocations between ministries predate the cash budget and that their principal cause has been the passage of supplementary spending bills for some ministries, followed by offsetting cuts for other ministries, as decided by the Ministry of Finance. This is supported by the fact that major deviations in nonwage recurrent expenditures occurred in 1992,

Figure 7. Estimates vs. out-turns by ministry in Uganda (nonwage recurrent expenditures, 1995–97). (Source: Uganda Ministry of Finance.)
previous to implementation of the cash budget (as shown in Figure 6). Figures on median deviations by ministry do not show a dramatic difference between the pre- and post-cash budget periods. Under the cash budget the median negative deviation has increased only slightly (from $-22\%$ to $-29\%$), and the size of the median positive deviation has dropped slightly (from $+31\%$ to $+21\%$). Interestingly, the correlation coefficient between a ministry’s rank in terms of out-turn performance (out-turn/estimate) during the pre-cash budget period and the cash budget period is also quite high (0.70). In other words, ministries which were winners in terms of receiving extra allocations after 1993 also tended to be winners in terms of receiving extra allocations before 1993.

Data on deviations between out-turns and estimates by ministry in Uganda show the same pattern seen in Zambia. Figure 7 shows the percentage deviation of actual out-turns from original estimates (for non-wage recurrent expenditures) by ministry over 1995–97. As in Zambia, the State House (part of the office of the President) and the National Assembly have been major sources of spending overruns. Apparently, while Uganda’s President has protected Ministry of Finance officials against pressure from many line ministries, this has not been accompanied by success in minimizing spending overruns in all areas. In contrast, several line ministries for which adequate funding is a priority for future growth have not been authorized to spend the full amount of their original estimate. This includes the Ministries of Education and Agriculture in particular. In 1996, the overrun by the state house alone was only slightly smaller than the combined shortfall in the Ministries of agriculture ($-51\%$) and education ($-29\%$). As is the case for Zambia, one should not be too quick to make the argument that these ministry by ministry deviations are a direct product of the cash budget. While pre-1992 data on original budget estimates and actual out-turns by ministry were not available for Uganda, officials remarked that there was already a major problem with supplementary spending bills previous to 1992.

(c) Marginalization of line ministries in the budget process

For the reasons outlined in Section 2’s description of the common pool problem, line ministries may have an incentive to spend excessively. Campos and Pradhan (1996), however, argue that line ministries are also more likely than central ministries to have accurate information about the potential benefits of different spending programs within their remit. In both Uganda and Zambia, this informational advantage of line ministries has been ignored, as they are instead largely marginalized with respect to the budget process. While marginalization of line ministries is not an inherent feature of cash budgeting (in fact, the same problem arises in some countries without cash budgets), it has been a continuing problem in both Uganda and Zambia, and so we consider it briefly here.

One major reason for this marginalization is that ministries of Finance in both Uganda and Zambia have considerable authority not only to set aggregate spending levels at monthly intervals and the distribution of spending between ministries, but also to determine the distribution of spending between different line items for a ministry. In addition, insufficient information is being solicited from line ministries about the potential benefits of different spending items. In Uganda, by all accounts, pre-budget discussions between line ministries and the Ministry of Finance are very perfunctory in nature. In Zambia, serious attempts were made beginning in 1993 to have line ministries formulate detailed budget proposals which would “go back to basics” and justify individual programs in terms of expected outputs. Due to a perceived lack of responsiveness from the Ministry of Finance, however, Zambian line ministries have in more recent years limited themselves to issuing budget proposals that simply reflect the previous year’s proposal corrected for inflation. In both countries, cabinet ministers representing line ministries also have very little influence on the formulation of the initial budget document.

In both Zambia and Uganda, it would seem possible to allow line ministries more freedom to determine priorities between spending on different line items without necessarily compromising the discipline imposed by the cash budget system. It would also seem possible to improve the quality of consultations between line ministries and the Ministry of Finance during the budget preparation stage.

6. CONCLUSION

Cash budgets can be a partial institutional remedy to excessive fiscal deficits, in particular
by providing improved information about line ministry expenditures and by making this information available both to finance ministries and to external actors such as the IMF. Cash budgeting obviously lacks much of the flexibility allowed in a commitment-based budgeting system, but in a context where the capacity to run a commitment-based system is limited, it may be desirable as a means to achieve improved fiscal policy outcomes. As capacity to run a commitment-based system is improved, one might expect governments to move away gradually from a cash budget, for example, by moving from monthly to quarterly cash releases by ministries of finance. One potential risk of cash budgeting, however, is that governments which adopt this system will fail to take the complementary steps to improve commitments monitoring.

While cash budgeting in Uganda and Zambia has improved flows of information about expenditures, it seems less likely that it has served as a mechanism for rulers to “tie their hands” and thus solve commitment problems in fiscal policy. In Uganda, the opposite seems to be the case as cash budgeting has succeeded in large part because of the active involvement of the President. In Zambia, a strict rule-based cash budget has not succeeded in tying the hands of a government, which has continued to make decisions which have periodically led to violations of the zero monetary financing rule. Adjustments following these violations in Zambia seem attributable as much to IMF pressure to adhere to the zero monetary financing rule as to domestic sources of pressure to adhere to the rule.

Cash budgeting also has clear costs. While we were unable to make before and after comparisons for Uganda and Zambia, existing evidence does establish that expenditure volatility has been much higher in Zambia than in Uganda. Two further potential costs of cash budgeting involve distortions in the composition of expenditures and a marginalization of line ministries within the budget process. We have argued that in both Uganda and Zambia these problems pre-date cash budgeting, and thus solutions to them will have less to do with changes in cash budgeting than with broader reforms in budgetary institutions, such as to restrict possibilities for the approval of supplementary expenditures.

NOTES

1. Another important aspect of cash budgets which we do not consider here is their use as a monetary policy instrument. As described in detail by Henstridge (1997), in contexts where governments lack appropriate indirect monetary policy instruments and where small changes in reserve money can swiftly translate into significant changes in inflation, they can opt to modify levels of monthly cash disbursements (with a knock-on effect on government deposits at the Central Bank) in order to achieve desired reserve money targets.

2. Bolnick (1997) observes “In broad terms, Zambia’s decision to adopt the cash budget exemplifies what Bates calls a ‘surrendering of sovereignty,’” to limit executive discretion.”

3. Optimal behavior would be the tax-smoothing strategy as defined by Barro (1979).

4. This may pose a problem when governments are uncertain about their tenure, even if ex post, they turn out to remain in office over a lengthy period. This scenario is derived from the model constructed by Tabellini and Alesina (1990). Take a situation where there are two groups in a country who favor spending on different public goods (say roads in the South of the country vs. roads in the North). To an extent these groups alternate in control of government, each may accumulate excessive debts in order to finance its preferred good and at the same time limit spending options for its successor. Over time this can lead to excessive accumulation of debt, and the problem will be more severe the more that politics in a country is polarized (groups have divergent preferences over spending), the greater the degree of political instability (the frequency with which governments are replaced), and the greater the extent to which political institutions favor “winner takes all” outcomes where one party controls both executive and legislature.

5. This is a commitment problem for a government seeking to reassure potential investors that it will not engage in excess fiscal expansions prior to future elections.

6. A related possibility is that when multiple actors set policy, stabilization measures will be delayed by disputes over which group should bear the burden of adjustment.
For a coalition government, if a shock occurs, which requires stabilization through either cutting spending or raising taxes, different parties may succumb to a “war of attrition,” where each side vetoes successive stabilization proposals in the hope of seeing its opponents bear most of the burden (Alesina & Drazen, 1991).

7. This is based on the presumption that finance ministers are more likely to have a strong preference for fiscal discipline. Under this system the parliament ultimately retains the authority to accept or reject overall spending proposals, but it has been shown theoretically and empirically that this delegation of “agenda setting” authority increases the likelihood of maintaining aggregate fiscal discipline (von Hagen & Harden, 1996).

8. von Hagen and Harden (1996) show that in the European budgetary systems with the tightest controls (France, Germany, and the United Kingdom), line ministries are required to obtain authorization for all disbursements either from a financial controller or direct from the finance ministry. In these countries, line ministries are also subject to cash limits on their spending, and the finance ministry reserves the right to block expenditure allocations, line item by line item.

9. As surveyed by Bohn and Inman (1996), US state government budget rules have varying degrees of restrictiveness. In addition, even the most restrictive US state budget rules allow expenditure to exceed revenue through issuance of bonds to finance capital projects. See also Poterba (1994).

10. In some US states with balanced budget rules, the rule is inscribed in the state’s constitution, meaning that it would at a minimum require a two-thirds majority to abolish it, while in other cases the rule is merely statutory. Budget rules have proved more durable in states where a rule change requires a constitutional change.

11. Checks and balances could involve a substantial separation of powers between legislature and executive, multiple houses of the legislature, or a tendency to have coalition governments where multiple parties have a de facto veto over policy. In Zambia, one party with a large majority in parliament has controlled fiscal policy decisions. A no-party system technically exists in Uganda, since candidates in legislative elections are officially required not to declare a party affiliation. Nonetheless, such affiliations are publicly known, and for the period considered here the President’s movement has held a majority in parliament.

12. Out of necessity several exceptions have been made. The rule does not apply to the first two weeks of each year since Treasury and line ministry accounts are zeroed at the end of each year, and revenues for each month are normally concentrated toward the end of the month. Second, given frequent delays in disbursement of external assistance by donors, the Central Bank has provided bridging loans to cover for assistance which has been promised but which has not yet been received. Subsequently this bridge loan has also been used to cover more general intra-month irregularities in revenue. Finally, there is a de facto exception for servicing of domestic debt. Since the government has a constitutional obligation of timely repayment in this area, on occasions the government has continued to make interest payments of domestic debt even if this means temporarily running a cash deficit (Bohn, 1997).

13. In addition to this, the Bank of Zambia had stopped publishing regularly audited accounts.

14. In some cases payments are made by directly debiting line ministry accounts at the Bank of Uganda.

15. The primary domestic balance is used because of the provision in the cash budget agreement that the government shall honor all domestic debt payments even on occasions, where this necessitates net financing from the Central Bank.


17. The October 1996 deficit was, however, also attributable to several developments not tied to electoral considerations, such as court-ordered payments to owners of previously nationalized companies.


19. This suggests substantial restraint, even if nonwage recurrent expenditures were slightly above the mean for the year in the month preceding the May 1996 presidential election (27.4 vs. 24.3 billion shillings) and in the month preceding the legislative election of June 1996 (32.2 vs. 24.3 billion shillings).

20. The government missed its IMF target only once during this period, and this seems to have been attributable more to an increase in claims by commercial banks rather than an increase in net claims by the monetary authorities.
21. Data from Ministry of Finance monthly economic reports.

22. Bank of Uganda data.

23. According to Ugandan officials present at the time in December 1991, the Bank of Uganda informed the Ministry of Finance that government spending, financed by advances from the Bank due to a shortfall in donor support, would lead to a dramatic acceleration in inflation unless curtailed. In January, the Ministry of Finance began monitoring its disbursements, but it was unable to reconcile its own records of disbursements with figures from the Bank of Uganda which showed a 50 billion shilling discrepancy. After several weeks it was revealed that a large number of government checks were being printed without the Ministry of Finance being aware.


26. This tendency has not been universal, however, as President Museveni has on occasion supported requests from certain ministries for increased allocations. Interviews in Kampala, April 1998.

27. Interviews in Kampala, April 1998.

28. Consolidated data sheets on government revenues and expenditures have been made increasingly available to private sector representatives on a monthly basis. We thank an anonymous referee for drawing our attention to this fact.


30. The mean value for overall domestic surpluses in target months was 12.8 and −2.5 billion kwacha in nontarget months. Based on a two-tailed t-test assuming unequal variances between the two samples, we reject the hypothesis that the means are equal (no. observations 16 in IMF target subsample, 32 in non-IMF target subsample; t-stat = 4.72; two-tailed p-value ≤ 0.00005). Overall surpluses are used here rather than primary surpluses, because IMF targets do not make an exception for the constitutional obligation of meeting interest payments on domestic debt as was the case *de facto* for Zambia’s zero monetary financing rule (as discussed above). Figures for average primary surpluses show similar trends.

31. No. observations = 15 in IMF target subsample 30 in non-IMF target sample; t-stat = −0.83; two-tailed p-value ≤ 0.42.

32. In other words, violations of the cash budget rule have not been used to smooth out the effect of major revenue shortfalls.

33. Out-turns for wage expenditures were 21% above original estimates, on average, during 1993–96. Capital expenditure outruns fell 46% short of original estimates, on average, over the same period (IMF, 1997).

34. Note, these figures compare out-turns vs. original estimates in nominal terms. Nominal deviations can be due to reallocation of spending between ministries and/or supplementary spending bills, which grant one ministry an increase without making offsetting cuts in other ministries. One source of deviation not captured in these nominal figures involves differences between actual inflation and expected inflation. If ministerial budgets normally are set based on an assumption about the rate of inflation for the coming year, then in cases where actual inflation is higher than expected inflation, a ministry will suffer a shortfall in real terms. While this is not relevant for Uganda in the period considered (since inflation has been in the single digits), it is relevant for Zambia during 1992–93 in particular, when inflation was quite volatile. With this said, a real shortfall due to underestimation of inflation is something which will affect all ministries equally. Given this fact, since our goal is to compare relative allocation between ministries, our nominal figures are still useful for this purpose.

35. These data for Uganda covers only nonwage recurrent expenditures, and thus we may overlook disparities due to reallocations of capital expenditures.

36. Unfortunately, data on estimates and out-turns by ministry were not publicly available for the period before 1995. The fact that out-turns for the Ministry of Finance were so far below estimates may be due to a practice in many countries of hiding contingency allowances as part of the Ministry of Finance budget.

37. The principal line items responsible for this overrun in the state house were travel, vehicles, and contributions to local organizations.

38. Interviews in Kampala, April 1998.

39. The blame for this state of affairs seems to lie with both sides since Finance may have an excessive tendency not to consult line ministries before preparing the budget, but line ministries too have been criticized for failing to prepare adequate reports in their initial budget requests each year. Interviews in Kampala, April 1998.

In Uganda while cabinet is briefed on the broad contours of the budget in advance of its submission to parliament, the cabinet is not presented with the actual budget document until the morning before the Minister of Finance’s budget speech.

REFERENCES


