Planning-Programming-Budgeting System: A Symposium

The Road to PPB: The Stages of Budget Reform

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Budgetary reform in the United States has evolved through three distinct stages, the last of which is associated with the contemporary Planning-Programming-Budgeting System. In the initial stage, the primary emphasis was on central control of spending and the budget was utilized to guard against administrative abuses. The detailed classification of objects of expenditure was the main control mechanism. The second stage was management-oriented. It was concerned with the efficient performance of work and prescribed activities. The performance budget, officially introduced by the Hoover Commission, was the major contribution of the management orientation. The third stage is reflected in the planning orientation of the new PPB system. It had roots in Keynesian economics and the new technology of systems analysis.

Among the new men in the nascent PPB staffs and the fellow travellers who have joined the bandwagon, the mood is of "a revolutionary development in the history of government management." There is excited talk about the differences between what has been and what will be; of the benefits that will accrue from an explicit and "hard" appraisal of objectives and alternatives; of the merits of multiyear budget forecasts and plans; of the great divergence between the skills and role of the analyst and the job of the examiner; of the realignments in government structure that might result from changes in the budget process.

This is not the only version, however. The closer one gets to the nerve centers of budget life—the Divisions in the Bureau of the Budget and the budget offices in the departments and agencies—the more one is likely to hear that "there's nothing very new in PPB; it's hardly different from what we've been doing until now." Some old-timers interpret PPB as a revival of the performance budgeting venture of the early 1950's. Others belittle the claim that—before PPB—decisions on how much to spend for personnel or supplies were made without real consideration of the purposes for which these inputs were to be invested. They point to previous changes that have been in line with PPB, albeit without PPB's distinctive package of techniques and nomenclature. Such things as the waning role of the "green sheets" in the central budget process, the redesign of the appropriation structure and the development of activity classifications, refinements in work measurement, productivity analysis, and other types of output measurement, and the utilization of the Spring Preview for a broad look at programs and major issues.

Between the uncertain protests of the traditional budgeteer and the uncertain expectations of the avant garde, there is a third version. The PPB system that is being developed portends a radical change in the central function of budgeting, but it is anchored to half a century of tradition and evolution. The budget system of the future will be a product of past and emerging developments; that is, it will embrace both the budgetary functions introduced during earlier stages of reform as well as the planning function.

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which is highlighted by PPB. PPB is the first budget system designed to accommodate the multiple functions of budgeting.

The Functions of Budgeting

Budgeting always has been conceived as a process for systematically relating the expenditure of funds to the accomplishment of planned objectives. In this important sense, there is a bit of PPB in every budget system. Even in the initial stirrings of budget reform more than 50 years ago, there were cogent statements on the need for a budget system to plan the objectives and activities of government and to furnish reliable data on what was to be accomplished with public funds. In 1907, for example, the New York Bureau of Municipal Research published a sample "program memorandum" that contained some 125 pages of functional accounts and data for the New York City Health Department.1

However, this orientation was not explicitly reflected in the budget systems—national, state, or local—that were introduced during the first decades of this century, nor is it explicitly reflected in the budget systems that exist today. The plain fact is that planning is not the only function that must be served by a budget system. The management of ongoing activities and the control of spending are two functions which, in the past, have been given priority over the planning function. Robert Anthony identifies three distinct administrative processes, strategic planning, management control, and operational control.

Strategic planning is the process of deciding on objectives of the organization, on changes in these objectives, on the resources used to attain these objectives, and on the policies that are to govern the acquisition, use, and disposition of these resources.

Management control is the process by which managers assure that resources are obtained and used effectively and efficiently in the accomplishment of the organization's objectives.

Operational control is the process of assuring that specific tasks are carried out effectively and efficiently.2

Every budget system, even rudimentary ones, comprises planning, management, and control processes. Operationally, these processes often are indivisible, but for analytic purposes they are distinguished here. In the context of budgeting, planning involves the determination of objectives, the evaluation of alternative courses of action, and the authorization of select programs. Planning is linked most closely to budget preparation, but it would be a mistake to disregard the management and control elements in budget preparation or the possibilities for planning during other phases of the budget year. Clearly, one of the major aims of PPB is to convert the annual routine of preparing a budget into a conscious appraisal and formulation of future goals and policies. Management involves the programming of approved goals into specific projects and activities, the design of organizational units to carry out approved programs, and the staffing of these units and the procurement of necessary resources. The management process is spread over the entire budget cycle; ideally, it is the link between goals made and activities undertaken. Control refers to the process of binding operating officials to the policies and plans set by their superiors. Control is predominant during the execution and audit stages, although the form of budget estimates and appropriations often is determined by control considerations. The assured controls and reporting procedures that are associated with budget execution—position controls, restrictions on transfers, requisition procedures, and travel regulations, to mention the more prominent ones—have the purpose of securing compliance with policies made by central authorities.

Very rarely are planning, management, and control given equal attention in the operation of budget systems. As a practical matter, planning, management, and control have tended to be competing processes in budgeting with no neat division of functions among the various participants. Because time is scarce, central authorities must be selective in the things they do. Although this scarcity counsels the devolution of control responsibilities to operating levels, the lack of reliable and relied-on internal control systems has loaded central authorities with control functions at the expense of the planning

function. Moreover, these processes often require different skills and generate different ways of handling the budget mission, so that one type of perspective tends to predominate over the others. Thus, in the staffing of the budget offices, there has been a shift from accountants to administrators as budgeting has moved from a control to a management posture. The initial experience with PPB suggests that the next transition might be from administrators to economists as budgeting takes on more of the planning function.

Most important, perhaps, are the differential informational requirements of planning, control, and management processes. Informational needs differ in terms of time spans, levels of aggregation, linkages with organizational and operating units, and input-output foci. The apparent solution is to design a system that serves the multiple needs of budgeting. Historically, however, there has been a strong tendency to homogenize informational structures and to rely on a single classification scheme to serve all budgetary purposes. For the most part, the informational system has been structured to meet the purposes of control. As a result, the type of multiple-purpose budget system envisioned by PPB has been avoided.

An examination of budget systems should reveal whether greater emphasis is placed at the central levels on planning, management, or control. A planning orientation focuses on the broadest range of issues: What are the long-range goals and policies of the government and how are these related to particular expenditure choices? What criteria should be used in appraising the requests of the agencies? Which programs should be initiated or terminated, and which expanded or curtailed? A management orientation deals with less fundamental issues: What is the best way to organize for the accomplishment of a prescribed task? Which of several staffing alternatives achieves the most effective relationship between the central and field offices? Of the various grants and projects proposed, which should be approved? A control orientation deals with a relatively narrow range of concerns: How can agencies be held to the expenditure ceilings established by the legislature and chief executive? What reporting procedures should be used to enforce propriety in expenditures? What limits should be placed on agency spending for personnel and equipment?

It should be clear that every budget system contains planning, management, and control features. A control orientation means the subordination, not the absence, of planning and management functions. In the matter of orientations, we are dealing with relative emphases, not with pure dichotomies. The germane issue is the balance among these vital functions at the central level. Viewed centrally, what weight does each have in the design and operation of the budget system?

The Stages of Budget Reform

The framework outlined above suggests a useful approach to the study of budget reform. Every reform alters the planning-management-control balance, sometimes inadvertently, usually deliberately. Accordingly, it is possible to identify three successive stages of reform. In the first stage, dating roughly from 1920 to 1935, the dominant emphasis was on developing an adequate system of expenditure control. Although planning and management considerations were not altogether absent (and indeed occupied a prominent role in the debates leading to the Budget and Accounting Act of 1921), they were pushed to the side by what was regarded as the first priority, a reliable system of expenditure accounts. The second stage came into the open during the New Deal and reached its zenith more than a decade later in the movement for performance budgeting. The management orientation, paramount during this period, made its mark in the reform of the appropriation structure, development of management improvement and work measurement programs, and the focusing of budget preparation on the work and activities of the agencies. The third stage, the full emergence of which must await the institutionalization of PPB, can be traced to earlier efforts to link planning and budgeting as well as to the analytic criteria of welfare economics, but its recent development is a product of modern informational and decisional technologies such as those pioneered in the Department of Defense.

PPB is predicated on the primacy of the
planning function; yet it strives for a multipurpose budget system that gives adequate and necessary attention to the control and management areas. Even in embryonic stage, PPB envisions the development of crosswalk grids for the conversion of data from a planning to a management and control framework, and back again. PPB treats the three basic functions as compatible and complementary elements of a budget system, though not as coequal aspects of central budgeting. In ideal form, PPB would centralize the planning function and delegate primary managerial and control responsibilities to the supervisory and operating levels respectively.

In the modern genesis of budgeting, efforts to improve planning, management, and control made common cause under the popular banner of the executive-budget concept. In the goals and lexicon of the first reformers, budgeting meant executive budgeting. The two were inseparable. There was virtually no dissent from Cleveland's dictum that "to be a budget it must be prepared and submitted by a responsible executive..." Whether from the standpoint of planning, management or control, the executive was deemed in the best position to prepare and execute the budget. As Cleveland argued in 1915, only the executive "could think in terms of the institution as a whole," and, therefore, he "is the only one who can be made responsible for leadership." The executive budget idea also took root in the administrative integration movement, and here was allied with such reforms as functional consolidation of agencies, elimination of independent boards and commissions, the short ballot, and strengthening the chief executive's appointive and removal powers. The chief executive often was likened to the general manager of a corporation, the Budget Bureau serving as his general staff.

Finally, the executive budget was intended to strengthen honesty and efficiency by restricting the discretion of administrators in this role. It was associated with such innovations as centralized purchasing and competitive bidding, civil service reform, uniform accounting procedures, and expenditure audits.

The Control Orientation

In the drive for executive budgeting, the various goals converged. There was a radical parting of the ways, however, in the conversion of the budget idea into an operational reality. Hard choices had to be made in the design of expenditure accounts and in the orientation of the budget office. On both counts, the control orientation was predominant.

In varying degrees of itemization, the expenditure classifications established during the first wave of reform were based on objects-of-expenditure, with detailed tabulations of the myriad items required to operate an administrative unit—personnel, fuel, rent, office supplies, and other inputs. On these "line-itemizations" were built technical routines for the compilation and review of estimates and the disbursement of funds. The leaders in the movement for executive budgeting, however, envisioned a system of functional classifications focusing on the work to be accomplished. They regarded objects-of-expenditure as subsidiary data to be included for informational purposes. Their preference for functional accounts derived from their conception of the budget as a planning instrument, their disdain for objects from the contemporary division between politics and administration. The Taft Commission vigorously opposed object-of-expenditure appropriations and recommended that expenditures be classified by class of work, organizational unit, character of expense, and method of financing. In its model budget, the Commission included several functional classifications.

In the establishment of a budget system for New York City by the Bureau of Municipal Research, there was an historic con-

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frontation between diverse conceptions of budgeting.

In evolving suitable techniques, the Bureau soon faced a conflict between functional and object budgeting. Unlike almost all other budget systems which began on a control footing with object classifications, the Bureau turned to control (and the itemization of objects) only after trial-and-error experimentation with program methods.

When confronted with an urgent need for effective control over administration, the Bureau was compelled to conclude that this need was more critical than the need for a planning-functional emphasis. "Budget reform," Charles Beard once wrote, "bears the imprint of the age in which it originated." 7 In an age when personnel and purchasing controls were unreliable, the first consideration was how to prevent administrative improprieties.

In the opinion of those who were in charge of the development of a budget procedure, the most important service to be rendered was the establishing of central controls so that responsibility could be located and enforced through elected executives. . . . The view was, therefore, accepted, that questions of administration and niceties of adjustment must be left in abeyance until central control has been effectively established and the basis has been laid for careful scrutiny of departmental contracts and purchases as well as departmental work. 6

Functional accounts had been designed to facilitate rational program decisions, not to deter officials from misfeasance. "The classification by 'functions' affords no protection; it only operates as a restriction on the use which may be made of the services." 8 The detailed itemization of objects was regarded as desirable not only "because it provides for the utilization of all the machinery of control which has been provided, but it also admits to a much higher degree of perfection than it has at present attained." 9

With the introduction of object accounts, New York City had a three-fold classification of expenditures: (1) by organizational units; (2) by functions; and (3) by objects.

In a sense, the Bureau of Municipal Research was striving to develop a budget system that would serve the multiple purposes of budgeting simultaneously. To the Bureau, the inclusion of more varied and detailed data in the budget was a salutary trend; all purposes would be served and the public would have a more complete picture of government spending. Thus the Bureau "urged from the beginning a classification of costs in as many different ways as there are stories to be told." 10 But the Bureau did not anticipate the practical difficulties which would ensue from the multiple classification scheme. In the 1913 appropriations act there were 3992 distinct items of appropriation. . . . Each constituted a distinct appropriation, besides which there was a further itemization of positions and salaries of personnel that multiplied this number several times, each of which operated as limitations on administrative discretion. 11

This predicament confronted the Bureau with a direct choice between the itemization of objects and a functional classification. As a solution, the Bureau recommended retention of object accounts and the total "de-functionalization" of the budget; in other words, it gave priority to the objects and the control orientation they manifested. Once installed, object controls rapidly gained stature as an indispensable deterrent to administrative misbehavior. Amelioration of the adverse effects of multiple classifications was to be accomplished in a different manner, one which would strengthen the planning and management processes. The Bureau postulated a fundamental distinction between the purposes of budgets and appropriations, and between the types of classification suitable for each.

... an act of appropriation has a single purpose—that of putting a limitation on the amount of obligations which may be incurred and the amount of vouchers which may be drawn to pay for personal services, supplies, etc. The only significant classification of appropriation items, therefore, is according to persons to whom drawing accounts are given and the classes of things to be bought. 12

Appropriations, in sum, were to be used as statutory controls on spending. In its "Next Steps" proposals, the Bureau recom-

7 Charles A. Beard, "Prefatory Note," ibid., p. vii.
9 "Next Steps . . .", op. cit., p. 39.
10 "Next Steps . . .", op. cit., p. 67.
11 "Some Results and Limitations . . .", op. cit., p. 9.
12 "Next Steps . . .", op. cit., p. 35.
mended that appropriations retain "exactly the same itemization so far as specifications of positions and compensations are concerned and, therefore, the same protection." 14

Budgets, on the other hand, were regarded as instruments of planning and publicity. They should include "all the details of the work plans and specifications of cost of work." 15 In addition to the regular object and organization classifications, the budget would report the "total cost incurred, classified by functions—for determining questions of policy having to do with service rendered as well as to be rendered, and laying a foundation for appraisal of results." 16 The Bureau also recommended a new instrument, a work program, which would furnish "a detailed schedule or analysis of each function, activity, or process within each organization unit. This analysis would give the total cost and the unit cost wherever standards were established." 17

Truly a far-sighted conception of budgeting! There would be three documents for the three basic functions of budgeting. Although the Bureau did not use the analytic framework suggested above, it seems that the appropriations were intended for control purposes, the budget for planning purposes, and the work program for management purposes. Each of the three documents would have its specialized information scheme, but jointly they would comprise a multipurpose budget system not very different from PPB, even though the language of crosswalking or systems analysis was not used.

Yet the plan failed, for in the end the Bureau was left with object accounts pegged to a control orientation. The Bureau's distinction between budgets and appropriations was not well understood, and the work-program idea was rejected by New York City on the ground that adequate accounting backup was lacking. The Bureau had failed to recognize that the conceptual distinction between budgets and appropriations tends to break down under the stress of informational demands. If the legislature appropriates by objects, the budget very likely will be classified by objects. Conversely, if there are no functional accounts, the prospects for including such data in the budget are diminished substantially. As has almost always been the case, the budget came to mirror the appropriations act; in each, objects were paramount. It remains to be seen whether PPB will be able to break this interlocking informational pattern.

By the early 1920's the basic functions of planning and management were overlooked by those who carried the gospel of budget reform across the nation. First generation budget workers concentrated on perfecting and spreading the widely approved object-of-expenditure approach, and budget writers settled into a nearly complete preoccupation with forms and with factual descriptions of actual and recommended procedures. Although ideas about the use of the budget for planning and management purposes were retained in Buck's catalogs of "approved" practices, 18 they did not have sufficient priority to challenge tradition.

From the start, Federal budgeting was placed on a control, object-of-expenditure footing, the full flavor of which can be perceived in reading Charles G. Dawes' documentary on The First Year of the Budget of The United States. According to Dawes, the Bureau of the Budget is concerned only with the humbler and routine business of Government. Unlike cabinet officers, it is concerned with no question of policy, save that of economy and efficiency. 19

This distinction fitted neatly with object classifications that provided a firm accounting base for the routine conduct of government business, but no information on policy implications of public expenditures. Furthermore, in its first decade, the Bureau's tiny staff (40 or fewer) had to coordinate a multitude of well-advertised economy drives which shaped the job of the examiner as being that of reviewing itemized estimates to pare them down. Although Section 209 of the Budget and Accounting Act had authorized the Bureau to study and recommend improvements in the organization and admin-

14 "Next Steps ... .", p. 59.
15 "Some Results and Limitations . . . .", op. cit., p. 7.
16 Ibid., p. 9.
17 "Next Steps . . . .", op. cit., p. 30.
administrative practices of Federal agencies, the Bureau was overwhelmingly preoccupied with the business of control.

The Management Orientation

Although no single action represents the shift from a control to a management orientation, the turning point in this evolution probably came with the New Deal's broadening perspective of government responsibilities.

During the 1920's and 1930's, occasional voices urged a return to the conceptions of budgeting advocated by the early reformers. In a notable 1924 article, Lent D. Upson argued vigorously that "budget procedure had stopped halfway in its development," and he proposed six modifications in the form of the budget, the net effect being a shift in emphasis from accounting control to functional accounting.20 A similar position was taken a decade later by Wylie Kilpatrick who insisted that "the one fundamental basis of expenditure is functional, an accounting of payments for the services performed by government." 21

Meanwhile, gradual changes were preparing the way for a reorientation of budgeting to a management mission. Many of the administrative abuses that had given rise to objections were curbed by statutes and regulations and by a general upgrading of the public service. Reliable accounting systems were installed and personnel and purchasing reforms introduced, thereby freeing budgeting from some of its watchdog chores. The rapid growth of government activities and expenditures made it more difficult and costly for central officials to keep track of the myriad objects in the budget. With expansion, the bits and pieces into which the objects were itemized became less and less significant, while the aggregate of activities performed became more significant. With expansion, there was heightened need for central management of the incohesive sprawl of administrative agencies.

The climb in activities and expenditures also signaled radical changes in the role of the budget system. As long as government was considered a "necessary evil," and there was little recognition of the social value of public expenditures, the main function of budgeting was to keep spending in check. Because the outputs were deemed to be of limited and fixed value, it made sense to use the budget for central control over inputs. However, as the work and accomplishments of public agencies came to be regarded as benefits, the task of budgeting was redefined as the effective marshalling of fiscal and organizational resources for the attainment of benefits. This new posture focused attention on the problems of managing large programs and organizations, and on the opportunities for using the budget to extend executive hegemony over the dispersed administrative structure.

All these factors converged in the New Deal years. Federal expenditures rose rapidly from $4.2 billion in 1932 to $10 billion in 1940. Keynesian economics (the full budgetary implications of which are emerging only now in PPB) stressed the relationship between public spending and the condition of the economy. The President's Committee on Administrative Management (1937) castigated the routinized, control-minded approach of the Bureau of the Budget and urged that budgeting be used to coordinate Federal activities under presidential leadership. With its transfer in 1939 from the Treasury to the newly-created Executive Office of the President, the Bureau was on its way to becoming the leading management arm of the Federal Government. The Bureau's own staff was increased tenfold; it developed the administrative management and statistical coordination functions that it still possesses; and it installed appointment procedures for budget execution. More and more, the Bureau was staffed from the ranks of public administration rather than from accounting, and it was during the Directorship of Harold D. Smith (1939-46) that the Bureau substantially embraced the management orientation. 22

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Ecutive Order 8248 placed the President's imprimatur on the management philosophy. It directed the Bureau to keep the President informed of the progress of activities by agencies of the Government with respect to work proposed, work actually initiated, and work completed, together with the relative timing of work between the several agencies of the Government; all to the end that the work programs of the several agencies of the executive branch of the Government may be coordinated and that the monies appropriated by the Congress may be expended in the most economical manner possible to prevent overlapping and duplication of effort.

Accompanying the growing management use of the budget process for the appraisal and improvement of administrative performance and the scientific management movement with its historical linkage to public administration were far more relevant applications of managerial cost accounting to governmental operations. Government agencies sought to devise performance standards and the rudimentary techniques of work measurement were introduced in several agencies including the Forest Service, the Census Bureau, and the Bureau of Reclamation. Various professional associations developed grading systems to assess administrative performance as well as the need for public services. These crude and unscientific methods were the forerunners of more sophisticated and objective techniques. At the apogee of these efforts, Clarence Ridley and Herbert Simon published Measuring Municipal Activities: A Survey of Suggested Criteria for Appraising Administration, in which they identified five kinds of measurement—(1) needs, (2) results, (3) costs, (4) effort, and (5) performance—and surveyed the obstacles to the measurement of needs and results. The latter three categories they combined into a measure of administrative efficiency. This study provides an excellent inventory of the state of the technology prior to the breakthrough made by cost-benefit and systems analysis.

At the close of World War II, the management orientation was entrenched in all but one aspect of Federal budgeting—the classification of expenditures. Except for isolated cases (such as TVA's activity accounts and the project structure in the Department of Agriculture), the traditional object accounts were retained though the control function had receded in importance. In 1949 the Hoover Commission called for alterations in budget classifications consonant with the management orientation. It recommended "that the whole budgetary concept of the Federal Government should be refashioned by the adoption of a budget based upon functions, activities, and projects. To create a sense of novelty, the Commission gave a new label—performance budgeting—to what had long been known as functional or activity budgeting. Because its task force had used still another term—program budgeting—there were two new terms to denote the budget innovations of that period. Among writers there was no uniformity in usage, some preferring the "program budgeting" label, others "performance budgeting," to describe the same things. The level of confusion has been increased recently by the association of the term "program budgeting" (also the title of the Rand publication edited by David Novick) with the PPB movement.

Although a variety of factors and expectations influenced the Hoover Commission, and the Commission's proposals have been interpreted in many ways, including some that closely approximate the PPB concept, for purposes of clarity, and in accord with the control-management-planning framework, performance budgeting as it was generally understood and applied must be distinguished from the emergent PPB idea. The term "performance budgeting" is hereafter used in reference to reforms set in motion by the Hoover Commission and the term "program budgeting" is used in conjunction with PPB.

Performance budgeting is management-oriented; its principal thrust is to help administrators to assess the work-efficiency of operating units by (1) casting budget categories in functional terms, and (2) providing work-cost measurements to facilitate the efficient performance of prescribed activities. Generally, its method is particularistic, the reduction of work-cost data unto discrete, measurable units. Program budgeting (PPB) is planning-oriented; its main goal is to ra-

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tionalize policy making by providing (1) data on the costs and benefits of alternative ways of attaining proposed public objectives, and (2) output measurements to facilitate the effective attainment of chosen objectives. As a policy device, program budgeting departs from simple engineering models of efficiency in which the objective is fixed and the quantity of inputs and outputs is adjusted to an optimal relationship. In PPB, the objective itself is variable; analysis may lead to a new statement of objectives. In order to enable budget makers to evaluate the costs and benefits of alternative expenditure options, program budgeting focuses on expenditure aggregates; the details come into play only as they contribute to an analysis of the total (the system) or of marginal trade-offs among competing proposals. Thus, in this macroanalytic approach, the accent is on comprehensiveness and on grouping data into categories that allow comparisons among alternative expenditure mixes.

Performance budgeting derived its ethos and much of its technique from cost accounting and scientific management; program budgeting has drawn its core ideas from economics and systems analysis. In the performance budgeting literature, budgeting is described as a “tool of management” and the budget as a “work program.” In PPB, budgeting is an allocative process among competing claims, and the budget is a statement of policy. Chronologically, there was a gap of several years between the bloom of performance budgeting and the first articulated conceptions of program budgeting. In the aftermath of the first Hoover report, and especially during the early 1950’s, there was a plethora of writings on the administrative advantages of the performance budget. Substantial interest in program budgeting did not emerge until the mid-1950’s when a number of economists (including Smithies, Novick, and McKeen) began to urge reform of the Federal budget system. What the economists had in mind was not the same thing as the Hoover Commission.

In line with its management perspective, the Commission averred that “the all-important thing in budgeting is the work or service to be accomplished, and what that work or service will cost.” Mosher followed this view closely in writing that “the central idea of the performance budget . . . is that the budget process be focused upon programs and functions—that is, accomplishments to be achieved, work to be done.” But from the planning perspective, the all-important thing surely is not the work or service to be accomplished but the objectives or purposes to be fulfilled by the investment of public funds. Whereas in performance budgeting, work and activities are treated virtually as ends in themselves, in program budgeting work and services are regarded as intermediate aspects, the process of converting resources into outputs. Thus, in a 1954 Rand paper, Novick defined a program as “the sum of the steps or interdependent activities which enter into the attainment of a specified objective. The program, therefore, is the end objective and is developed or budgeted in terms of all the elements necessary to its execution.” Novick goes on to add, “this is not the sense in which the government budget now uses the term.”

Because the evaluation of performance and the evaluation of program are distinct budget functions, they call for different methods of classification which serves as an intermediate layer between objects and organizations. The activities relate to the functions and work of a distinct operating unit; hence their classification ordinarily conforms to organizational lines. This is the type of classification most useful for an administrator who has to schedule the procurement and utilization of resources for the production of goods and services. Activity classifications gather under a single rubric all the expenditure data needed by a manager to run his unit. The evaluation of programs, however, requires an end-product classification that is oriented to the mission and purposes of government. This type of classification may or may not be very useful for the manager, but it is of great value to the budget maker who has to decide how to allocate scarce funds among competing claims. Some of the difference between end-product and activity classifications can be gleaned by comparing the Coast Guard’s existing activity schedule with

25 Ibid.
27 David Novick, Which Program Do We Mean in “Program Budgeting”? (Santa Monica: 1954), p. 17.
the proposed program structure on the last page of Bulletin 66-3. The activity structure which was developed under the aegis of performance budgeting is geared to the operating responsibilities of the Coast Guard: Vessel Operations, Aviation Operations, Repair and Supply Facilities, and others. The proposed program structure is hinged to the large purposes sought through Coast Guard operations: Search and Rescue, Aids to Navigation, Law Enforcement, and so on.

It would be a mistake to assume that performance techniques presuppose program budgeting or that it is not possible to collect performance data without program classifications. Nevertheless, the view has gained hold that a program budget is "a transitional type of budget between the orthodox (traditional) character and object budget on the one hand and performance budget on the other." 28 Kammerer and Shadoan stress a similar connection. The former writes that "a performance budget carries the program budget one step further: into unit costs." 29 Shadoan "envisions 'performance budgeting' as an extension of . . . the program budget concept to which the element of unit work measurement has been added." 30 These writers ignore the divergent functions served by performance and program budgets. It is possible to devise and apply performance techniques without relating them to, or having the use of, larger program aggregates. A cost accountant or work measurement specialist can measure the cost or effort required to perform a repetitive task without probing into the purpose of the work or its relationship to the mission of the organization. Work measurement—"a method of establishing an equitable relationship between the volume of work performed and manpower utilized"—is only distantly and indirectly related to the process of determining governmental policy at the higher levels. Program classification are vitally linked to the making and implementation of policy through the allocation of public resources. As a general rule, performance budgeting is concerned with the process of work (what methods should be used) while program budgeting is concerned with the purpose of work (what activities should be authorized).

Perhaps the most reliable way to describe this difference is to show what was tried and accomplished under performance budgeting. First of all, performance budgeting led to the introduction of activity classifications, the management-orientation of which has already been discussed. Second, narrative descriptions of program and performance were added to the budget document. These statements give the budget-reader a general picture of the work that will be done by the organizational unit requesting funds. But unlike the analytic documents currently being developed under PPB, the narratives have a descriptive and justificatory function; they do not provide an objective basis for evaluating the cost-utility of an expenditure. Indeed, there hardly is any evidence that the narratives have been used for decision making; rather they seem best suited for giving the uninformed outsider some glimpses of what is going on inside.

Third, performance budgeting spawned a multitude of work-cost measurement explorations. Most used, but least useful, were the detailed workload statistics assembled by administrators to justify their requests for additional funds. On a higher level of sophistication were attempts to apply the techniques of scientific management and cost accounting to the development of work and productivity standards. In these efforts, the Bureau of the Budget had a long involvement, beginning with the issuance of the trilogy of work measurement handbooks in 1950 and reaching its highest development in the productivity-measurement studies that were published in 1964. All these applications were at a level of detail useful for managers with operating or supervisory responsibilities, but of scant usefulness for top-level officials who have to determine organizational objectives and goals. Does it really help top officials if they know that it cost $0.07 to wash a pound of laundry or that

the average postal employee processes 289 items of mail per hour? These are the main fruits of performance measurements, and they have an important place in the management of an organization. They are of great value to the operating official who has the limited function of getting a job done, but they would put a crushing burden on the policy maker whose function is to map the future course of action.

Finally, the management viewpoint led to significant departures from PPB's principle that the expenditure accounts should show total systems cost. The 1949 National Security Act (possibly the first concrete result of the Hoover report) directed the segregation of capital and operating costs in the defense budget. New York State's performance—budgeting experiment for TB hospitals separated expenditures into cost centers (a concept derived from managerial cost accounting) and within each center into fixed and variable costs. In most manpower and work measurements, labor has been isolated from other inputs. Most important, in many states and localities (and implicitly in Federal budgeting) the cost of continuing existing programs has been separated from the cost of new or expanded programs. This separation is useful for managers who build up a budget in terms of increments and decrements from the base, but it is a violation of program budgeting's working assumption that all claims must be pitted against one another in the competition for funds. Likewise, the forms of separation previously mentioned make sense from the standpoint of the manager, but impair the planner's capability to compare expenditure alternatives.

**The Planning Orientation**

The foregoing has revealed some of the factors leading to the emergence of the planning orientation. Three important developments influenced the evolution from a management to a planning orientation.

1. Economic analysis—macro and micro—has had an increasing part in the shaping of fiscal and budgetary policy.
2. The development of new informational and decisional technologies has enlarged the applicability of objective analysis to policy making. And,
3. There has been a gradual convergence of planning and budgetary processes.

Keynesian economics with its macroanalytic focus on the impact of governmental action on the private sector had its genesis in the underemployment economy of the Great Depression. In calling attention to the opportunities for attaining full employment by means of fiscal policy, the Keynesians set into motion a major restatement of the central budget function. From the utilization of fiscal policy to achieve economic objectives, it was but a few steps to the utilization of the budget process to achieve fiscal objectives. Nevertheless, between the emergence and the victory of the new economics, there was a lapse of a full generation, a delay due primarily to the entrenched balanced-budget ideology. But the full realization of the budget's economic potential was stymied on the revenue side by static tax policies and on the expenditure side by status spending policies.

If the recent tax policy of the Federal Government is evidence that the new economics has come of age, it also offers evidence of the long-standing failure of public officials to use the taxing power as a variable constraint on the economy. Previously, during normal times, the tax structure was accepted as given, and the task of fiscal analysis was to forecast future tax yields so as to ascertain how much would be available for expenditure. The new approach treats taxes as variable, to be altered periodically in accord with national policy and economic conditions. Changes in tax rates are not to be determined (as they still are in virtually all States and localities) by how much is needed to cover expenditures but by the projected impact of alternative tax structures on the economy.

It is more than coincidental that the advent of PPB has followed on the heels of the explicit utilization of tax policy to guide the economy. In macroeconomics, taxes and expenditures are mirror images of one another; a tax cut and an expenditure increase have comparable impacts. Hence, the hinging of tax policy to economic considerations inevitably led to the similar treatment of expenditures. But there were (and remain) a number of obstacles to the utiliza-
tion of the budget as a fiscal tool. For one thing, the conversion of the budget process to an economic orientation probably was slowed by the Full Employment Act of 1946 which established the Council of Economic Advisers and transferred the Budget Bureau's fiscal analysis function to the Council. The institutional separation between the CEA and the BOB and between fiscal policy and budget making was not compensated by cooperative work relationships. Economic analysis had only a slight impact on expenditure policy. It offered a few guidelines (for example, that spending should be increased during recessions) and a few ideas (such as a shelf of public works projects), but it did not feed into the regular channels of budgeting. The business of preparing the budget was foremost a matter of responding to agency spending pressures, not of responding to economic conditions.

Moreover, expenditures (like taxes) have been treated virtually as given, to be determined by the unconstrained claims of the spending units. In the absence of central policy instructions, the agencies have been allowed to vent their demands without prior restraints by central authorities and without an operational set of planning guidelines. By the time the Bureau gets into the act, it is faced with the overriding task of bringing estimates into line with projected resources. In other words, the Bureau has had a budget-cutting function, to reduce claims to an acceptable level. The President's role has been similarly restricted. He is the gatekeeper of Federal budgeting. He directs the pace of spending increases by deciding which of the various expansions proposed by the agencies shall be included in the budget. But, as the gatekeeper, the President rarely has been able to look back at the items that have previously passed through the gate; his attention is riveted to those programs that are departures from the established base. In their limited roles, neither the Bureau nor the President has been able to inject fiscal and policy objectives into the forefront of budget preparation.

It will not be easy to wean budgeting from its utilization as an administrative procedure for financing ongoing programs to a decisional process for determining the range and direction of public objectives and the government's involvement in the economy. In the transition to a planning emphasis, an important step was the 1963 hearings of the Joint Economic Committee on The Federal Budget as an Economic Document. These hearings and the pursuant report of the JEC explored the latent policy opportunities in budget making. Another development was the expanded time horizons manifested by the multiyear expenditure projections introduced in the early 1960's. Something of a breakthrough was achieved via the revelation that the existing tax structure would yield cumulatively larger increments of uncommitted funds—estimated as much as $50 billion by 1970—which could be applied to a number of alternative uses. How much of the funds should be "returned" to the private sector through tax reductions and how much through expenditure increases? How much should go to the States and localities under a broadened system of Federal grants? How much should be allocated to the rebuilding of cities, to the improvement of education, or to the eradication of racial injustices. The traditional budget system lacked the analytic tools to cope with these questions, though decisions ultimately would be made one way or another. The expansion of the time horizon from the single year to a multiyear frame enhances the opportunity for planning and analysis to have an impact on future expenditure decisions. With a one-year perspective, almost all options have been foreclosed by previous commitments; analysis is effective only for the increments provided by self-generating revenue increases or to the extent that it is feasible to convert funds from one use to another. With a longer time span, however, many more options are open, and economic analysis can have a prominent part in determining which course of action to pursue.

So much for the macroeconomic trends in budget reform. On the microeconomic side, PPB traces its lineage to the attempts of welfare economists to construct a science of finance predicted on the principle of marginal utility. Such a science, it was hoped, would furnish objective criteria for determining the optimal allocation of public funds among competing uses. By appraising
the marginal costs and benefits of alternatives (poor relief versus battleships in Pigou's classic example), it would be possible to determine which combination of expenditures afforded maximum utility. The quest for a welfare function provided the conceptual underpinning for a 1940 article on "The Lack of a Budgetary Theory" in which V. O. Key noted the absence of a theory which would determine whether "to allocate x dollars to activity A instead of activity B.\footnote{V. O. Key, "The Lack of a Budgetary Theory," \textit{The American Political Science Review}, XXXIV (1940), 1188.} In terms of its direct contribution to budgetary practice, welfare economics has been a failure. It has not been possible to distill the conflicts and complexities of political life into a welfare criterion or homogeneous distribution formula. But stripped of its normative and formal overtones, its principles have been applied to budgeting by economists such as Arthur Smithies. Smithies has formulated a budget rule that "expenditure proposals should be considered in the light of the objectives they are intended to further, and in general final expenditure decisions should not be made until all claims on the budget can be considered."\footnote{Arthur Smithies, \textit{The Budgetary Process in the United States} (New York: 1955), p. 16.} PPB is the application of this rule to budget practice. By structuring expenditures so as to juxtapose substitutive elements within program categories, and by analyzing the costs and benefits of the various substitutes, PPB has opened the door to the use of marginal analysis in budgeting.

Actually, the door was opened somewhat by the development of new decisional and informational technologies, the second item on the list of influences in the evolution of the planning orientation. Without the availability of the decisional-informational capability provided by cost-benefit and systems analysis, it is doubtful that PPB would be part of the budgetary apparatus today. The new technologies make it possible to cope with the enormous informational and analytic burdens imposed by PPB. As aids to calculation, they furnish a methodology for the analysis of alternatives, thereby expanding the range of decision-making in budgeting.

Operations research, the oldest of these technologies, grew out of complex World War II conditions that required the optimal coordination of manpower, material, and equipment to achieve defense objectives. Operations research is most applicable to those repetitive operations where the opportunity for qualification is highest. Another technology, cost-benefit analysis, was intensively adapted during the 1950's to large-scale water resource investments, and subsequently to many other governmental functions. Systems analysis is the most global of these technologies. It involves the skillful analysis of the major factors that go into the attainment of an interconnected set of objectives. Systems analysis has been applied in DOD to the choice of weapons systems, the location of military bases, and the determination of sealift-airlift requirements. Although the extension of these technologies across-the-board to government was urged repeatedly by members of the Rand Corporation during the 1950's, it was DOD's experience that set the stage for the current ferment. It cannot be doubted that the coming of PPB has been pushed ahead several years or more by the "success story" in DOD.

The third stream of influence in the transformation of the budget function has been a closing of the gap between planning and budgeting. Institutionally and operationally, planning and budgeting have run along separate tracks. The national government has been reluctant to embrace central planning of any sort because of identification with socialist management of the economy. The closest thing we have had to a central planning agency was the National Resources Planning Board in the 1939-1943 period. Currently, the National Security Council and the Council of Economic Advisors have planning responsibilities in the defense and fiscal areas. As far as the Bureau of the Budget is concerned, it has eschewed the planning function in favor of control and management. In many States and localities, planning and budgeting are handled by separate organizational units: in the States, because the professional autonomy and land-use preoccupations of the planners have set them apart
from the budgeteers.

In all governments, the appropriations cycle, rather than the anticipation of future objectives, tends to dictate the pace and posture of budgeting. Into the repetitive, one-year span of the budget is wedged all financial decisions, including those that have multiyear implications. As a result, planning, if it is done at all, "occurs independently of budgeting and with little relation to it." 94 Budgeting and planning, moreover, invite disparate perspectives: the one is conservative and negativistic; the other, innovative and expansionist. As Mosher has noted, "budgeting and planning are opposite, if not opposite. In extreme form, the one means saving; the other, spending." 95

Nevertheless, there has been some rapprochement of planning and budgeting. One factor is the long lead-time in the development and procurement of hardware and capital investments. The multiyear projections inaugurated several years ago were a partial response to this problem. Another factor has been the diversity of government agencies involved in related functions. This has given rise to various ad hoc coordinating devices, but it also has pointed to the need for permanent machinery to integrate dispersed activities. Still another factor has been the sheer growth of Federal activities and expenditures and the need for a rational system of allocation. The operational code of planners contains three tenets relevant to these budgetary needs: (1) planning is future-oriented; it connects present decisions to the attainment of a desired future state of affairs; (2) planning, ideally, encompasses all resources involved in the attainment of future objectives. It strives for comprehensiveness. The master plan is the one that brings within its scope all relevant factors; (3) planning is means-ends oriented. The allocation of resources is strictly dictated by the ends that are to be accomplished. All this is to say that planning is an economizing process, though planners are more oriented to the future than economists. It is not surprising that planners have found the traditional budget system deficient, 96 nor is it surprising that the major reforms entailed by PPB emphasize the planning function.

Having outlined the several trends in the emerging transition to a planning orientation, it remains to mention several qualifications. First, the planning emphasis is not predominant in Federal budgeting at this time. Although PPB asserts the paramountcy of planning, PPB itself is not yet a truly operational part of the budget machinery. We are now at the dawn of a new era in budgeting; high noon is still a long way off. Second, this transition has not been preceded by a reorientation of the Bureau of the Budget. Unlike the earlier change-over from control to management in which the alteration of budgetary techniques followed the revision of the Bureau's role, the conversion from management to planning is taking a different course—first, the installation of new techniques; afterwards, a reformulation of the Bureau's mission. Whether this sequence will hinder reform efforts is a matter that cannot be predicted, but it should be noted that in the present instance the Bureau cannot convert to a new mission by bringing in a wholly new staff, as was the case in the late 1930's and early 1940's.

What Difference Does It Make?

The starting point for the author was distinguishing the old from the new in budgeting. The interpretation has been framed in analytic terms, and budgeting has been viewed historically in three stages corresponding to the three basic functions of budgeting. In this analysis, an attempt has been made to identify the difference between the existing and the emerging as a difference between management and planning orientations.

In an operational sense, however, what difference does it make whether the central budget process is oriented toward planning rather than management? Does the change merely mean a new way of making decisions, or does it mean different decisions as well? These are not easy questions to answer, particularly since the budget system of the

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95 Ibid., p. 48.
96 See Edward C. Banfield, "Congress and the Budget-
future will be a compound of all three functions. The case for PPB rests on the assumption that the form in which information is classified and used governs the actions of budget makers, and, conversely, that alterations in form will produce desired changes in behavior. Take away the assumption that behavior follows form, and the movement for PPB is reduced to a trivial manipulation of techniques—form for form's sake without any significant bearing on the conduct of budgetary affairs.

Yet this assumed connection between roles and information is a relatively uncharted facet of the PPB literature. The behavioral side of the equation has been neglected. PPB implies that each participant will behave as a sort of Budgetary Man, a counterpart of the classical Economic Man and Simon's Administrative Man.\(^{37}\) Budgetary Man, whatever his station or role in the budget process, is assumed to be guided by an unwavering commitment to the rule of efficiency; in every instance he chooses that alternative that optimizes the allocation of public resources.

PPB probably takes an overly mechanistic view of the impact of form on behavior and underestimates the strategic and volitional aspects of budget making. In the political arena, data are used to influence the "who gets what" in budgets and appropriations. If information influences behavior, the reverse also is true. Indeed, data are more tractable than roles; participants are more likely to seek and use data which suit their preferences than to alter their behavior automatically in response to formal changes.

All this constrains, rather than negates, the impact of budget form. The advocates of PPB, probably in awareness of the above limitations, have imported into budgeting men with professional commitments to the types of analysis and norms required by the new techniques, men with a background in economics and systems analysis, rather than with general administrative training.

PPB aspires to create a different environment for choice. Traditionally, budgeting has defined its mission in terms of identifying the existing base and proposed departures from it—"This is where we are; where do we go from here?" PPB defines its mission in terms of budgetary objectives and purposes—"Where do we want to go? What do we do to get there?" The environment of choice under traditional circumstances is incremental; in PPB it is teletic. Presumably, these different processes will lead to different budgetary outcomes.

A budgeting process which accepts the base and examines only the increments will produce decisions to transfer the present into the future with a few small variations. The curve of government activities will be continuous, with few zigzags or breaks. A budget-making process which begins with objectives will require the base to compete on an equal footing with new proposals. The decisions will be more radical than those made under incremental conditions. This does not mean that each year's budget will lack continuity with the past. There are sunk costs that have to be reckoned, and the benefits of radical changes will have to outweigh the costs of terminating prior commitments. Furthermore, the extended time span of PPB will mean that big investment decisions will be made for a number of years, with each year being a partial installment of the plan. Most important, the political manifestations of sunk costs—vested interests—will bias decisions away from radical departures. The conservatism of the political system, therefore, will tend to minimize the decisional differences between traditional and PPB approaches. However, the very availability of analytic data will cause a shift in the balance of economic and political forces that go into the making of a budget.

Teletic and incremental conditions of choice lead to still another distinction. In budgeting, which is committed to the established base, the flow of budgetary decisions is upward and aggregative. Traditionally, the first step in budgeting, in anticipation of the call for estimates, is for each department to issue its own call to prepare and to submit a set of estimates. This call reaches to the lowest level capable of assembling its own estimates. Lowest level estimates form the building blocks for the next level where they are aggregated and reviewed and transmitted upward until the highest level is reached and the totality constitutes a depart-

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ment-wide budget. Since budgeting is tied to a base, the building-up-from-below approach is sensible; each building block estimates the cost of what it is already doing plus the cost of the increments it wants. (The building blocks, then, are decisional elements, not simply informational elements as is often assumed.)

PPB reverses the informational and decisional flow. Before the call for estimates is issued, top policy has to be made, and this policy constrains the estimates prepared below. For each lower level, the relevant policy instructions are issued by the superior level prior to the preparation of estimates. Accordingly, the critical decisional process—that of deciding on purposes and plans—has a downward and disaggregative flow.

If the making of policy is to be antecedent to the costing of estimates, there will have to be a shift in the distribution of budget responsibilities. The main energies of the Bureau of the Budget are now devoted to budget preparation; under PPB these energies will be centered on what we may term prepreparation—the stage of budget making that deals with policy and is prior to the preparation of the budget. One of the steps marking the advent of the planning orientation was the inauguration of the Spring Preview several years ago for the purpose of affording an advance look at departmental programs.

If budget-making is to be oriented to the planning function, there probably will be a centralization of policy-making, both within and among departments. The DOD experience offers some precedent for predicting that greater budgetary authority will be vested in department heads than heretofore, but there is no firm basis for predicting the degree of centralization that may derive from the relatedness of objectives pursued by many departments. It is possible that the mantle of central budgetary policy will be assumed by the Bureau; indeed, this is the expectation in many agencies. On the other hand, the Bureau gives little indication at this time that it is willing or prepared to take this comprehensive role.

Conclusion

The various differences between the budgetary orientations are charted in the table presented here. All the differences may be summed up in the statement that the ethos of budgeting will shift from justification to analysis. To far greater extent than heretofore, budget decisions will be influenced by explicit statements of objectives and by a formal weighing of the costs and benefits of alternatives.