During the last five decades, budgeting has developed naturally and spontaneously rather than in a planned manner and, to a certain extent, empirically rather than theoretically. It has been heavily influenced by political systems, economic theories, management approaches, accounting principles, and the conduct of public administration. While the specific influences of each discipline may not lend themselves to precise identification, Table 4 indicates the significant aspects of budgeting, the influences from different social sciences, and the areas covered.

Budgeting is an intricate and complex process, containing many pieces if viewed as a puzzle. The pieces cannot always be arranged sequentially because several of them interact simultaneously. Although a beginning of the budget activity is indicated for purposes of administration, it is actually a continuous process and therefore does not necessarily follow a sequence in which it should be examined. What is important is that these pieces should be brought together to reveal their interconnections. This chapter combines the general and preliminary elements of the budgetary process and is self-contained, while also serving as a prelude to a more detailed discussion of specific aspects in the following chapters.
Table 4. Approaches to the Study of Budgeting

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<td>Description of internal working of administrative agencies; stages of budget cycle, etc. (e.g., Ministry of Finance, accounting and auditing agencies)</td>
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<td>Political Science</td>
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Budgeting: Evolution and Present Purposes

Budgeting in the early stages of its evolution was concerned with serving the purposes of legislative accountability. The long struggle with the monarchs culminated in control of taxation by the legislatures. Having won some right to impose, amend, or approve the tax proposals, legislatures turned their attention to control spending. As a
result, legislatures required the annual submission of budgets containing the statement of expenditures and a statement of the revenues needed for the purpose. To supplement these functions, appropriate institutional machinery was evolved for raising monies and for ensuring that they were spent with due observance of regularity and economy. In due course, central agencies were set up within the government to oversee the financial management of government. As governments became larger, the spending agencies were entrusted with more responsibilities. Within this broad framework of the division of responsibilities between central and spending agencies, gradual developments took place in the nature and approaches of budgeting to reflect the changing undercurrents in the economy. World Wars I and II and consequent increases in expenditure, the Depression and the associated changes in the approaches of state and fiscal policy, the inexorable growth in government expenditure after World War II, and the need for economic stabilization and achievement of full employment have, as noted earlier, influenced the budget objectives. The features associated with the classical or early budget systems were their unity, comprehending all the transactions of government; regularity—requiring the annual submission of budgets; accuracy—mandating that revenue and expenditure estimates imply a bond with the legislature and a basis for their approval; clarity, so that the community and its representatives could understand and deliberate on its contents; publicity—requiring that it be a public document and that its contents be known to the community; and, finally, operational adequacy as a tool of administration within government. The legislative accountability inherent in these principles continues to govern the budget today. In addition, the budget has acquired dimensions of planning and management and has become a key instrument of national policymaking.

Broadly, the purposes and associated features of the budget may be considered in terms of three aspects—as a tool of accountability, as a tool of management, and as an instrument of economic policy. Budgeting in the final analysis, regardless of the type of legislature, is a political exercise. From this point of view, a budget is expected to state clearly the purposes of expenditures and provide them in a form that will be useful for legislative action. In addition, the budget is the

1 For a discussion of these principles, see J. W. Sundelson (1938).
instrument for accountability, in that the government agencies are responsible for the proper management of funds and programs for which funds are appropriated. It is also a tool for management, because a budget, as an operational document, specifies either directly or implicitly the cost, time, and nature of the expected results.

Budgeting as an instrument of economic policy has more varied functions. First, in policy terms, it indicates the direction of the economy and expresses intentions regarding the utilization of the community's resources. In operational terms, it leads to the determination of the national growth and investment goals and, in more detail, with the allocation of resources among consumption, transfer, and investment outlays and among sectors. Second, a major function of the budget is to promote macroeconomic balance in the economy. The policy choices in this regard include specification of the amount of growth that is compatible with employment, price stability, and balance in the external sector. The economics of budgeting require that due regard be paid to revenue, expenditure, and monetary policies. Available revenues must be allocated among various uses so as to maximize the benefits received. The total revenues required for the purpose are to be managed so as to ensure an equitable distribution of the tax burden and have minimal detrimental effects on the economy. The budget will have to strive toward equating the social benefits of expenditure and the social cost of withdrawal of resources from the private sector. The financing of the budget deficit should be in conformity with the goals of growth and price stability and should be coordinated with monetary policy. In developing countries, this would also involve a careful assessment of foreign aid and external borrowing. Third, with the recent emphasis on distribution of resources in an egalitarian fashion, the budget has become a vehicle for reducing inequalities. The roles of taxation and expenditure programs, as well as the pattern of their distributional effects, must be continuously mapped by the budget. Certainly, distributional goals are sought to be achieved through a variety of instruments, and the budget is an important one. Fourth, the budget should be so organized as to permit a quick and meaningful measurement of its impact on the national economy as a whole. It should permit a determination of the government's share in national income and the extent to which growth and associated objectives of government are fulfilled by the budget. During recent years, there have been significant advances in the
general understanding of the relationship between the budget and the economy and of their reciprocal impact. Associated with these is the recognition that economic policy changes take time to become effective. In turn, the budget is perceived not merely in terms of one year (although for legal purposes, this continues to be the case) but in terms of a period of years. The budget is increasingly visualized as an annual part of a medium-term plan. The structuring of the budget is also expected to fulfill a number of institutional requirements that in turn reflect, although not comprehensively, the complexity of the tasks of economic management. The budget must have a meaningful correlation with the development plan, assist the central bank in assessing the impact on credit and financial institutions, and, in a narrower way, facilitate government management of cash balances and debt.

The above functions are converted into more tangible policies in the budgetary process. The incomes and expenditures of government are decided upon, approved, and realized while a number of other decisions are being taken. The process involves the generation, transmission, and utilization of large amounts of information of an immense variety. The budgetary process has also developed, over the years, to reflect these tasks. Thus, in describing the budget process, caution is needed in ascribing it to a stage of budget development. In an ideal sense, reflecting the cumulative experience of the years, the budgetary process can be described as one where there is first an establishment of goals in the light of available data and recognition of economic, political, and administrative constraints (Chart 1). The next stage consists of the development of plans and programs for short, medium, and long terms. This stage involves looking ahead at issues and alternatives. More specifically, it involves the preparation of projects with sizable outlays. Experience indicates that, on average, the identification, preparation, and selection of projects, as well as determination of their financing, take up to a decade. This consideration alone requires organized forecasting. The formulation of a development plan is followed by the annual budgeting or the allocation of resources. The implementation of the budget involves the ongoing recognition of new issues and reallocation of resources. The final stage is the appraisal and evaluation of the implemented budget for accountability and, more significantly, as feedback for the formulation of new goals. Each stage leads to the next, facilitating
Chart 1. Budgetary Process

- Establishment of goals, objectives, and policies
- Appraisal and evaluation
- Development of programs for short, medium, and long terms
- Allocation of resources
- Execution of the budget
- Assignment of specific responsibilities; achievement of targets within time/cost requirements
- Reporting and monitoring of programs; adjustments and evaluation
- Data collection; review of data; recognition of economic and other constraints, assumptions, and other inputs
- Projections and forecasts; formulation of criteria for selection of programs; recognition of supporting programs
- Short-term, medium-term, and long-term financial plans; alternative fiscal policies; priorities
- For major projects, identification, preparation, and appraisal of projects
- Economic, financial, and program analyses; annual allocations; rapport between financial and physical aspects; formation of operational targets
- Short-term changes in the budget, and reallocation of resources
decision making on the policy, accountability, and management aspects of the budget. At each stage, there are a number of issues. But before considering the specific operational issues, it is appropriate to raise the question of how public expenditures are determined and to review the body of theoretical literature available. Readers who have greater interest in the operational aspects of budgeting may move on to the following chapters.

DETERMINANTS OF PUBLIC EXPENDITURES: THEORETICAL APPROACHES

The analysis of public expenditures and their determinants is a complex task that has been exacerbated somewhat during recent years by attempts at quantification and formulation of views on their patterns of regularity. Various theories have been proposed during the last three decades to offer explanations of different aspects of public expenditures. Several of them are normative and do not seek to offer an empirical or operational theory of budgeting. Some of them are models, which, depending on the choice of the researcher, are based on assumptions and seek to analyze the effects of prices, income, income distribution on the pattern of public expenditure. Each one offers, it seems, an incomplete explanation of a complex phenomenon. Consequently, notwithstanding the numerous efforts, no comprehensive theory of public expenditure has yet been developed. The literature is, however, prolific and varied. Although it is quite unlikely that reference to academic theories and writings will be made in the day-to-day administration of budgeting, it is helpful to have an understanding of their basic content to gain a better appreciation of the whole art of budgeting. The following discussion does not attempt a detailed survey of the literature but is primarily concerned with the dominant trends relevant to budgeting.\(^2\) The theories contain several elements but only those strands of thought that have a direct impact on budgeting, as distinct from the wider philosophical issues relating to social choice, are considered here. A detailed survey is obviously

\(^2\) For detailed surveys of economic literature, of which there are many (and still more on the way), see Jesse Burkhead and Jerry Miner (1971); Peter O. Steiner (1974), pp. 241–357; Dennis C. Mueller (1976), pp. 395–424, and (1979).
inappropriate, for it would divert attention from budgeting to the broader issues of public finance. In considering these theories, three major qualifications need to be kept in mind: (1) they have no settled body of knowledge, (2) they deal with societies that are essentially democratic, and (3) to a large extent, they were developed in the western democracies.

In the early period of its development, budgeting was essentially considered to be an administrative process and no specific attention was paid to expenditures. The Cameralist writers of Germany, who dominated thinking in this regard from the middle of the sixteenth to the end of the eighteenth centuries, viewed civic problems from a common point of view and attempted to systematize the administrative routine of fiscal departments. This tradition had a heavy influence on the approaches of British writers during the nineteenth century, when James Mill and John Stuart Mill considered financial matters to be a chore of administrative and political forces. In the same period, continental writers, particularly those from Italy, believed that public expenditure was to be considered as an integral part of fiscal analysis. To the Italian writers there were three types of states—the monopolistic state, in which a ruling clan or group comes to power and uses governmental machinery to further the welfare of its members; the individualistic state, in which the primary concern of the state is to provide welfare, which is viewed as the sum total of the individuals' requirements; and the paternalistic state, that usually transcends the sum total of society's requirements and may provide services that are different from individual wants. Writers like De Viti de Marco, who embraced the individualistic state, believed that consumer sovereignty or individual preferences should be the basis of society and that social choice should reflect the individual choice. Other Italian writers, like Mazzola tended to take the paternalistic state approach and underscored the need for the political authority to impose a policy of general welfare. These two trends—individual preferences for state services and their aggregation, on the one hand, and the general welfare concerns, on the other—were the foundation of all the subsequent theories of expenditure in their normative, positive, economic, political, and sociological settings. It will be evident from the

following discussion that current academic discussions basically revolve around these two themes in various forms.

The theories that shed light on the determination of public expenditure—on its total magnitude and composition—may be divided into economic, organizational, and empirical schools. Chart 2 shows the theories that form part of these schools. The theories considered here have several components, some of which may be viewed as political or economic. A criterion for distinguishing them on either basis is somewhat difficult to choose in a practical subject such as budgeting. Public finance itself is, as Dalton remarked, a borderline subject between economics and political science. Budgeting, as an extension thereof, is at the crossroads of economics, political science, public administration, and a host of other social disciplines. It is primarily viewed here as an exercise in applied economics—an exercise that can and does take place in a regular political framework. To an extent, therefore, the classification in Chart 2 may be considered arbitrary. Basically, however, three concepts of budgeting are evident in the economic and organizational approaches: (1) budgeting as an optimizing process that deals essentially with normative theories of resource allocation, which in turn deal with the maximization of individual and social welfare; (2) budgeting viewed as an internal bureaucratic process and comprising theories that compare the approaches of governments toward resource allocation to the firms in the commercial world; and (3) empirical or descriptive approaches that link budget determination to the demand for services and which view the budget as being finally decided in a bureaucratic process with reference to endogenous variables (cost of services) and exogenous factors (availability of revenue). The theories advanced as a part of the optimizing school are considered below. The comparison with commercial firms, which primarily relates to decision making, is considered in Chapter 4 while the descriptive approaches to budgeting are considered in Chapter 3.

MARGINAL UTILITY

An important school of thought in the economic approach to the determination of the composition of expenditure, and thus of

Chart 2. Approaches to Expenditure Analysis and Budgeting

Economic approaches
Normative or neoclassical approaches
- Marginal utility approach
  - Pure theory of expenditures: allocation and distribution of resources: general and partial equilibrium treatment
- Social choice
  - Market failure and public goods
    - Unanimity rule, optimal majority, vote trading
- Choice in a democracy
  - Self-interest theories
- Voter behavior
  - Behavioral and empirical studies
- Positive approaches
  - Public and private sector relationships: conflicts
- Neo-Marxist approaches
  - Incidence and impact studies, Cost Benefit Analysis, etc.

Organization and process-oriented approaches
- Bureaucratic process
  - Conflict resolution: organizational learning, maximizing behavior of bureaus
  - Optimizing or decision-making process
  - a) Rational or normative decision-making approaches to allocation of resources
  - b) Satisficing and incremental approaches
- Budget as an externally determined event
  - (a) External variables such as population, level of resources, etc.
  - (b) Cost of services—performance approach
  - (c) Result of interaction among different groups
- Optimal control
  - Self-regulating control mechanisms that adjust to changed circumstances

Indicates influences among major groups
budgeting, is the one relating to marginal utility, which was developed in the early 1920s. The theory held that an individual will spend to satisfy his wants in a manner that will achieve a certain balance among different types of expenditure and ensure that the marginal return of satisfaction is the same for all of them. This theory was first adapted to fiscal control by Hawtrey, who observed that "the purpose of the system of treasury control is to secure a uniform standard of the financial sacrifice involved in all the activities of all departments of government." Hawtrey did not, however, use the term marginal utility, although he implied it to be the basic rule. Developing this theme more explicitly, Pigou wrote "just as an individual will get more satisfaction out of his income by maintaining a certain balance between different sorts of expenditure, so also will a community through its government. The principle of balance in both cases is provided by the postulate that resources should be so distributed among different uses that the marginal rates of satisfaction is the same for all of them. . . . Expenditure should be distributed between battleships and poor relief in such wise that the last shilling devoted to each of them yields the same real return." The principles of marginalism have been debated extensively in the literature for more than six decades. The concept is normative and is a logical construct, and its transition to empirical and practical levels is a difficult problem that has not yet been solved. The first problem concerns the measurement of utility. While an individual is in a better position to ensure that a unit spent brings him, at the margin, the same utility, the application to government finance is rendered doubtful because government consists of a huge machinery involving several heterogeneous groups of interests and of people that make it impossible to compare utilities. Pigou himself recognized this and cautioned that a complete balance of equimarginal satisfaction may be possible only when a community is literally a unitary being, with the government as its brain. The concept lacks an empirical base, in that it cannot be subjected to a test. Marginalism is possible, even in theory.

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only when there is an objective function in terms of which utility can be evaluated. This is rendered difficult because of the vast array of services and goals of government and the absence of an acceptable measure. Even if the concept is applicable in a framework based on assumptions, it can at best offer a guide—as a sort of general principle for the use or distribution of a fixed sum rather than as a standard for determining the total. In public finance, there is an iterative relationship between total expenditure and its components. To the extent that the principle itself does not deal with total expenditure, it offers only partial guidance.

The absence of an economic theory to rear budgeting as a part of applied economics prompted several writers to examine the matter. Lewis offered a model in 1952, in which an attempt was made to render operational the marginal utility principles. His model comprises three basic approaches—marginal utility or relative value, incremental analysis, and relative effectiveness. The principle of marginal utility implied (1) measurement of relative values and (2) assessment of the alternative uses of financial resources. In practical terms, this approach would involve the computation of costs of various activities and the comparison of the relative values of results obtained from alternative uses of funds. The incremental analysis approach suggested that the analysis should be applied to the increments of resources rather than to the sum total of resources. If applied to the total, i.e., increments and previous resources, the law of diminishing utility would apply and additional units would yield less value. Comparison is therefore to be made at the margins. The relative effectiveness approach suggested that the relative values cannot be compared unless there is a common denominator or a common objective. Lewis contended that such a denominator was available through the political framework that specified common ends. Lewis was aware that the implementation of his framework was difficult, but he thought that it offered a useful direction. Supplementing this three-pronged approach, Lewis formulated an alternative budget plan, under which each official concerned with spending would formulate alternative skeleton plans for utilization of resources, and he suggested that these alternative budgets would offer better proxies for relative

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8See, for example, V. O. Key, Jr. (1940), pp. 1137–44.
Lewis's attempt, although not so stated in his contribution, essentially consisted of giving a budgetary and operational framework to cost-benefit analysis, which was then prevalent in some agencies of the U.S. Government. Relative value was nothing more than a comparison of the interproject benefits, and incremental analysis was a basic ingredient of cost-benefit analysis, in that it was concerned with increments and not with sunk costs. Relative effectiveness, in his analysis, was equivalent to the specification of objectives of projects. In short, it was an effort to incorporate the rationality approach in that a project was to be undertaken only when benefits exceeded costs.

In analyzing the problem, however, Lewis did not tackle the many operational problems in the measurement of all costs and all benefits, nor did he deal with the issues in the specification of objectives, which will be evident from the application of Lewis's model to the fourfold classification of expenditures proposed in Chapter 1. His model implies that, in regard to the first category of expenditures (on defense and other social services), analysis of benefits and costs can be made if the budget categories are comparable. In regard to the second category (goods and services produced by the state to be sold in the market) prices should be fixed with reference to marginal costs but this raises difficult problems of measurement in view of the joint nature of the products. As to the third category (transfers to productive sectors and transfers to households), enumeration of costs and benefits of government intervention differs according to type and much is dependent on the incidence of subsidies. These examples illustrate that the economics of public expenditure are wider than the application of marginal principles. Further, Lewis's model does not suggest how to determine total expenditure. This shortcoming is partly compensated for later by the opportunity-cost principle, which implies that the measure of relative value should be applied not only to the public dollar but also to the private dollar. Use of a resource by government implies that its alternative private uses have been forgone. In order to be allocatively efficient, resources can be used by government only when greater output cannot be obtained for the same resources in the private

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10This feature came to be operational later as a part of Canadian A, B, and X budget systems and as a part of zero-base budgeting in the United States during 1976-80. This aspect is considered in Chapter 11.
But the selection of a rate that would reflect the opportunity cost and the measurement of costs and benefits continues to be a major problem. Indeed, it appears that budget preparation would be easier and could even be automated if only expenditures could be tested against some unique formula of alchemy.

**PUBLIC GOODS APPROACHES**

Developments in neoclassical fiscal theory during the 1950s primarily consisted of theories of public goods and the process of their selection for budgetary purposes. Samuelson in his paper, "The Pure Theory of Public Expenditure," referred to a system that included private consumption goods and collective consumption goods (those that all enjoy) and assumed that each individual has a consistent set of preferences for both private and collective goods. With the help of equations and diagrams, Samuelson showed how the planner would derive for each individual his demand function and the collective consumption goods that would contribute to his utility maximization. In this system, the planner is expected to have an omniscient presence and be able to ascertain individual preferences even when they are not voluntarily revealed. Samuelson attempted to show the combination of public and private goods and their distribution that would maximize social welfare. His concern was with the total community’s welfare and with all the goods; it did not have much to do with the central reality of the budget in the ordinary world.

The major contributions of the neoclassical theories of expenditure determination revolve around public goods and the implementation of the objectives of budget policy. Public goods, although variously defined, are those for which no private mechanism exists to provide them and which are consumed in equal amounts by all; people who

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11 In the early 1950s, the growth of government and its expenditures brought repeated pleas for the introduction of market-oriented pricing mechanisms and use of opportunity-cost principles for government allocation of resources.

12 Bernard Shaw’s remark in *Man and Superman* that “government presents only one problem: the discovery of a trustworthy anthropometric method” is relevant in this context.

have not paid for them cannot be excluded from their enjoyment.14 Public goods are also likely to be qualitatively different from those provided by the private sector (in regard to merit wants) and may have a distribution impact different from privately provided goods and services. Public goods, used broadly to correspond with all goods and services provided by government, include a wide variety of goods and the demand for them becomes an important element in the determination of public expenditures. In this context, Musgrave’s concept of the three branches of the public household becomes relevant.15 Musgrave is doubtful about the planner in whom Samuelson has so much confidence, and he contends that governmental functions are performed through three branches of decision making—allocation, distribution, and stabilization. The function of allocation is to provide goods and services toward satisfaction of wants. However, as there is no market to reveal the preferences of the community, a political process that acts as a substitute for a market mechanism is assumed. In this case, there should be a voting process that would reveal the community’s preferences. For purposes of formulating the budget, it is assumed that the proper state or desired state of income distribution is exogenously determined as is the stabilization function. Once those goals are given, the manager in charge of allocation has to analyze the preferences for public versus private goods. Taxes to finance the allocations are determined on a benefit basis, following Wicksell’s principles. For the determination of the distributional adjustments, it is assumed that the political process would have specified proper weights for distribution. The interdependence between distribution and allocation is recognized, and it is expected that, in attaching weights for distribution, the impact of allocation on factor incomes is fully taken into account. The function of stabilization is to ensure full utilization of resources while maintaining the value of the money. Here again, it is assumed that some form of consensus is achieved on

14 It is contended that in the modern age exclusion of certain groups of people from enjoying the benefits is technologically feasible, but the cost of such prohibition is likely to be considerable and the state may prefer general enjoyment as a less expensive alternative. Given this nonexclusion and the free-rider problem, preference revelation in the public sector appears impossible. This also poses a problem for the measurement of public output. The market failure to provide information on citizen preference is sought to be compensated for through the political process.

the level of unemployment and price stability or inflation. Within this framework, the managers of the three branches are expected to consolidate their separate budgets.

In Musgrave's framework, the decision maker's role is almost mechanical and his responsibility consists of conforming to the revealed preferences to obtain optimality in resource allocation. The difficulties primarily relate to the mechanism for revelation of preferences. Musgrave's distribution function is concerned more with the aggregate distribution between public and private households than with distribution among groups. In operational terms, his framework implies that if the budgeteer can conduct an opinion poll or organize mechanisms to ascertain the community's views on public goods, the pattern of distribution, and the goals of stabilization, the act of budgeting becomes a mere arithmetical exercise. It also implies, in operational terms, that a budgeteer works in a political sphere. So stated, this might appear a commonplace and obvious conclusion. The major merit of Musgrave's contribution lies in shifting attention to the political processes and to the interaction between the community and the state. Admittedly, while Musgrave's theory sheds more light than Samuelson's analysis, in terms of offering an operational framework, both theories are incomplete and are distinguished by degrees of difference in the formulation of paradigms.

**PUBLIC CHOICE**

The recognition of the importance of the political processes for revealing public preferences has in due course contributed to the growth of "public choice" theories, which cover a wide range from voting solutions and conflict resolutions to property rights. Collectively, they can be described as the analysis of nonmarket decision making or the application of economics to political science. In considering these theories, it is appropriate to consider also the political premises, albeit briefly.

Allocation of funds in the final analysis, it is recognized, is a political process. What then is the theory of budgeting in a democracy? What are the approaches of the community to the budget? How useful and precise are they for revealing the determinants of public expenditures? A significant effort was made by Downs to offer
some useful analysis of these political processes.\textsuperscript{16} Downs's theory was primarily based on the U.S. system, although parts of it could be applied to less democratic societies as well. In his framework, governments set both revenues and expenditures to maximize their chances for winning the election,\textsuperscript{17} and the budget itself is arrived at, not with reference to overall spending and taxation but through a series of separate policy decisions based on gains and losses of votes.\textsuperscript{18} However, as some budget proposals may not be adaptable to a gain/loss calculation, they may be grouped into convenient blocs, such as defense and nondefense. The government will provide what voters want (reminiscent of the consumer sovereignty school of public finance) but not necessarily what is beneficial. Downs, however, branches off from the benefit theory of allocation of resources, and he suggests that budgets tend to be smaller in a democracy because each benefit entails some cost to the taxpayer and costs are likely to outweigh the benefits. Even if there is full information and identification of benefits, a taxpayer may desire a smaller budget and ask for the elimination of projects that he does not benefit from. To Downs, the central reality for government is the citizen's vote, not his welfare.

Downs's theory has been subjected to serious review by political scientists and economists. The former group considered it to be too simplistic and unrealistic. Economists, while questioning parts of it, have made further modifications that later emerged as the public interest or public choice schools. From the technical viewpoint of budgeting, Downs's theory suffers from many limitations. It ignores the role of the state and views the budget as a mechanical and predictable exercise. The voter's reaction on costs is contingent on the tax burden and its distribution. The voter is also a game player; his concern is not only with direct benefits but also with externalities. In Downs's calculation, each decision is viewed as an independent package, without any inherent interdependence. The budget is viewed in a vacuum, devoid of its economic function. If Downs's theory were


\textsuperscript{17}It could be argued that totalitarian regimes follow similar policies for perpetuation in power.

\textsuperscript{18}See also, Anthony Downs (1957). Downs's main argument in his book is that political rationality is different from economic rationality and that the former introduces distortions in resource allocations.
correct, it could be argued that expenditures and taxes should have been going down rather than up.\textsuperscript{19}

The public choice theory extends Wicksell’s view on government as a quid pro quo exchange of services for payments. The principal issue to be determined is the applicability of a mechanism as the nearest equivalent or proxy for market behavior. The basic assumption of public choice theory is that governments are collectivities of utility maximizers—officials in government, elected representatives, government agencies, and interest groups. Their concern is with the institutional framework within which budgets are chosen rather than with the articulation of criteria for budget efficiency. These concerns have been reflected in various theories that are now integral elements of the public choice school. Principally, they relate to voting rules and voter behavior. Within the voting rules, an aspect that does not need any elaboration here, is the relationship between the individual and the democratic machinery. Implications of the unanimity rule, reflecting a unanimous consent for public goods, as well as optimal majorities and their relevance for permitting an efficient allocation of resources, are considered to be integral parts of these theories.

Following Downs’s approach, studies were also made on the self-interest of the voter and how he would maximize his own welfare. The impact of these studies on budgeting relates to (a) the viability of the political process as a proxy for the market forces and (b) the implications of utility maximization by government agencies. Notwithstanding the considerable amount of literature, it appears that the revelation of collective preferences through the democratic process does not offer a foolproof mechanism. Transitivity in individuals may not translate itself into collective preferences. Market forces are different from voting considerations. In the market the quid pro quo is direct; in the voting booth it is indirect and remote. This difference alone may generate a different responsiveness in the voter. Bargaining among individuals and groups, which is an ingredient of voting power, does not permit optimal allocation of resources. Also, there is the fundamental issue whether the services produced by government are in any way connected with the prices citizens are willing to pay for them.

\textsuperscript{19}In a dynamic setting, while actual taxes and expenditures may move upward, they may be less than what they would be otherwise. Downs does not offer an evaluation of how the levels of “what would be” are ascertained.

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Clearly, if weight is given to the role of the paternalistic state or to leadership, the pattern of collective wants may not be a spontaneous one but may be created. On a more fundamental level, critics of the utility maximization approach contend that voters lack the information to maximize their net personal benefit and do not perform the calculations to identify the optimum benefit. Self-interest itself has been subjected to both a narrower and a broader version, and in the latter it has been stretched to cover paradoxically a selfish concern for the welfare of others. The demand for goods is influenced both by utility and the willingness to pay and these two may not be equal in magnitude. These theories, however, consider collective preferences at an aggregate level and have shown no great concern for who pays for what. While preferences do indicate the broad directions of the voters' needs, the theories are not very helpful in providing an operational process in which the magnitudes of outlays and the time frame for rendering those services are to be determined.

The proponents of the utility maximization school suggest that the adoption of the maximizing approach by government agencies would invariably lead to larger budgets, bigger bureaucracies, greater governments, and more problems stemming from the financing of the budgets. Proceeding on this basis, and somewhat paradoxically to the utility maximization paradigm, many public choice theorists argue for a reduction in the size of the government and for decentralization of authority. The policy implications of this approach have been considered in Chapter 1, but what it means for the bureaucracy may be noted. Bureaucracy, if the pejorative connotation is ignored, is the structure of the government that exists to solve tangible problems and is one that is expected to have an ongoing direct contact with the people. Properly organized and well motivated, bureaucrats may resolve rather than exacerbate the moral dilemmas of democracy, and it is believed that they serve collective and not personal interests.

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20 In all this, the role of fiscal illusion cannot be ignored. The public choice theory contends that the institutional manner in which citizens are required to pay for government can affect taxpayer perceptions of the price of government and hence the size of the government. For example, during periods of inflation, taxpayers may object less strenuously to increases in public expenditure.

21 For a discussion of this approach, see William A. Niskanen (1971).

22 The growth of the spoils system in preference to the merit system has frequently contributed to the feeling that bureaucracy at its worst is an extended form of patronage.
Bureaucracy operates the financial resources of the state, and the system provides ample checks and balances. The approach also neglects the heterogeneity of the bureaucracy. Indeed, in budgeting, the conflict is between those who have an obligation to provide services and those who have an obligation to the society in terms of contained financial burdens. The fiscal paradigms, therefore, remain conceptual and offer guidance that may seem obvious.

**Positive Approaches**

The positive approaches, unlike pure theories, are more concerned with the empirical growth of public expenditures and deal with the formulation and verification of certain hypotheses. Literature on this, which reached a sizable magnitude during the 1960s, has shown signs of abatement and now seems to have received a setback. To some extent, the current state of apathy may be due partly to what appears to be wrong approaches in retrospect and partly to statistical difficulties inherent in the testing of public expenditure growth. Most of the work was guided by a search for empirical laws, or explanations and the difficulty of formulating laws in the social sciences has been a significant factor contributing to lack of progress in this area.

The earliest theory advanced is that of Adolph Wagner (1876) in what has come to be known as the law of increasing state activities, suggesting that the share of the public sector in the economy will rise as economic growth proceeds, owing to the intensification of existing activities and extension to new activities. There have been, however, variations of this law in that several researchers interpreted it in their own way and proceeded, in some cases, to test it empirically. Among these, four hypotheses for the empirical verification of Wagner's law may be noted: (a) government expenditure must increase at an even faster rate than output; (b) in growing economies the share of public consumption expenditures in the national income increases; (c) as a nation experiences economic growth, an increase must occur in the activities of the public sector and the ratio of increase, when converted into expenditure terms, would exceed the rate of increase in output per capita; and (d) there would be a rising share of the public sector or ratio of public expenditure to GNP in the context of the development of a country from low to high per capita income (i.e., the elasticity of public expenditure as a share of GNP per capita is greater than unity).
The results of these tests show, apart from differing interpretations, the lack of universality, and they show that the growth of expenditures is far more complex than is evident from the tests. Musgrave contends that instead of seeking an explanation for the total expenditure, it may be more appropriate to adopt a disaggregated approach through a study of expenditures of government on capital formation, consumption, and transfer payments. Analysis of these factors, however, reveals different propositions that are considered below.

During the 1950s and 1960s, attempts were made to provide greater empiricism and to make international comparisons in expenditure growth. These attempts fall into two categories: (a) those that emphasized the economic growth and modernization factors on the demand side, and (b) those that explained the supply side, treating changes in government expenditure as results of social disturbances or wars. The latter studies proposed that increases in public expenditure during wartime exceed the limitation on taxation, thereby permitting higher postwar civilian expenditures. This increase in expenditures would have a displacement effect, a concentration effect, and an inspection effect. The displacement effect primarily consisted of shifting public revenues and expenditures to new levels, where they would be accompanied by changes in the relative importance of central and local governments, with the former assuming new functions and taking over functions of the latter (concentration effect). Simultaneously, these shifts would force the attention of governments and people to problems of which they were formerly less conscious (inspection effect). This hypothesis generated numerous statistical studies to test its validity. The results of the tests show conflicting results, but it is evident that the displacement effect is one kind of explanation for certain situations.

Several studies have also been made on the behavior of the components of expenditures. Some of the hypotheses tested, from which there were varying results, are the following: (1) rich countries spend more on defense, social security, and food subsidies; (2) the

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24 See the pioneering study by S. Fabricant (1952). For an international comparison of revenues and expenditure, the first effort which started a trend was by Martin and Lewis (1956), pp. 203–44.
Pattern of spending in export economies is different from others in that they tend to spend more on education and health; (3) the aggregate level of expenditures is related to the outlays on defense and economic services; (4) as GNP grows, the shares of civil consumption expenditures and general administration expenditures remain the same; (5) increased government revenues are often accompanied by corresponding, if not greater, increases in expenditures, with the possibility of a drop in public savings; (6) economic determinants do not fully explain nondefense spending; and (7) consideration must be given to social determinants.

Statistical approaches have their limitations and when applied to government expenditures have not made much headway in providing useful indications of expenditure determinants. Most international comparisons are based on cross-section analyses and appear to have ignored time as a variable. The studies did not offer a reliable guide for the analysis of expenditures or for decision making. Their main contribution may have been an unintended one, in that they provided a useful diversion from the normative approaches in offering selected explanations of expenditure growth.

Theories and studies proved to be interesting but the establishment of a law, or even the pursuit of a law, that would explain the determination of public expenditure appears to be futile. As Bird stated in a study of Canada’s public expenditure a full understanding of government expenditures and their growth over a period of time requires a greater recognition of social and political factors.26 Offering a broad-based approach, he observed that five sets of factors—environmental, technological, economic, political, and administrative—influence the growth of expenditure.

Government finances, notwithstanding their importance, did not receive much attention in the hands of Marxian scholars. This gap has, however, been filled, albeit to a minor extent, by O’Connor,27 who offers an explanation for the fiscal crisis in the modern state. In his view, a fiscal crisis would emerge because of the tendency of expenditures to outstrip revenues. Expenditures perform two contradictory functions—accumulation in terms of provision of social overhead capital to support private capital formation, and the

27 James O’Connor (1974).
legitimate function, comprising police, welfare, and related expenditures for the maintenance of law and order. The inherent conflict between these two functions, it is argued, will intensify and cause a fiscal crisis. This, however, is primarily a quasi-political interpretation of the fiscal approaches of the state and does not offer an explanation of the determinants of expenditure growth.

The applied approaches to government expenditures deal with their impact and are considered, respectively, in the sections below on incidence and economic analysis. Note should be made, however, of the optimal control approaches that have come to be advanced recently but have not yet become operational. The approaches of this school emphasize the utilization of econometric techniques for formulation of government macroeconomic policies, including budgetary ones, and suggest, based on the parallel of industrial operations, self-balancing mechanisms so that expenditures grow or are reduced automatically according to selected indicators. This approach is concerned more with changes in expenditures than with their determinants and it views budgeting as a mechanical exercise.

**MARKET AND NONMARKET FAILURES**

The economic literature, as noted above, is concerned with the provision of public goods. The need for public goods arises because of the nature of the public goods themselves and because of the imperfections of the market system. When economic activities create externalities—benefits or costs to others—these must be considered in production decisions and not doing so will imply a less efficient allocation of resources. There are, however, several externalities that do not enter into the private producers’ calculation. The existence of such externalities and the need for correcting them offer a basis for government intervention and regulation. Similarly, in industries such as the traditional public utilities, original capital investments are heavy and are subject to declining marginal costs, which, in turn, reduce the prospect of competition. Thus, the government emerges as an investor. The concerns of the state also require that attention be paid to distribution, necessitating action by the manager of distribution in Musgrave’s framework. While these aspects have received

considerable study, as noted earlier, relatively less attention has been paid to the failures of government or of the nonmarket mechanism. More recently, however, as a part of the public choice school, studies were initiated in this regard. The theory expressed in these studies of nonmarket failures stresses that information acquisition and its control, bureaucratic inertia, and the tendency to self-preservation may contribute to the increase of redundant costs over time and to a sustained growth in public expenditures. The measurement of the costs would be possible only when there are organizational goals (formulated on a viable basis) that act as proxies for nonmarket output. Moreover, the state may create unanticipated effects through its regulatory policies. In respect of distribution, it may create more inequalities when its pay or pension policies for certain classes are indexed to income while some others are not. Correctives for these nonmarket failures will be possible only when there is a keen public awareness of the issues and a reliable system for correction both within and outside government. These views supplement the three-branch approach of Musgrave by illustrating the need for both policy and informational correctives in budgeting. If, in the Musgrave framework, a tranquil functioning of the government is assumed within the framework of given concerns for both distribution and stabilization, the theory of nonmarket failure stresses the need for correctives in a dynamic setting.

The preceding analysis indicates that, while substantial progress has been made in the study of public expenditures, the theories explain at best only selected aspects and are far from operational. In practice, therefore, budgeting tends to be a political and bureaucratic process that takes into account the economic factors. In some situations, it becomes an economic process that fully recognizes the political and associated factors. Therefore, it remains an art and is not yet a science.

**INCIDENCE OF PUBLIC EXPENDITURES**

The budgeteer is confronted with a number of issues in determining allocations among programs within each budget function. While political influences are always present, the policymaker would like to

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29 For a summary of the views, see Charles Wolf, Jr. (1979), pp. 114–33.
be informed on the direction, the benefits, and the community’s acceptance and utilization of expenditures. His concerns can be analyzed under two complementary groups. From a macroeconomic point of view, the distributional aspects of government expenditures are of considerable importance because they have gained further impetus during recent years with emphasis on the use of public expenditure for providing basic needs, ameliorating the lot of the poor, and improving the delivery systems of public services. There is also an implicit link (irrespective of one’s preference for the benefit, the voluntary exchange, or the ability-to-pay theory of taxation) between the community’s willingness to pay taxes in compliance with the tax system and the quantity, quality, and cost of public services. From a program management point of view, and for purposes of budgeting, the policymaker’s interest lies in ascertaining the clientele to use the services, the location of the clientele, the amount of use of services, adequacy of the services, and sufficiency of the resources, as well as monitoring the cost movements. Evaluation of benefits is also useful in undertaking ex ante cost-benefit assessments of new expenditure programs. Alternatives to existing programs can be envisaged if, for example, the target groups of expenditures (backward regions or low-income classes) are not receiving the benefits. The concern is then to seek answers regarding the fulfillment of the government’s policy objectives.

In providing answers, the policymaker can resort to two broad instruments—managerial techniques and economic studies. The former refers to cost measurements, efficiency assessment, and the overall evaluation of performance in terms of the primary objectives of programs or with reference to objective criteria. These aspects, which form part of performance budgeting, are considered in some detail in Chapter 11. These techniques are also frequently supplemented by a performance or effectiveness audit that is carried out by independent audit agencies on behalf of the legislature. The focus here is limited to the economic studies that may provide some useful guidance to the policymaker in the above areas.

Expenditures cover a wide area, and their incidence and effects are similarly far-reaching. The economic effects of expenditures are examined with reference to the primary effects of spending itself, the secondary effects of consumer spending when consumers begin to spend their newly earned income, and the tertiary effects of new
private investment induced by increases in public expenditure, as well as the impact of expenditures on liquidity. The primary effects of spending is the immediate concern here. Of these, effects in the first stage and the incidence of expenditures refer to the same phenomenon—namely, the change brought about in the distribution of household income as a result of government intervention through its budgetary expenditure. In examining the incidence of expenditure, a distinction is made between expenditure incidence, in terms of the effects on private incomes, and benefit incidence, in terms of the benefits received from government services. Although both these aspects have been largely neglected, efforts have been made during the last two decades to enquire into the distributional effects of the benefits of public expenditure and to evolve a framework that would facilitate future consideration of these issues, but these efforts have not yielded any enduring framework. While this result is viewed with some disappointment, the fact that these neglected aspects have at least been receiving attention is a matter of some satisfaction.

The study of expenditure incidence involves an analysis of the adjustments made in the private sector's economic behavior as a result of the provision of government services. The incidence itself is a vastly complicated phenomenon, and its assessment must take into account the interdependent relationships between public and private sectors and the difficulties in isolating the effects of expenditure. The household's recognition of and reaction to the government's services depends on its perception of the services and the extent to which they are internalized. Both these differ, depending on the purpose and category of expenditures. To recall the earlier classification of expenditures, the government budget consists of public goods and quasi-public goods, direct trading and manufacturing activities, transfers to productive sectors, and transfers to households. Of these, the benefits that flow from direct trading and manufacturing activities are evident in a straightforward manner because these are traded in the market. The pricing mechanism indicates the movements in consumer welfare. Transfers to households, comprising pensions and other social assistance benefits, lend themselves to some measurement in the first stage of incidence. More or less the same is true of transfers to productive sectors, where the effects would become evident from the market signals. The more complex and somewhat intractable area relates to the public and quasi-public goods. Most of the recent studies
of expenditure incidence have been addressed to this area. The general assumption behind all these studies, although not explicitly stated, is that the budget is comprehensive and that all relevant expenditures pertaining to a function are incurred only through the government budget.

The several statistical analyses that have been made can be conveniently grouped into two broad categories—benefit and income approaches. The benefit approaches essentially seek to estimate the benefits from government expenditure and to distribute them among different groups according to the researcher’s preference. As there is no market mechanism that effectively reflects the value of government services, the costs of production—or government outlays—are taken as the base and apportioned to different economic groups. Among the groups that have been examined are rural versus urban, poor versus nonpoor, low-income and high-income groups, regional groups, and general versus specific expenditures. These studies reflect several problems; the assumption made on the valuation of government services is itself the main handicap, and the studies do not attempt to examine whether services are substandard or whether the benefits are greater or less than the expenditures. The income approach, or the money flow approach, concentrates on the recipients of direct payments made by government on the assumption that expenditures benefit the people who receive the payments. There are also variations on this theme. In some cases the distribution of expenditure is assumed to be congruent with income groups, and tax and expenditure burdens are distributed according to that pattern. The argument against the tax approach is its concern with the recipient and not with his work, and the limitation of the expenditure approach is that it deals with the total expenditure (and, therefore, excludes the impact of specific expenditures) and does not lend itself to empirical testing. A further variant is to measure the costs of selected programs and to treat them directly as proxies for the value of benefits and then measure the actual costs across the various groups of income, with focus on distribution of

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30 For a review of the literature, see Luc De Wulf (1975), pp. 61-131. His survey refers to a third approach, which examines how the transfer of resources from the private to the public sector modifies the expenditure pattern in the economy and affects factors and outputs that are more appropriately a part of budget incidence studies not covered here. Also see J. Meerman (1979), Ch. 2: A Model of Budget Incidence; M. Selowsky (1979); and A. P. Gupta (1980).
the services. This approach involves heroic statistical assumptions and has some fundamental limitations in that the analysis is confined to a few sectors and excludes outlays on public goods. As a further variation, a radical theory of fiscal incidence has recently been proposed, but its distinction lies not in seeking a measurement of benefits but in analyzing the nature of the state and it implies that all expenditures have the aim of protecting the interests of the capitalist class.\(^3\)

The cursory discussion above of these approaches illustrates the difficulties in providing answers to the policymaker's needs. Some of the studies are characterized by inherent statistical limitations and other features that reduce the acceptability of the approaches presented. From a statistical point of view, they cover a limited time span (one year), are not able to distinguish the effects of cumulative and current outlays, are aggregative in nature, and reflect a static situation rather than development over time. Their classifications of expenditures do not conform to the decision-making packages of the policymaker, and the studies do not answer the policymaker's concerns of seeking new directions for existing services or for the provision of new services. Also, because of the diversity of approaches, the same data could be used to arrive at different conclusions. As some of the studies have excluded major public outlays, such as defense, they have also implicitly ignored the interaction among groups of expenditures. It is not unusual to find that the distributional intent of some expenditures may be overshadowed or neutralized by other expenditures. Thus, the exclusion of externalities continues to be a major problem. Moreover, some studies ignore the relationship between inputs and outputs. The research studies, as one investigator described it, should be considered to be on a more modest scale than is implied by their titles. To revert to the concern of the policymaker, it appears that his job has not been made any easier by recent research. His intuitive perception of the needs, and his reliance on administrative techniques of performance measurement, on the one hand, and the voters' preferences revealed through democratic procedures, on the other, continue to mold expenditure programs.

\(^{31}\) See D. M. Peppard (1976), pp. 1–16.