

Lessons of Multi-Year Budgeting

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The objective of this short note is to discuss lessons learned from the development and implementation of multi-year budgeting systems. These initiatives share the common goal of improving decision-making processes between the various branches of government, restructuring management processes to enhance administrative and economic efficiency, and increasing accountability to taxpayers. As I note below, the U.S. Department of Defense has extensive expertise in multi-year budgeting and is currently attempting to return to the original vision of the Planning-Programming-Budgeting System (PPBS).

Lesson 1: Recognize the Value of a Multi-Year Budget Perspective

Concentrating all efforts on the improvement of budget execution solely within the context of the annual budget overlooks the close connection between the annual budget formulation process and the longer-term budgetary problems countries face. Indeed, any budgetary process that fails to prioritize expenditures over the medium term or that fails to internalize the linkages between budget decisions in the current year and expenditure requirements in subsequent years is exposed to inconsistencies and, ultimately, failure.

Introduction of a multi-year dimension in the budget process (or the transformation of a multi-year development plan into a true multi-year budget strategy) could improve the budgetary process in a variety of ways. Perhaps most importantly, a multi-year budget framework could make a substantial contribution to correcting the perennial fiscal problem: the imbalance between the available resources and the government's expenditure commitments. Placement of the budget in a medium term

context would provide a framework to analyze fiscal strategy issues and provide a mechanism to build a political consensus on national priorities. The multi-year dimension would also allow for the structural review and prioritization of expenditure commitments as opposed to the arbitrary across-the-board cuts which are often relied on in the absence of a clear multi-year framework. In this application, multi-year estimates would serve as a tool to increase the efficiency of the public resource allocation process.

There are other potential benefits that would derive from the inclusion of a multi-year dimension in the budget process. Multi-year budget estimates could provide a projection of fiscal outcomes under alternative economic conditions. In this sense, multi-year budget estimates would function as an early warning signal for policies that are not compatible with the medium-term fiscal objectives of the government. A multi-year budget approach could further be used to provide stability and continuity to the budget process by using this year's expenditure forecasts as the starting point for the annual budget formulation process for the following year. Finally, a multi-year budget strategy could encourage increased involvement of line ministries in the budget process. These various objectives of the multi-year dimension are by no means exclusive or incompatible. Most governments pursue a combination of these objectives simultaneously.

Lesson 2: One Multi-Year Budget Approach Does Not Fit All

A relevant observation when considering the introduction of multi-year budget components is that substantial differences exist between the respective approaches to multi-year budgeting. Differences in multi-year budgeting approaches are caused by

differences across countries in policy objectives, budget institutions and traditions, administrative capabilities or differences in the availability of administrative resources. Thus, each multi-year budget approach is specifically designed to uniquely suit the particular policy needs and fiscal conditions in each respective country.

One of the most complete approaches to multi-year budgeting is the development of a detailed multi-year tax and expenditure plan such as the *Federal Financial Plan* in Germany. The German multi-year financial plan enhances the budgetary process in several ways. Most importantly, the financial plan ensures that the government's fiscal policies are consistent with the country's economic policy objectives and the government's medium-term fiscal strategy. In addition, if executed properly and updated frequently, multi-year financial plans provide a high degree of certainty about future fiscal policies and provide continuity to the budgeting process. In combination, these elements results in a very systematic development of fiscal policy.

The integrated multi-year financial plan used in Germany, however, has several disadvantages and is not widely applicable outside the German context. First, the formulation of an integrated multi-year financial plan is quite complex and administratively very demanding. In addition, the use of a full-fledged multi-year financial plan requires strong political and social consensus, which may not exist in many countries.

New Zealand pursues another comprehensive approach to multi-year budgeting where many budget responsibilities (including the development of multi-budget estimates) have been devolved to the spending agencies through a system of system of formal contracts. The reliance on contracts within the government sector is possible

because the country has a strong private sector, established mechanisms for enforcing contracts, a high degree of transparency in the allocation of public resources and efficient public expenditure controls. Adoption of New Zealand's budgetary approach lacking these facets would result in certain failure.

In fact, it would be unwise to duplicate any of the existing multi-year budget approaches simply because the approach has proven to be successful in the context of some other country's budget process. Instead, a more advisable approach would be for a country to first carefully consider its own budget institutions and its policy objectives in introducing a multi-year budget approach. Then, guided by the review of international practices, the country should attempt to develop its own multi-year budget approach with the idea of capturing the benefits of multi-year budgeting within the context of the country's specific policy objectives, budget institutions, and the relevant institutional and administrative constraints.

Lesson 3: Learn from the Experience of Other Countries

The United States is not the only developed country to introduce significant budget process reforms in the past decade. Several OECD countries, including Australia, Germany, Great Britain, and New Zealand have undertaken reforms with the objective of moving the focus of the budget process from an annual, input-oriented perspective to a multi-year, performance-based focus. Three general trends emerge from these efforts. First, many of these countries have introduced performance budgeting techniques in an attempt to quantify performance and to explicitly link resource allocation with performance. Second, there has been a tendency to move away from centrally driven

budgets to budgets that are created by line departments and ministries. Third, each of these countries moved to highlight, and in some cases, explicitly incorporate, the multi-year budgetary implications of resource allocation decisions.

What lessons do these reforms hold for the United States? First, performance oriented multi-year budget reform cannot be successful without reforms in other supporting budget processes. Examining the budget reforms in Australia, Great Britain, and New Zealand, we note that the reform process has been systemic rather than piecemeal. Performance objectives have been tied to multi-year budget estimates that are consolidated in a centralized budget database. The role of the central finance department or ministry has been transformed from one of generating estimates and resource allocations to one of providing budgetary guidance, consolidation, and evaluation of the estimates of the line departments and ministries. The line departments and ministries, and not the central finance department, have assumed the responsibility of generating their budget estimates. While variations exist among the Commonwealth countries, this approach to budgeting appears to be a marked departure from that currently practiced by the federal government in the United States.

Second, budget process reform requires a significant investment in accounting and information systems and personnel. This financial investment must be accompanied by an empowerment of line departments and agencies through enhanced flexibility in personnel and other policies. In Great Britain, for example, budget reform resulted in the creation of new task-oriented agencies. The heads of these agencies, which were hired on a contractual basis, were given control over resources and were held accountable for results. At the same time, heads of traditional agencies were gradually granted the

authority to determine the pay scales for their employees. Concurrently, the role of central agencies was gradually transformed from centralized management to oversight, audit, and, when necessary, intervention. In Australia, the on-going budget reform process has led the Australian Department of Finance and Administration to offer training programs for the support staff of Members of Parliament. These programs were designed not only to address the need for budget analyst training in the executive branch of government, but also the legislative branch of government.

Lastly, devolving authority in the budget process appears to enhance accountability and the transparency of the budget process. In Great Britain, line departments are responsible for determining program priorities subject to general guidance provided by the Treasury. Line departments have the authority to reprogram funds within their departments to concentrate scarce resources on higher priority programs by reducing or eliminating lower priority programs. In this context, departments are responsible for allocating scarce resources to produce the best possible outcomes; therefore an incentive exists for departments to allocate resources in response to citizen preferences and to conserve scarce resources to meet program priorities. Departments that achieve cost savings can transfer a portion of the savings to the next fiscal year, a provision that appears to be directly aimed at defeating the “use it or lose it” behavior associated with control oriented budgets. These, and other reforms, attempt to redress the incentive structure associated with control oriented budgets. Lastly, we must note that devolving authority to line ministries and departments remains dependent upon the issuance of strategic guidance and resource constraints by the executive branch or ministries.

Lesson 4: Learn from Your Own Past

Mandated by President Johnson in 1965, the Planning-Programming-Budgeting System attempted to introduce an explicit decision-making framework to the executive branch's budget formulation process. The PPBS approach consisted of three distinct phases: Planning -- the definition and examination of alternative goals and objectives; Programming -- the definition and analysis of alternative actions to achieve those goals together with their resource implications; and, Budgeting -- the formulation, justification to the Congress, execution and control of the budget. While the planning and budgeting phases of the PPBS system did not significantly differ from the existing federal budgeting process, the programming phase attempted, for the first time, to create an explicit, institutional linkage between the planning and budgeting components of the budget process.

By attempting to introduce constrained optimization techniques into the federal budgeting process, the PPBS was seen as a means of encouraging an analytical, intertemporal approach to decision-making that emphasized the systematic evaluation of alternatives through the use of cost-benefit and systems analysis. Instead of the annual focus of previous budgeting systems, the PPBS encouraged multi-year discounting, intertemporal tradeoffs among competing programs, and provided incentives for the complete accounting of all relevant costs, including the positive and negative externalities associated with budgetary decisions. The PPBS introduced one other significant innovation by attempting to explicitly link program elements (measurable inputs) and program categories (intermediate outputs and activities) to multi-year objectives.

While the PPBS introduced systems analysis and multi-year discounting into the

federal budgeting process, the system failed to provide the proper incentives to emphasize the output side of the budget. Part of the failure of the PPBS can also be attributed to the lack of preparation of executive departments and Congress for its implementation. The annual budget cycle also placed significant time pressure on the programming phase of the PPBS and the administrative and reporting requirements of the PPBS increased significantly over time. Today, what remains of the PPBS can be found in the budget formulation process of the United States Department of Defense (DoD) where the Planning-Programming-Budgeting-Execution System (PPBES) is still used to develop the DoD budget that is included in the President's annual budget submittal to Congress.

Over time, the pressures of the annual budget process and the analysis requirements of PPBS/PPBES created an incentive for the replacement of inter-service tradeoffs and multi-year analysis with *incremental budgeting*. With incremental budgeting, policymakers assume that the majority of an organization's budget is 'outside' the budget process. A baseline level of funding exists that, in most circumstances, is outside the purview of budget discussions. Last year's budget becomes the baseline for this year's budget and so on. The majority of effort in the budget process is expended on distributing incremental changes to the baseline level of funding among competing organizations.

Over the past four years, a significant effort has been underway within the DoD to reorient PPBES from its current 'bottom up' budgeting approach. While the appropriations-authorization-obligating process constrains budgeting to an annual basis, DoD has, over the course of the last four years, attempted to shift the focus from annual

to biennial budgets. The off-year program/budget review, however, is an incremental strategy, that is, program change proposals are submitted to change funding levels but systematic reprogramming of resources across services is not likely to occur. A potential result, however, of these efforts is a reduction in the effort expended in the budget process in the off-years and a longer budgeting time horizon in the concurrent program/budget review years. Whether this effort has produced discernable results and whether the biennial budget approach would be continued under Capabilities Based Planning (CBP) is unclear. What is clear is the desire to have decisions ‘born joint’ rather than ‘forced to be joint.’

Lesson 5: Observe What Your Organizations Are Doing Right Now

With the ongoing conflicts in Iraq and Afghanistan and the subsequent demands for resources, increasingly uncertain threats in the future, and the desire to promote joint operations across the Services, DoD has embarked on a potentially significant budgetary reform. If successful, the orientation of the current resource allocation system will shift from the competition for monetary resources to the generation of capabilities to meet a range of probabilistically determined threats. The drive to design and implement CBP, however, begs the question of whether we have not been down this road before and what lessons can be learned from previous attempts to budget for uncertain outcomes in DoD.

CBP envisions a common framework for planning, programming, and budgeting across the various functions of the DoD. CBP will change the five year planning time horizon of the PPBES to fifteen years. The programming time horizon will remain at five years while budgeting will be conducted on annual basis. CBP will be a top-down budget

system that focuses on the tradeoffs between risks and resources across a spectrum of threats. CBP would attempt to develop cost-effective capabilities that generate outcomes that would increase costs to opponents while reducing DoD costs. These tradeoffs would not only occur within the Services but across Services.

If implemented as proposed, CBP would represent a shift towards the spirit of PPBS away from the incrementalist approach of the PPBES. From the National Security Strategy, the Quadrennial Defense Review, and the guidance of the Secretary of Defense come the Strategic Challenges (Threats) and Strategic Objectives (Policies). The Challenges and Objectives, in turn, are disaggregated into the Planning Targets (Goals) and then into Joint Concepts (Forces). The Joint Concepts are employed to achieve the desired operational effects (Outcomes) through the employment of Capability Options (Combinations of inputs to achieve the desired outcome). The selected capabilities are reflected in the budget.

We note the similarity between CBP top-down planning process and that of the original PPBS. PPBS proposed a flow of information from threat to budget and then a return of information on tradeoffs and risks. Simply put, all threats cannot be addressed within the current budget, thus there are risks involved that policymakers must either accept or address through the additional commitment of resources.

CBP would represent a similar flow of information. What is not clear, however, is whether the flow of information would be in both directions, as the emphasis in CBP is on a top-down process. Given the need to analyze tradeoffs across functions and Services, we believe that the two-way flow of information is implicit in the design of CBP.

Of concern is the statement that CBP will be employed to apportion risk across the Strategic Challenges. Risk, by its very definition, is uncertain and may be quantified with a certain degree of precision. For a given budget, there will be many different combinations of risks across the challenges, that is, a five percent risk that we will not be able to meet and defeat a equivalent force in a tactical engagement; a twenty percent risk that we will not be able to train 50,000 local security troops within a given period of time; and thirty percent risk of being unable to deter the employment of a weapon of mass destruction in a given area of responsibility. To apportion or to assign risk assumes that we can effectively quantify these risks in combination with the resources and capabilities needed to mitigate them. It further assumes that we will be able to objectively examine the tradeoffs among the different risk combinations and to conclude that a marginal increase in the probability of conventional warfare defeat is ‘worth’ the marginal reduction in the probability of the use of a weapon of mass destruction. We may not, as much as we would like to believe, be able to control risk so that we may apportion it.

Is there a theory to guide our analysis of CBP and PPBES? A repeated adage is the lack of a unified budgetary theory in the fields of public finance and public administration. Unlike microeconomic theory with its testable hypothesis of consumer demand, there are numerous theories of public budgeting, to include, but not limited to, incremental budgeting, performance-based budgeting, capital-improvement budgeting, transaction-cost budgeting, and so on. Whether descriptive (what is being done) or normative (what should be done), these theories have not, in general, been adequately linked with existing budgetary processes. Descriptive theories often fail to ‘translate’ into different environments; what works in the private sector may not well as well in the

absence of the profit motive in the public sector. Normative theories that suggest techniques to improve efficiency and effectiveness (PPBS, Zero-Base Budgeting, Performance Budgeting) are often abandoned in the face of complex administrative and political institutions.

The current challenge facing DoD is to create a system of incentives to solicit the timely and accurate submittal of cost, output, and outcome data which can then be used in the budget process. Services, on the other hand, may be focused on objectives other than cost minimization or output maximization. They may instead have the objective of obtaining budgets that provide as much residual funding as possible in excess of the true cost of providing a given level of output. Providing DoD with accurate information on costs and outputs may pose a threat to this objective. In an environment characterized by asymmetric information and monopolistic supply, a Service may be able to secure a budget that is greater than desired.

Whether CBP is an improvement over the existing process remains to be seen. The Strategic Challenges must not only be defined but must also be capable of shifting over time to reflect the evolving security environment. Planning targets must be developed and joint concepts constructed across the Strategic Challenges. As the Services are being entrusted with developing capabilities to address the Strategic Challenges, the question of how Secretary of Defense can incentivize the Services to conduct joint analysis and avoid stovepiping is unanswered. A method of tradeoff and risk analysis must be developed to support the goals and objectives of CBP. Finally, CBP must be tested using real world issues. Much of the framework, however, is already in place; DoD merely needs to employ PPBS as it was originally intended.