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## From Program to Performance Budgeting: The Challenge for Emerging Market Economies

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**Abstract**

<p>The views expressed in this Working Paper are those of the author(s) and do not necessarily represent those of the IMF or IMF policy. Working Papers describe research in progress by the author(s) and are published to elicit comments and to further debate.</p>
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Many emerging market economies are trying to improve their budget processes and move to performance-based budgeting. This paper first reviews the evolution of the “new” performance budgeting model, increasingly being applied in industrial countries. By identifying its main components, the tasks faced by emerging market economies when converting their present budget systems to this model are determined. It is recognized that this conversion will not be easy and will require four major reform elements. First, any existing program structure must be set in the wider context of strategic budget planning and medium-term budget frameworks. Second, this typically involves redesigning and refining existing program structures. Third, existing budget-costing systems and associated skills will probably need to be improved. Fourth, and perhaps most difficult, a new system of accountability and budget incentives needs to be introduced. For emerging market economies, these should be viewed as the prerequisites for a successful introduction of the new performance-budgeting model.

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## I. INTRODUCTION

This paper first reviews the progression from the “old” performance-budgeting model, introduced in the United States over half a century ago, to the “new” performance budgeting model. The latter, which contains many of the elements of the old model, is being increasingly applied in the advanced economies, including the United States. Using the classification of budget models derived from this review, many of the emerging market economies can be viewed as having introduced some form of program budgeting, although admittedly the term is used in a wide variety of ways. However, they have yet to advance further to output budgeting, and then subsequently to incorporate the reforms required for the new performance budgeting. In this paper, it will be argued that by not making this move, the emerging market economies have failed to make full use of their program budgets to improve budget management. It is recognized that taking this step is not easy and will require four main elements to be introduced and/or strengthened to assure the success of such a move. These should be viewed as the basis of the strategy to introduce the new performance-budgeting model.

It is argued that the four main elements of this strategy are as follows. First, any existing program structure must be set in a wider context of budget planning and policy. It should be an integral part of a strategic medium-term expenditure plan, connecting policy objectives with detailed annual budget plans. This mirrors the fact that in industrial countries the introduction of the new performance-budgeting approach has paralleled the greater reliance on medium-term budget frameworks. Second, there is often a need to redesign or refine present program structures to remove institutional and information constraints that often impede their usefulness for budget managers. Third, there is usually also a need to improve budget-costing systems, whose rather limited role in traditional budget systems needs to be expanded. Fourth, and perhaps most difficult, a new system of accountability and budget incentives needs to be introduced, thus recognizing that budget management is only one dimension of effective public resource management.

## II. THE ROAD FROM OLD TO NEW PERFORMANCE BUDGETING

First and foremost, there is a need to clarify terminology in this area. Budget reforms that were introduced in industrial countries following World War II, under the rubric of “performance budgeting,” have been introduced in many guises and generally have endured in some form in most countries. Unfortunately, owing to these many variants, the term itself has been interpreted differently at different times and in different countries. At the broadest definitional level, the term is associated, first, with a budget presentation that emphasizes the outputs rather than the inputs associated with government operations<sup>2</sup> and second, with a restructuring of government operations on the basis of programs and activities producing

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<sup>2</sup> Or as Burkhead put it... “that emphasizes the things which government does, rather than the things which government buys. Performance budgeting shifts the emphasis from the means of accomplishment to the accomplishment itself” (Burkhead, 1956, p. 133).

these outputs. As a consequence, the term is often used synonymously with program budgeting.

At the same time, there is also a vast body of literature on program budgeting,<sup>3</sup> which unfortunately also tends to be somewhat confused because there is no unique form of program budgeting, and because terms, such as program budgeting; associated orientations, such as performance budgeting and planning-programming-budgeting systems (PPBSs); and, subsequently, results and output-based budgeting, are often used interchangeably.

Accordingly, to impose some order in this terminological confusion, this paper attempts a stylized characterization of each of these budgeting concepts and their specific features. As indicated in Box 1, the progression toward the “new” performance budgeting can be characterized as following distinct steps, namely:

### **A. The Origins of Performance Budgeting**

The concept of performance budgeting has a long history. Although elements of program budgeting were in evidence in the United States prior to World War II,<sup>4</sup> the term performance budgeting is more clearly associated with the 1950s reforms in the United States. The latter attempted to develop performance information for budgeting and to reorient the U.S. federal budget process from its focus on inputs to one that also included the outputs derived from using those inputs. The approach really took off when the Hoover Commission on the organization of the executive branch of the government in 1949 promoted this approach and encouraged its widespread implementation.<sup>5</sup> The Budget and Accounting Procedures Act of 1950 required agency heads, in coordination with the Bureau of the Budget, to support their budget requests with information on performance and program costs by organizational unit. The U.S. budget for the 1950/51 fiscal year was the first to show the effects of this changed perspective. It should be noted that, even from these beginnings, the Hoover Commission used the terms program budgeting and performance budgeting almost synonymously.<sup>6</sup>

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<sup>3</sup> For example, Wildavsky (1969) and Henke (1992).

<sup>4</sup> An early definition by the U.S. Bureau of the Budget quoted in Axelrod (1988, p. 266): “A performance budget is one which presents the purposes and objectives for which funds are required, the costs of the programs proposed for achieving these objectives, and quantitative data measuring the accomplishments and work performance under each program.” The Tennessee Valley Authority’s program budget system of the mid-1930s, while a “for profit” agency, is a classic example of the approach, and other federal agencies followed by developing activity schedules within program budgets during the war years.

<sup>5</sup> The Hoover Commission also publicized the concept of a “performance budget” in recommending “that the whole budgetary concept of the federal government should be fashioned by the adoption of a budget based on functions, activities, and projects; this we designate a performance budget.”

<sup>6</sup> “A program or performance budget should be substituted for the present budget, thus presenting in a document of much briefer compass the Government’s expenditure requirements in terms of services, activities, and work projects, rather than in terms of the things bought” (A. E. Buck in the Hoover Commission’s Task Force Report).

## **Box 1. Terminology: The Road to the New Performance Budgeting**

### **Planning, programming, and budgeting systems (PPBSs)**

Elements:

- Identification and examination of goals and objectives in each major area of government activity.
- Analysis of the output of a given program in terms of objectives.
- The measurement of total program costs, not just for current year but several years ahead.
- The formulation of multi-year expenditure programs.
- The analysis of alternatives to find the most efficient and effective means of attaining program objectives.
- The establishment of these procedures as a systematic part of the budget review process.

### **Program budgeting**

Elements:

- Group organizational units within common functions and subfunctions.
- Identify costs of a function and subfunction.
- Given these costs, decide what the unit's output should be.

Program budgeting leaves the PPBS's higher-level strategic planning functions out of the budget process. It entails an interactive process refining cost assignment and output definition.

### **Output budgeting**

Elements:

- Group together all costs of achieving a particular output, regardless of the number of agencies involved in producing it.
- Emphasize on full costing, including overhead assignment.
- Define outputs in terms of measurable indicators and to assess the quality of goods and services delivered, analogous to what is done in the private sector.
- Compare with actual output to gauge efficiency and effectiveness.

### **New performance budgeting**

Elements:

- Contains all elements of output budgeting.
- Incorporates explicit performance measures and systems of performance assessment.
- Also includes higher-level accountability with associated rewards and sanctions.

Note: Program, output, and "new" performance budgeting all occur after the first two steps of PPBS have been completed.

In these early days, performance budgeting was not viewed as a fundamental change in budget decision making, but rather a useful adjunct that was perhaps relevant for only some service-based operations. These reforms were seen as being severely handicapped by inadequate accounting systems that could not identify the full costs of government operations; the equally constraining problem of developing measures of performance; and, most particularly, the lack of interest of decision makers in using performance information (Burkhead, 1956). In practice, program and performance budgeting proved time consuming and required much administrative support: improved accounting, costing, activity, and performance-measurement systems.<sup>7</sup> Nor was it very popular with appropriation committees, who were more comfortable with detailed line item controls rather than providing lump-sum appropriations in return for specified levels of performance. Budgeteers also often preferred that information on operating targets, workload, and performance standards not be explicit but remain largely hidden in detailed objects of expense.

### **B. The PPBS Period**

Nevertheless, the application of program and performance budgeting persisted in the United States at the federal government level. The PPBS, as a complete system of budget making, was first adopted by U.S. Department of Defense in 1961, then later applied to all agencies, and subsequently spread to states and local governments, and also to some other countries.

The PPBS process—as its name implies—had three basic phases which linked planning with budgeting through programs. The *planning phase* sought to identify present and future objectives, to evaluate different possible ways of achieving these objectives. The *programming phase* then took the proposals of the planning phase and integrated them into programs arranged by a hierarchy of priorities that would be subject to decision-making at different levels of the political hierarchy. For example, the setting of broad priorities (program categories) would be government/cabinet level responsibility, while the optimization within individual programs would be the task of sector agencies. The third phase of budgeting was the translation of each multi-year program into a set of specific annual actions, by determining who does what and then assigning required resources. This was a difficult stage of the process. Since the administrative structure of the budget could be different from that of program structure, it was difficult to apportion resources between programs. Moreover, the U.S. federal budget process was strictly regulated by a complex set of laws, which had evolved over time that governed not only the budget structure but the means of presentation, approval, and execution.

By 1971, the system was largely abandoned. In part, the system was a victim of its own ambition. As Axelrod argues, “many of the problems of the PPBS in the federal government

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<sup>7</sup> As a consequence, Schick, 1971, complained of hybridization, whereby various aspects of the performance system were assimilated into traditional budget procedures and thereby watered down. He writes... “once the initial allure of performance budgeting had worn off, it was viewed with indifference. Performance budgeting was not salient to the interest of budget participants, nor was it regarded as an important reform” (p. 62).

stemmed from its simultaneous introduction across the board in agencies that were ill-prepared to implement it.”<sup>8</sup> The diagnosis of what went wrong holds lessons for the future adoption of a full-scale budget programming approach. Despite its name, the PPBS was not a single system: each agency had to develop its own version and often agency directors did not appreciate its value and were reluctant to undertake such work. Central leadership of the reform process was lacking. The reluctance to fully convert to the new system was fueled by the fact that the Bureau of the Budget continued to review cost and performance on the traditional basis in making its recommendations. Its adoption was further undermined by a lack of commitment by legislators: the congress insisted on the traditional budgetary presentation and on preserving the existing appropriation structure. Additionally, there were important practical problems never fully resolved: of program definition, of how to develop a program or subprogram around each objective, of how to allocate costs to it. In many ways, as will be evident from subsequent sections in this paper, many of these question still beg answers. Further, there was a question of coverage. The entire system was probably not useful in dealing with large segments of government expenditures: entitlements; transfer payments to state and local governments; debt servicing; tax expenditures; and off-budget expenditures.

In the end, the critics were damning. Wildavsky characterized the system as “a vast amount of inchoate information characterized by premature quantification of irrelevant items.”<sup>9</sup> The system imposed what was felt to be an unbearable burden of calculation that choked the budgetary process that impeded budgetary decision making instead of expediting it. Schick (1971) was equally damning, focusing on what he felt was a chasm between planning and budgeting—the ideal of analytical policy analysis, as seen in the PPBS, was stifled by the routines of budgetary process reality.

### **C. Consolidation and Refinement of Program Budgeting**

Despite the demise of the full-blown PPBS, program budgeting continued to be applied in the United States in a less-ambitious form. The passage of the Congressional and Impoundment Act of 1974 advanced multiyear budgeting; budget classifications by mission, function, and program; the use of sophisticated analytical techniques by the Congressional Budget Office and the General Accounting Office (GAO), the development of performance indicators; and improved accounting and information systems. This approach persisted to the present day, resulting in a situation where it is possible for federal budget decision makers to have data on program and performance as well as on objects of expense.<sup>10</sup> Moreover, in the meantime, the program approach to budgeting spread to other countries.

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<sup>8</sup> Axelrod, 1988 (p. 288).

<sup>9</sup> Wildavsky, 1969.

<sup>10</sup> However, for some of the critics the data on programs and performance is just window dressing, with decisions being taken based on traditional line-item objects of expense (Schick, 1966).



With the 1965 publication by the UN of a Manual for Program and Performance Budgeting, the use of program and performance budgeting was reinforced as a tool of development planning. In the 1960s, nearly 50 countries introduced variants of program and performance budgeting, although never on the scale of the United States. This then spread to developing countries, so that, by the end of the 1960s, nearly all Latin American countries, several Asian countries, and some African countries had introduced versions of program budgeting.<sup>11</sup> On the whole, the impact on-budget decision-making has been disappointing<sup>12</sup>—perhaps indicating that for many developing countries, its adoption was premature. The UN Manual, heavily based on U.S. experience, did lay down preconditions for successful performance budgeting in developing countries: sound budgetary operating procedures; financial discipline; efficient methods of recording and reporting financial and physical data; and close coordination between the central budget agency and other government agencies. All, or most, being typically absent in developing countries.

#### **D. Output and the New Performance Budgeting**

In the United States, after the PPBS system, there were brief initiatives, such as Management by Objectives and Zero-Based Budgeting, but these were limited in impact, being pushed by the executive branch with little or no involvement of congress. However, between 1990 and 1996, there was a spate of new laws that emerged from congress that created a government-wide platform for the “new performance”-based management. The term “new performance budgeting” was used by Mikesell in the United States to categorize these reforms of the 1990s: the Chief Financial Officers Act of 1990, the Government Performance and Results Act of 1993, the Federal Acquisition Streamlining Act of 1994, and the Clinger Cohen Act of 1996.<sup>13</sup> All represented an attempt to convert the federal budget process to a more results-based one with specific references to the use of performance information for budgeting.<sup>14</sup>

However, in many ways this new legislation was only the means for the United States to catch up with international developments in public expenditure management (PEM) reform. Following the early lead of New Zealand, whose public sector reforms culminated in the passing of the Fiscal Responsibility Act in 1994, other countries, such as Australia and the United Kingdom, were quick to follow, and in turn their attempts were mimicked in many northern European countries, as well as the United States. The penetration of the new ideas to

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<sup>11</sup> Waterson, (1965), identifies 16 countries, ten in Latin America, that had experimented with performance budgeting; Premchand (1977) provides brief case studies of similar budget innovations in Asia.

<sup>12</sup> These problems led Dean to conclude that “the history of performance budgeting is one of high hopes and disappointing achievement” (Dean, 1989, p. 123).

<sup>13</sup> FASA included provisions for agencies to establish cost, performance, and schedule goals for major acquisitions and related pay to performance; Clinger-Cohen included requirements for agencies to develop performance measures for information technology used or acquired by the agency.

<sup>14</sup> See J. Mikesell (1995).

lower levels of government has been almost universal in these countries.<sup>15</sup> The themes of these new reforms—often termed the New Public Management—were the primary emphasis on outputs outcomes, and performance in budgeting; particularly the use of performance information in the budget. This was coupled with other major PEM reforms: the introduction of greater flexibility for government bodies (agencies); the introduction of contractual arrangements; and the move away from cash accounting to the use of accrual accounting and budgeting on the lines of the private sector.<sup>16</sup> It was the first aspect, the “new performance” approach, that has been the most universally accepted internationally. An OECD 2001 survey found that 70 percent of its membership included performance information in their budgets, whereas the remainder included such information for a limited set of programs. Moreover, 40 percent of the countries surveyed claimed their performance measures distinguished between outputs and outcomes, with 20 countries using systematic annual reporting on performance against outputs and 15 countries on performance against outcomes targets.<sup>17</sup>

A key feature of the new performance budgeting approach is the recognition that, if performance is to matter, the objectives of the budget management system must be integrated with overall accountability, so that good budgetary performance is rewarded while a poor one is penalized. Although countries have taken different approaches to how they achieve this, there are some common elements that can be identified from OECD experience.

The new performance budgeting is more comprehensive than a simple refinement of budget programs. While using a program structure to introduce a performance orientation, it is clear that, to be effective, a program budget format must also be integrated into a wider model of budget management. Experience suggests that the benefits of a budget program format will soon be lost unless departments (and most central agencies) continue the momentum and purpose of the reform by moving on to develop standards of service delivery and search for ways by which these standards can be continuously improved and services delivered more effectively. That is, government service delivery needs to be redefined in a more results-oriented manner. How to do this? The most effective way, at least from the experience of a few pioneering industrial countries, involves a fundamental revision of accountability relationships within the public sector. The implications for budget management are profound: firstly, performance needs to be specified and reported in a way which is operational for budget managers; secondly, government agencies need greater managerial autonomy and freedom from tight input controls, so they can determine their most efficient delivery of results; and, thirdly, changes are required for the range of incentives and sanctions facing departmental managers.

Accordingly, it can be concluded that a good program structure is the basis for budget reform along the lines of the “new performance” budgeting approach, but experience indicates that it

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<sup>15</sup> See S. Bellamy and R. Kluvers, 1995, pp. 39.

<sup>16</sup> For a review of the experience and difficulties in implementing this approach, see Schick (1996).

<sup>17</sup> For full details see Kristensen (2002).

will not be sufficient to ensure it. If the program structure is to yield benefits it must be linked to other much wider reforms.

If one views the progression from old to new performance budgeting as stages in the development of budget management, it is possible to characterize many emerging market economies as having reached the stage of program budgeting, with some already experimenting with the next stages of output budgeting. To successfully move on to these next stages some lessons of the past should not be forgotten. Generally, this means that emerging market economies require to introduce a program structure into their budgets, and where they already exist, to fundamentally redesign their program structures to accommodate the new performance budgeting approach. Specifically, it requires reviewing programs to ensure that there is a clear policy statement or list of objectives that adequately define the purpose of the programs, so that the results expected from the programs can be assessed and measured in some way and be reported. In turn, this will allow the introduction of more rigorous accountability mechanisms characterizing the “new” performance budgeting approach.

### III. ISSUES OF DESIGN IN A PROGRAM STRUCTURE

From the previous, necessarily brief, review of the evolution of the concept of performance budgeting some key features emerge. First, *an essential element in all systems is the concept of a program* and the restructuring of the budget on this basis. The principles are fairly clear: a program is viewed as any suitable and meaningfully integrated group of activities and projects, under a single manager, which consume resources to contribute to a specified policy objective. The operational objectives of each program and activity can then be identified. On this basis, budgeting and accounting can be carried out, so that the separate costs and revenues of each program/activity are made clear to decision makers. It is apparent from this description that the evolution of this program approach maintains the same fundamentals but adds some elements. Thus, output budgeting would add measuring the outputs and performance of activities so that they can be related to their costs and operational objectives. In turn, the “new” performance budgeting would add to this the use of the resultant data to establish standards and norms, so that costs and performance can be evaluated and government resources used more efficiently/effectively through an incentive system that enforces accountability. To all approaches, the basis of performance budgeting is a meaningful program structure.

Second, *the program approach to budgeting is an enduring one* which, despite its critics, has been viewed by budget practitioners as having value added. In contrast to traditional line-item budgeting, program budgeting is seen to counter the alleged deficiencies of its short-term focus, its incremental nature, emphasis on input rather than program outputs, and its excessive detail which obscures alternative means of reaching the same objectives. (Babunakis, 1976). At the same time, it must be admitted that there is little agreement on the guiding principles of program classification. As a consequence in practice, the term is used in a variety of ways—in some cases a “program” corresponds more closely to a broader concept of a “fund,” and in others is closer to a line item of expenditure. Inevitably, by being policy oriented, a program structure tends to be country specific.

Third, *its successful implementation has proved to be universally difficult* in whatever country setting and in whatever form it has been attempted. Some of these problems have already been indicated: difficulty in providing meaningful information, particularly relating costs to performance data; suspicion of information overload; legislators reluctance to yield detailed line item controls associated with the concern that somehow budget compliance will be compromised; failure to implant this in wider budget management reforms, particularly that of increased delegation—indeed, perhaps it has been viewed suspiciously by some as a way of circumventing centralized controls. The following sections of this paper explore these considerations further, stressing four main features:

- The program structure should be set in a wider strategic framework

The program structure is basically a way of describing the expenditure plan of the budget in terms of objectives. To be relevant the program structure must be anchored in a wider strategic view that allows it to describe the contribution of government operations to achieving nationwide objectives. To use the language of strategic planning, the national objectives or “strategic result areas” are translated into detailed and fully costed “key result areas” which are the responsibility of specific government units. The latter should then formulate the required detailed implementation plans required for preparing the agency’s budget bid. The wider strategic view has typically been addressed in many countries by adopting a medium term budget framework, as discussed below.

- Defined in a way to support political decision-making and prioritization

Following from the need to relate programs to wider policy and planning priorities, it is necessary to make clear the relationship between the resources used by the program and the proposed outputs and/or policy result (outcome). This implies programs are provided with sufficient resources to meet the objectives assigned to them, and in turn, to ensure this there must be adequate costing of the program’s outputs. The latter has often proved technically difficult to achieve for government operations.

- Structured in a way to ensure accountability

Programs and subprograms should be disaggregated to activities and projects in such a way to support clear managerial responsibility in attaining the proposed outputs or outcomes. This implies each program has an appropriate size for efficient management and clear managerial responsibility, usually within a single organizational unit. It also implies programs should be designed and “owned” by the organizational unit and not by the MOF.

- Integrated into a wider performance–enforcing budget management model

To gain maximum benefit from the program structure in terms of improved performance, and to allow accountability to be enforced, requires wider budget management reforms. It entails that responsibility for implementing each program/subprogram should be aligned to budget appropriations as much as possible, providing a clear link between budget and policy outputs/outcomes. This implies that programs are directly linked to one appropriation head.

#### **IV. THE WIDER STRATEGIC FRAMEWORK OF THE PROGRAM STRUCTURE**

As indicated, the core building block of performance budgeting is a meaningful program structure for government operations. However, underlying this reorientation is a wider objective to improve the quality of budgeting—by providing a link with policy, to help in ensuring the relevance to wider sectoral policies of government operations supported by budget appropriations. However, designing an operational program structure for the budget should not simply be regarded a way of reclassifying the government’s expenditure plan. Rather it should involve some more fundamental rethinking of government activities and the way they are managed, that is:

- To reconsider their respective roles and missions.
- To review the way they can best organize themselves to carry out their mission.
- To redesign cost allocation and financial reporting systems to improve the efficiency of management.
- To review the efficiency and effectiveness of operations and delivery of goods and services.

The starting point in this review of government activities is to connect them to underlying government objectives. This can be achieved by linking the operations of each spending agency with the implementation of its sector’s policies. Broad sector functions can be divided into subfunctions and these into programs which are constructed from a number of activities, both of a recurrent and capital (project) nature. These activities and projects are then considered as cost centers for which an economic or object of spending classification can be prepared. In this way, the meaningfulness of the program structure is dependent on sectoral policies, and these in turn are dependent on the system of prioritization between sectors. The set of programs will then reflect the major priorities of the government. In this way, the program structure is the link between the budget and the overall strategic planning that reflects the policy framework for government operations. Accordingly, the program structure is much more than a way of classifying expenditures but should be viewed as a tool of policy analysis. It is a way to consider what should be funded, the level of the funds that should be applied, and the policy impact of the funds applied. If effective, therefore, program budgeting should represent a substantial change in the traditional way that budgets are prepared, approved, managed, reported on, and evaluated.

This would require somewhat of a top-down approach to budget planning, in contrast to the bottom-up approach of more traditional budgeting. The drawbacks of the bottom-up approach to budget planning have become well appreciated (see Box 2). Despite the attraction of developing a more proactive top-down approach, it must be recognized that this is not easy. To impose a top-down perspective on budget formulation implies having a strategic view of the state's role in society. This has had a number of implications for budget policy. Firstly, a consequent sharper differentiation between private and public sector activities, and a clear view of what government should and should not do. Secondly, a determination of the maximal size of the resource envelop to be made available to the government sector. Thirdly, in determining this, a clearer view of where and for what purposes the government resources are optimally deployed within this resource envelop. The impetus for performance budgeting comes from this latter perspective.

### **Box 2. Limitations of a “Bottom-Up” Planning Process**

- The spending plans may not be sustainable. The bottom up aggregate demands may result in an unsustainable level of resource use, since no one has an overall aggregate view. The absence of an effective resource constraint results in poor budget discipline.
- There may be counter-productive resource allocations. People working in individual sectors do not fully understand/allow for the complex development linkages. Projects and programs may not be fully compatible and mutually supportive.
- There is a tendency for bottom-up demands to reflect powerful interest groups, not necessarily general welfare considerations. One might suspect the interests of the weak or disadvantaged may not be adequately heard.
- There may be significant gaps in the coverage of such plans. Important areas may not be covered because no one acts as a “product champion”—i.e., accepts responsibility for formulating a needed project. Or because of ambiguities in the public's understanding of the role of the state, neither the government nor the private sector undertake some types of activity (e.g., some types of research or information gathering).

For many countries, the implications of this reorientation has typically been profound. The more precise specification of activities to be carried out by government has, for many industrial countries, resulted in a considerable downsizing of government, and other fundamental public sector reforms. It also has resulted in a restructuring of the relationship between government and the private sector, which, typically, involves a greatly reduced role for the government in influencing particular private sector activities. In terms of the government itself, it has usually involved borrowing the techniques of the private sector in planning and delivering its services. One aspect of this has been the adoption of “strategic planning” in marked contrast to more traditional development planning methodology. This can be viewed, following the New Zealand model, as a top-down process in three stages. First, a determination of the overall sustainable level of government resource use in the economy. Second, within this envelope the government determines its core activities

(“strategic results areas,” in the terminology of strategic planning). Third, each of these basic core activities is then translated into action plans for each department or agency involved in that core activity (i.e., its “key results areas”).

To be meaningful, and to give more weight to the first element, sustainability, these plans are set in a medium-term framework. The strategic results areas should center on a government’s core “public good” function: law and order, infrastructure, education and health facilities as investment in human resources. These should be relatively few in number, and represent those activities or achievements considered to have critical bearing on a country’s development.<sup>18</sup> They should, to the greatest extent possible, be presented in output oriented terms.<sup>19</sup> Within this framework, the next step is to translate each strategic results areas into key results areas for each department, that is represented in their budget vote, incorporated in their respective business plans, and assured adequate budget funds to accomplish these results. In this somewhat idealized system, the strategic plans are translated into budget allocations—again set in a medium term budget framework. The role of the budget then is to provide the link between higher-level planning and formulation of more detailed implementation plans. Schematically, these relationships are shown in Box 3.

## V. FORMULATION OF PROGRAM STRUCTURE IN BUDGET FORMAT

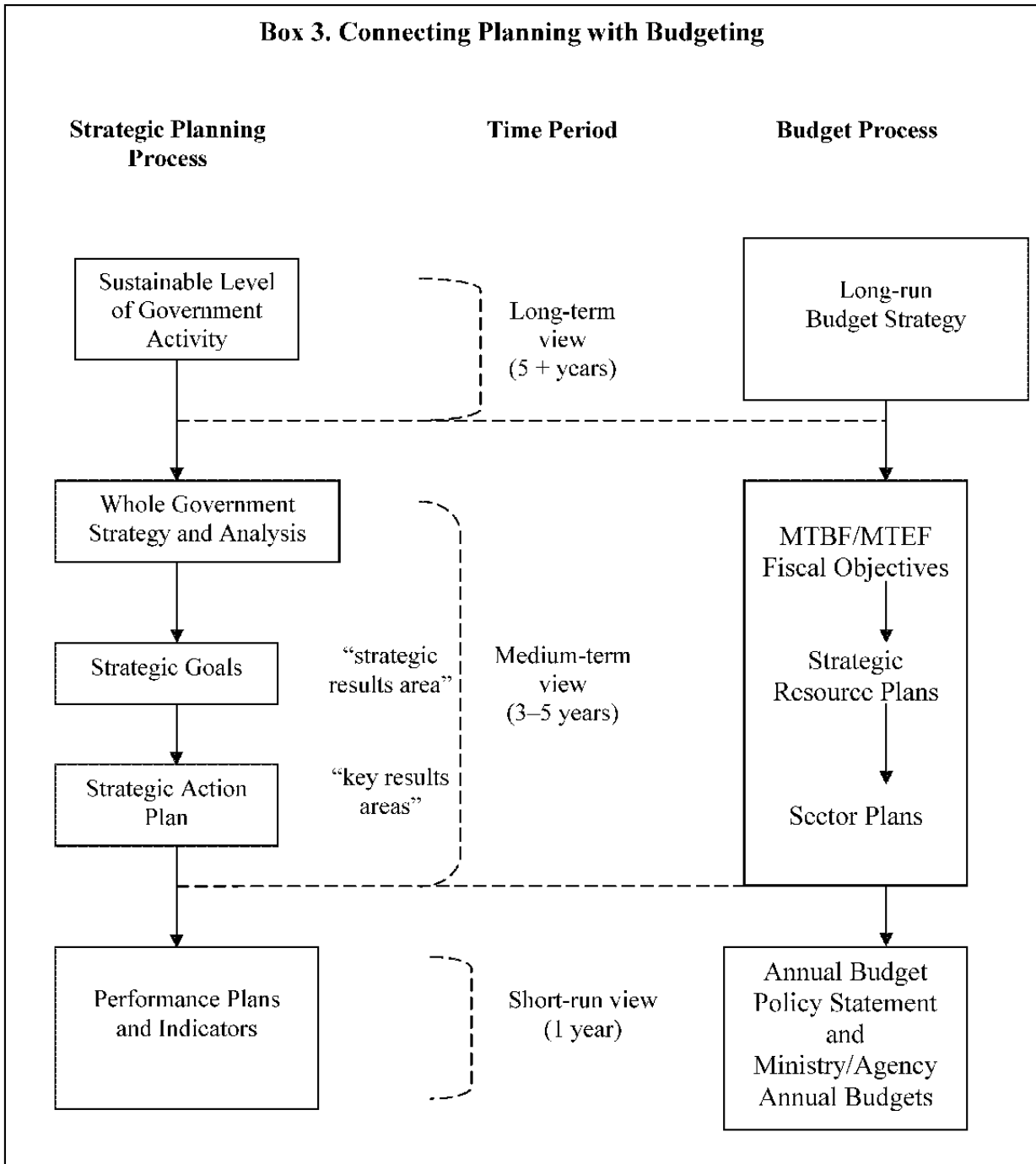
As indicated, typically emerging market economies require to fundamentally redesign their program structure to allow a new performance budgeting approach. As argued in the previous section, this restructuring of programs needs to be placed in the context of a wider strategic plan for government operations to strengthen the link between policy and planning and budgeting. In this context, the review of program structures should ensure that there is a clear policy statement, or list of objectives, that adequately define the purpose of the programs and the results expected from the programs so that they can be assessed and measured in some way. The process for this review is outlined in Box 4. In this way, the central characteristic of a program is a collection of government activities that share some common set of objectives—that is, the program structure is based on policy.

While the program structure should be seen as the means whereby the budget should be linked to strategic objectives, the question still arises how programs should be best designed to meet these objectives. There appear to have been two basic approaches to this task. The route pioneered by the USA is to make the program structure agency specific—take a spending agency (say, a Ministry) and design the program only within that ministry’s activities. Other countries have designated broad policy areas, identifying the programs on

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<sup>18</sup> These will be country specific, since what constitutes a “public good” is debatable; and governments need not necessarily deliver all such public goods.

<sup>19</sup> That is, the results expected should be explicitly stated and these should be quantified where appropriate and relevant.



this basis, so that individual institutions could end up contributing to only a part of a program. The former approach constrains the logic of the policy basis of programs by the prevailing organizational structure of government, and it is possible to end up with meaningless cost centers from a policy analysis viewpoint. This approach does, however, make accountability easier to specify, monitor and enforce. The latter approach, while purer from a policy viewpoint, depends on having adequate classification and accounting capability to capture all inputs associated with programs, regardless of where they arise. This can be a



#### **Box 4. Process for Agreeing on Program Budget Format**

##### **Strategic results areas**

- Define policy objectives in agency's area of operations (sector).
- In light of this, identify the key changes required for the agency to deliver its strategic goals.

##### **Realign strategic action plan**

- A review of each spending unit's role.
- A redefinition of the spending agency's current mission (may change year to year).

##### **Define key results areas**

- Given these key results areas, decide whether the agency is organizing itself the best way to achieve these results.
- Decide on the final distribution of accountabilities, i.e., who is responsible for doing what.

##### **Responsibility centers**

- Identified accountable officers and their supporting staff should prepare implementation plans which elaborate in detail how, when, by whom, key results will be achieved/delivered.

##### **Budget format and costing prepared**

- Finalize budget formats and cost allocation procedures, so agencies are able to prepare "mock-ups" of financial and accounting reports to be produced by the agency or the MOF systems.
- Agree with Ministry of Finance on any new codes required for new activities and on nonfinancial performance measures.

problem in countries without this capability, and where budgets are firmly rooted in approved inputs. This makes accountability more difficult to specify, monitor and enforce. It is argued subsequently in this section that the agency specific program design is preferable for most countries, but admits that in exceptional cases multi-agency programs may be unavoidable. A useful starting point in determining the policy framework in program design is to use the functional classification of government expenditures. In presenting categories of government expenditure useful for international comparisons, as well as a means of presenting budget data that is meaningful to the general public, functional classifications have been standardized internationally (e.g., the UN's COFOG system). Since the functional classification aggregates data from a range of government agencies that are engaged in similar activities, it provides a comprehensive view of government expenditures in such broad areas such as defense, health, social welfare and education. In so doing it provides a useful framework for constructing a program structure. However, within this framework, the way the functional categories can be broken down into programs, and directly related to

policy, will vary from country to country. General guidelines on how this might be done are presented in Box 5.

When reviewing country experience in adopting rules for the design of program budgets, experience has shown that three main issues have been particularly important:

### **Box 5. General Guidelines on the Design of Programs**

- Programs are “mono-functional,” so that each program is linked to only one function.
- Programs are hierarchically constructed, so that each program has a number of subprograms, each subprogram can be decomposed into a number of activities and projects. Each subprogram is related to only one program, likewise each activity and project is related to only one subprogram.
- Each program has an appropriate size for efficient management. This varies from country to country, but often implies for broadly defined and resource intensive programs that the main unit for accountability and performance specification could be at a lower level than that of the program, say at the subprogram.
- Programs and subprograms should be defined in a way to support political decision-making and prioritization, by making clear the relationship between the resources used and the envisaged outputs and envisaged policy result (outcome).
- Programs must consider all related activities (including regulatory ones) and projects, which together assist in achieving their objectives. This means that capital and recurrent spending should be considered together in judging program performance relative to its objectives.
- Greater levels of disaggregation to activities and projects will exist to support, and be designed to facilitate, management in pursuit of the subprogram objectives and results.
- Accountability for subprograms should have clear managerial responsibility, usually and preferably, within a single organizational unit.
- Responsibility for implementing each particular program should almost always align by administrative unit to one chapter (or “vote”) in the budget. Where it is not possible to maintain this, it is important to assign lead roles to a particular chapter.

#### **A. Agreed Rules for Aggregation to a Program Structure**

This is an important precondition for making program budgeting a success. These rules should cover the issue of the level of aggregation of basic activities/projects that is most useful for defining a program. If too disaggregated, then some programs can only have one subprogram, if this is the case, what is the usefulness of this distinction? However, if the program is too aggregated so its implementation will cut across institutions, it will be difficult to define specific program outputs and assign specific accountability. Care should also be taken to agree the specificity in program definition: should programs always be

expressed in terms of a specific major policy area, rather than as a catch-all for a loosely related set of activities? Is it possible for each subprogram to capture activities which produce homogeneous outputs? Can there be a clear specification of the outputs sought in terms of its timeliness and accuracy, and in a way that can be measured?

### **B. The Institutional Coverage of Programs**

In redesigning programs, the following range of questions typically needs to be addressed: how much should programs be aligned with the organizational structure? Can programs extend beyond single ministries? Can a work unit contribute to more than one program? A related accountability issue is the alignment of programs with appropriations: how should appropriations be allocated to programs?

When originally introduced, program budgeting described programs irrespective of organizational lines of responsibility. It was not unusual for the responsibility for the design of the program structure to be given to the central budget agencies. Sometimes, the line ministries were not heavily involved, especially at the design stage, even though they had the most detailed and comprehensive view of the functions and objectives of their entities and were responsible for implementing the programs. Many countries have tried this approach since the 1960s, and none have truly succeeded in making it work. Now the emphasis is on a modified approach to program budgeting, that focuses on outputs and performance, with improved accountability—the output budgeting and new performance budgeting approaches. However, this should not detract from the conclusion that introducing a good program structure probably should involve substantial changes in the organizational structure of government. The reality is, of course, that this is usually practically not an option.

A dominating reason for arranging for a given output to be managed within one organizational unit is clear accountability for performance. In practice the bulk of outputs produced by government are produced within a single organization, for example, medical treatment at hospitals, teaching services in schools, etc. Problems arise in those cases where governments request the achievement of complex outcomes, such as “crime prevention” or “tourism development,” which necessarily require outputs from a range of agencies. Small outputs are commonly produced within single organizations—but not so with more complexity. A problem with the program approach arises where there is an incomplete alignment with the organizational structure.

When programs are conducted jointly by two or more administrative units responsibility is also divided, so that specific activities and end products are difficult to assign to individual organizations. In other cases a single administrative unit will conduct a number of different programs. In this case costing becomes difficult and requires elaborate costing systems, discussed further below. At the same time it is unwise to reorganize government agencies in the interests of introducing program structure. Rather in designing a program structure it is necessary to recognize a variety of operating units: some are merely supervisory; others implement their own programs; some do both; some fund projects implemented by other levels of government; some have responsibility for public enterprises and quasi autonomous bodies etc., each type may require a different approach.

### **C. Existence of an Adequate Management Information System**

Improved accountability is dependent on adequate information to judge performance. There is no point in designing and implementing a program structure if there is no information for their evaluation. The design of programs should take into account the practicality of constructing a comprehensive and regular information and reporting system to provide relevant data in a timely manner.

A major user of a performance budget should be management. However, a government consists of vast hierarchical systems of many levels and organizational relationships. Designing information systems for such structures is complex, so that program designers must resolve such questions as: at what levels should costs be collected? Can performance indicators be provided for those cost collection centers? From what sources should originating data be collected? How should it be reported to higher levels? What information would different managers need and what regular reporting system would supply that information?<sup>20</sup> The whole question of the costing of programs, is often a neglected area and deserves more extensive treatment. While costing systems are discussed in the following section, it is worth noting that they should be based on a good economic classification of budget expenditures. Programs are typically monitored through comparing outputs (and less often outcomes) in relation to inputs, which are the economic items included in the economic classification. A good program classification will have to be supported by a good economic classification.

## **VI. COSTING SYSTEMS**

The costing methodology for performance-based budgeting has often been neglected. That is, the new emphasis on outputs or outcomes does not remove the need for input identification, which remains the most used means for annual budgeting and accounting. For the program structure to be implementable, there must be adequate mechanisms to fully cost programs, so that the outputs of programs can be related to their budgetary costs, and then ultimately to their benefits in order to judge program performance. Costs can be allocated on many different criteria.<sup>21</sup> From a program budgeting viewpoint, the more pertinent criteria is their direct or indirect association with the program—i.e., based on the principle of assignment. Costs can be assigned to different cost objects: operating units, cost centers, outputs, and projects. Whatever the criteria used, they should be clearly specified in a government-wide costing system that not only can produce accurate cost information on programs, but can assign those costs correctly and is not too complex or resource intensive to

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<sup>20</sup> The particular problems of performance measurement cannot be addressed here, but it should be acknowledged that many practical problems exist: information on performance is fragmentary and unsatisfactory; often data only reflect certain aspects of performance. Also it has been difficult to relate performance to costs.

<sup>21</sup> For example: by their nature (variable or fixed); production function viewpoint (output or non-output); decision-making (investment, sunk, opportunity cost); accountability (controllable or non-controllable).

apply (see Box 6). Often these characteristics are hard to satisfy simultaneously, so that important trade-offs exist.

### **Box 6. Attributes of a Costing System**

- **Relevant:** provide reasonably accurate information in a form relevant for decision making.
- **Clear assignability:** offer a clear assignment of cost to each government activity, avoiding the risk of cross subsidization of activities.
- **Cost effective:** the cost of managing the costing system must not be onerous in terms of resources required (including staff time).

To be accurate, the cost allocation must avoid two important types of distortion. There is a rate distortion—the cost bases used to describe program activities do not accurately capture their consumption of resources. The solution is to devise more accurate assignment mechanisms; or decompose program activities into more homogenous categories. Both solutions, however, involve increased complexity and higher costs in implementing the system. There is often also a quantity distortion, in that the costs assigned to program activity outputs do not reflect the actual quantity of resources consumed. Simple costing systems often assume that all resources aggregated in an operating unit are consumed proportionately by all outputs that are produced by the unit. But if this is not the case, then quantity distortions occur. The solution is to assign costs by more appropriate operations, and allow each operating unit to use multiple assignment mechanisms.

Cost-allocation systems are designed to provide cost information on various dimensions, such as organizational units, cost centers, outputs, projects, etc., which are described as the cost objects of the costing system. The choice of cost objects affects the administrative complexity and determines the costs involved in operating the cost allocation system. There is an obvious trade-off between the degree of detail of cost objects, determined by the amount of cost information required by decision-makers, and the cost of operating the system. The danger at the other extreme is that an overly simple cost allocation system may end up with a poor cost allocation system and increase the risk of cross-subsidization, and give misleading information to decision-makers.

For the purposes of program budgeting, the manner in which costs are consumed by programs, activities, outputs, or cost centers will determine whether they are allocated as direct or indirect costs. To increase the accuracy and relevance of total program or output costs, and, at the same time, to reduce arbitrary cost allocations, it is necessary to identify as many of the resources as possible as direct costs.<sup>22</sup> Of course, for some costs it may not be

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<sup>22</sup> There are usually many ways to do this, e.g., time recording systems, coding actual transactions, and judgment by management.

possible to establish a direct relationship to cost objects, since they are common to more than one object. However, these indirect costs may still be assigned to cost objects on the basis of consumption i.e. on the basis of the extent to which they contribute to, or are caused by, the cost object.<sup>23</sup> Much depends on how closely the costing system follows an existing organizational structure. If each operating unit or cost center is contributing to only one output (program or activity) the need for allocation in the second stage will be minimized. However, often costs accumulated in a cost center must be allocated to two or more outputs, or alternatively some units within an organization provide services to other unit, and then a more complicated two-stage allocation (or step-down) process is required. Under this method, the costs accumulated in cost pools are then allocated down to other cost pools or cost objects, using a variety of allocation bases, until all costs have been allocated to final cost objects.<sup>24</sup> Schematically, the process is shown in Box 7.

A variant, more in line with the output budgeting approach, is activity-based costing (ABC). In this approach, programs are broken down into their basic activities—the steps or sequences of processes that convert inputs into outputs. As a first step, this approach also starts with apportioning an organization's expenses to a set of cost pools but then ABC compiles cost information on all activities performed in an organization. This includes activities that do not vary with output volume, and it is oriented to allocating overheads with a primary focus on identifying full costs of providing government services.<sup>25</sup> Organizations that are most likely to benefit from ABC are those with high overhead costs and widely diverse operating activities or service lines—i.e., most government agencies. This approach is typically most applicable at the operational level on a service-by-service basis, enabling service managers to budget more confidently for target activity levels and to be able to break down the budgetary impact of each level of activity.<sup>26</sup>

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<sup>23</sup> Where costs cannot be directly assigned to cost objects, agencies must identify appropriate bases for assigning them, reflecting in some way the consumption relationship between the costs and cost objects.

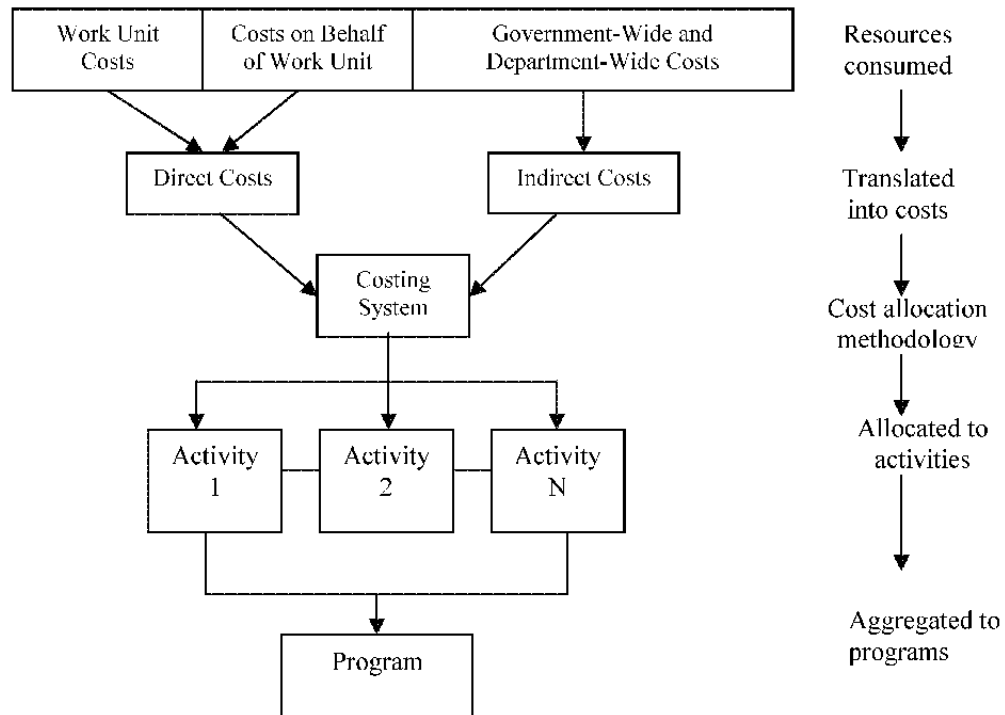
<sup>24</sup> For example, the allocation process could begin with depreciation of buildings and fixtures. These costs would be distributed across all remaining cost pools. The amount to be distributed from the next pool (building maintenance) would now include not only its own costs but also the amount allocated to it from the previous step. This total would then be allocated to all the remaining pools, and so forth. (Thompson, 1998, p. 387).

<sup>25</sup> In this way, it supports what is often termed “activity-based management” that focuses on the management of an activity to continuously improve its efficiency and effectiveness. For a case study of its application, see Abrahams and Reavely, 1998.

<sup>26</sup> Although the ABC approach is not used by higher levels to set overall budgets, it can lead to greater knowledge about unit costs, and provide a basis for setting benchmarks for government activities.

### Box 7. Basic Steps of a Program-Based Costing System

- Breakdown the program into the activities that produce the program's objective, service or product, and identify the work units undertaking each activity.
- Identify all resources used and their associated costs in terms of the basic work units delivering program outputs/outcomes
- Categorize and measure *direct costs* – those arising from operations of work unit or the costs incurred on behalf of the unit through the operations of other work units; and those government wide or department wide *indirect costs*, i.e. overheads.
- Assign or allocate all direct and indirect costs to specific activities, using an agreed costing methodology.



There is common agreement that the uniform measurement of the full costs of end-products or activities across all government programs is logically required in order to judge performance from a policy perspective. There are many practical problems, however, that require to be overcome. Firstly, the problem of indirect costs, or overheads, must be acknowledged as a difficult one. One typical problem in cost measurement is that the activities of any agency will include certain common staff functions such as personnel and

accounting and an unapportioned activity such as general management, that are difficult to break down into specific activities. Indeed, some would argue that the usefulness of program structure could be substantially diminished in certain government sectors by their presence. Secondly, the measurement of program costs is further complicated by the existence of joint products and activities by the same basic unit. To be able to separate them requires specialized accounting skills. In the private sector such cost measurement is the special domain of managerial or cost accountants geared to servicing internal management decision-making. In the government sector, these skills are typically underdeveloped and often nonexistent. Last, but not least, it is often argued that to capture full costs ideally requires an accrual system of accounting, as is found in the private sector. In the commercial sector, the whole rationale of accrual accounting is to ascertain the true cost of “outputs”— i.e., it is an output oriented accounting system.

The case for moving to accrual accounting in government, at least in principle, is a strong one. This move certainly enables the full costs of output production to be ascertained each year and compared between years. The adoption of accrual accounting at the agency level, arguably can bring the following benefits:

- By capitalizing the costs of capital assets and depreciating them during their operating lives, departments can assign the relevant portion of capital costs to annual cash flows.
- Costing of agency outputs enables supervising departments and ministries to make valid comparisons between alternative sources of supply in both public and private sectors.
- The output focus adds impetus to the process of cost recovery for services, which yield private benefits. Full costing provides a better basis for cost recovery calculations.
- Budget negotiations conducted with an output “price” focus are more likely to move departments away from a “cost-plus” mentality and thereby generate fiscal savings.
- Departments become more aware of their responsibilities for the active management of their physical assets.<sup>27</sup>

However, in practice, the case is less strong. Most governments maintain more simple cash based accounting systems, or a modified cash system. For those countries that have attempted to move their government accounting systems to an accrual basis the shift to accrual accounting has invariably proved difficult and costly. It could be argued that many of the costing benefits derived from accrual accounting can be derived by other means and

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<sup>27</sup> Focusing attention on the balance sheet, especially if the government introduces a capital charge on departmental capital encourages them to extract maximum value from the use of their assets and to review whether the assets held are all need to produce their outputs.



accordingly, for the emerging market economies perhaps an intermediary move to accruals is all that should be attempted.<sup>28</sup>

## VII. CONCLUDING REMARKS

It is apparent, from the above discussion, that the implications for emerging market economies of reengineering their program budgets to adopt the “new” performance-budgeting approach should not be underestimated. It has been argued that the program structure should be set in a wider strategic framework. The need to provide a meaningful link between policy and budgeting has long been recognized but has also consistently proved elusive. Most emerging market economies have accepted the central role of the program structure is to translate broad policies into activities and projects that can be costed, with the identified resource requirements approved as budget appropriations. At the same time, many have also appreciated that this cannot be viewed as a one-off annual exercise. Increasing numbers of countries are adopting medium-term budget frameworks to assist in capturing the full costs of activities and projects, and hence to better plan programs, to improve prioritization between them, and provide some overall discipline over their resource use. Other countries have gone further and accepted that real financial discipline, in terms of results rather than inputs, requires reframing the underlying budget-management model and changing accountability relationships. However, the fact that it is difficult to find emerging market economies that have made rapid progress in any of these directions indicates that they have encountered important implementation problems.

The capacity to successfully carry out this linking of policies with programs through strategic planning mechanisms requires the skills to construct medium-term budget frameworks with well-defined programs. It requires other analytical skills, and adequate reporting systems to make clear the relationship between the resources used by the program and its outputs and/or policy result (outcome). As indicated above, the basic work of program design and program costing is unlikely to be straightforward, demanding skills, such as cost accounting, which are often in short supply. Even more problematic is the definition and measurement of program outputs (and, even more so, of program outcomes), which may prove difficult and costly to implement adequately. Thus, for many countries, the human resource constraints may impede the move to performance budgeting.

At the same time, this new approach to budget management also requires parallel administrative procedures to activate the strategic plans and the program structure for decision making. This move inevitably must reflect the reform capacity of the country and, to be successful, advisably should not to be implemented too rapidly, but should be carefully sequenced. Moreover, typically this approach can be attempted only once there have been prior improvements in financial compliance and fiscal control. Without a secure and adequate level of resources, strategic planning is likely to prove too difficult.

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<sup>28</sup> This is discussed further in Diamond (2002).

The “new” performance-budgeting approach requires all this and more. Perhaps greater difficulty will be faced in introducing enhanced accountability and the associated changes required in budget management. This will require improved transparency, greater emphasis in evaluating outputs in relation to inputs, and streamlining control mechanisms to balance control needs and new efficiency requirements. In turn, this will increase the pressure to produce new types of reports that facilitate management of resources as well as a likely expansion in the accounting base. While full output and performance contracting are very resource- demanding, and have been fully realized in only a few fairly advanced countries, even more limited movement in this direction is likely to strain many administrative systems in emerging market economies. Certainly, this transformation from traditional budgeting procedures is likely to require a substantial effort in managing the change process.<sup>29</sup>

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<sup>29</sup> See Diamond (2001).

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