Chapter 10: Performance Budgeting

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Draft chapter for *Handbook of Public Financial Management* (forthcoming 2012)

NOT FOR QUOTATION

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Introduction

Performance budgeting is an important instrument for improving expenditure prioritization, effectiveness and efficiency. Its relevance is greater than ever today, given the tougher fiscal circumstances which face many countries. However, reaping the benefits of performance budgeting requires that the performance budgeting system be properly designed, and that it is accompanied by the right types of complementary reforms.

What sort of performance budgeting works best at the government-wide level? What, on the other hand, does not work? These questions are the main focus of this chapter. The chapter also identifies key supporting reforms required for performance budgeting to succeed. Implementation strategy and the role of performance budgeting in developing countries are also considered.

The structure is as follows. In the next section, performance budgeting is defined and a number of distinct performance budgeting mechanisms are identified. This is followed by a discussion of program budgeting, and then three sections exploring the applicability to the government-wide budget of alternative performance budgeting mechanisms. Implementation/sequencing issues and the specific challenges facing developing countries are then reviewed. Conclusions – in the form of a summary guide to practitioners – complete the chapter.

What is Performance Budgeting?

Performance budgeting refers to *public sector funding mechanisms which use formal performance information to link funding to results (outputs and/or outcomes), with the aim of improving performance*. There are a number of different performance budgeting mechanisms, which seek to link funding to results in distinct ways. Certain of these mechanisms focus mainly on improving *expenditure prioritization* – in other words, helping the budget to allocate limited public funds to the types of services of greatest benefit to the community and, as part of this, shifting funding away from low priority or ineffective services. Other performance budgeting mechanisms focus more on boosting the *effectiveness* or *efficiency* of existing services.

Whatever the specific mechanism employed, performance budgeting in all cases depends for its success upon the impact of results on funding. This rules out the notion, advanced by some (OECD, 2007: 21), of a purely "presentational" performance budgeting, in which performance information is presented in the government's budget documents without any intention that it influences funding.

Performance budgeting mechanisms can be applied on a "government-wide" basis – i.e. as a means of linking funds to results in the whole of the government budget. Alternatively, they may be applied on a "sectoral" basis – i.e. to the funding of specific types of government service, such as schools or hospitals. The main focus of this chapter is on government-wide performance budgeting.

Program Budgeting

Program budgeting is the most widespread and enduring form performance budgeting mechanism, and the one which is most widely applied on a government-wide basis. Originally introduced in the United States in the 1960s (Novick, 1967), versions of it exist today in a large number of developed and developing countries. One example is the impressive French system which came into full operation in 2005 (Ministre du Budget, 2008; Lannaud, 2007).

The defining characteristics of program budgeting are

- Funds are allocated in the budget to "programs" which mainly represent *product lines* – groups of outputs with common outcomes. For example, the education ministry's budget would contain allocations to a primary education program, a secondary education program, and a tertiary education program, and the environment ministry's budget would include a nature conservation program and an anti-pollution program.
- "Line item" controls – limits imposed by the parliament or the ministry of finance on the amounts ministries[1] can spend on specific types of inputs (such as office supplies, travel, and utilities) – are radically reduced (but not entirely eliminated).
- Good performance information on programs is collected and used in the budget preparation process to assist budget decision-makers to decide program funding allocations.

Some Key Terms

Effectiveness: a service (output) is more effective if it achieves better outcomes.

Efficiency: delivering an output at lower cost, without sacrificing quality or effectiveness.

Evaluation: Analytic assessments typically addressing the cost-effectiveness or appropriateness of public policies, organizations or programs. Includes "performance auditing", which is essentially evaluation conducted by external audit entities[2].

Activities: Types or categories of work undertaken in the production and delivery of outputs.

Inputs: Resources used in the carrying out of activities to produce outputs (for example. labor, equipment, buildings).

Outputs: A good or service provided by an agency to or for an external party.

Outcomes: Changes brought about by public interventions upon individuals, social structures, or the physical environment.

The main objective of program budgeting is improved expenditure prioritization. By providing information on the costs and benefits of alternative programs, it facilitates decisions about which areas of expenditure to cut back on, and which to augment, in order to best meet community needs. By contrast, a traditional budget in which funds are mainly allocated by line item is of limited value as a vehicle for choices about expenditure priorities.

Expenditure prioritization is not, however, the only objective of program budgeting. By making program performance a more important factor in decisions on ministry budget allocations, program budgeting also aims to place significant pressure on ministries to improve the effectiveness and efficiency of their existing services.

Program budgeting has it critics. Some question its effectiveness in improving expenditure prioritization. Others go further and deny the feasibility of allocating resources by product line. Some consider that program budgeting is not sufficiently ambitious and that, whatever its success may be in improving expenditure prioritization, it does not place sufficiently strong pressure on ministries to improve their effectiveness and efficiency.

It is this latter point of view which led historically to the development of a number of newer performance budgeting mechanisms. What these have in common is that they all seek, albeit in different ways, to link funding to the *quantity* of results which ministries deliver – i.e. to the volume of services delivered and/or the outcomes achieved. This contrast with the program budgeting approach of linking funding only to the *type* of result to be delivered.

There are four main “newer” performance budgeting mechanisms (Robinson, 2007b):

Formula Funding Performance Budgeting

Under formula funding performance budgeting (FF), the budget requirements of each ministry are estimated by determining the planned output quantity and the cost of these outputs. Usually, this means budgeting based on *unit costs*. In this approach, for example, the budget to be provided to the health ministry for vaccination services is determined by multiplying the cost per vaccination by the number of vaccinations expected to be carried out in the coming year. If vaccinations cost $20 per unit, and plan is that 100,000 vaccinations be delivered, the budget for the ministry would provide $2m for that purpose. In this way, the output deliverables of the ministry concerned are clearly defined, and considerable pressure is applied to the ministry to actually deliver these. The primary objective of FF performance budgeting is to pressure ministries to improve their efficiency (i.e. more outputs delivered with funding provided).

Purchaser-Provider

The purchaser-provider (PP) system applies the principle of “payment by results”. This means that the funding provided is determined by the quantity of output which the entity *actually delivers*, times a “price” based broadly on unit cost. Assume, that the “price” paid by government for vaccinations is $20, and that (as in the FF example above) the budget identifies an amount of up to $2m for that purpose.

Under PP, the health ministry would receive the full $2m only if it actually delivered 100,000 vaccinations. If it only delivered, say, 50,000 vaccinations, it would only receive $1m. This contrasts with FF, under which funding is determined by *planned* output and there is no attempt to reduce or increase funding if *actual* output delivered is less that or greater than planned output. Like FF, the primary objective of PP is efficiency improvement. Indeed, linking funding to actual output can in principle creates an even more intense pressure to improve efficiency than under FF. Like FF, the PP mechanism is essentially only applicable to outputs, because outcomes are in general too uncertain to be treated as commodities to be purchased.

Bonus Funding

When used as a performance budgeting mechanism, bonus funding means that supplementary funding – on top of core funding covering most operational costs – is given to government agencies for *outcomes or outputs* achieved, as measured by specific indicators. Funding rewards for public hospitals based on their scores in customer satisfaction surveys is an example of this approach. Bonus funding is performance pay *for institutions*, which may or may not be linked to performance pay for those institution's employees. An important difference with PP is that bonus funding cannot usually be considered to be a "price" paid for results, because it is not usually based on estimates of the costs of delivering those outcomes or outputs. This is because these costs are generally not known and may even be indeterminate. Thus, for example, funding bonuses paid to public universities for their graduate employment rate (an outcome) are not based on estimates of what it costs to raise the graduation rate, which is impossible to estimate. Because bonus funding is not usually based on cost estimates, the mechanism can be readily used to reward outcomes *as well as* outputs. The primary objective of bonus funding can be either improved effectiveness or improved efficiency, but the emphasis tends to be more on the former (through *outcome*-linked bonuses).

Budget-Linked Targets

Under this approach, performance targets are set for ministry outcomes or outputs at the same time as their budget is determined, with the targets being in some way calibrated to the level of funding provided. A salient example of this approach was the UK "Public Service Agreements" (PSA) system in the form in which it operated between 1998 and 2007, under which the finance ministry set several hundred key performance targets for ministries as an integral part of the determination of multi-year budget allocations (Smith, 2001). The primary objective of budget-linked targets is improved effectiveness and/or efficiency. The PSA system mainly emphasized effectiveness, because it privileged outcome targets. To avoid confusion about the meaning of "budget-linked targets", it should be emphasized that a process of setting performance targets for ministries without any systematic relationship to the budget does *not* constitute performance budgeting. What turns target-setting into a form of performance budgeting is the attempt to *systematically link performance targets to the budget*.

As noted above, each of these four mechanisms links funding to the quantity of results. One can distinguish between the mechanisms which link funding to the quantity of *expected* results (FF and budget-linked targets), and those which link it to results *actually achieved* (PP and bonus funding). A cross-cutting distinction is between the mechanisms which rely upon unit cost to link funding and results (FF and PP), and those which do not necessarily do so (bonus funding and budget-linked targets).

Unlike program budgeting, none of these newer mechanisms aim to improve expenditure prioritization. Their aim is, rather, to intensify performance pressure on agencies. In order to do so, they adopt approaches which – particularly in the case of unit costs – are inherently more complex than program budgeting.

The outline of performance budgeting mechanisms – focused on program budgeting plus four newer mechanisms – is not quite complete. It omits zero-base budgeting (ZBB), which enjoyed a brief period of popularity in the 1970s and 1980s. In the form applied to the public sector – which has more accurately been referred to as "alternative budgeting" (Axelrod, 1988: 300) – ZBB demanded the identification for each program[3] of several alternative options for cuts or increases to funding, accompanied by analysis of the impact of these alternatives on results delivered to the public (GAO, 1997). ZBB is long dead, and the term tends today to be used (or rather *mis*used) to refer to in-depth spending review. Space constraints – together with the fact that there is little to add to the analysis of the failure of ZBB to be found in the existing literature (e.g. Schick, 1978; GAO, 1979, 1997) – mean that it will not be discussed further in this chapter.

Program Budgeting

Program budgeting is unambiguously suitable for government-wide application. Its strong focus on expenditure prioritization – as well as effectiveness and efficiency –make it particular relevant at a time when many governments face much tougher constraints on aggregate expenditure and must therefore cut into ineffective and low priority spending if they are to finance important new priorities.

The cornerstone of program budgeting is the introduction of an appropriate program-based budget classification and consequent modifications to the accounting system (including the computerized financial management information system – FMIS) to make it program-compatible (Robinson, 2011; Robinson and Last, 2009). Appropriate definition of programs and sub-programs, and of their relationship to organizational structures, is essential. Redesign and simplification of central line-item controls over ministry expenditure is required to ensure that the shift to program-based budget appropriations is accompanied by increased freedom for ministries over the way in which they produce services. These budget classification and accounting issues tend to be the focus of much of the technical assistance provided by international organizations such as the IMF and World Bank.

Program budgeting is, however, much more than a system of budget classification. It is wrong to think that merely by introducing a program classification of expenditure, the aims of program budgeting can be realized.

The development of the right type of program performance information is just as important as the program classification. The program classification of expenditure shows how much is being spent on various product lines, but this only becomes useful if it is accompanied by good information on the results which are achieved. This requires the development of the right types of program performance indicators[4]. However, program *evaluation* is also essential to effective program budgeting because performance indicators are frequently insufficient in isolation to permit judgments on program or ministry effectiveness. For example, some program outcomes cannot be measured, or can be measured only very imperfectly, and many outcome indicators are heavily affected by so-called "external factors"[5].

For program budgeting to work, accompanying budgeting reforms are also essential. The budget process usually needs to be redesigned to make consideration of expenditure priorities a routine part of the process. Particularly important here are:

- Spending review processes to ensure that the continued relevance and effectiveness of ongoing "baseline" expenditure is kept under review. It should be noted that evaluation is an essential raw material for good spending review.

- Effective integration of planning and budgeting – includes the establishment of a "strategic phase" at the start of the budget preparation process, in which ministers or other key budget decision makers explicitly consider priorities for the coming budget.

In most countries, effective program budgeting also requires a systematic attack on expenditure rigidities: in other words, on the range of barriers to the rational reallocation of resources which tend to exist in government, such as the earmarking of revenues for specific purposes and unduly rigid civil service employment arrangements which may make it impossible to reduce employment and expenditure on low priority or ineffective programs.

Critics who suggest that program budgeting is ineffective often base their judgment on the misleading test of whether the introduction of a program classification has *in itself* led to improved prioritization of expenditure. It is all too easy to point to many examples – including in developing countries – where the introduction of program budgeting has had no apparent effect on the quality of expenditure prioritization. However, program budgeting is only a tool, and can only work in the right environment and with the right accompanying reforms. The quality of governance is clearly of overarching significance. If the political leadership has no interest in the rational allocation of limited public resources, program budgeting will obviously be ineffective. This should be a fundamental consideration in deciding whether specific countries are ready for this reform[6].

Even where the quality of governance is basically sound, the nature of the political system can create major obstacles to the success of program budgeting. For examples, in political systems where the legislature exercises considerable direct control over budgetary funding allocations – as is the case in the

US – attempts by executive government to improve expenditure prioritization are often undone by legislators who are more interested in buying votes in their individual constituencies than in any government-wide view of expenditure priorities (Joyce, 2003). This single fact probably explains most of the pessimism of the critics – most of whom are American political scientists – about the effectiveness of program budgeting. However, it is inappropriate to generalize from the peculiarities of US experience to the entire world.

As noted earlier, there is another line of criticism of program budgeting which questions the feasibility of basing the budget on allocations to programs. This is Schick's (2007: 113-6) position, which he justifies via three propositions:

- That the allocation of funds to organizational units is an essential part of budgeting.
- That programs and organizational structures are "fundamentally antagonistic" – in other words, that allocating funds to programs is radically different from allocating it to organizational units.
- That it is impossible to allocate funds in the budget to *both* programs and organizational units.

Based on these propositions, Schick concludes that program budgeting will only work if programs are the same as organizational units, in which case the principle of programs based on product lines will in effect have been abandoned.

It can, however, be argued that only the first of Schick's three propositions is correct.

Under program budgeting, the government allocates funds in the annual budget to each ministry for that ministry's programs, not for its internal organizational units. Of course, ministries must be able *internally* to allocate their budgets between their organizational units and must therefore be able to map program budgets to organizational units. This does not, however, mean that programs and organizational units must be identical. Consider the example of a ministry the internal organizational structure of which is based upon directorates, and sub-directorates, with both levels serving as budget holders. All that is necessary to reconcile program and organizational unit budgets under these circumstances is that the ministry explicitly identifies the allocation between sub-directorates of each program's budget. In practical terms – although this is not absolutely essential[7] – this usually means that each sub-directorate will be identified with a single program. If this approach is applied, there is nothing to rule out several sub-directorates or even directorates being mapped to a single program (or sub-program). A program could, indeed, even include several sub-directorates from *different* directorates. In short, the need to explicitly *link* programs and organizational units does not mean that programs must be *the same* as organizational units.

Schick's proposition that programs and organizational structures are "fundamentally antagonistic" is hard to sustain. In fact, organizational structures in almost any government follow product lines to quite a large degree. Within an education ministry, for example, there will typically be separate directorates covering primary, secondary and tertiary education, and these will map naturally to primary, secondary and tertiary education programs. Similarly, within an environmental ministry, there would certainly be separate directorates for nature conservation and pollution control, and these again would correspond directly to programs.

Of course, organizational structure does not *entirely* follow product lines. The most obvious divergence between the two is that organizational structures always include units dedicated to the provision of internal support service units – such human resources management, IT and finances – which cannot be considered to be product lines because internal services are not ministry outputs (outputs are services delivered to *external* clients). To the extent that organizational structure legitimately diverges from product lines, program budgeting usually accepts some compromise of the principle of product line-based programs in order to preserve a simple link between organizational structure and programs. In the case of support services, this is done by creating "support service" programs, in the full knowledge that these are not consistent with the pure program budgeting principle. The crucial point, however, is that such compromises of the principle of "product line" programs are *strictly limited*, and it remains the case that the great majority of programs are based on product lines.

Organizational structure sometimes diverges quite inappropriately from product lines and, where this is the case, program budgeting encourages – and should be seen as linked to – organizational restructuring. This is particularly the case under traditional, inward-looking civil service systems. Rational organizational restructuring consistent with a client-orientation should include, for example, the integration of separate organizational units which deliver closely related products. It should also in many cases include the elimination of organizational structures based on *functions* (i.e. professional competences/types of work process such as engineering) rather than products. Chevauchez (2007) makes the point that in France, precisely this type of organizational restructuring has been a key by-product of the new performance budgeting system. This underlines the importance of viewing program budgeting not as an isolated reform, but as part of an overall "managing for results" reform package.

Applying the New Performance-Budgeting Mechanisms

What about the four newer performance budgeting mechanisms? As already noted, these mechanisms seek to intensify significantly the performance pressure on ministries. This has made them understandably attractive to reformers, and has led many countries to experiment with them. Unfortunately, however, these experiments have not been sufficiently informed by a sound analysis of the strengths and weaknesses of the mechanisms concerned, and this has led to serious mistakes.

There can be little doubt that these newer mechanisms have enjoyed considerable success as the basis for *sectoral* performance budgeting systems. In the form of the "diagnostic related group" (DRG) funding system – under which public hospitals are funded mainly on the basis of patient treatments provided – the PP principle has been applied with great success in many countries to the funding of public hospitals (Robinson and Brumby, 2005). The FF principle has been applied successfully to school funding in countries including Denmark and Norway, with funding to individual schools mainly based on the number of students they are expected to enroll. And, as touched on above, bonus funding has been a useful element of public university funding in many countries, with bonuses paid not only for variables such as graduate employment rates, but also for research (an output) and graduation rates (an outcome) (Herbst, 2007).

More problematic, however, has been the use of these new mechanisms as part of government-wide performance budgeting systems. A particularly striking example was the failed attempt in New Zealand and Australia during the 1990s-early 2000s to apply the PP principle to the entire government budget (Robinson 2000, 2002). Under this so-called "accrual output budgeting" (AOB) system, the aim was that all government ministries would be funded via "prices" paid for the outputs which they produced. AOB attracted considerable international attention at the time, and there were even attempts to apply it in the most unlikely contexts, such as small pacific island countries. It has now, mercifully, faded from view.

What has not faded from view is a government-wide performance budgeting model which grafts FF onto program budgeting. Under this model, programs are used to allocate budgets to ministries, but the *budget for each program is estimated by formula funding*. In other words, *every* program in *every* ministry is supposedly budgeted for by identifying the specific types of outputs it produces, the quantities of those outputs, and their unit costs – in exactly the same process as described above for vaccinations. For example, the funding requirement of the irrigation program would be estimated by multiplying the cost of building one village pump by the number of planned pumps, and then doing the same for the other types of irrigation services delivered under the program. In some parts of the world, this model is so influential that many people think it is the one and only meaning of "performance budgeting". Despite this, it is a model without a generally recognized label. It will be referred to here as *output-cost based program budgeting.* Some people confuse it with *activity-based budgeting*, and present it as a process in which each program's *activities* are identified, costed and budgeted for. However, this is wrong because it is based on an (unfortunately quite widespread) confusion between activities and outputs.[8]

Even more widespread is the attempt to use budget-linked performance targets as a key element of the government-wide performance budgeting system. The main form that this takes is to combine performance targets with program budgeting, by requiring that key performance targets be set *for each program* as part of the budget process.[9]

Unit Costs and the Government-Wide Budget

It is precisely the success of the unit cost approach to linking funding and results at the sectoral level which has led to a desire to generalize the approach across government. The seductiveness of this siren call is exemplified by Schick's (2008: 11) recent suggestion that, to be effective, performance budgeting should use marginal cost (a type of unit cost) to link funding and results. In his view, "ideally, performance budgeting …[should] expressly link each increment in resources to increments in results …by means of sophisticated cost accounting schemes that disaggregate results into standard units and measure the cost of each unit". But is it really possible to make unit costs the basis for the government-wide performance budgeting system?

Unfortunately, the answer is *no*. The problem is that the unit cost approach only works where for those types of government outputs which have a stable unit cost. This is the case, for example, where the type of service provided to one client or case is essentially the same as that provided to any other, as is the case for vaccinations[10]. Many public services do not, however, have a stable unit cost. Take an extreme but illustrative case – police criminal investigations. The cost of one murder investigation can vary enormously from that of another, because the circumstances of the case differ. Another example: emergency services in a hospital, where the cost per treatment of patients tends to vary greatly and unpredictably, and which are for this reason excluded from DRG systems. It is easy to identify numerous other examples of such "heterogeneity"— that is, of costs varying because of differences in the effort required because of the circumstances of particular cases. But the problem doesn't end there. How could one possibly fund an army, or a fire service, on the basis of unit costs of the outputs delivered? These are services which government funds not so much for outputs actually delivered (wars fought, fires extinguished etc), but rather to maintain capacity to deliver those crucial outputs if and when they are needed. They are in a sense like insurance policies. (Robinson, 2007d: 31-34; 2007c: 53-54).

It is therefore quite inappropriate to seek to use unit costs as the basis for a government-wide performance budgeting system. The formula funding and purchaser-provider versions of performance budgeting should be seen as primarily appropriate for sectoral application, restricted to service which are relatively standardized. The failure of the "accrual output budgeting" systems of New Zealand and Australia was primarily due to the error of assuming that all government outputs have stable unit costs (Robinson, 2007e).

This problem dooms to failure all the current efforts to develop output-cost based program budgeting by grafting formula funding onto program budgeting. Demanding that all ministries use unit costs to prepare their budget requests on leads to confusion. Ministries such as the police, foreign affairs, defence – and, to a lesser extent, even ministries such as education and health – end up scratching their heads in bewilderment as they attack the impossible task of applying the unit costs methodology to the complex and heterogeneous services which they deliver.

The limited and selective use of unit costing as a tool for program cost estimation can, however, in principle work for the sub-set of government programs which principally deliver standardized services (see below). And the technique will be more useful to some levels of government – particularly local government – than others. Across-the-board application will, however, never work.

Even where it is technically feasible, budgeting based on unit costs is technically demanding. Quite advanced management accounting systems are required. Complex adjustments have to be carried out to allow for complicating factors (such as regional cost differentials). These considerations mean that, as a rule, FF or PP are only worth considering for services which the government delivers in quite large volumes.

Bonus Funding

What about bonus funding? The reason that this can work well on a sectoral basis is that when funding rewards are paid to institutions of the same types (e.g. to universities, or hospitals), they can be based on common (outcome or output) indicators. For example, the same measure of graduate employment (e.g. rate of full time employment six months after graduation) or of research output (e.g. number of publications in top-rated journals) can be applied to all universities to determine their bonus funding.

By contrast, attempting to apply this mechanism on a government-wide basis runs into the problem that there are no standard performance indicators which can compare the outcomes or outputs of, say, the health ministry and the education ministry. It is no doubt for precisely this reason that very few attempts have been made to apply bonus funding to ministries on a government-wide basis. A rare exception was the Canadian province of Ontario, which in the 1990s introduced a system under which ministries were given funding rewards based on subjective rates by the cabinet of ministers of the performance of each ministry (GAO, 2002). The obvious lack of credibility of these ratings – which were not only not based on any defined common metric, but were also clearly influenced by political considerations – led to the system's rapid demise.[11]

Budget-Linked Performance Targets

The one "newer" performance budgeting mechanism which arguably has merit on a government-wide basis is budget-linked performance targets. It is, for example, difficult not to be impressed by the apparent success of the UK PSA model in inducing quite large improvements in targets outcomes.

From a performance budgeting perspective, the most important question concerns the linkage between performance targets and the budget. The UK case suggests that this linkage can be important for two reasons. The first is that setting targets as part of the budget process – and, as part of this, scrutinizing performance against past targets when deciding future resourcing – can significantly increase the pressure on ministries to take centrally-imposed targets seriously. The second is that linking the two processes helps to ensure that the targets are not inconsistent with the level of resourcing – thus, for example, avoiding a situation where targets are set which disregard that the impact of funding cuts to a ministry upon its potential performance. The incompatibility of budgets and targets is a real problem in the many countries where there is no coordination between the budget and the setting of centrally-imposed performance targets[12].

It is, however, unrealistic to expect close calibration of targets and budgets. In the case of outcomes, the impact of external factors and uncertain time lags means that it is generally impossible to say what improvement in measured outcomes can be reasonably expected as a result of a specific increase in budget funding. Who can say, for example, what increase in literacy levels it is reasonable to expect over, say, a three year time frame, as a result of a ten percent increase in funding to the education ministry? In respect to outputs, only in the case of standardized outputs which have – as discussed previously – a stable unit cost is it possible to closely link an output quantity target to the level of funding. These realities require flexibility in interpreting, and reacting to, ministry failures to achieve their targets.

Target-setting is controversial. Some critics claim that targets actually worsen performance, or at best leave it unchanged. They note that "gaming" – falsification or manipulation of reported performance against the target – may give the impression of improved performance when there is none. "Perverse effects" – deteriorations in aspects of performance not measured by the targets (e.g. the quality of service deteriorates when quantity increases) – might also more than offset the benefits of improved performance against the target variable. Unfortunately, it is not possible to cover these and other debates about target-setting here. However, it may be suggested that such empirical evidence as does exist of perverse effects and gaming in the public sector does not indicate that these problems are so serious as to outweigh the benefits of target-setting[13].

If target-setting is linked to the budget, its effectiveness will depend on limiting the number of centrally-imposed targets and to ensuring that performance against them is monitored. In some countries, the budget documents have been crammed with thousands of program performance targets with little monitoring of actual performance. Unsurprisingly, the targets are not taken very seriously. Again, the approach taken under the PSA system provides useful guidance. Not only was the number of PSA targets strictly limited, but performance relative to the PSA targets was carefully monitored by both the finance ministry and a "service delivery unit" reporting directly to the Prime Minister.

Implementation and Sequencing of Government-Wide Performance Budgeting

This chapter has suggested that program budgeting is the core form of government-wide performance budgeting. Implementation and sequencing of program budgeting must, however, be approached properly. If starting from scratch, implementing program budgeting requires three main initial steps:

- The development of a performance information base: The initial aim should therefore be to develop a relatively small set of useful program indicators, along with quite simple program evaluation which is designed to be usable in the budget process. (This should be viewed as the start of a longer-term process of more towards a more comprehensive monitoring and evaluation system.)
- The development of ministry program structures.
- The modification of the accounting system and the computerized financial management information system (FMIS) to make them program-friendly.

Only after the last of these steps is completed it is possible to start legally approving the budget on a program basis. Prior to this point, most countries first develop indicative program budgets which are presented to the parliament as an annex to the traditional budget. This shows what the budget appropriations would look like if they were approved in program terms.

In moving to program appropriations, it is crucial to make a clear decision about the manner and extent to which traditional line-item control budget controls will be reduced. It is a serious mistake to simply impose program appropriations on top of a highly detailed traditional budget.

The example of France is a good one to have in mind when determining the implementation timetable. After having spent some years determining the broad parameters of its new performance budgeting system, France deliberately chose a five year implementation period between the 2001 passage of the law mandating the new system and its coming into full force in 2006. This five year implementation timetable should be regarded as, if anything, ambitious.

Once the budget law has been moved onto a program basis, with accompanying program indicators and program evaluation, it becomes possible to add on more sophisticated elements to the program budgeting system.

The first of these is budget-linked targets, in the form of selected key program performance targets. It is true that many countries start setting targets for program performance indicators as soon as those indicators are developed, and have often also required that targets be set for *all* program performance indicators. This is not, however, good practice. It is important to have several years' data for a performance indicator before starting to set targets for it, because it is essential to have an accurate baseline. Moreover, if targets are to be taken seriously, it is important to carefully select which indicators will be used for target-setting, rather than simply requiring that targets be set for all indicators. Good processes also need to be established for the negotiation between spending ministries and the government of the appropriate numerical values and time frames for targets.

An even more advanced "add-on" to program budgeting is the *selective* use of the unit costing technique. As indicated above, it should be recognized that this technique does not suit many types of government outputs. However, for those types of output which do have a stable unit cost, consideration can be given to using it in the setting of program *output* targets. (For example, when the health ministry is given $2m for vaccinations, an output target of 100,000 vaccinations may be set for its preventative health program.) However, the fact that this technique generally requires quite advanced managerial accounting means that it should be pursued on any scale only at a point well after the basic program budgeting system is well established (Diamond, 2007).

The management of the implementation process for government-wide performance budgeting is critical to success. Performance budgeting cannot, firstly, be implemented successfully without strong support from the political leadership. It will usually make sense for the MoF – perhaps in conjunction with other central agencies – to create an implementation task force which includes the spending ministries. Throughout the implementation process, the MoF need to provide spending ministries strong technical guidance and support.

Finally, performance budgeting should not be treated as an isolated reform. Not only should it be part of a broader set of budgetary reforms – for example, covering expenditure prioritization processes – but it should also be closely linked to a broader set of results-oriented public management reforms. These should include civil service reform, the reform of administrative structures, and the introduction of greater client choice.

Performance Budgeting in Developing Countries

For a developing country, the first question is whether it is ready for the introduction of performance budgeting. If the country's budgeting system has major basic weaknesses – for example, an inability to ensure that ministries stick to their budgets – the resolution of these weaknesses should be treated as a priority, and any consideration of performance budgeting postponed. And if the country has profound governance problems – for example, a political leadership which is deeply corrupt and uninterested in public sector performance – it should be frankly recognized that performance budgeting is not going to work. Having said this, there is no justification for the view – advanced by some – that performance budgeting is something only for developed countries.

The resource and capacity limitations of developing countries make it particularly important to avoid unnecessarily complex performance budgeting mechanisms, such as the large-scale application of unit costing techniques. Developing countries should also not be seduced by unfounded claims that, to make performance budgeting work, it is necessary to implement "advanced" accounting reforms such as accrual accounting and activity-based costing. The guiding principle should be "keep it simple".

Developing countries are sometimes strikingly unrealistic about the implementation timetable for performance budgeting – they want it implemented in, say, one or two years. These unrealistic expectations indicate that they do not fully understand the far-reaching nature of the reform. On the other hand, one should be cautious about suggestions that developing countries require much longer implementation periods than do developed countries. If the preconditions are in place, taking longer than, say, five years is generally not justifiable. Too long an implementation timetable all too easily leads to reform fatigue and failure.

Conclusions and Practitioner's Guide

What works and what doesn't work? The conclusions of this chapter on this question are as follows:

- Program budgeting is the most useful and relevant form of *government-wide* performance budgeting.
- The standard critiques of program budgeting are misguided and unconvincing. Claims that program budgeting is ineffective in improving expenditure prioritization tend to be based on unrealistic expectations of what this single reform is capable of achieving in isolation. They hold program budgeting responsible for problems arising from other obstacles to improved expenditure prioritization. Claims that it is not technically feasible to allocate resources by product line are unjustified.

- To succeed, program budgeting must be seen not as an isolated reform in budget classification but as part of a wider set of reforms. Developing the right type of program performance information – including evaluation as well as good indicators – is essential. So also are complementary reforms, including the development of better expenditure prioritization processes during budget preparation and the reduction of expenditure inflexibilities. More generally, performance budgeting should be pursued within the context of a wider "managing-for-results" reform program.

- The attempt to go beyond program budgeting with *government-wide* performance budgeting systems based on formula funding, purchaser-provider or bonus funding are misguided and doomed to failure. This is true both of attempts to *replace* program budgeting with these mechanisms (e.g. *accrual output budgeting*), and of attempts to combine these mechanisms with program budgeting (e.g. *output-cost based program budgeting*). Reform blueprints along these lines simply waste effort and resources, and lead to disillusionment.

- Government-wide performance budgeting systems based on output unit costs – including *output-cost based program budgeting* – do not work because there are many types of government outputs for which expenditure cannot be calculated by multiplying planned output quantity by unit cost. The problem is not just that the complexity of unit cost budgeting is too great for developing countries – although this also is true.

- Formula funding, purchaser-provider and bonus funding mechanisms work only on a selective basis, and should therefore be only applied selectively (mainly, to specific sectors such as education and health) and in countries with sufficient capacity and resources to cope with their added complexity. Where these mechanisms can work, they provide a powerful means of promoting better performance, and should therefore be encouraged.

- Integrating the setting of key performance targets into the budget preparation process can strengthen the government-wide performance budgeting system – but only if the right approach is taken to target-setting. This means, amongst other things, selectiveness in choosing targets and effective monitoring of performance against targets. Target-setting can be readily incorporated within the structure of a program budgeting system.

In respect to implementation strategy for government-wide performance budgeting, the key points are:

- Before deciding to introduce performance budgeting, careful consideration should be given to whether countries meet the appropriate preconditions, including those which relate to the quality of governance and the soundness of basic budget processes.

- The development of program performance information – including program evaluation – should be pursued in tandem with the development of a program budget classification, not left till a later stage,

- The need to make the accounting system (including the FMIS) program-compatible should be recognized and planned for from the outset,

- Keeping the system simple – by, for example, postponing consideration of more complex optional "add-ons" and resisting demands to combine performance budgeting with complex reforms such as accrual accounting – substantially increases the chances of success. This is true in developed as well as developing countries.

The considerable and growing interest in performance budgeting around the world makes it imperative that practitioners understand and take to hear the lessons of past experience in respect to both design and implementation. If this is done, performance budgeting will make a major contribution in helping countries to deal with the major fiscal challenges which they face now and in coming years.

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[1] The term "ministry" should be understood to include in this chapter all government agencies – i.e. all agencies which depend primarily on taxes for their financing.

[2] Performance auditing is in fact considerably less important to effective program budgeting than is evaluation carried out within executive government, because performance auditing is in general an external ex post accountability tool rather than an executive management and budgeting tool. See Robinson (2011).

[3] More precisely, for each "decision unit", which could be either a program or an organizational unit.

[4] A mistake which many countries have made is to use performance indicators which happen already to be available. In general, this results in a set of program performance indicators mainly focused on activities (work processes) and inputs (resources), and too little on program outcomes and outputs.

[5] External factors are other influences which are outside the control of government and which may assert an unpredictable influence on measured outcomes.

[6] There are some political scientists who object that the aim of more rational expenditure prioritization is misguided because, in their view, politics and politics alone will determine budgetary allocations, leaving no role for considerations of what will benefit society most. However, it is surely a gross exaggeration to suggest that politics and rational expenditure allocation are completely antithetical and that, even in well-governed societies, politicians have no interest in the effectiveness of public expenditure.

[7] It is not impossible to allocate funds from two separate programs to a single organizational unit. If this is done, it requires that the organizational unit concerned manages these allocations as two separate pots of money each of which is only to be used for its designated purpose.

[8] Activities are work processes rather than outputs (services to external clients). Even if budgeting on the basis of unit *activity costs* were technically feasible (it is not), it would not constitute a form of performance budgeting, as it would not link funding to results. "Activity-based budgeting" gained some favor by being seen as the application to budgeting of the well-known "activity-based costing" (see Robinson, 2007c: 54-55).

[9] The UK system was unusual in that the PSA performance targets were not linked to budgetary programs.

[10] It can also be the case for services where the average cost is fairly stable because the extra cost of high cost is averaged out by lower cost cases. This is the case for many types of hospital treatments, which is why the DRG hospital funding system works.

[11] The Management Improvement Program introduced in 1998 Chile might also be considered to have been an attempt at a bonus funding system for performance. Under this system, agencies and their staff were to be rewarded for performance again targets, *including results targets*. Again, however, the problem of lack of comparability of ministry indicators and targets rapidly became apparent, and the program was modified in 2001 to one which rewarded only management processes, rather than results achieved (Arenas and Berner, 2010: 15, 37-8).

[12] E.g. the former is undertaken by the ministry of finance and the latter by the civil service ministry or president's office.

[13] See on this Social Market Foundation (2005), Kelman and Friedman (2007) and Hood (2006).