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Establishing a Performance Management Framework for Government

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Abstract

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Based on the experience of budget management reforms that have been introduced over the last two decades in a large number of member countries of the Organization for Economic Cooperation and Development (OECD) it is not uncommon to find emerging market economies moving toward performance-based budgeting where measures of performance play a key role. While it might be tempting for middle income countries to press forward to adopt a full-blown outputs and outcomes framework, there are some risks in the move. Such a change in orientation is only possible once managers have had adequate experience in refining the definition of programs and their objectives, and on this basis developing a comprehensive system of performance measurement. It is argued in this paper that to develop a comprehensive performance measurement system requires resolving a number of issues involved in clearly defining how to measure “performance” as well as overcoming a number of technical issues in the design and use of measures of that “performance.” However, perhaps the most critical step is introducing a system whereby performance information can influence resource allocation decisions, i.e., establishing a performance management system. Based on international experience, this paper reviews each of these hurdles in moving toward a performance management framework.

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I. REQUISITES FOR MOVING TOWARD A PERFORMANCE MANAGEMENT FRAMEWORK

Based on the experience of budget management reforms that have been introduced over the last two decades in a large number of member countries of the Organization for Economic Cooperation and Development (OECD), it is not uncommon to find emerging economies moving toward performance-based budgeting. Many have completed the first step of this process by moving away from the traditional emphasis on managers' stewardship of public resources and on compliance within strict detailed appropriations. This usually involves implementing some form of program management and budgeting, along ministry of finance (MOF) lines, where there is greater emphasis on achieving efficient and effective outputs and outcomes. In this process, measures of performance have tended to play a key role as a basis for introducing initiatives such as strategic planning, performance agreements for selected services, remuneration bonuses based on performance, and external evaluation of agency programs.

While experience differs within the OECD, there are evidently different channels whereby performance measurement has exerted a positive influence on public expenditure management. In budget preparation, the wider use and availability of performance data has strengthened the hands of the ministry of finance in challenging the budget proposals of line ministries. Budget execution has been strengthened generally by allowing comparisons between poor and good performers and allowing both external as well as peer pressure to stimulate reforms in service delivery. This has been made more formal by introducing contractual agreements for service managers with explicit performance targets. In Australia and New Zealand, there has been a more formal linking of performance measures with budget allocations, while in most other OECD countries these linkages are more indirect.

While it might be tempting for middle-income countries to press forward to adopt a full-blown performance management framework, such as that implemented by countries like Australia and New Zealand,² there are evident risks in the move. Such a change in orientation is only possible once managers have had adequate experience in refining the definition of programs and their objectives, and on this basis developing a comprehensive system of performance measurement. The latter is usually lacking in emerging market economies, but at the same time is recognized as critical to the successful implementation of a performance budgeting and management system. It is argued below that to develop a comprehensive performance measurement system requires first clearly defining how to measure "performance"; secondly, overcoming a number of technical issues in the design and use of measures of that "performance"; and thirdly, making performance information relevant for resource allocation decisions, i.e., establishing a performance management system. This paper reviews each of these dimensions in moving toward a performance management framework.

² Many countries have budgets with program structures, but moving from this to performance budgeting focused on outputs and outcomes and linking them with inputs is not easy, as discussed more fully in Diamond, 2003.

II. DIFFERENT MEASURES OF PERFORMANCE

A general consensus is emerging in OECD member countries that performance measurement improves the quality of management by helping officials make better decisions and use resources more effectively.³ Quantifying performance allows managers to monitor changes, identify potential problems, and take timely corrective action. Data that describe performance in terms of where the agency has been, where it is today, and how it compares with other similar agencies allows managers to direct resources to (and officials to support) activities that are successful. Performance measures also influence employee behavior. When employees know the basis on which they will be assessed, they are more likely to perform. For the government as a whole, it can be argued, performance recognition builds trust and enhances credibility with taxpayers.

In accepting the need for performance measurement, it is important not to underestimate the problems in its implementation. There is general agreement that the critical first step in implementation is to define performance. Trying to measure performance demands that organizations clearly articulate their objectives, and hence the basis on which performance will be measured. Performance cannot be measured until these objectives are translated into measurable desired results. This process itself has been considered invaluable. It has been argued that the very act of defining the desired results to be achieved has enormous power to focus the energies of an organization.⁴ Unfortunately, this first step of defining the dimensions of performance is often quite difficult for government agencies. Performance is system-specific and depends ultimately on the goals of the wider budget management system. If the budget management system is a traditional one, performance will be defined by measures of compliance and stewardship. On the other hand, if the budget management system is outcomes focused, and judges success in terms of impact on society, in this case performance will be defined by measures of the effectiveness of outputs produced. The need to refer to the budget system's basic orientation when defining performance is illustrated in Figure 1, which also attempts to define some specific performance terminology.

³ Osborne and Gaebler, 1992, "Organizations that measure the results of their work...find that the information transforms them," p. 63; see also Kristensen, Groszyk, and Buhler, 2000.

⁴ Not surprisingly, perhaps, high-performance organizations have often been found to have clear goals and a strong focus.

Figure 1. The Concept of Performance in Different Budget Systems

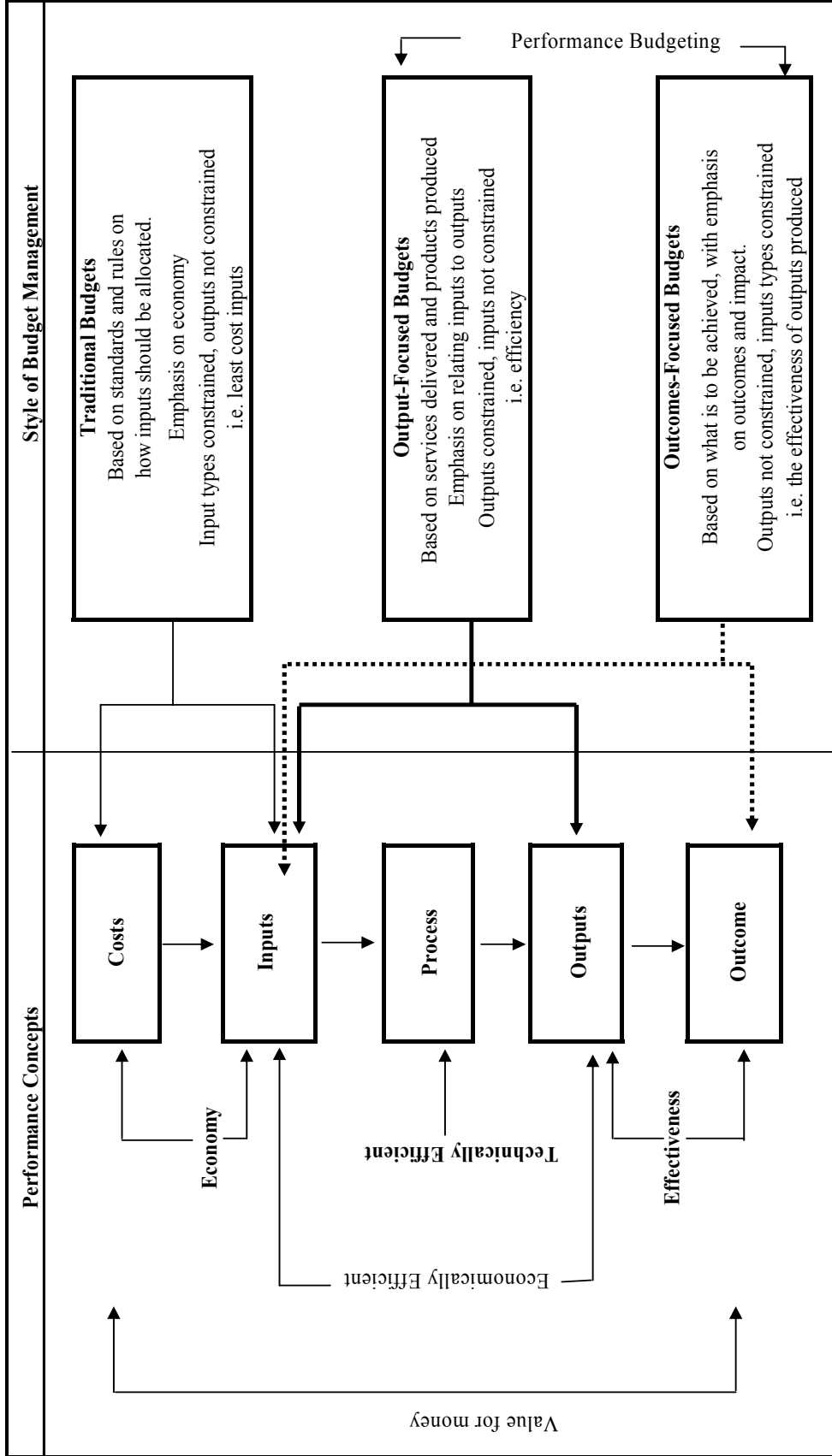


Figure 1 describes in somewhat abstract terms a government “production process.”⁵ The process commences from the cost of acquiring inputs, the use of these inputs in a production process, to the production of outputs that have an outcome, in the sense of meeting some defined objective of government policy. Arising from this process there are a range of possible indicators of performance. Traditional budget systems focus on inputs, the amount of resources actually used (usually expressed as the amount of funds or the number of employee-years), or both. The key concept is economy, or the aggregate control of input costs at the margin. In output-focused budget systems, inputs are related to an agency’s output to produce indicators of efficiency or productivity.⁶ In outcome-focused budget systems, an agency’s outputs are related to the achievement of its ultimate goals producing indicators of effectiveness. In such systems, often costs are compared with the final outcomes attained to give measures of cost effectiveness, or sometimes termed value-for-money indicators.

In performance budgeting, therefore, there are a number of ways that spending can fail to meet expected “performance,” and it is important to differentiate the source of this performance failure in order to specify the cure:

- **Technically inefficient:** arising from resources not being employed in the technically best way to produce a given output or service level. The attainment of technical efficiency implies that it is impossible to reduce the physical level of any input without reducing the level of output. The failure to attain the maximum possible output level with given inputs has been referred to by Liebenstein as X-inefficiency⁷, and must be resolved by improving and changing the internal functioning of organizations and the units that comprise them.
- **Economically inefficient:** arising from resources not being employed in the most economically efficient way, so that a higher return in the form of a higher provision of service can be obtained without increasing costs by switching spending between resources. The attainment of economic or allocative efficiency implies that it is impossible to substitute one input for another without increasing total costs of a given output or service level.

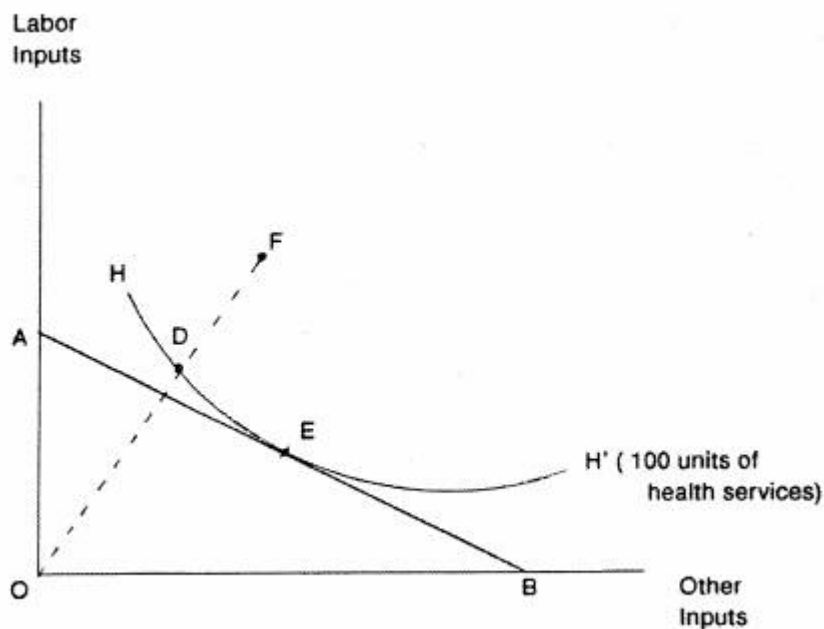
⁵ The use of a simple production model to characterize the operation of a government unit is usually regarded as the foundation for assessing performance, and has a long tradition, e.g., Brace et al, 1980; Jackson and Palmer, 1989; Boyne and Law, 1991; Hyndman and Anderson, 1995. However, others have questioned its adequacy, especially for complex public programs; see Osborne, Bovaird, Martin, Tricker, and Waterston, 1995. Others have been more critical of the fundamental production model, for example stressing the differential access to information of ruling groups, hence using “political models of performance assessment, Pollitt, 1993, or organizational models, such as Kotter and Heskett, 1992.

⁶ Where the ratio of input to output defines efficiency and the reciprocal ratio of output to input defines productivity.

⁷ See Liebenstein, 1966, p. 394.

- **Technically ineffective:** expenditures are not effective in the sense that although resources are allocated efficiently (both in a technical and economic sense) to provide a certain service, the service itself does not satisfy the objectives it was designed to meet.
- **Economically ineffective:** expenditures can be efficient (in the sense that resources are allocated to produce the maximum output of a certain service at least cost), and effective (in the sense that the output has the desired outcome), but overall effectiveness in the use of public resources could be increased by cutting some expenditures and reallocating the resources to other services, i.e., becoming more allocatively effective.

Figure 2. Technical and Economic Efficiency



Some of these performance concepts are illustrated in Figure 2, where curve HH' shows all the different combinations of labor and other inputs to produce a given output of health service, say, rural disease prevention. The line AB shows the available budget for this service which can buy OA units of labor, or OB units of other inputs, or any combination along the line AB. The slope of AB reflects the relative prices of labor and other inputs. If the service delivery is operating at point F, this is technically inefficient. All the points above HH' use more of at least one input than is required. Technical efficiency can be increased by a more efficient allocation of resources to reach point D. However, even though at point D the service delivery is technically efficient, this may not be economically efficient since costs

can be reduced by reallocating the mix of labor and other inputs to reach point E. With this combination of labor and other inputs, it is possible to deliver the same service at least cost.

Suppose the objective is to prevent disease in rural areas by providing the services of rural health clinics. While the service delivered may be technically and economically efficient at point E, it may not be technically effective in the sense that it may not actually prevent disease in rural areas. For example, the rural health clinics may not be within easy access of disease ridden areas. This is a technical flaw to be resolved by health specialists and not one to which economists can make much contribution. However, even if service delivery was technically effective in eliminating disease in the rural population, this does not mean it is economically effective. It may be possible, for example, to attain the same level of disease prevention through less costly improvements in rural water supply. In the latter case, the government's service would be more cost effective, or would attain best value for its money.⁸

Different dimensions of performance vary in the way they can be improved through better systems of budget management. As indicated, technical inefficiency is symptomatic of more general shortcomings in the internal organization and procedures of the producing unit. This type of inefficiency, Liebenstein argues, is likely to be the greatest source of inefficiency, particularly in the public sector. It is also the one that is more amenable to improved budget management. To some extent, improved budget procedures can promote economic efficiency. At the same time, it must be recognized that for other sources of nonperforming expenditures involving the lack of effectiveness of expenditure programs, the role of budget management is necessarily more circumscribed. Questions linking resource allocation to objectives are more clearly in the realm of policy. In this case, the role of improved budget management tends to be supportive to facilitate and improve the process of making such policy choices through greater transparency and the provision of timely and relevant performance information.

III. DEFINING A FRAMEWORK FOR PERFORMANCE MEASUREMENT

Moving from the above rather schematic description of the dimensions of performance to the practical problem of developing a framework for measuring performance in government requires addressing some key issues:

- Output or outcome?

“Performance budgeting” is a term that often refers to both output- and outcomes-focused budget systems. The properties desired by both of these concepts are described in Boxes 1 and 2 below. There is an ongoing debate between the value of focusing on output as against the outcome or impact of these outputs. This debate tends to be at two levels. Firstly, there are the evident practical measurement problems. Often, outcomes are difficult to measure

⁸ From this brief review of the main concepts and issues in the performance literature, it is perhaps possible to find sympathy for the conclusion “that the notion of performance—often bereft of normative standards, invariably full of ambiguity—is, in theory and practice, both contestable and complex,” Carter et al, 1991, p. 50.

directly (e.g., greater national security) or they are complex, for example, in the case where there are interlinkages between a number of different programs and subprograms (e.g., lower morbidity rates). Secondly, at a higher level, there is controversy over accountability—what should managers be held accountable for? On practical grounds, output is generally what the agency can exert control over, but the ultimate outcome is often determined by external factors, usually of an unpredictable nature. Also, observed outcomes can be interpreted in different ways. Rather than what the agency’s program itself achieved, outcomes can be interpreted as the consequence of what the program did, so that outcomes can be considered as including side effects, whether intended or not. Thus the Office of Management and Budget (OMB) in the United States focuses on intended outcomes,⁹ while others like Australia report ex post on the total outcome, intended and unintended. This has led some writers to differentiate outcome, based on intended effects, from impact, which would include the total effects of the agency’s actions. Others differentiate between different levels of outcome, or like Hatry differentiate between intermediate and end outcomes.¹⁰ For example, some countries like the United States and United Kingdom make a distinction between different levels of outcomes depending on the time horizon.

Clearly “performance” in government is subject to different interpretations. However, it does appear that in the OECD member countries there is increasing recognition that the output approach has limitations and may deflect the attention of delivery agencies from the impact of their programs, which from the government viewpoint is the more relevant concept.¹¹ As a consequence, more and more OECD member countries are adopting an outcome-focused approach. At the same time, it should be recognized that many OECD governments preceded this move with extensive use of output measures.¹²

⁹ For a full description of the performance management framework and its specific terminology under the Government Performance Results Act (GPRA, see Groszyk, 2001.

¹⁰ Hatry, 1999, p. 15.

¹¹ See Kristensen, Groszyk, Buhler, 2001, p. 1. At the same time, several writers (notably Pollitt, 1993) suggest the emphasis on outcomes over outputs (and the broader emphasis on economy and efficiency rather than effectiveness) may reflect the political interest of a government that is primarily concerned with cost-cutting rather than performance evaluation.

¹² “Australia, Netherlands, and New Zealand began by concentrating on outputs and are now moving to an outcomes approach. Australia and the Netherlands are changing their accounting and budgeting systems to focus on outcomes. France recently passed a law, which requires the production of outputs and outcomes in budget documentation for the majority of programmes,” OECD, 2004, p. 7. It should be noted that while Australian states began with a focus on output, the federal government specifically rejected output budgeting, preferring to move directly to outcomes.

Box 1. Desirable Properties of Outputs

- Should be a good or service provided to individuals/organizations external to the agency.
- Should be able to be clearly identified and described.
- Should be for final use and not for an internal process or intermediate output.
- Should contribute to achievement of planned outcomes.
- Should be under the control (directly or indirectly) of the agency.
- Should be able to generate information on attributes of performance—price, quantity, and quality.
- Should generate information that is a basis for performance comparisons over time or with other actual or potential providers.

Example: policy advice

Output: briefs or submissions prepared

Quantity: number

Quality: satisfaction of minister and his staff; other assurance tests

In preparing the budget, it will be necessary to determine and agree performance targets for each output measure. These should be chosen selectively, with priority on their clarity in interpretation, so that they provide an undisputed indicator of the degree of output (and even outcome) achieved in any time period. The approach is to specify the output as a rate, and the frequency with which the target will be met. Additionally, it is useful to set out the information on which each target will be estimated, perhaps based on actual performance data for previous periods, as well as identifying the implications for the cost of the output if there is a significant difference between expected and actual target achievement. The latter will provide a platform from which the operating unit could analyze and explain any variances in performance.¹³ The United Kingdom, in designing its Public Sector Agreements within government, has placed much emphasis on the importance of setting meaningful targets alongside agencies' budgets. This, it is argued, not only assists managers in improving their agency's performance, but as a means of allowing the center to identify policies and processes that work as well as in enhancing public accountability.¹⁴ To use the U.K. acronym, in their selection these targets should be SMART: Specific, Measurable, Achievable, Relevant, and Timed. It has been found, however, that as there has been a shift in focus from outputs to outcomes, the technical problems of measurement have increased, and it has had to be admitted that setting targets for some outcomes is inherently difficult.¹⁵

¹³ For a much fuller discussion with examples, see OECD, 2000.

¹⁴ Hill, 2004.

¹⁵ Henderson, 2004, contrasts a straightforward target such "reduce substantially the mortality rates by 2010 from heart disease by at least 40 percent in people under 75; from cancer by at least 20 percent in people under 75..." (Department of Health) with, for example, "Improve effectiveness of the U.K. contribution to conflict prevention and management as demonstrated by a reduction in the number of people whose lives are

(continued...)

Box 2. Desirable Properties of Outcomes

- Should adequately reflect the government’s objectives and priorities.
- Should be indicated by the impact on the community.
- Should be differentiated from the agency’s strategies to which they contribute.
- Should clearly identify target groups, if so focused.
- Should be achievable in the specified time frame.
- Should be possible to monitor and assess the achievement of the outcome.
- Should be possible to identify the causal link between agency’s output and the outcome.
- Should have clarity in definition and description to be easily reported externally.

Example: Ensuring young homeless people have access to appropriate accommodation.
Made more precise by including a target: 90 percent of young homeless have access to appropriate accommodation within 24 hours.

Operationalized by clearly identified target group, definition of “appropriate housing,” and causal link between agency action, such as assistance through a subsidy.

- Process indicators

It is also important not to neglect process. This generates indicators of workload, throughput, and work rate, which give important measures of the technical efficiency of an agency’s operations. Such process indicators of performance include the amount of work that comes into a program or work in progress but not yet being completed.¹⁶ While amounts of work by themselves are not outputs or outcomes, workload data can be used as an input to produce output data: for example, the amount of work not completed as a proxy for delays in service to customers, a quality dimension of output (see below). There are some activities where it is difficult to measure outputs or outcomes but where process-related measures may still be a useful to access performance. It cannot be denied that often the major gains to be made in budget system reform are made in improving process, and eliminating the so-called “invisible” X-inefficiency in government operations.

affected by violent conflict and a reduction in potential sources of future conflict...” (FCO, Ministry of Defence, DIFID).

¹⁶ Performance measurement is even applicable to internal support services, but the outcomes from internal support occur within the organization, and it is impossible to estimate the impact these services have on outcomes of external services.

- The quality dimension

This is an important consideration for the efficiency of service provision, where efficiency as measured by the ratio of outputs to inputs can be improved by reducing quality of the output. If outcomes are tracked, a more accurate indicator of efficiency becomes possible by including a quality dimension, which can be broken down into various characteristics shown in Box 3. While some regard quality characteristics as an output, others like Hatry designate them as a special type of intermediate outcome, since quality characteristics indicate how well the service was delivered but do not indicate what results occurred after the service was delivered. All agree, however, that quality of service is an important dimension to measure and to track, although the mode of tracking is often disputed. Some governments have questioned the value of internal measures of quality (e.g., Denmark) and have emphasized rather client surveys of the level of service satisfaction. Although both approaches are important, certainly client surveys provide an important “reality check” on formal indicators of quality that are generated internally. Moreover, an important question remains: since there are many dimensions to quality, who decides what qualitative characteristics are important for a particular service?

Box 3. Typical Service Quality Characteristics

- Timeliness in service provision.
- Accessibility and convenience.
- Accuracy of the assistance.
- Courtesy in service delivery.
- Adequacy of information dissemination to potential users.
- Condition and safety of agency facilities used.
- Customer satisfaction.

Source: Hatry, 1999, p. 17.

- Relating performance to inputs

Ultimately, for resource allocation decisions there is a need to relate output and outcome measures to costs. This is often difficult because accounting systems are not necessarily set up to bring cost data together on a program basis and hence data on inputs is not readily available on a timely basis.¹⁷ Often in emerging market economies, especially in transitional

¹⁷ The problems of the measurement and allocation of costs is necessarily limited when government units typically use cash accounting principles. In the United Kingdom, one of the problems encountered in enforcing accountability in the Next Steps Agencies, created in the late 1980s and early 1990s, was the lack of information on unit costs. This arose from them not having commercial style accounts as well as because of the undeveloped nature of their costing systems. A related problem was that typically the measure used as the cost object was rarely the ultimate result, but an intermediate output measure related to activity. A full discussion is contained in Pendlebury et al, 1994.

economies, this is aggravated by the fact that the role of cost accounting is not developed and there is little expertise to carry out this work. In any case, the work is often not straightforward. Allocating costs to programs can be a major problem in cases with large central overheads and in activities where more than one service is being delivered.¹⁸ Thirdly, there may be limitations in the accounting system, especially if cash based, that may not be able to record the full costs of capital since depreciation is not included. Fourthly, there is a need to focus on marginal rather than average cost that is typically more difficult to measure. Confusing average efficiency for marginal efficiency may cause extra resources to be allocated to programs with proven average efficiency but where the additional resources have little impact on output. These practical costing problems are often important since feasible performance measures are those that can be established at reasonable cost and this may well depend on the availability of reliable cost data.

IV. USING PERFORMANCE MEASURES

While it is undeniable that performance measurement is a key tool in the process of improving the delivery of public services, this should not be viewed as an end in itself, but part of a wider reform process. Performance measurement has become so popular it has tended to lead the reform process rather than be seen as an integral part of a wider performance management reform. While many benefits flow from the mere act of trying to measure performance, to be fully effective performance measurement must be integrated into a performance management system. Failure to recognize this, and to move from performance measurement to performance management, gives rise to some concerns.

- The danger of overreliance on Performance Measures

There is a significant danger of overreliance on performance measures—they tend to offer clues to the success/failure of a program, but usually a comprehensive evaluation process is required to confirm this, which is unfortunately not a costless activity.¹⁹ It is important to recognize that performance measurement has at least three limitations.²⁰ First, performance data do not by themselves tell why the outcomes occurred, that is the extent to which the program caused the measured results, because there is unlikely to be any practical counterfactual. A performance measure assumes some causality between a program's activities and its outcomes, but one which can only be confirmed ex post through a properly

¹⁸ It has also been argued that the increasing complexity of government operations has significantly contributed to the problem. Traditional cost accounting is adequate when processes were simple. However, as technology has advanced in scale and complexity with major investments the cost profile of government organizations has been significantly complicated. Costs that traditionally had been considered overheads now represent activities critical to the delivery of government services. It is increasingly difficult to associate these costs directly to individual programs or customers. See Gearhart, 1999.

¹⁹ "Performance indicators are no substitute for the independent, in-depth qualitative examination of the impact of policies which evaluations can provide," OECD, 2004, p. 15. Due to the costs involved, these necessarily have to be used sparing and guided by some cost-benefit principle.

²⁰ See Hatry, 1999, p. 4 ff; Perrin, 1998, p. 374.

designed evaluation study. Secondly, it should be admitted that some outcomes cannot be measured directly. The most obvious example is success in preventing undesirable events. Thirdly, it should be recognized that the information provided by performance measures is just part of the information that is needed by managers and elected officials to make resource allocation decisions. Performance information may provide a clearer understanding of what is expected and what has been accomplished, but other supporting information will be required. For example, the costs of providing goods and services by alternative approaches can be derived from agency accounting and finance officers providing financial and resource information, or from benchmarked cost data.

In sum, it might be best to view the major purpose of performance measurement as necessary but not sufficient to determine what should be done. This implies managers cannot rely solely on performance measurement for decision-making.²¹ It is interesting to note that the private sector is moving away from the narrow focus on outcomes measurement toward a broader approach as evidenced in the “balanced scorecard” (Kaplan and Norton, 1992), that has also attracted some interest within OECD governments.²²

- Danger of inappropriate measures

It also should be recognized that measuring performance is not an easy job that gets even more difficult as measurement moves from program outputs to program outcomes. In this paper there has been a deliberate use of the term performance measurement rather than performance indicator. When dealing with processes and outputs there is greater assurance over the consistency in the interpretation of the measures of performance. When one deals with outcomes, direct measures are often difficult, hence the measures can only “indicate” the outcome rather than directly measure it. Often it takes more than one indicator to adequately capture an outcome, further complicating interpretation.²³ Not surprisingly, performance indicators tend to be subject to a greater degree of interpretation and hence are more open to abuse as well as to the danger of selecting inappropriate indicators. A concern in the use of performance measures is that the measures displace the actual outcomes as an agency’s objectives. This “goal displacement” can often lead to emphasizing the wrong activities (e.g., those that are easier to measure) and to an agency’s energies being spent in

²¹ As a consequence, it is often recommended that any ongoing monitoring of performance be supplemented with periodic program evaluation or reviews. That is, “an effective performance information system will include an appropriate mix of ongoing performance information and periodic evaluations,” Australian Department of Finance, 1996, p. 3. The latter allows a wider range of information and stakeholder perceptions. From the U.S. perspective, see Joyce, 1993, p. 10.

²² The balanced scorecard looks at a wide range of measures, including difficult to measure factors such as the company’s focus on innovation and learning. For example, Osborne et al, 1995, would include as an important dimension of performance in social programs indicators of the process of “learning lessons” and “empowerment” of communities, p. 31 ff.

²³ Perhaps not surprisingly, it is often found that the development of performance indicators has been fastest in the least problematic areas where government units have clearly defined functions, and that the problems of measuring performance increase with the complexity of government activities; see Carter et al, 1991.

improving “the numbers” without improving actual outcomes.²⁴ An obvious example is the usual bias of performance measurement to the short-term, for ease of measurement. However, there is a distinct danger that the short-run beneficial outcomes may result in increased costs over the longer-run, with an undesirable shifting of costs into the future.

- Danger of misuse

Inevitably performance measures require careful interpretation, and adequate knowledge of the different factors impacting the measures. This need for interpretation brings its own dangers. Experience has shown that no matter how clearly defined, performance indicators are invariably recorded and interpreted in very different ways by different people. Moreover, when people feel the future of a program is dependent on an indicator, a positive bias may come into play—they inevitably will interpret them in the way that is most favorable to the agency. Perhaps of more concern is the danger of introducing performance measurement without the managers’ commitment to the new performance management system. Often attempts are made to enforce such commitment from above, or from the outside by the legislature, by demanding performance information. Experience has shown that when managers and staff are required to collect and compile performance measures that are recognized as inappropriate or will never be used by the agency, they will become cynical about performance measurement and more likely to seek ways to use it to their own ends. Often the greater the pressure from above, the more the pressure from below to subvert the system. As more attempts are made to use performance measures, the higher the stakes become and the greater the incentives for people to identify self-serving performance indicators and to report misleading performance data. Hence the need to provide managers with incentives to buy-in to the new performance measurement system, such as offering increased managerial flexibility.

- The danger of information overload and lack of selectivity

Performance indicators can be irrelevant for decision-making, even if they are accurate. The essence of performance measurement is to reduce the multidimensional aspects of the program’s outcome to a few measurable indicators.²⁵ This is often recognized as leading to oversimplification, and hence gives rise to the counterpressure to employ multiple measures of performance. However, from a decision-making viewpoint this may not be a solution—

²⁴ The PEM literature is replete with examples of poor or dysfunctional performance measures: a tax office measuring the cost per application of revenue collected might encourage the office to leave difficult cases aside; a hospital using “cost per occupied patient bed” could encourage managers to retain patients to ensure no beds are unoccupied; rating a school’s performance based on examination success rates might lead to schools discouraging low performers from joining the school, etc.

²⁵ “Performance measurement should aim at developing a limited number of well-chosen, stable measures, so that a track record of an organization’s performance over time can be built up. This does not mean that performance measures are defined once and for all; they may need to be modified to take into account changes in the managerial context and the environment in which the organization exists.” OECD, 1994, p. 14.

more data make decisions more informed not necessarily easier.²⁶ This may also result in confusion between different types of indicators and their use. For example, an approach to use a weighted average of different measures may lead to misleading aggregate indicators as critical subgroup differences are lost in the aggregation process.

V. GUIDELINES FOR USING PERFORMANCE MEASURES

How to guard against the above dangers? The experience of practitioners in performance measurement points to some guidelines, namely:

- Aim for clarity in purpose

First, it is necessary to be sure about who will use the performance information, how they will use it, and why they will use it. There are many potential users of performance information, ranging from the program manager, the central evaluator in the ministry of finance, the member of a legislative watchdog committee, and the final consumer of the government service. Each of these potential users has different objectives: for example, making better resource allocation decisions, improving services, increasing accountability, etc. Measures should only be chosen when users are identified and their objectives properly defined. The ultimate aim should be to help the user reach more informed conclusions and to make better decisions about service performance.

- Focus on core information

Second, once the purpose has been clarified there should be a conscious effort to prioritize between different performance measures to avoid information overload. It is usually recommended that in the first instance the focus should be on the priorities of the entity, i.e., its core objectives and service areas. Often it takes sufficient time and effort to establish success criteria for these priorities and objectives without widening the scope of performance measurement.

- Align with practical needs of the agency

Third, it is necessary to make performance information as relevant as possible to the agency. To do so requires performance measurement to be aligned with the objective, setting procedures and the performance review process of the agency. In this way, those collecting and processing the data can appreciate what these are being used for and relate their use to the agency's procedures. Of course, this does not mean ignoring the multiple uses of performance information. There should be links between the performance measures used at an operational level, those used by agency's management, and those used by higher level government officials, say in the ministry of finance.

²⁶ "There are limits on how much information decision-makers can make good use of: people have 'bounded rationality' and so do organizations," OECD, 2004, p. 4.

- Balance the perspective on performance

Fourth, it is necessary to recognize that different activities create different needs for performance measurement. Narrow program activities perhaps can be covered by very few measures, but complex program activities may need a wide range of performance measures balanced over the different aspects of the services. Often it is felt desirable to have an appropriate mix of internally generated and external measures. Obviously, meeting this need may involve trade-offs with other criteria such as focus and alignment.

- Review the performance measures

Fifth, there should be a consistent effort to upgrade performance measurement. This reflects the fact that the previously chosen criteria are subject to change over time. Agency objectives change, priorities between objectives change, different users emerge, and hence the required balance of performance information is necessarily changed. Selected performance measures, therefore, should be regularly reviewed and updated to reflect such changes in priorities and shifts in the focus of public policy. A performance measurement system that is static is not likely to be fulfilling its function as part of a performance management system.

- Ensure robustness of basic information

Lastly, but perhaps more importantly, performance measures should be based on reliable and timely data. The basic raw data should be robust, in the sense of being derived in a way that is verifiable, free from bias, and preferably comparable over time and between different organizations. Data should also be capable of being derived in a time frame compatible with the needs of decision-makers.

VI. ESTABLISHING A PERFORMANCE INFORMATION SYSTEM

If performance measurement is to be more than simply an add-on to the traditional budget process it should become an essential part of the process of performance budgeting. In turn, performance budgeting must be viewed as an integrated method of allocating resources. The central idea is to link resource allocation explicitly to outputs or outcome—performance—and this should be recognized as involving more than just budgeting. Rather it encompasses the entire budget management process in supporting and demanding better performance: budget planning, budget execution, reporting, and auditing. In this way, performance measurement requires to be fully integrated into a performance management system. To support the latter, in turn, entails establishing a performance information system.

An effective performance information system requires managers to develop their performance information to ensure the following management needs are met:

- Performance measures are chosen that are clearly linked to intended objectives, and will enable ready assessment of performance in terms of effectiveness, efficiency, and service quality. Needless to say they must be feasible and accurate, and derived in a cost effective way.

- As far as possible, a core set of performance information should be identified that minimizes the cost of performance management and ensures that performance information is relevant and understandable to the organization and its stakeholders.
- The continued appropriateness of performance information should be regularly assessed. “Appropriateness” could include such factors as relevance, cost, value, and usefulness to decision-makers.
- Responsibilities for performance measurement and reporting need to be clearly defined and understood, including whether services are delivered by the agency, are outsourced, or produced by other third-party arrangements.
- Monitoring and periodic evaluation of performance should be balanced with other operating demands and used appropriately. It should be expected that performance will be monitored on a continuing basis and complemented by periodic evaluation, generally within at least a five-year, and preferably a three-year cycle.
- Performance management activity should be planned and integrated with business planning that can be fully supported by the performance management information system.

Two points are worth emphasizing when establishing such an information system: the need for a reporting structure and the assurance of data quality.

- Reporting structures must be planned and set up

Performance management requires not just measuring performance but reporting on it. At the outset there is a need to consider the structure of the data capture, its ultimate presentation as management information to different levels of user that can be expected to have different reporting needs. Unfortunately, typically reforms in performance measurement are designed and used by agency managers to meet their needs, without regard for what other users, such as citizens or their elected representatives, want to know. To encourage accountability and better governance, citizen participation is to be encouraged. Lack of citizen involvement can undermine the value of performance measurement by minimizing its importance in the eyes of elected officials.

Some general principles in reporting on performance are indicated in Box 4 below. The range of performance measures should be reported regularly and consistently, and allow performance to be measured against the standard chosen. This means data could cover: actual performance compared to the plan; actual performance compared to a predetermined standard; actual compared to actual performance of peers; and actual compared to performance in previous period. Experience has shown there are great benefits in benchmarking in this way, especially in allowing external comparisons to some pre-determined standard of good practice or a benchmark, e.g., peer group activity.

Box 4. Key Principles for Reporting Performance Information

- *Be Open:* Provide feedback of the results and explain the reasons for collection of information and the use to which it will be put.
- *Be Selective:* Do not report all measures to everyone, so as not to overload users with information that is not relevant to them.
- *Be Focused:* When a specific issue is under review it is necessary to report only the measures relevant to that issue.
- *Be Proactive:* Take action to indicate where a response or an action is required as a result of the information being provided.
- *Be Pragmatic:* Concentrate on what can be influenced.
- *Be Reasonable:* Take or suggest action that is reasonable in the circumstances.

- The need for a system of verification.

Performance measurement must be credible. It is not enough to introduce performance measurement without the added assurance of internal controls and data verification.²⁷ Performance measurement verification helps to ensure that expenditure on performance measurement is spent wisely. If elected officials and administrators can trust the reliability of such information, the likelihood is increased that performance information will be used for decision-making purposes. The value of performance information is undermined if its accuracy cannot be verified, and the government without some such verification may not take performance measurement seriously. Given the need, who will carry out this validation? The most obvious candidates are internal audit staffs or external auditors, and typically a cooperative effort is recommended. This verification should be performed at least annually on a rotational basis so that all programs are covered in say a three-year cycle.

VII. DEVELOPING A PERFORMANCE MANAGEMENT SYSTEM

It is as well to recognize that it will take time to introduce a comprehensive system of performance management. The ultimate objective is to put in place a system to match costs with activities, to measure performance of these activities, to develop standards of performance, and compare costs and performance levels with agreed standards. The challenge of this approach is to link performance information to the budget process and the allocation of resources. International experience has shown that until this connection occurs performance, is seen merely as a regular reporting requirement, but not directly relevant to day-to-day management and budgeting.

How to develop such a performance management system? Six discernable steps are described here, all of which require developing and strengthening performance measurement capacity: First by clarifying objectives of programs, and hence better defining how their performance

²⁷ This issue of quality control in performance measurement is dealt with more fully in Wholey, 1999.

will be judged;²⁸ secondly, by providing a stronger link between inputs into the production process and the monitoring of the achievement of outcomes; thirdly, by making performance information relevant in resource allocation decisions; fourthly, by presenting information on planned performance (usually in budget documents) and actual performance (in documents such as annual reports) on a consistent basis; and fifthly, providing incentives for managers to use performance measures in making day-to-day management decisions. The final step is developing a system to monitor program management. All of these steps require developing and strengthening performance measurement capacity.

- Step 1: Improve definition of programs and their objectives.

Well-defined programs require to be anchored in a strategic plan incorporating the aspects indicated in Box 5 that should be formulated for implementing services or units.

Box 5. Features of the Strategic Plan

- Comprehensive description of the agency's mission, including the organization's main functions and operations.
- General or strategic goals and objectives for the organization's main functions and operations.
- Description of the guidelines to be followed to attain the goals and objectives.
- Identification of external factors crucial to the organization which are beyond its control and which could have a significant impact on the attainment of general goals and objectives.
- Description of program evaluation.
- The plan is used to define or revise general goals and objectives.

The term of the strategic plan should be long (at least five years), consistent with a medium-term budget framework, and similarly periodically updated. Based on the strategic plan, annual implementation plans, or operating plans, should be prepared subsequently, providing a direct link between the long-term goals of the strategic plan and those identified in budgets, to serve as a point of reference for annual progress evaluations. The main features of an operating plan are described in Box 6.

²⁸ See the interesting discussion on the importance of defining objectives as one of the main obstacles found when measuring performance of U.S. federal agencies, CBO, 1993.

In the initial period of introducing a performance management framework, there may be a role for a central advice unit to assist agencies in making the required changes outlined above.

Box 6. Main Features of an Operating Plan

An Operating plan should include:

- Operating objectives defining the targeted level of program implementation, i.e., outputs.
- Output goals expressed in an objective, quantifiable, and measurable manner.
- Description of how annual goals or operating objectives will relate to the general goals of the strategic plan.
- Indicators for use in assessing the value of relevant products, level of service, and the results of each program activity.
- Bases for comparing program results with established implementation targets.
- Description of the methods to be used in checking and validating the measurements obtained.

- Step 2: Provide a stronger link between budgeting inputs and program outcomes

Since the budget remains the chief motivating force in determining the allocation of resources to meet the objectives of program management, this means the performance targets should be matched with full annual budgetary costs. This matching of budgetary costs with program performance provides not just the information but the incentives for budget managers to make efficient trade-offs in allocating resources to meet the program targets.

Each agency should be required to identify the linkages between financial and nonfinancial inputs to their production of goods and services, and the outcomes that they have identified, or are in the process of identifying in redefining their programs. Examining outcomes associated with programs in isolation from the direct inputs to their daily operations reduces the relevance of performance measures. This process may not necessarily mean that agencies have to identify all the outputs of the production process. This will come later as managers gain more experience in measuring performance.

The identification of outcomes should be a joint exercise of the ministry of finance and the relevant ministry in charge of the services. The outcomes associated with the programs should then be agreed with the minister of the government who has responsibility for that part of the public sector. The linking of inputs to program outcomes is predominantly the responsibility of the relevant ministry as only they have the detailed knowledge to provide this essential connection.²⁹

²⁹ A discussion of the development of an information system to support this central first step is discussed further in Diamond and Khemani, 2004.

- Step 3: Make performance information relevant

It is common to find program structures with defined measures of performance which have little impact on the allocation of resourcing. Goals or objectives may be set, but often this is done predominantly within the service ministry, after the budget has been passed. Due to this, there is little impact on the allocation of resourcing between major functional areas of the budget, such as education and health. Furthermore, often these goals or objectives within a ministry only affect the allocation of resources at the margin, with the bulk of resources allocated regardless of the performance of the sector concerned.

To force a break with this approach, *a phased introduction of the new system is recommended*. In *the first stage* major ministries and service agencies provide six months prior to the processing of the budget an agreed set of outcomes of their programs, with clear linkages to the associated financial and nonfinancial inputs. This provides the ministry of finance with the opportunity to examine the total level of their resourcing in light of the proposed outcomes of the programs, and feed that information into the formulation of the budget. Without associated performance measures this information may not have a significant impact on the determination of the budget, but it is an important transitory phase. In *the next stage*, all agencies would provide similar information six months prior to the budget, together with a full set of performance measures that clearly shows how each agency has performed during the last 12 months. This would be the first point at which the budget would reflect the relative allocation between ministries and service agencies and would be directly affected by their performance.³⁰

- Step 4: Present performance information on a consistent basis

It is important that the process of publicly releasing performance information six months prior to the budget be comprehensive, so that all agencies release information on a full set of programs, and associated outcomes, with clear linkages of inputs and performance indicators. The central budget documentation should include a summary of performance information published by agencies and a clear indication of where resourcing has been affected by good or poor performance. It is recommended that the publication by agencies of such information be an annual process to raise the accountability of agencies and their managers for the efficient and effective use of public funds. This accountability should not, however, be restricted to an annual reporting process. All documents released publicly by agencies that deal with their operations should include performance measures from the commencement of their use. Alongside this regular reporting, publishing the results of periodic evaluation should be encouraged. Indeed it is recommended that all agencies would conduct periodic reviews of their programs, preferably with all programs reviewed over three years.

³⁰ During this stage, ministries could also use these performance measures to determine the allocation of up to 10 percent of resourcing between service areas. It may also be useful to recommend that the percentage of resource allocation subject to satisfactory performance of managers be increased progressively by at least 5 percent each year. This will provide a clear message to managers that performance information is important and relevant in deciding on the allocation of budget resources.

- Step 5: Provide incentives for managers to use performance information

To clearly establish performance targets as a permanent feature of public sector management, the establishment of a process for performance agreements with agencies should be encouraged. Agency performance agreements should be included in their business plans, commencing with the major ministries and service agencies, progressively including all agencies. To work, however, incentives cannot be purely negative, where managers must fear budget cuts. There must also be an appropriate set of rewards for good managers. Those managers that are innovative in the provision of goods and services, and at the same time provide savings to the budget, should be identified and appropriately compensated. This may take the form of allowing them more flexibility in decision-making. Initiatives in the introduction of performance-based pay should be encouraged. The opportunity should be provided for employees to enter into workplace agreements with management, whereby performance bonuses are paid for an agreed level of performance or achievement of some operational or strategic objectives. This could extend to individual employees, reducing their standard rate of pay and having it replaced with performance-based pay.

- Step 6: Develop a system to monitor program management

In this new performance management system, the ministry of finance should define the general features of a monitoring system to be adopted by the units and services that manage budget programs, as well as the information to be reported periodically. Among these are: the progress in the attainment of objectives; the costs incurred; and the most significant physical and financial discrepancies vis-à-vis indicator-based estimates. There should also be an explanation and examination of the causes of discrepancies observed, classified as internal if attributable to management, or external in all other cases. Ideally, this should be accompanied by a description of corrective measures to be adopted or proposed, as appropriate. Performance measures should have clearly defined characteristics to ensure the provision of sufficient relevant information for taking management decisions.

VIII. ASSESSING PERFORMANCE OF THE BUDGET SYSTEM

These steps toward a performance management system are directed to setting up a clear accountability framework for budget managers that lies at the heart of the new performance budgeting model. From the above description it is evident that this accountability framework is based on some key elements:

- a clear ex ante specification of the performance expected of each agency head;
- agreed ex ante arrangements for the collection of all the information required to assess performance;
- incentives and sanctions to encourage agency heads to act in the government's interests;
- a clear performance assessment process involving ex post reporting of actual performance against the initial specification; and

- devolution of decision-making authority to give agency heads the degree of managerial autonomy they need to achieve the tasks assigned to them.

This reformulated accountability arrangement represents a fundamental change toward a more devolved system of budget management whose effects are quite far reaching. However, for this reorientation to be fully effective will require certain preconditions to be met.

Clearly, before introducing a performance management framework there should be some assurance that this will rest on a solid basis of public expenditure management (PEM). The question arises, therefore, of how to judge whether a PEM system is robust enough to accommodate the previously discussed changes required by performance-oriented budget management. In turn this requires an assessment of the overall performance of the PEM system.

From this perspective, it is important to take note of some recent work directed at measuring the performance of the public expenditure management system as a whole.³¹ This effort has arisen from the fiduciary needs of donors and multilateral development agencies that increasingly direct aid to countries through general budget support rather than projects. The recognition that expenditure is fungible has forced recognition of the need to look at government spending in a more comprehensive way, and for fiduciary purposes to examine the performance of public expenditure management system as a whole. To replace the multiple diagnostic tools used for this purpose by bilateral and multilateral agencies, work is ongoing to develop common tools for measuring the performance of budget systems that would satisfy most donors' requirements. This has resulted in the development of an assessment framework, designed to measure the performance of countries at all levels of PEM development. Performance is judged from a strict fiduciary risk perspective as well as from a development risk viewpoint.

This standardized assessment, developed by the World Bank with the assistance of its development partners, including the IMF, has aimed at streamlining and condensing the previous diagnostic tools.³² Taking six critical objectives of a well-functioning PEM system (see Box 7), a small number of high-level indicators were derived to assess performance against these objectives.³³ Each indicator is measured against a four-point ordinal scale A–D, and guidance notes have been developed on what level of performance would meet each score, for each indicator. This has then been applied to pilot countries for testing.

³¹ See Allen, Schiavo-Campo, and Garrity, 2002.

³² The Public Expenditure and Financial Accountability (PEFA) program is a joint program of the World Bank, European Commission, IMF, development agencies from France, Norway, Switzerland and the United Kingdom, and the Strategic Partnership with Africa (SPA). The program was established in December 2001; its secretariat is based in the World Bank.

³³ While the approach concentrates on a standard set of indicators considered relevant to all country circumstances, it is recognized that a country may add further indicators to meet specific needs.

Box 7. Critical Objectives of PEM Systems Measured in Standardized Assessment

- Budget realism: budget is realistic and implemented as intended in a predictable manner.
- Comprehensive, policy-based budget: budget captures relevant fiscal transactions, and is prepared with due regard to government policy.
- Fiscal management: aggregate fiscal position and risk are monitored and managed.
- Information: adequate fiscal, revenue, and expenditure records and information are produced, maintained, and disseminated to meet decision-making, control management and reporting purposes.
- Control: arrangements are in place for the exercise of control and stewardship in the use of public funds.
- Accountability and transparency: arrangements for external transparency and scrutiny of public finances are operating.

Source: PEFA, PFM Performance Measurement Framework, February 2004.

The result is a standardized assessment tool, where countries' budget systems are assessed against benchmarks based on international good practices in a variety of different dimensions. While the standard assessment may be a synthesis of assessments generated through existing instruments, the ultimate objective in the medium term would be to replace the existing instruments and to harmonize recommendations for improving the PEM system.

The new approach emphasizes actions aimed strengthening PEM systems with the ultimate objective to make aid more effective. However, this approach also has potential as a guide to budget system reform. The power of the approach is to recognize the PEM system as a system, where different phases of the process are interrelated. This integrated approach to performance assessment is beneficial in identifying key weaknesses in the system that cause problems elsewhere in the system, and this assists in prioritizing remedial actions in often capacity-constrained public administrations. The emphasis has been placed on proactively using this tool for capacity development, by diagnosing weaknesses in the PEM system and then developing a strategy and action plan jointly with the donor community and the government to correct these weaknesses. Using this approach it should be possible to strengthen PEM systems to reach a basic level that can then accommodate performance management reforms.

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