

# Different Problems, Different Solutions?

**Budget Performance and Processes  
In Ghana's Ministries**

**Policy Brief**

**November 2013**



**Martin J. Williams**  
Department of Government  
London School of Economics and Political Science



## **EXECUTIVE SUMMARY**

Budget systems are designed to treat all spending ministries in the same way, but in reality different ministries have different budget performance and processes. **Some ministries are better overall than others, and different ministries have different problems.** Even when ministries share a common problem they may do so for different reasons and require different remedies, just as a fever may be caused by different diseases that each require their own medicine.

This raises the question whether the one-size-fits-all approach to budgeting is optimal. Rather than pretending these differences do not exist, it may be better to recognize and deal with them – **better to build differences into the budget system than risk having them break it.**

This report is based on structured interviews with 23 budget schedule officers in the Ministry of Finance (MOF). These interviews are used to construct two indices of budget performance for each spending ministry: a Budget Basics index, reflecting how well the ministry fulfills the technical requirements of budget preparation and execution; and a Budget Outcomes index, reflecting the incidence of extra-budgetary requests, accumulation of avoidable arrears, and systematic underestimation of project costs. There is little correlation between Budget Basics and Budget Outcomes – **ministries that do the Basics well do not necessarily have good Outcomes.**

**Infrastructure-sector ministries are different: they tend to have the best Budget Basics scores, but the worst Budget Outcomes.** This is particularly concerning in the context of the creation of the new Ghana Infrastructure Fund. Drawing on recent research and other countries' experiences, the report suggests ways that institutional checks and procedures could help reduce cost inflation and overspending in infrastructure.

Finally, the report describes the variations in budget processes and structures within the spending ministries. **Not only do ministries have different budget performance, they also have different internal budget processes.** The report also discusses variations in the strength of institutional planning and monitoring processes among ministries.

The report concludes by discussing the implications of these findings, especially for Ghana's transition to Programme-Based Budgeting (PBB). It **recommends some simple ways that MOF could deal with variation in budget performance and processes:**

- 1) Define and track some indicators for ministries' budget performance, focusing on the technical aspects of budget management but also including budget outcomes.
- 2) In the context of PBB, reward ministries with strong planning processes and budget discipline with greater discretion and flexibility on spending.
- 3) Maintain a focus on input and output monitoring, especially for ministries that lag on planning, monitoring, and technical aspects of budget management.
- 4) Use MOF's contracts database to monitor indicators of the quality of infrastructure planning and management processes in different ministries.
- 5) Strengthen central review of ministries' planning, procurement, and management of infrastructure projects.

## CONTENTS

<b>1. Introduction</b>	<b>1</b>
<b>2. Methodology</b>	<b>3</b>
• Interview details	
• Construction of Budget Basics and Budget Outcomes indices	
• Link between Budget Outcomes and actual out-turns	
<b>3. Different Ministries Have Different Problems</b>	<b>6</b>
• Variation in Budget Basics	
• Variation in Budget Outcomes	
• Good Budget Basics doesn't always mean good Outcomes	
• Same symptom, different diseases	
<b>4. What Explains Variation in Budget Basics and Outcomes?</b>	<b>10</b>
• Infrastructure ministries have better Basics but worse Outcomes	
• Budget size, complexity, and composition	
<b>5. Structures and Processes in Spending Ministries</b>	<b>12</b>
• Which division handles budgeting	
• Budget relationship between a ministry and its agencies	
• Planning and monitoring processes	
<b>6. Implications for Programme-Based Budgeting (PBB)</b>	<b>15</b>
<b>7. Conclusion and Recommendations</b>	<b>17</b>
• Key findings	
• Recommendations	
<b>Appendix: Feedback from budget schedule officers on their role in MOF</b>	<b>20</b>

## ACKNOWLEDGEMENTS

This document is a policy-focused report, based on independent research conducted for academic purposes.

I am very grateful to the Ministry of Finance for their kind assistance in facilitating this research, in particular to Eva Mends. I am also grateful to the London School of Economics and Political Science for providing financial support and to the African Center for Economic Transformation for hosting me in Accra. However the contents of this report are the sole responsibility of the author, and the opinions expressed do not necessarily represent the views of these institutions and individuals and should not be attributed to them.

I am especially indebted to the budget schedule officers who generously gave their time to be interviewed as part of this research. The anonymity under which the interviews were conducted makes it impossible to adequately acknowledge their contributions, but without their patience and frank answers this research would not have been possible.

## 1. INTRODUCTION

Most research and policy guidance on budgeting and public financial management (PFM) focuses on national-level outcomes and processes, such as aggregate spending and budget formulation procedures. In these discussions, spending ministries appear only in the background, if at all. Even when the role of spending ministries in PFM is explicitly considered, they are usually treated as identical units with the same budget problems, structures, and processes.<sup>1</sup>

But there is no reason why this assumption should be true. Indeed, policymakers often acknowledge that there are “problem ministries” and challenges that are unique to particular organizations. It is important to study the extent of these differences, because **if different ministries have different problems and processes then the same budget system may not be optimal for all of them.**

The findings of the report confirm that **there are significant differences in budget outcomes and processes among ministries in Ghana.** Some ministries are better overall than others, and different ministries have different problems. **Even when ministries share a common problem, such as frequent extra-budgetary requests, they often do so for different reasons.** The same symptom may be due to different diseases, and therefore require different cures.

This can be illustrated using the examples of three social sector ministries which consistently make large extra-budgetary requests, all for different reasons:

**Ministry X** has very poor planning and financial management. Their annual budget submissions are always late – the schedule officer has to ‘chase’ them to submit it – and even when it is submitted it doesn’t conform to the guidelines given by MOF and the costing is ‘sometimes not proper’. Their in-year release requests are also consistently late and incomplete. The schedule officer for Ministry X reports that the ministry also has a major problem with extra-budgetary requests, not because of political pressure or unpredictable events, but simply because each year they make requests for activities that they had put in their annual budget submission but which didn’t make it into the budget.

Another ministry, **Ministry Y**, is above average on the technical aspects of budget management, but also consistently makes significant extra-budgetary requests. In their case, however, they are responsible for providing funding for activities whose occurrence and timing is entirely out of their control, so extra-budgetary requests are almost inevitable. Because these requests are unexpected but must be paid, they can present significant cash flow problems for MOF, so MOF allocates part of the money for the activity, the ministry somehow sources the remaining funds to enable the activity to take place (the schedule officer doesn’t know how they do this), and this difference ends up as payment arrears.

In a third social-sector ministry, **Ministry Z**, extra-budgetary requests are also a major problem, not due to poor administration or unpredictable events but to political pressure. The ministry is large and high profile so politicians frequently make off-the-cuff promises to communities which then have to be catered to immediately, through extra-budgetary requests. (To illustrate a point from an earlier section, however, size itself does not necessarily appear to lead to bad outcomes – the other social sector

ministry that is similar in size and political salience rarely makes extra-budgetary requests.)

**This illustrates why it is important to understand not just the variation in budget performance among ministries, but also its causes.** Technical fixes, like stricter procedural controls or training, may be effective at reducing extra-budgetary requests in Ministry X, but would be useless for Ministries Y and Z. Greater commitment to fiscal discipline on the part of politicians could help for Ministry Z, but would do little for Ministries X and Y. And so long as resource constraints prevent the accumulation of an adequate contingency fund, Ministry Y is likely to continue to accumulate arrears due to extra-budgetary requests, regardless of anything done at the technical or political levels.

But despite the clear importance of this topic, there is almost no relevant research to consult for guidance. There are only a handful of studies that examine within-country variations in budget performance among spending ministries, and even these focus exclusively on expenditure out-turns without considering other elements of budget management.<sup>2</sup> Expenditure out-turns are an important element of budget performance and an undoubted challenge for Ghana and other developing countries, but they reflect only a year-end aggregate and do not necessarily capture other important 'outcomes' of budget management, such as in-year extra-budgetary requests and accumulation of payment arrears.

In addition, procedural and technical aspects of budget management are also important for budget performance – delayed submission of release requests, for example, negatively impacts on MOF's ability to plan and manage cash flow. These other aspects of budget performance cannot always be easily quantified and are not usually tracked by governments, especially in developing countries, so they often get overlooked.

To address these limitations, **this report takes advantage of the immense knowledge and experience of MOF budget schedule officers to generate two indices of budget performance** that are more informative than raw out-turn figures. These include information of the technical, procedural aspects of budget management (the Budget Basics index) as well as overall outcomes (Budget Outcomes index).<sup>3</sup>

Surprisingly, there is little correlation between Budget Basics and Budget Outcomes – **ministries that do the Basics well do not necessarily have good Outcomes**, and vice versa. This is especially stark for infrastructure-sector ministries: **on average, infrastructure ministries have the best Budget Basics scores, but the worst Budget Outcomes.** This is particularly concerning in the context of the creation of the new Ghana Infrastructure Fund. Drawing on recent research and other countries' experiences, the report suggests ways that institutional checks and procedures could help reduce cost inflation and overspending in infrastructure projects.

The report also draws on qualitative data from the budget schedule officer interviews to describe the variations in budget processes and structures within the spending ministries. **Not only do ministries have different budget performance, they also have different internal budget processes.** The report also discusses variations in the strength of institutional planning and monitoring processes among ministries, based on parallel research conducted on management in the spending ministries.<sup>4</sup>

The next section discusses the methodological details of the interviews and index construction, and validates the indices by showing that they are correlated to other relevant measures. Section 3 discusses the range and patterns of variation in Budget Basics and Budget Outcomes among ministries, and discusses how the same budget problem can arise from different causes in different ministries. Section 4 draws on other relevant variables to try to explain this variation, and Section 5 describes variation among ministries in internal processes and structures for budgeting, planning, and monitoring. Section 6 discusses the implications of the findings for Programme Based Budgeting (PBB) in Ghana, and Section 7 concludes and makes some recommendations for how MOF to handle the differences in budget performance and processes among ministries. The Appendix summarizes direct feedback from the budget schedule officers about their role in MOF and the budget process, and their ideas to improve it.

## 2. METHODOLOGY

### Interview details

The core data for this report is derived from structured interviews conducted with 23 budget schedule officers in MOF, covering every ministry in Ghana.<sup>5</sup> The interviews were structured around nine topics covering the major stages of the budget cycle: medium-term planning, annual budget preparation and submission, budget execution, and monitoring and reporting.<sup>6</sup>

**All of these processes are formally identical across ministries, so the interviews focused on the particularities, strengths, and weaknesses of the particular ministries with respect to each of these topics.** They also covered the accumulation and handling of arrears and, for ministries that construct significant amounts of physical infrastructure, infrastructure-specific topics such as construction costing, operations and maintenance, and project management.<sup>7</sup>

Finally, the interviews included some specific questions about the details of budget structures and processes in that particular ministry (which division is primarily responsible for budgeting, the relationship between a ministry and its agencies, etc.). **All interviews were conducted anonymously** with respect to the officer and non-attributably with respect to the ministry discussed.<sup>8</sup>

### Construction of Budget Basics and Budget Outcomes indices

These interviews were used to generate **two numerical indices** of budget performance: one that quantifies how well an ministry carries out a set of six **procedural ‘Budget Basics’**, and one that characterizes the extent to which an ministry exhibits three **negative ‘Budget Outcomes’**. Budget performance is used here in the broad sense of good overall planning and execution of the budget by the spending ministry, rather than in the narrow sense of expenditure out-turns.

Both of these indices focus on **aspects of the budget process which are largely under control of the spending ministry** (at the technical or political level), rather than MOF. This distinguishes them from existing out-turn-based measures of budget performance such as overall budget execution, which (under a cash budgeting system) are influenced at least as much by the finance ministry as the spending ministry.

Table 1: List of ministries covered, by sector

<i>Economic</i>	<i>Infrastructure</i>
<ul style="list-style-type: none"> <li>• Ministry of Environment, Science, Technology, and Innovation</li> <li>• Ministry of Food and Agriculture</li> <li>• Ministry of Lands and Natural Resources</li> <li>• Ministry of Tourism, Culture, and Creative Arts</li> <li>• Ministry of Trade and Industry</li> </ul>	<ul style="list-style-type: none"> <li>• Ministry of Communications</li> <li>• Ministry of Energy and Petroleum</li> <li>• Ministry of Roads and Highways</li> <li>• Ministry of Transport</li> <li>• Ministry of Water Resources, Works, and Housing</li> </ul>
<i>Social</i>	<i>Administration and Public Safety</i>
<ul style="list-style-type: none"> <li>• Ministry of Chieftaincy and Traditional Affairs</li> <li>• Ministry of Education</li> <li>• Ministry of Employment and Labour Relations</li> <li>• Ministry of Gender, Children and Social Protection</li> <li>• Ministry of Health</li> <li>• Ministry of Youth and Sports</li> </ul>	<ul style="list-style-type: none"> <li>• Ministry of Defense</li> <li>• Ministry of Finance</li> <li>• Ministry of Information</li> <li>• Ministry of Interior</li> <li>• Ministry of Foreign Affairs and Regional Integration</li> <li>• Ministry of Justice and Attorney-General's Department</li> <li>• Ministry of Local Government and Rural Development</li> </ul>

Note: Sector classifications are based on classifications used in the 2013 budget, with the exception of the Ministry of Energy and Petroleum which is classified by GoG as economic sector but is treated as an infrastructure ministry for the purposes of this report.

The Budget Basics index uses schedule officer assessments of whether the ministry submits required information in a timely and complete fashion. It is an indicator of the technical performance of the ministry – how well it carries out budget procedures which are entirely within its control.

The Budget Basics index is comprised of six items:

- **Annual budget submission**
  - 1) Timeliness
  - 2) Completeness
  - 3) Quality of costing
- **In-year release requests**
  - 4) Timeliness
  - 5) Completeness
- **In-year financial reports**
  - 6) Regularity of submission

These six items were selected because they are topics about which schedule officers were (mostly) knowledgeable and because they are easy for officers to assess objectively (as opposed to more strategic issues, like the quality of medium-term planning). Each item is coded on a scale of [0 = Not a problem, 1 = Minor problem, 2 = Major problem].

The Budget Outcomes index uses schedule officer assessments of the extent to which budget implementation in the ministry is characterized by three negative outcomes:

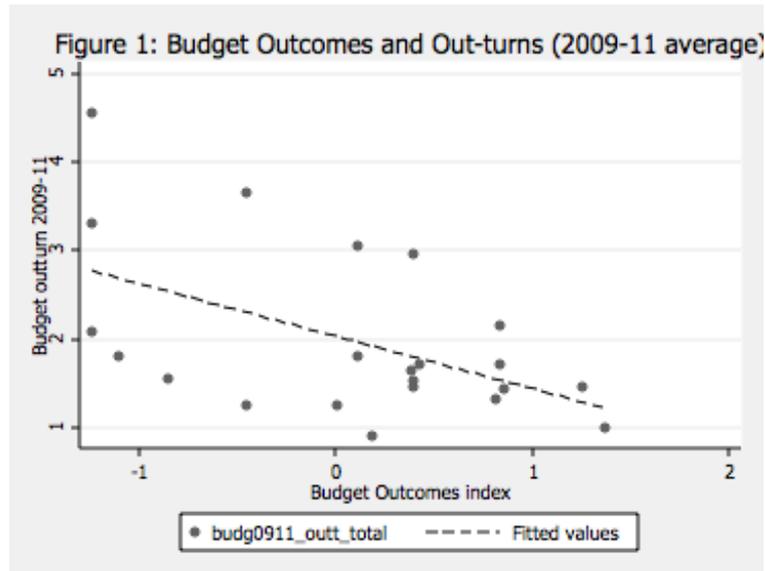
- 1) **Extra-budgetary requests.** How frequently the ministry makes in-year requests for significant expenditures that were not included in the annual budget. This is a bad outcome because it causes cash-flow problems for MOF and reduces budget credibility.
- 2) **Over-programming.** Whether the ministry deliberately underestimates activity/project costs in the annual budget in order to include additional projects on the budget, under the assumption that this will allow them to start the project and then lobby for additional funds during the year.
- 3) **Payment arrears from unbudgeted/unapproved commitments.** Whether accumulation of significant payment arrears is a common occurrence in the ministry. These can occur either due to the ministry entering into commitments before receiving MOF's approval, or due to the ministry making extra-budgetary requests that receive MOF's approval but for which funds are not available since the expenditure was not budgeted for. In both of these cases, the arrears are primarily the 'fault' of the ministry rather than MOF. Arrears arising from genuine commitments (both budgeted and approved by MOF) for which cash is simply not available are excluded, since this is out of the ministry's control.

These three items are related but distinct phenomena with clear negative consequences for budget credibility and overall fiscal control. They focus on negative outcomes which arise due to action or inaction on the part of the line ministry rather than MOF, although they can arise for both political technical reasons. They are outcomes not necessarily in a temporal sense but in that they have negative consequences that are real, not simply formal or procedural. As with the items in the Budget Basics index, each item is coded on a scale of [0 = Not a problem, 1 = Minor problem, 2 = Major problem].

To create each index, the items it comprises are first converted into normalized z-scores and then summed, leaving out missing values. The z-scores for each item and the two indices are thus both variables with a mean of zero and standard deviation of one, with positive numbers representing better performance and negative numbers representing worse performance.

#### **Link between Budget Outcomes and actual out-turns**

Figure 1 plots each ministry's Budget Outcomes score against its average 2009-11 outturn.<sup>9</sup> The correlation is negative (-0.52), and is highly statistically significant. **As expected, ministries that perform poorly on the Budget Outcomes index also tend to have larger expenditure overruns.** The Budget Outcomes index measures other negative outcomes besides expenditure overruns so it is natural that the correlation is not perfect, but it is nonetheless reassuring that the index is correlated with another commonly accepted measure of budget performance.<sup>10</sup>



It therefore seems that the Budget Outcomes index is capturing real variation amongst ministries, not simply measurement error.<sup>11</sup>

### 3. DIFFERENT MINISTRIES HAVE DIFFERENT PROBLEMS

Even though budget preparation and execution follows formally identical procedures and requirements for all ministries, there is a great deal of variation in how well these are actually carried out. This is true both overall – in **that some ministries perform better than others** – and also with respect to particular processes – in that **different ministries have different problems**. Likewise, **even ministries that have strong overall budget performance still have problems in some areas**, and ministries that perform poorly overall do some things well.

#### Variation in Budget Basics

Figure 2 plots the Budget Basics Index. There is clearly a wide range of variation, with strong performers, poor performers, and everything in between.

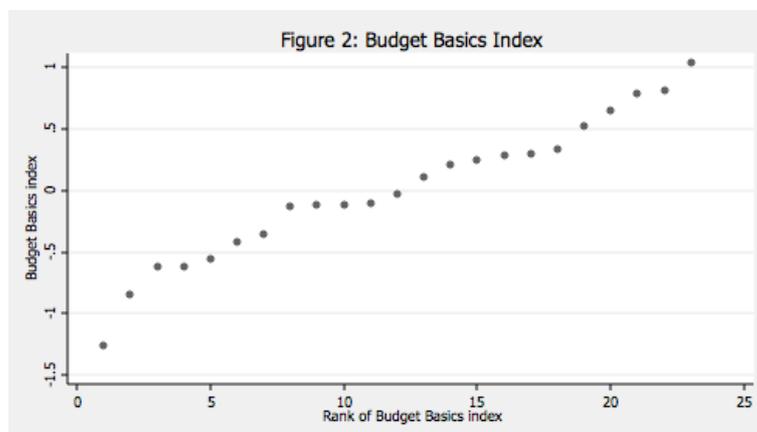


Table 2 shows the distribution of scores for the six component items in the Budget Basics index. The six items are almost all positively correlated, meaning that ministries which do well on one tend to do well on the others.<sup>12</sup> **Each item is a problem for some ministries but not others.**<sup>13</sup> However, it is not the case that some ministries have major problems with every item while others are perfect.

Table 2: Ministry performance on Budget Basics items

	Not a problem	Minor problem	Major problem	Don't know/missing
<i>Annual budget submissions</i>				
Timeliness	7	10	3	3
Completeness	15	3	4	1
Costing	9	5	2	7
<i>In-year release requests</i>				
Timeliness	7	13	3	0
Completeness	10	10	2	1
<i>In-year financial reports</i>				
Regular submission	4	7	7	5

Table 3 shows this with respect to the three ministries located at the 25<sup>th</sup>, 50<sup>th</sup>, and 75<sup>th</sup> percentiles, representing below average, average, and above average ministries. For example, the 25<sup>th</sup>-percentile ministry has major problems with its annual budget costing and in-year release request timeliness, minor problems with annual budget timeliness and in-year request completeness, but no issues with annual budget completeness or submission of in-year financial reports. The 75<sup>th</sup>-percentile ministry, by contrast, has a major problem with timeliness of in-year release requests, but no other problems.

Table 3: Budget Basics in representative ministries

	25 <sup>th</sup> -percentile ministry (below average)	50 <sup>th</sup> -percentile ministry (average)	75 <sup>th</sup> -percentile ministry (above average)
<i>Annual budget submissions</i>			
Timeliness	Minor	Not	Not
Completeness	Not	-	Not
Costing	Major	Major	Not
<i>In-year release requests</i>			
Timeliness	Major	Minor	Major
Completeness	Minor	Not	Not
<i>In-year financial reports</i>			
Regular submission	Not	-	-
<b>Budget Basics index score</b>	-0.42	-0.03	0.34

Note: Budget Basics index score is the normalized z-score, so zero is average and positive scores indicate above-average performance.

This illustrates the point that some ministries perform better than others (in terms of technical budget management), but that **even the above-average ministries have room for improvement and even the below-average ministries do some things well.**

**Variation in Budget Outcomes**

The results for the Budget Outcomes items, in Table 4, show similar patterns. Extra-budgetary requests are a major problem for one third of the ministries and a minor problem for another third, as are arrears. Over-programming is less common, but is still a minor or major problem for half of the ministries for which data is non-missing. All three Budget Outcomes items have strong and statistically significant positive correlations.

Table 4: Ministry Performance on Budget Outcomes items

	Not a problem	Minor problem	Major problem	Don't know/missing
Extra-budgetary requests	4	8	8	3
Over-programming	9	4	4	6
Arrears	6	9	8	0

Table 5 shows that **while these outcomes overlap for some ministries, for others they don't.** For three ministries, neither extra-budgetary requests nor over-programming are problems, while both are major problems for four ministries. However, other ministries are off this diagonal – for example, extra-budgetary requests are a major problem for two ministries which do not have a problem with over-programming. Of the four ministries for which both over-programming and extra-budgetary requests are major problems, three are infrastructure ministries; this foreshadows the finding of the following section that ministries in the infrastructure sector are different in important respects than their peers in other sectors.

Table 5: Overlap of negative Budget Outcomes in ministries

	Extra-budgetary requests		
Over-programming	Not a problem	Minor problem	Major problem
Not a problem	3	4	2
Minor problem	1	2	1
Major problem	0	0	4

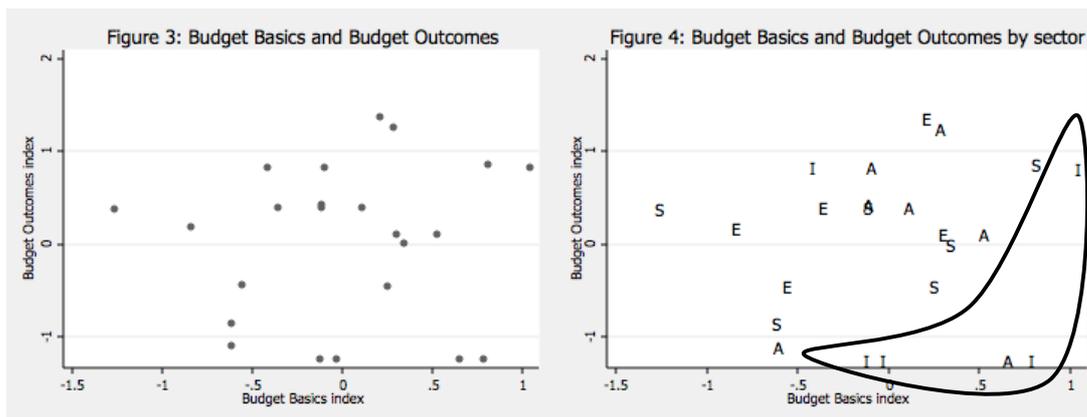
As with the Budget Basics index, the two key themes arising from analysis of the Budget Outcomes index are that 1) **some ministries perform better overall than others,** and 2) **different ministries have different problems.**

**Good Budget Basics don't always mean good Budget Outcomes**

The relationship between these two indices is also interesting. One might expect a positive correlation – that ministries which fulfill the technical requirements of

budgeting better would also have better outcomes. Indeed, this is the rationale underlying many of the budget procedures imposed on spending ministries.

However, this does not appear to be the case in Ghana. Figure 3 at left shows that there is no obvious relationship between the two indices. **There are ministries that have strong Budget Basics and also good Budget Outcomes, but also ministries with strong Budget Basics but very poor Budget Outcomes.** This latter category is circled in Figure 4 at right, which shows the same graph but with the sector of each ministry denoted by a letter (E for Economic, etc.).



The ministries circled in the bottom-right corner are ministries with much worse Budget Outcomes than one would expect based on their Budget Basics scores. Four of the five are from the infrastructure sector, and only one infrastructure-sector ministry does not fall in this category of underperformers. If the infrastructure sector is excluded, there is a slight positive (but still not statistically significant) relationship between Budget Basics and Budget Outcomes.

This finding that **the relationship between Budget Basics and Budget Outcomes seems to be different for infrastructure-sector ministries** than other ministries foreshadows the next section, which suggests that infrastructure-sector ministries are different across a number of other variables as well.

Note that this analysis demonstrates a lack of correlation, not necessarily a lack of a causal relationship. It may well be the case that improving Basics in lagging ministries would also improve their Outcomes. However, the lack of an overall correlation does suggest that the whole story is somewhat more complex.

### Same symptom, different diseases

This analysis of the Budget Basics and Budget Outcomes indices shows that different ministries have different problems. There is also an additional level of variation among ministries: not only do ministries vary in what type of problems they have, but also in the mechanisms of these problems and the underlying causes.

**Just as a patient with fever may be suffering from many different diseases, a ministry that consistently accumulates arrears may do so for a number of different**

**reasons.** The same is true of a ministry that consistently over-programmes or makes frequent extra-budgetary requests, or even of a ministry whose budget submissions are late or incomplete. And just as a doctor's treatment must focus on curing the disease rather than just treating the symptoms, **improving budget performance requires identifying and dealing with the different underlying problems in each ministry; there is no single cure for extra-budgetary requests that will work in all ministries.**

This was illustrated in the introduction by the examples of three social sector ministries (X, Y, and Z) that all consistently make large extra-budgetary requests, each for different reasons. In Ministry X, the problem was technical; in Ministry Y, the problem was environmental uncertainty; and in Ministry Z, the problem was fiscal indiscipline on the part of political leaders.

The same point – that the same symptom can arise for different reasons – can also be made about arrears, performance of basic budget procedures, and over-programming. For example, over-programming can be due either to: political pressure to start new projects rather than complete existing ones; poor planning that results in 'wish list' budgeting (programming a wider range of activities than is feasible to undertake); or self-interest on the part of bureaucrats who benefit from receiving additional resources. For the ministries where it is a major problem (mostly the infrastructure sector), over-programming tends to arise for the first of these reasons (essentially political pressure), but the phenomenon of 'wish list' budgeting is also very common across many ministries (especially in the economic sector). The ministries where over-programming happens for political reasons also have the best planning processes, so technical issues of planning and costing are not a constraint here. **This diversity of budget performance and problems in ministries has significant practical implications for improving PFM in Ghana,** especially with respect to the implementation of programme-based budgeting (PBB).

#### **4. WHAT EXPLAINS VARIATION IN BUDGET BASICS AND OUTCOMES?**

The previous section demonstrated that there is significant variation in Budget Basics and Budget Outcomes among ministries in Ghana; this section investigates what other factors explain this variation.

The most robust finding is that **infrastructure ministries are different, tending to have better Basics but worse Outcomes.** Other potential explanations for varying budget performance are also considered: budget size, budget complexity, sources of funds, and expenditure composition. While tentative evidence is found that these can also affect performance on Budget Basics and Budget Outcomes, these relationships are less robust than the finding about infrastructure ministries.

#### **Infrastructure ministries have better Basics but worse Outcomes**

Table 6 examines the differences in budget performance between sectors in more detail. **Infrastructure ministries have the highest average Basics scores and the lowest average Outcomes scores.** These differences are not statistically significant at conventional levels, but this is not surprising given the small sample.

Table 6: Variation in Budget Basics, Outcomes, and out-turns across sectors

	Admin & PS	Economic	Social	Infra.	All non- infra.
Budget Basics	0.11	-0.25	-0.10	0.25	-0.06
Budget Outcomes	0.10	0.32	0.06	-0.41	0.15
Budget out-turns (2009-11 average)	194%	155%	183%	1002%	180%
Budget out-turns, excl. MOEP (2009-11 average)	194%	155%	183%	284%	180%

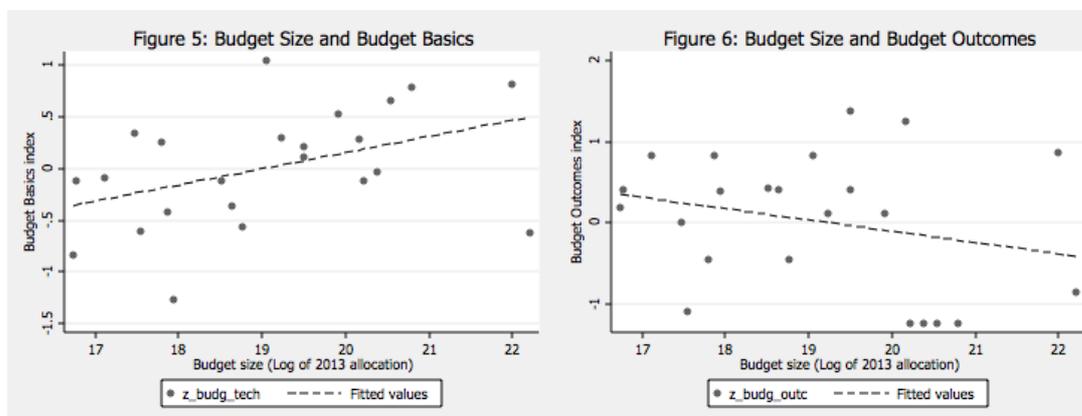
Note: All variables are sectoral means. Zero represents the average ministry for Budget Basics and Budget Outcomes. Ministry of Energy and Petroleum (MOEP) is excluded from the bottom row as it is an extreme outlier.

**Infrastructure ministries also have much higher out-turns than non-infrastructure ministries:** even when excluding the Ministry of Energy and Petroleum outlier, infrastructure ministries’ average annual expenditure from 2009-11 was 284% of their annual budget allocation, compared to 180% for non-infrastructure ministries. These differences are statistically significant.

**Budget size, complexity, and composition**

Policymakers and budget schedule officers often cite other types of factors as reasons for ministries’ varying budget performance, for example “Ministry A is often late because they have a large budget and lots of cost centers”, or “Ministry B overspends because they have lots of assets expenditure”. It is worth investigating whether these common perceptions have any explanatory power.

Figure 5 (left) examines the relationship between budget size and Budget Basics, while Figure 6 (right) compares budget size to Budget Outcomes.<sup>14</sup> Contrary to common perception, there is actually a positive and statistically significant relationship between budget size and Budget Basics – **ministries with larger budgets actually do better on technical aspects of budget management like timeliness and completeness of submissions.**



On the other hand there is a slight negative correlation between budget size and Budget Outcomes, suggesting that **ministries with larger budgets tend to have worse Outcomes**. This is paralleled by a small positive correlation between budget size and actual out-turns from 2009-11 (not shown), although neither of these correlations is statistically significant.

Budget complexity, as proxied by the number of pages in the ministry's 2013 detailed budget allocations, does not have a bivariate correlation with either Budget Basics or Budget Outcomes (not shown). However, after controlling for overall budget size, budget complexity does have a significant negative correlation with Budget Basics. This suggests that **having many cost centers does in fact make it more difficult for ministries to make timely and complete budget submissions to MOF**.

A number of hypotheses about budget performance concern the ministry's sources of funds (GoG/Statutory vs. IGF vs. Donor) and expenditure composition (Personnel vs. Goods and Services vs. Assets). However, none of these variables show robust relationships to either Budget Basics or Budget Outcomes, although there is weak evidence in some cases. (For brevity, only selected elements of the analysis are shown here. Full details are available from the author on request.) This is a surprising finding, and is worthy of further investigation.

## **5. STRUCTURES AND PROCESSES IN SPENDING MINISTRIES**

The previous sections have discussed variation in terms of how well ministries carry out functions, both in terms of technical Budget Basics and overall Budget Outcomes. This section focuses on variation in structures and processes within spending ministries that are relevant for budgeting.

### **Which division handles budgeting**

Ministries differ in which division is primarily responsible for budgeting. As Table 7 shows, in the largest number of ministries (nine), budgeting is handled mainly by either the Finance and Administration (F&A) division or the Accounts section; in eight ministries it is handled by Policy, Planning, Monitoring, and Evaluation (PPME) or its equivalent; and in two ministries it is handled by another division, such as a technical division. Finally, in four ministries PPME and F&A are equally involved in budgeting.

**The main determinant of which division handles budgeting seems to be the size of the ministry's budget.** The largest ministries tend to have PPME and F&A jointly handle budgeting, while medium-large ministries tend to be handled by PPME alone. Medium-small ministries tend to be handled by F&A or Accounts, while it is only in the very smallest ministries that an Other division handles budgeting.

Comparing actual budget out-turns for 2009-11 across the categories, it is apparent that overspending is substantially higher in ministries where PPME and F&A handle budgeting jointly. This is probably not a causal relationship, however, and instead seems to reflect that these ministries are larger and include two infrastructure ministries, which are particularly prone to overspending. Nevertheless the sharp difference across categories is a surprising finding.

Table 7: Division in the ministry primarily responsible for budgeting, by sector

	F&A or Accounts	PPME	PPME and F&A jointly	Other
Admin. & PS	3	3	0	1
Economic	2	2	0	1
Infrastructure	2	1	2	0
Social	2	2	2	0
<b>Total</b>	<b>9</b>	<b>8</b>	<b>4</b>	<b>2</b>
Median budget size	124.9m	370.0m	652.8m	30.1m
Budget out-turns, excl. MOEP (2009-11 average)	168%	182%	327%	136%

Note: Based on information from budget schedule officer interviews. Median budget size is in Ghana cedis from 2013 budget allocations. Ministry of Energy and Petroleum is excluded from the budget out-turns calculation as an extreme outlier.

### **Budget relationship between a ministry and its agencies**

All ministries are responsible for various agencies and other cost centers under their oversight, including on budget matters. Budget submissions and requests for agencies should, on paper, be coordinated by and passed through their sector ministry. Likewise, ministries are supposed to provide overall policy direction for their agencies, which would be expected to guide agency budgeting decisions as well.

In practice, however, **different agencies have different relationships to their sector ministries** depending on a number of factors, including the extent to which they depend on the consolidated fund, their capacity to generate and retain IGF, their degree of statutory autonomy, and their political salience. As a result, **in some sectors the key budget decisions are taken by the agencies themselves**, and the ministry essentially collates and forwards these to MOF.

Table 8 looks at the prevalence of these relationships. **The ministry takes the key decisions in the majority (11) of cases**, while in another five ministries the ministry and agencies share decisions equally. However, there are four ministries where the agencies take the key budget decisions. Strikingly, three out of four of these are in the Administration and Public Safety sector.

Table 8: Where key budget decisions are taken, by sector

	Ministry	Agencies	Ministry & agencies equally	Not sure
Admin. & PS	0	3	1	1
Economic	4	0	1	0
Infrastructure	3	1	1	0
Social	4	0	2	0
<b>Total</b>	<b>11</b>	<b>4</b>	<b>5</b>	<b>1</b>

Note: Based on information from budget schedule officer interviews.

**Planning and monitoring processes**

The strength of institutional planning and monitoring processes also varies greatly among ministries, as shown by parallel research conducted by the author in 20 spending ministries in Ghana.<sup>15</sup> A full discussion of these results is beyond the scope of this paper, but a brief summary is relevant for the discussion of variation in budget processes and performance.

**Some ministries in Ghana take planning much more seriously than others.** At one extreme, planning amounts to little more than compiling a “wish-list” of activities for each agency and division, with little strategic discussion or active coordination. In these cases, the focus is purely on the annual budget and medium-term planning is seen as a reporting formality rather than something that actually binds the organization. At the other extreme, some ministries derive their annual plans from carefully constructed medium-term plans through iterative processes and strategic discussions, just like the textbooks recommend. Other ministries find themselves somewhere in between.

**A similar range of variation exists with respect to monitoring.** Some ministries undertake no regular physical monitoring and barely track any key performance indicators. Other ministries systematically collect data on important indicators, continuously review it to identify emerging problems, and undertake systematic physical monitoring to ensure the integrity of this data and see that it reflects the reality on the ground.

This variation exists in spite of the fact that all ministries are required to complete various formal procedures designed to force them to plan and monitor, including: annual budgets, Sector Medium-Term Development Plans (SMTDPs) and associated Monitoring and Evaluation frameworks, and quarterly and annual reports to the Office of the Head of Civil Service (OHCS).

This is because “on paper” management processes are only one part of management in organizations. **Formal processes must be supported by complementary (often informal, unwritten) management practices.** These complementary practices are necessary for the formal processes to be carried out effectively, in the spirit in which they were intended; otherwise they become mere formalities. These informal, complementary practices often take the form of **norms, expectations, or organizational culture.**

Across government organizations in Ghana, for planning and monitoring as for other aspects of management, a common pattern emerges. For a given area of management, one group of organizations largely carry out whatever is the formal process for that area, but do not take additional steps beyond that (see *Average* in Table 9). In the example of staff appraisal discussed above, this would be the ministry which conducts appraisals annually but treats them as a formality. A second group of organizations does not even regularly implement the formal process, so whatever happens is ad hoc and depends entirely on individual personalities (*Not the best*). And a third group of organizations **implements the formal process and takes additional steps to ensure that the process achieves its purpose (*Star performer*).**

Table 9: The relationship between formal and informal management practices in government organizations in Ghana

	‘Not the best’ organizations	Average organizations	Star performer organizations
Formal processes	Not carried out	Carried out	Carried out
Complementary/informal practices	Non-existent/ad hoc	Non-existent/ad hoc	Systematically instituted
Result	Management is ad hoc	Formal processes are just formalities	Processes used effectively

Source: Reproduced from Williams (2013).

In terms of planning, all ministries in Ghana have formal processes, in the form of SMTDPs submitted to the NDPC. Most also have their own sector medium-term plans, which often have different time scales (e.g. four or five years as opposed to three in the SMTDP) and different formats and cover different time periods than their SMTDPs. Likewise for monitoring, every ministry has defined performance indicators and targets in their SMTDP, and many of them additionally in sector-specific medium term plans.

**But ministries differ greatly in the execution of these formal processes.** Ministries that do not take planning seriously simply add or subtract activities from annual budgets without regard to whether they were included in the medium-term plan; ministries that do not take monitoring seriously do not collect the data necessary to track the indicators they have defined for themselves. Even beyond this, **fully integrating planning and monitoring into organizational processes requires constant efforts from management – these subtle actions cannot be defined on paper, let alone measured.**

This distinction between formal processes and informal/complementary practices has major implications for the role of external stakeholders, including MOF, in improving planning and monitoring in spending ministries. Broadly speaking, **external stakeholders can impose formal processes on organizations and force compliance with them, but they cannot force organizations to adopt the informal/complementary practices that are necessary to make formal processes more than formalities.** The following section discusses this further with respect to the shift to PBB in Ghana.

## 6. IMPLICATIONS FOR PROGRAMME-BASED BUDGETING (PBB)

The findings of this report about the variation in budget performance and processes among spending ministries in Ghana have important implications for the introduction of PBB. Specifically, **PBB is likely to be more effective for some ministries than others**, and this may mean that **it may be optimal for MOF to deal with some ministries differently than others – one size might not fit all in budgeting.**

In his review of programme budgeting in OECD countries, Kraan (2008) points out that the two main requirements for PBB’s success are: 1) good technical estimates by spending ministries, and 2) budget discipline. These broadly correspond to the Budget Basics and Budget Outcome indices defined in this report. As this report has demonstrated, these are present in some ministries in Ghana, but not in others. To make

matters even more complicated, **the ministries that produce good technical estimates (Budget Basics) are not necessary the ministries that have good budget discipline (Budget Outcomes), and only a few ministries are good at both.**

As Kraan states, “a programme classification is a contract between the ministry of finance and the line ministries in which discretion over inputs is exchanged for the acceptance of rules of budgetary discipline.”<sup>16</sup> Embedded in this is the assumption that ministries have strong planning and monitoring systems, so that they can make use of the discretion over inputs to maximize output delivery. But as the previous section showed, this is true for some ministries in Ghana but not for others. Processes imposed from outside the organization (such as PBB) can only improve these to an extent, as they can drive adoption of formal processes but not informal, complementary practices, such as integration of the formal processes into day-to-day operations of the organization. All ministries already have formal planning and monitoring structures (e.g. through SMTDPs and annual reports), and many already have their own highly developed institutional planning and monitoring processes. **The challenge for PBB then is to recognize the existing systems and find ways to build on these and add value, all while recognizing its own limitations. Even with the best budget system, the most important improvements in planning and monitoring must be driven from within spending ministries themselves.**

Likewise, the discussion above in the section *Same Symptom, Different Diseases* demonstrated that poor outcomes such as extra-budgetary requests and arrears can arise from multiple causes. Some of these are technical and may be helped by PBB, but others are due to political factors from outside the budget process or to unexpected events. Adopting a programme classification for the budget is unlikely to ameliorate these.

Another goal of PBB is to decentralize control of spending, by relaxing the requirement that MOF approve every commitment. **In practice, however, cash flow considerations mean that MOF will still have to be actively involved in the scheduling of releases for large Assets projects,** which are inherently lumpy in their funding requirements. **This is likely to affect some ministries more than others** – in particular, ministries that construct large amounts of infrastructure. This is another reason why PBB is likely to be more effective for some ministries than others.

Finally, **the integration of performance information into the budget is also likely to prove more effective for some ministries than for others,** for several reasons. First, some ministries are much better at monitoring their outputs and outcomes than others (as discussed in the previous section). Because the availability of data for performance indicators depends largely on the efforts of the ministry to monitor itself and there is a wide range in the quality of institutional monitoring undertaken by ministries in Ghana, **efforts to integrate performance information into the budget process will be most effective for the ministries that already monitor their own performance well.** Paradoxically, these are the ministries for which performance monitoring through the budget is the least necessary.

Second, some ministries tend to receive a larger proportion of their budgeted funds to spend than others. This undermines accountability for improving outcomes, because

some ministries receive more resources to do so than others. Maintaining a focus on outputs is therefore important, because **it is easier to relate the level of inputs to delivery of outputs than to improved outcomes.**

Third, **shifting focus from outputs to outcomes will be most effective for those ministries which are already good at delivering and monitoring outputs.** But the ministries which are best at this tend to be infrastructure ministries, and there are obvious dangers to relaxing input controls and output monitoring on large Assets projects.

Most of these implications fall into the category of challenges or “things to keep in mind” for PBB rather than specific recommendations, and **the staff of MOF’s Budget Division are best placed to find specific ways to address these challenges.** However, the recommendations at the end of the next section do suggest some ways that MOF could deal with these issues related to variation in budget performance and processes among ministries, and even take advantage of them.

## 7. CONCLUSION AND RECOMMENDATIONS

### Key findings

This report has demonstrated that different ministries have different budget performance and processes. To summarize the findings:

- 1) **Different ministries have different budget problems.** There is a huge range of variation of performance among ministries, with respect both to technical Budget Basics as well as Budget Outcomes. This is true overall, in that some ministries perform better than others, and also with respect to particular processes, in that different ministries have different problems. Likewise, even ministries that have strong overall budget performance still have problems in some areas, and ministries that perform poorly overall do some things well.
- 2) **Doing the technical aspects of budgeting well doesn’t necessarily lead to good budget outcomes.** There are ministries that have strong Budget Basics and also good Budget Outcomes, but also ministries with strong Budget Basics but very poor Budget Outcomes.
- 3) **Infrastructure ministries are different.** Infrastructure ministries tend to perform well on Budget Basics, but have poor Budget Outcomes, including overspending.
- 4) **The same budget problem can be due to different causes,** much as the same symptom can arise from different diseases. A common problem, such as frequent extra-budgetary requests, can be due to political pressure in one ministry, poor technical capacity in another, and unexpected events in yet another. This means that different solutions may be required for each ministry, even though their problems seem similar on the surface.
- 5) **Ministries have different internal processes and structures for budgeting, planning, and monitoring.** This can also affect budget performance, and means that budget systems which are optimal for one ministry may not be optimal for another ministry.

### **Recommendations**

The first three recommendations of this report focus on recognizing that spending ministries have varying budget performance and processes, and how to deal with this. Since ministries are not identical to each other, one size may not fit all with respect to budgeting. **Recognition of these differences should be built into the system, or else they might end up breaking it.**

In practice it is inevitable that ministries will be treated somewhat differently from each other, since they each have different expenditure profiles, technical capabilities, and cash flow requirements. This report argues that it is better to **acknowledge these differences and try to address them transparently and systematically, rather than trying to impose a uniform system on a diverse group of ministries.**

The phenomenon of differences in budgeting among ministries has not been well studied in Africa or indeed worldwide, making it impossible to draw on insights from other countries' experience. The following recommendations are therefore more preliminary ideas than best practices:

- 1) **Define and track some indicators for ministries' budget performance, focusing on the technical aspects of budget management but also including budget outcomes.** MOF should formally track some elements of the Budget Basics and Budget Outcomes indices, such as timeliness and completeness of release requests and frequency of extra-budgetary requests. This would be simple to do, especially with GIFMIS, and would provide useful information on ministries' budget performance and management, which ministries need capacity interventions or cautions from MOF, and which technical budget problems are occurring most often in different ministries. These objective indicators could be supplemented with the insights of the ministry's budget schedule officer. The indicators do not necessarily need to be made public or included in the budget; rather, they could be used internally within MOF and shared with ministries during the year or at policy hearings, so that ministries are aware of how they compare to their peers. For ministries that currently have poor budget performance, demonstrating with objective indicators that their peers are doing better could provide impetus for reform.
- 2) **In the context of PBB, reward ministries with strong planning processes and budget discipline with greater discretion and flexibility on spending.** This would reward ministries with good planning and budget discipline – which will benefit most from great discretion anyway – while lagging ministries would have to improve their processes and performance in order to earn greater flexibility. This would be analogous to risk management in auditing, where previous performance is used to determine the level of future scrutiny. Such a system could be combined with the use of process indicators (see recommendation #1 above) to make it more objective and thus less subject to dispute. MOF could also work with Office of the Head of Civil Service to integrate other measures of management in ministries, such as the Institutional Performance Assessment Tool (IPAT) currently under development.

- 3) **Maintain a focus on input and output monitoring, especially for ministries that lag on planning, monitoring, and Budget Basics.** It is easier to hold ministries accountable for input use and output delivery than for outcomes, because inputs and outputs are directly under the control of the ministry. PBB grants ministries additional discretion over their use of inputs; lagging ministries should first demonstrate that they would use this discretion responsibly to improve output delivery before shifting focus to outcomes. Targeting outcomes will be most effective for those ministries which are already good at delivering and monitoring outputs.

The final two recommendations apply these ideas specifically to infrastructure planning and management:

- 4) **Use MOF's contracts database to monitor indicators of the quality of infrastructure planning and management processes in different ministries.** This could include indicators such as cost variance, project delays, number of scope changes, number of tenders submitted, bid spread, and comparison of unit costs to other similar projects. Formally tracking 'red flags' like these could help identify potential problems before they get out of control. Alexeeva *et al* (2008) demonstrate how this can be done for the road sector across a number of African countries. MOF could also aggregate these indicators across projects to construct an average score for each ministry, which could help identify 'problem ministries' and specific areas for improvement.
- 5) **Strengthen central review of ministries' planning, procurement, and execution of infrastructure projects.** Ministries have political and institutional incentives to underestimate project costs, overestimate benefits, and make mid-project scope changes. This is the reason why infrastructure-sector ministries tend to have worse budget outcomes. There is a need for independent review of infrastructure plans, cost estimates, and contract administration. Recent research (e.g. Flyvbjerg, 2013) and governmental innovations (e.g. the UK's Major Projects Authority) have demonstrated that simple technical procedures and institutional checks can drastically improve project planning and reduce cost overruns. In Ghana, this could be conducted under MOF's Public Investment Division or possibly the new Ghana Infrastructure Fund. The purpose would not be to supplant ministries' lead role in project planning and implementation, but simply to provide a 'reality check' to reduce the incidence of future problems.

## **APPENDIX: FEEDBACK FROM BUDGET SCHEDULE OFFICERS ON THEIR ROLE IN MOF**

In addition to information about their schedule ministry, budget schedule officers were also asked about how they see their role in MOF and the budget process. This appendix synthesizes and reports their responses.<sup>17</sup>

### **Schedule officers see themselves as both controllers and advocates**

Most schedule officers view their role as dual: they act on behalf of MOF to keep their schedule ministries within the rules, but they are also the “mouthpiece” of their schedule ministry within MOF. Officers report switching back and forth between these roles frequently. A handful of officers see themselves as more one or the other.

In terms of the depth of their engagement, most schedule officers feel underutilized. They see themselves as “just the advance secretary”, processing papers in order for others to make the decisions, although some report having deeper interactions, including with contractors, in order to understand the issues and make recommendations. Some officers view giving advice and recommendations to their superiors as an integral part of their work, while others feel that their bosses are uninterested in their opinions.

### **Not enough engagement with schedule MDAs**

Almost all officers report that their schedule ministry does not get them involved enough to be able to effectively understand the issues, guide them, and make recommendations.

Officers understand the importance of being actively engaged with their ministry, and believe that it would allow them to better guide the ministry through the budget process as well as offer better advice to their superiors in MOF. However, they feel that the ministries do not take the necessary steps such as inviting them for meetings. Some officers think this is because the ministries are actively trying to hide things from MOF, while others see it more as a matter of ministries not appreciating the potential benefits of involving their schedule officers. Officers report that the result of this lack of engagement is that they are unaware of basic things like how a

ministry does its costing or allocates cost ceilings among agencies, and are occasionally caught by surprise by large extra-budgetary requests during the year.

#### **In officers' words...**

If the ministry people would come around often it would help, communicating via letters is very slow. Most of the time they only come to us when there are problems.

We should be their guide. They should get us involved in all activities so we can help, but now sometimes we look dumb because the ministry will come mid-year with something we were totally unaware of.

I'm supposed to be really actively involved with [my ministry], be part of the meetings, but they don't invite me. Also I'm not involved during budget preparation. [Our bosses are] always saying we should be active, but the Ministry won't invite you. They always have different excuses. I think it's because they're trying to cover things up.

For example [my ministry] organizes seminars for their staff on [sector]-related issues, and they should invite me to these so I'm aware of the issues. For example [common sector activity], there is a law; if I knew about this I would be better at dealing with the release requests that arrive. MOF should tell MDAs to invite the schedule officers to budget committee meetings and trainings.

Officers suggested two ways to improve engagement with their schedule ministries:

- MOF should provide dialogue and advocacy training for schedule officers along with budget officers in the MDAs.
- MOF should require MDAs to invite their schedule officers for certain types of relevant meetings at the MDA-level, for example budget committee meetings or training seminars on sector-specific issues.

### **Underutilization and marginalization by MOF**

Many schedule officers also feel that MOF itself does not adequately involve them in budget processes. In particular, they often feel that they get bypassed by their superiors in dealing with the MDA, and that this undermines their position. They also feel that there should be a devolution of some types of authority to the schedule officer.

Officers report, for example, that MOF leadership sometimes writes directly to an MDA for information without copying desk officers, even when the schedule officer could have just given that information. This undermines the position of schedule officers with their MDAs, and reinforces the impression of the MDAs that schedule officers are unimportant and therefore are not worth engaging.

Ensuring that schedule officers are involved in all aspects of the budget process within MOF would also allow them to fulfill their liaison role better. For example, officers can informally pass along budget circulars or other information to the MDA in advance of the formal notification, since formal communication can sometimes delay, get minuted to the wrong person, or go missing.

#### **In officers' words...**

We are supposed to be the link, but sometimes D/Budget will write to MDAs directly without even cc'ing desk officers, so we come to find out only when an MDA calls us; sometimes the schedule officer even could have given them the information they are asking for...If we are part of the process, we should be part of the process. Because our own people bypass us, MDAs also have the confidence to bypass us.

If you send out a budget circular it will probably go to the Minister and who knows how long (or if) it will take to get minuted down to the right person. As a schedule officer you should also send that note yourself informally to the right person so they can get started.

Currently we only advocate and advise, but we have no authority. Some matters should be brought down from the political level. In other countries, schedule officers are more empowered and they speak the voice of the minister. A certain number of policies and actions should be able to be taken by the desk officer without going through the minister. It should be in the law that desk officers are empowered to do or refuse certain things (e.g. refuse to pay extra-budgetary requests), if it's in the law then you can stand your ground.

Schedule officers also suggest that they should be vested with some level of authority over certain actions, so that not everything would have to pass through MOF leadership. For example, schedule officers could be empowered to deny some types of extra-budgetary requests or at least put in writing that the request is outside of the budget. Simple procedural guidelines such as this could substantially reduce extra-budgetary requests and budgetary indiscipline on the part of the MDAs.

Officers suggest that any such authority should be backed by law or by written procedural rules within MOF, so that they could stand their ground with respect to their MDA. Currently, some officers are reluctant to put such things in writing because there is a perception that uncooperative officers can be victimized or transferred.

Finally, officers feel that their role in monitoring the outputs of their schedule MDAs is not being adequately fulfilled. Especially with the transition to programme-based budgeting, they want more emphasis and resources to be able to undertake regular monitoring.

### **Career progression and training**

Many officers find their jobs important and fulfilling, but a number raised concerns about career progression and access to training within the Budget Division. In particular, there is a perception that some officers – especially new entrants and the Budget Analyst class – are favored with respect to trainings and other opportunities.

In addition to these concerns about equity, many officers also expressed a desire to spend more time on analysis and other activities, in order to further their personal development. This is also related to the perception (discussed above) that budget schedule officers feel underutilized.

#### **In officers' words...**

When we joined the service there was a Budget class, now they added a Budget Analyst class and they are trying to kill the Budget class. The Budget Analyst class is favored even for trainings etc., but we do the same work. Once we work on the same budget, we should be given the same exposure.

I have been in the Ministry for 18 years and am doing the same thing, I want to learn new things. I would like to do more analysis and policy formulation after 18 years as a desk officer.

More training. Some officers now get lots, others get none. New entrants get preferred to those of us who have been around a while.

## REFERENCES

Addison, Douglas (2012). “Cross Country Correlates for the Quality of Budget Execution: Political Institutions, Fiscal Constraints, and Public Financial Management”. Working Draft, March.

Alexeeva, Victoria, Gouthami Padam, and Cesar Quieroz (2008). “Monitoring Road Works Contracts and Unit Costs for Enhanced Governance in Sub-Saharan Africa.” World Bank Transport Paper TP-21.

Bloom, Nicholas, and John Van Reenen (2007). “Measuring and Explaining Management Practices Across Firms and Countries”. *Quarterly Journal of Economics* Vol. 122(4).

Breunig, Christian, and Chris Koski (2006). “Punctuated Equilibria and Budgets in the American States”. *The Policy Studies Journal*, Vol. 34(3).

Flyvbjerg, Bent (2013). “Quality control and due diligence in project management: Getting decisions right by taking the outside view”. *International Journal of Project Management*, Vol. 31(5).

Kraan, Dirk-Jan (2008). “Programme Budgeting in OECD countries”. *OECD Journal on Budgeting*, Vol. 7(4).

Stasavage, David, and Dambisa Moyo (2000). “Are Cash Budgets a Cure for Excess Fiscal Deficits (and at What Cost)?” *World Development* Vol. 28(12).

Williams, Martin J. (2013) “There Is More Than One ‘Public Sector Way’: The Diversity of Management Practices in Ghana’s Government”, Policy Brief.

## NOTES

---

<sup>1</sup> For example, the Public Expenditure and Fiscal Accountability (PEFA) Assessments only have one indicator focused on spending ministries: PI-2, which measures “Composition of expenditure out-turn compared to original approved budget”. But even though this indicator calculates expenditure deviations at budget head-level, the indicator focuses only on the average deviation as opposed to which budget heads are over/underspent and why.

<sup>2</sup> Addison (2012) looks at budgeted and actual expenditure composition across budget heads to show that many countries have significant deviations in budget execution at the budget head level, but there is no investigation of which budget heads are over- or underspent and why. Breunig and Koski (2006) examine reallocations among different expenditure categories in American states, but again focus only on the aggregate level of reallocation rather than on particular organizations or sectors. Stasavage and Moyo (2000) study the impact of cash budgeting in Uganda and Zambia, and find that certain ministries consistently overspend their estimates while others underspend.

<sup>3</sup> Another reason why these measures of budget performance are more informative than raw out-turns is that they are largely under the control of each spending ministry, whereas expenditure out-turns also depend on factors out of the spending ministry’s control such as total cash flow, unexpected circumstances, and political considerations. This makes it easier to identify real variations in performance and processes among ministries. Overspending, for example, could be due to: poor technical capacity, in either the spending ministry or finance ministry; lack of budget discipline in the spending ministry or

---

overall fiscal control in the finance ministry; unexpected events or changes in priorities; or deliberate political or financial decisions.

<sup>4</sup> See Williams (2013) and forthcoming academic work.

<sup>5</sup> There are formally 24 ministries in Ghana, but the Ministry of Fisheries and Aquaculture was newly created in January, 2013, and was not functional at the time of the study or during the creation of the 2013 budget. Non-ministerial Ministries, Departments, and Agencies (MDAs) such as the National Media Commission and Office of Government Machinery were excluded from the study.

<sup>6</sup> The initial interviews covered four additional topics (Setting of Target Levels, Spending of Released Funds, Routine Institutional Monitoring Activities, and Dealing with Development Partners) but these were dropped as most budget desk officers did not have sufficient information to respond. The interviews focused mostly on spending on Goods and Services and Assets, rather than Personnel, as payroll is handled centrally by the Controller and Accountant-General's Department (CAGD) rather than the spending ministries themselves.

<sup>7</sup> This includes the infrastructure sector ministries, plus Education, Health, Food and Agriculture, and Energy and Petroleum.

<sup>8</sup> The average length was 42 minutes. A recent reorganization of the division meant that most officers had been transferred to a different ministry a month previously, so in these cases the interviews focused on their previous ministry. Officers have served on the schedule ministry discussed in the interview for an average of 2.6 years and have been in the Budget Division for an average of 11.5 years, so they are familiar with the budget process not only in their schedule ministry but also in other ministries they have previously handled.

<sup>9</sup> Out-turns for each year are calculated as actual expenditure divided by budget estimates as reported by CAGD, for Consolidated Fund expenditure only. Expenditure on all categories is included, but the results are qualitatively similar if out-turns are calculated using only Services and Investment expenditure. For 2011, the original budget estimates rather than the supplementary budget estimates are used, as these better reflect the expectations of each ministry from the start of the year. The Ministry of Energy and Petroleum is excluded, as it is an extreme outlier with an average outturn of 3879%, mainly reflecting very large unbudgeted expenditures in 2011. Including this ministry in the calculation does not change the substantive results, however.

<sup>10</sup> The fact that the CAGD out-turn calculations exclude some revenue sources, such as IGF and Donor, is another reason why the interview-based Budget Outcomes index is more informative in some respects.

<sup>11</sup> The Budget Basics index is harder to validate, since there are no existing objective measures that plausibly measure the same thing. However, the Budget Basics index has a positive correlation (0.39) with another interview-based measure of management quality, constructed using an adaptation of Bloom and Van Reenen's (2007) methodology based on interviews conducted by the author in line ministries (the methodology underlying the construction of this measure will be fully described in a forthcoming academic paper by the author). This correlation is statistically significant at the 10% level. These two indices each measure different phenomena, but insofar as they both measure aspects of technical-level management in spending ministries, it is reassuring that they are positively correlated.

<sup>12</sup> All but two of the pairwise correlations between items are positive, though usually not statistically significant. Annual budget timeliness and in-year release timeliness have a negative correlation of -0.07, and annual budget completeness and in-year release timeliness have a negative correlation of -0.18, neither of which is statistically significant.

<sup>13</sup> The 'Don't know/missing' category reflects interviews in which the schedule officer either did not know or the topic was not covered in sufficient depth to make a determination. As discussed later, there is also considerable variation among schedule officers in their involvement with their schedule ministries. No ministry has 'Don't know/missing' for more than two of the six Budget Basics items, however.

<sup>14</sup> Budget size is measured as the natural logarithm of the ministry's 2013 budget allocation.

<sup>15</sup> This section draws on and briefly summarizes research by the author, discussed in Williams (2013) and forthcoming academic work.

<sup>16</sup> Kraan (2008), p.8.

<sup>17</sup> Because the interviews were not recorded, all quotations in this section are approximate and should be regarded as paraphrases.