

A U T O R : RICHARD A. MUSGRAVE

T I T U L O : THE THEORY OF PUBLIC FINANCE (A Study in Public Economy)

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C E N D E S

C U R S O : POLITICA ECONOMICA

PROFESOR: Ferico Herschel

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CHAPTER 1

A MULTIPLE THEORY OF THE PUBLIC HOUSEHOLD

Modern capitalism is a mixed economic system. The larger part of the national output is purchased by private consumers and investors, and the larger part of the product is produced and supplied by private firms. The distribution of income is determined largely by the ownership of factors of production and by their earnings in the market. At the same time, a substantial share of the nation's product goes to satisfy public wants, a substantial part of private income originates in the public budget, and public tax and transfer payments significantly influence the state of private distribution. Moreover, budget policy affects the level of employment and prices in the private sector. Thus ours is a mixed system, including a sizable and vitally important sphere of public economy along with the market sector.

A. INTRODUCTION

The complex of problems that center around the revenue-expenditure process of government is referred to traditionally as public finance. Following this convention, the same term is used in the title of this volume, but with much hesitation. While operations of the public household involve money flows of receipts and expenditure, the basic problems are not issues of finance. They are not concerned with money, liquidity, or capital markets. Rather, they are problems of resource allocation, the distribution of income, full employment, and price-level stability and growth. Therefore, we must think of our task as an investigation into the principles of public economy; or more precisely, on those aspects of economic policy that arise in the operations of the public budget.

Theories of Public Economy.

Economists have paid much attention to the formulation of theories that examine the problems of consumer households, business firms, cooperatives, trade unions, and other decision-making units in the economy. While much remains to be done, we can boast of a fairly adequate frame work in which to explore these matters. No such success can be claimed for occasional attempts to develop a corresponding theory of the public sector.

Such a theory can be approached in two ways. First, we attempt to state the rules and principles that make for an efficient conduct of the public economy. In other words, we determine the optimal budget plan on the basis of initially defined conditions and see how it can be achieved. This we refer to as a normative or optimal theory of the public household. In the second approach, we attempt to develop a theory that permits us to explain why existing policies are pursued and to predict which policies will be pursued in the future. Such a theory of budget policy may be thought of as a sociology of fiscal politics. For purposes of either approach, the economic consequences of legislative action must be determined. For the first approach, we must know how the market reacts to various tax or expenditure policies so that we can choose that policy which gives optimal results. For the second approach, we must know how the market

reacts so that we can predict further changes in policy that will be generated by these reactions.

For purposes of this study, our concern is primarily with the first or normative view. A theory of fiscal politics is interesting and important but will be referred to only in occasional connections. (1) Our normative model of public economy is not designed to be realistic in the sense of describing what goes on in the capitals of the world. Rather, it is designed to show what would go on if an optimal result were achieved. Nevertheless, our model is not without close relation to social and economic institutions. The framework of a normative theory of public economy itself depends upon the political and social values of the society that it serves; and the implementation of the optimal budget plan depends upon the functional relationships that prevail in the market sector of the economy.

Our task will be to examine how the objectives of the budget plan can be determined in an optimal fashion, and how they can be implemented accordingly. The introductory chapters of Part I are designed to give a general framework of analysis, covering the entire range of problems to be considered later on. Many difficulties dealt with at a later point are overlooked for the time being. In Part II, we examine how the optimal objectives of budget policy can be determined. In Part III, we deal with the implementation of budget policy in a classical system, where there is no problem of stabilization policy. In Part IV, we consider the implementation of budget policy in a compensatory system.

Three Objectives of Budget Policy.

There is no simple set of principles, no uniform rule of normative behavior that may be applied to the conduct of public economy. Rather, we are confronted with a number of separate, though interrelated, functions that require distinct solutions. Our first task is to sort out these objectives, to state the issues, and to see how objectives and issues are related.

In order to obtain a comprehensive, if highly simplified, view of the problem, let us observe the determination of budget policies in an imaginary state, where efficient standards of fiscal planning prevail. The responsibilities of the Fiscal Department in our imaginary state are derived from a multiplicity of objectives. For present purposes these are grouped under three headings: The use of fiscal instruments to (1) secure adjustments in the allocation of resources; (2) secure adjustments in the distribution of income and wealth; and (3) secure economic stabilization.

Let us now think of each of these functions as being performed by a particular branch of our imaginary Fiscal Department. These branches may be referred to respectively as the Allocation, Distribution, and Stabilization

(1) On fiscal politics see Joseph Schumpeter, "Die Krise des Steuerstaates", *Zeitfragen aus dem Gebiete der Soziologie*, Graz, Austria, 1918. "English translation: "The Crisis of the Tax State", *Inter. Econ. Papers*, N° 4, pp.5-38, London 1954). - For a Marxist interpretation see Rudolf Goldscheid, "Wesen und Aufgabe der Finanzwissenschaft vom Standpunkte der Soziologie", *Handwörterbuch der Finanzwissenschaft*, Tübingen, Germany, 1926, vol. 1 (English translation: R.A. Musgrave and Alan T. Peacock (eds.) *Classics in the Theory of Public Finance*, Inter. Eco. Association, Macmillan & Co. Ltd., London, 1958)

Branches. The manager of the Allocation Branch must determine what adjustments in allocation are needed, who is to bear the cost, and what revenue and expenditure policies are required to achieve the desired objectives. The manager of the Distribution Branch must determine what steps are needed to establish the desired or "proper" state of distribution, and the manager of the Stabilization Branch must decide what must be done to secure price-level stability and full employment.

For reasons to be explained later, each manager is to plan his job on the assumption that the other two branches will perform their respective functions properly. In other words, the diversion of resources to satisfy public wants is to be planned in the Allocation Branch on the assumption that resources are fully employed and that the proper distribution of income has been secured. The proper or desired distribution is to be planned in the Distribution Branch on the assumption that a full-employment income is available for distribution and that the satisfaction of public wants is taken care of. Finally, the manager of the Stabilization Branch is to determine what fiscal actions are needed to maintain the required level of aggregate demand, given the proper state of distribution and diversion of resources to the satisfaction of public wants.

In this way, budget policy is determined as the result of three interdependent plans, each of which involves different objectives and principles of action. These subplans may then be cleared and consolidated into a net budget involving but a single set of tax and expenditure measures. This, however, is a matter of convenience only. The basic task is to arrive at efficient budget planning for each of the three levels.

B. THE ALLOCATION BRANCH

One is tempted to describe the function of the Allocation Branch as providing for the satisfaction of public wants, but this does not tell us much. It merely poses the problem of how to define public wants. This cannot be done readily in general terms, since different situations give rise to different types of public wants. We shall get further, therefore, if we view the function of this branch as that of securing necessary adjustments in the allocation of resources by the market. We may then examine the various situations in which such adjustments are required and thus secure a more specific view of the nature of the public wants to be met in each case.

Situations Calling for Adjustments in Allocation.

The pricing mechanism of the market secures an optimal allocation of resources, provided that certain conditions are met. (1) These conditions are met reasonably well over wide areas of economic activity, so that the bulk of the allocating function may be left to the forces of the market. In these areas, public policy need not concern itself with matters of allocation. Yet conditions arise in many connections where the forces of the market cannot secure optimal results. Here we are faced with the problem of how public policy can intervene to secure a more efficient resource allocation. In some cases, the required

(1) See, for instance, A.P. Lerner, The Economics of Control, The Macmillan Company, New York, 1944, chap 2.

adjustment is made best through budget policy, while in others, different techniques are more suitable. Let us note briefly the major situations where problems of allocation policy must be faced.

To begin with, an occasion for adjustment arises where, for institutional reasons, the organization of industry precludes free entry, so that allocation diverges from that obtained under purely competitive conditions. This is the general case of monopoly control. The existence of market imperfections must be allowed for in the determination of efficient budget policy, and budget policies may be used to remove them. However, the regulation of competition is not primarily a problem of budget policy. More commonly, it is dealt with by legislation to control industrial organization or to regulate the price and output policies of firms. Since our study is concerned with budget policy, this aspect of allocation control enters our discussion only in a collateral way.

A second and more difficult problem of adjustment arises in the case of lumpiness of productive factors and of production processes that involve decreasing cost. These conditions may not only lead to monopoly, but they make it futile to demand that the monopolist behave like a competitor. Optimal determination of output requires an equating of average revenue with marginal cost. Under conditions of decreasing cost, the firm cannot be expected to follow such a policy, since it involves a loss. A tax-subsidy process -and, hence, budget policy- is required to secure an optimal output.

Next, we have situations where external economies or diseconomies are generated by the operation of particular individuals or firms. Establishment of an expensive store may increase real estate values in the neighborhood, even though the store cannot collect for the services thus rendered. A railroad into new territory may lead to gains in economic development that greatly exceed the profits to the particular railroad. Since the market permits a price to be charged for only a part of the services rendered, the development may be unprofitable from the private, but profitable from the public, point of view. Similarly, private operations may involve social costs that are not reflected in private cost calculations and, hence, are not accounted for by the market. A factory may pollute the air and damage an adjoining resort. The smoke nuisance is a cost to the particular community, yet it is not a private cost to the firm. The resort owners cannot collect from the firm since they cannot prevent its use of the common air. Thus, what is profitable to the private firm may be unprofitable from a social point of view.

Other discrepancies may arise from differences between public and private risk, and again others from differences between public and private time preferences. Indeed, if we assume that any one person's welfare depends on that of all others - a case of keeping up with the Joneses- we must conclude that the satisfaction of all private wants involves gains and losses that are not accounted for in the market.

We thus find a wide array of situations where the market mechanism involves varying degrees of inefficiency in resource allocation -inefficiencies that arise collateral to the satisfaction of private wants, nevertheless, the satisfaction of such wants in most cases is best left to the market. Depending upon the nature and severity of the inefficiencies, corrective action may be desirable and reasonable; but such action as is taken remains more or less marginal.

Let us now turn to situations where the market mechanism fails altogether and where the divergence between the social and private products becomes all-inclusive. This is the case of social wants proper, the first type of public wants to be considered. Social wants are those wants satisfied by services that must be consumed in equal amounts by all. People who do not pay for the services cannot be excluded from the benefits, they will not engage in voluntary payments. Hence, the market cannot satisfy such wants. Budgetary provision is needed if they are to be satisfied at all. Determination of the required budget plan is complicated by two factors, both of which arise because the same amount of services must be consumed by all.

A primary difficulty arises because true preferences are unknown. Since, as we have noted, no one can be excluded from the benefits that result, consumers will not readily reveal their preferences before it can decide how to satisfy them efficiently. A way must therefore be found by which to induce people to reveal their preferences.

A second difficulty arises even if we assume that the true preferences of all individuals are known. The difficulty arises because there is no single most efficient solution to the satisfaction of social wants or to the problem of supplying services that are consumed in equal amounts by all. This difficulty exists, at least, if we apply the criterion of efficiency as understood in the determination of market price. Therefore, a more specific welfare function is needed to secure an optimal solution. These are the two issues which comprise the crux of the problem to be solved by the Allocation Branch.

The suggested distinction between private and social wants is not of an absolute sort. Inefficiencies arise in the satisfaction of private wants through the market process, and wherever such is the case, one could say that an element of social want is involved. The difference is essentially one of degree, but the same may be said for most categories in economics, e.g. consumption and capital formation. The distinction remains of fundamental importance. In the case of private wants, the divergence between private and social product is a more or less marginal matter; in the case of social wants, the divergence becomes of the essence. Private wants are provided for adequately by the market. Social wants must be satisfied through the budget if they are to be satisfied at all. For purposes of public policy, the difference in degree thus becomes an important difference in substance.

So far, we have considered situations where corrective policy is required in order to secure an allocation of resources that is in line with consumer preferences. A different type of intervention occurs where public policy aims at an allocation of resources which deviates from that reflected by consumer sovereignty. In other words, wants are satisfied that could be serviced through the market but are not, since consumers choose to spend their money on other things. The reason for budgetary action in this case is not to be found in the technical difficulties that arise because certain services are consumed in equal amounts by all. Separate amounts of individual consumption are possible. The reason, then, for budgetary action is to correct individual choice. Wants satisfied under these conditions constitute a second type of public wants, and will be referred to as merit wants. The problem they pose must be distinguished clearly from that posed by social wants.

Social Wants.

Let us now take a closer look at the nature of social wants. Such wants cannot be satisfied through the mechanism of the market because their enjoyment cannot be made subject to price payments.

Exchange in the market depends on the existence of property titles to the things that are to be exchanged. If a consumer wishes to satisfy his desire for any particular commodity, he must meet the terms of exchange set by those who happen to possess this particular commodity, and vice versa. That is to say, he is excluded from the enjoyment of any particular commodity or service unless he is willing to pay the stipulated price to the owner. This may be referred to as the exclusion principle. Where it applies, the consumer must bid for the commodities he wants. His offer reveals the value he assigns to them and tells the entrepreneur what to produce under given cost conditions.

This mechanism breaks down with social wants, where the satisfaction derived by any individual consumer is independent of his own contribution. Such, at least, is the case where the individual consumer is but one among many, and any contribution he may render covers only a small part of the total cost. Consider, for instance, such items as a flood-control project, the more general benefits of which accrue to an entire region; a sanitary campaign that raises the general level of health throughout an area; expenditures for the judiciary system that secure internal safety and enforce contractual obligations; or protection against foreign aggression. All these contribute to the welfare of the whole community. The benefits resulting from such services will accrue to all who live in the particular place or society where the services are rendered.⁽¹⁾ Some may benefit more than others, but everyone knows that his benefit will be independent of his particular contribution. Hence, as we have said, he cannot be relied upon to make a voluntary contribution. The government must step in, and compulsion is called for.

The difficulty thus created would be slight if the problem were merely one of collecting tax bills. Unfortunately, this is not the case. The tax collector, while important, does not solve the problem of the economist. The latter must determine what expenditures should be made and what taxes should be collected. To do this, a way must be found to determine people's true preferences in social wants, i.e., the preference pattern by which they rate the satisfaction of their total wants, private and social. The difficulty arises because the market mechanism fails as a device for registering consumer preferences. Since the services that satisfy social wants can be had without payment, the individual consumer need not reveal his evaluation thereof (and invite corresponding tax assessments!) through market bids. Because of this,

(1) It is evident that the case of social wants must involve joint consumption; but joint consumption, as usually defined, does not necessarily involve social wants. A circus performance involves joint consumption on the part of those who attend. Yet entrance fees can be charged, different amounts can be consumed by various people, and the service can be provided through the market. Demand schedules can be added horizontally. (See p. 76.) For a social want to arise, the condition of equal consumption must apply to all, whether they pay or not. In other words, we must combine the condition of joint consumption with that of inapplicability of the exclusion principle. Only then will demand schedules be added vertically.

signals are lacking and true preference scales for social wants are unknown. Such, at least, is the case with central finance. In the case of local finance, some registration of preferences may occur by moving from less to more congenial fiscal communities, a factor that will be disregarded for the time being.

Since the market mechanism fails to reveal consumer preferences in social wants, it may be asked what mechanism there is by which the government can determine the extent to which resources should be released for the satisfaction of such wants; the extent to which particular social wants should be satisfied; and the way in which the cost should be spread among the group. In a democratic society, the decision to satisfy one or another social want cannot be imposed in dictatorial form. It must be derived, somehow, from the effective preferences of the individual member of the group, as determined by his tastes and his "proper" share in full-employment income.⁽²⁾ A political process must be substituted for the market mechanism, and individuals must be made to adhere to the group decision. As shown later on, the problem is to determine the kind of voting process or group decision that offers the best approximation to the solution (or one of the solutions) that would be chosen if true preferences were known.

The preceding argument is based on the premise that individuals can evaluate social wants, that is, that such wants form part of individual preference scales along with private wants. Without this, no determination of public preferences can be made that meets the requirements of a democratic society as we understand it. This approach differs from an alternative view, according to which social wants are collective in nature and are experienced by the group as a whole or its leaders, as distinct from its members. It is futile to debate which of these is the correct interpretation. Let us look upon our preference for the individualistic over the organic view as a matter of value judgment and be content to show that our formulation makes empirical sense. I see no reason why individuals should not be able to evaluate the benefits they derive from the satisfaction of social wants, along with the benefits they derive from the satisfaction of private wants. To be sure, it may be simpler to assess the advantages of installing a lock in one's own house than to appraise the precise benefits one derives from military protection against foreign invasion; or one may find it simpler to measure the advantages of improving one's own yard than to evaluate one's gain from the installation of public parks. Such differences in degree may exist, but they are not inherently a matter of public versus private wants. Similar distinctions arise between various types of private wants, some of which are more immediate (such as medical consultation in the case of illness) and some of which are more remote (such as preventive medical care). Considerations of this sort, therefore, do not contradict our basic proposition that social wants are an integral part of the individual's preference pattern.

Individuals, at the same time, are social beings, dependent in their preferences and actions on their social environments, and their relations to others. While all wants are evaluated in terms of individual preference patterns, these patterns are not determined in a Robinson Crusoe setting. All

(2) As noted before, the budget of the Allocation Branch is planned on the assumption that the Distribution Branch has provided for the proper distribution of income and that the Stabilization Branch has provided for a full-employment level of income.

sorts of social motivations enter, be it with regard to private or to public wants. While social preference must be anchored in individual valuation, it does not follow that people are selfish monsters. Altruistic or social motivation may be imbedded in the structure of individual preference patterns. A person may favor expenditures for courts or for education, not only because they will improve his safety, increase his learning, give the pleasure of dealing with more educated neighbors, or because he expects them to think well of him if he appears socially minded; he may favor them simply because he feels that he should contribute to the good life of others.(1)

Such consideration will be present in varying degrees; but they will not be so strong or universal as to justify the assumption that people will reveal their true preferences in social wants on a voluntary basis, independent of any assurance that the same will be done by others. With all due allowance for social interdependence and altruistic motivation, such an assumption would be unrealistic and inconsistent with the premises of all other phases of economic analysis. The first difficulty of the Allocation Branch, therefore, is how to induce people to reveal their individual preferences in social wants.

Suppose, now, that this part of the task has been accomplished in some fashion. We may expect to find that individual preferences differ with regard to social as well as to private wants. In the case of private wants, such differences are reflected in the purchase of varying amounts of goods and services at a common price. This solution is inapplicable to social wants, since the same amount of goods and services must be consumed by all. If costs are to be allocated in response to individual preferences, different prices must be charged to various consumers, or different tax assessments must be placed on various voters. This suggests that a solution may be obtained which is analogous to that of efficient pricing in the market. Unfortunately, this is not the case. The condition of equal consumption by all does not permit a single most efficient solution; or, to put it more precisely, it permits such a solution only on the basis of a social preference function that goes much beyond the conditions of efficiency required to evaluate the allocation of resources in the provision for social wants, a problem that remains even if individual preferences can be determined.

Taxes imposed by the allocation Branch are designed to cover the cost of public services. Will the distribution of these tax payments be regressive, proportional or progressive? Since they are to express the individual's valuation of social wants as based on the proper distribution of income, the answer depends on the income elasticity of social wants. If this elasticity in the typical case tends to be unity, tax contributions will be proportional; if it is above unity, they will be progressive; and if it is below unity, they will be regressive. In any case, note that the considerations behind the question of progression are quite different in this context from considerations arising in connection with distributional adjustments.

Merit Wants.

The type of public wants dealt with under social wants are wants whose satisfaction should be subject to the principle of consumer sovereignty.

(1) See p. 88.

The basic rule is that resources should be allocated in response to the effective demand of consumers, determined by individual preferences, and the prevailing state of distribution. Indeed, social wants are quite similar in this fundamental respect to private wants.

We now turn to our second category of public wants. Such wants are met by services subject to the exclusion principle and are satisfied by the market within the limits of effective demand. They become public wants if considered so meritorious that their satisfaction is provided for through the public budget, over and above what is provided for through the market and paid for by private buyers. This second type of public wants will be referred to as merit wants. Public services aimed at the satisfaction of merit wants include such items as publicly furnished school lunches, subsidized low-cost housing, and free education. Alternatively, certain wants may be stamped as undesirable, and their satisfaction may be discouraged through penalty taxation, as in the case of liquor.

The satisfaction of merit wants cannot be explained in the same terms as the satisfaction of social wants. While both are public wants in that they are provided for through the public budget, different principles apply. Social wants constitute a special problem because the same amount must be consumed by all, with all the difficulties to which this gives rise. Otherwise, the satisfaction of social wants falls within the realm of consumer sovereignty, as does the satisfaction of private wants. The satisfaction of merit wants by its very nature, involves interference with consumer preferences.

In view of this, does the satisfaction of merit wants have a place in a normative theory of public economy, based upon the premise of individual preference in a democratic society? A position of extreme individualism could demand that all merit wants be disallowed, but this is not a sensible view. To begin with, situations arise that seem to involve merit wants but on closer inspection involve social wants. Certain public wants may fall on the border line between private and social wants, where the exclusion principle can be applied to part of the benefits gained but not to all. Budgetary provision for free educational services or for free health measures are cases in point. Such measures are of immediate benefit to the particular pupil or patient, but apart from this, everyone stands to gain from living in a more educated or healthier community. Wants that appear to be merit wants may involve substantial elements of social wants.

Moreover, a case for the satisfaction of merit wants add for interference with consumer sovereignty, narrowly defined, may derive from the role of leadership in a democratic society. While consumer sovereignty is the general rule, situations may arise, within the context of a democratic community, where an informed group is justified in imposing its decision upon others. Few will deny that there is a case for regulating the sale of drugs or for providing certain health facilities. The advantages of education are more evident of the informed, thus justifying compulsion in the allocation of resources to education; interference in the preference patterns of families may be directed at protecting the interest of minors; the freedom to belong may override the freedom to exclude, and so forth. These are matters of learning and leadership which are an essential part of democracy reasonably defined and which justify the satisfaction of certain merit wants within a normative model.

The basic doctrine of consumer sovereignty, finally, rests on the assumption of complete market knowledge and rational appraisal. In the modern economy, the consumer is subject to advertising, screaming at him through the media of mass communication and designed to sway his choice rather than to give complete information. Thus, there may arise a distortion in the preference structure that needs to be counteracted. The ideal of consumer sovereignty and the reality of consumer choice in high-pressure markets may be quite different things. At the same time, the satisfaction of merit wants remains a precarious task. Interferences with consumer choice may occur simply because a ruling group considers its particular set of mores superior and wishes to impose it on others. Such determination of wants rests on an authoritarian basis, not permissible in our normative model based upon a democratic society.

To the extent that merit wants are admitted, the provision for such wants differs basically from the provision for social wants. In the case of the latter, the problem is one of giving effect to individual evaluations. Even though policy will not be determined by unanimous vote, the task remains one of fitting the result as closely as possible to individual tastes and effective demands. Majority rule is a necessary evil to approximate the desired result, not a principle desired as such. In the case of merit wants, however, the very purpose may be one of interference by some, presumably the majority, into the want pattern of others. The solution to the determination of social wants, based on the true preferences of all individuals alike, does not apply in this case.

Providing for the Satisfaction of Public Wants.

Suppose, now, that it has been decided which public wants, social or merit, shall be provided for through the public budget. What, precisely, do we mean by saying that the government must "provide" for the satisfaction of such wants?

We mean, simply, that the goods and services needed to satisfy public wants must be paid for out of general revenue. The goods and services must be supplied free of direct charge to the user; at the same time, they need not be produced under the direct management or supervision of the government. This is an important distinction to be made in order to avoid confusion.

Consider, for instance, the case of military protection. Provision for protection means that resources must be diverted to the construction of guns or of naval vessels. It does not mean, necessarily, that the guns or ships should be constructed by a public enterprise -or, necessarily, by private firms. One may consider also the matter of public playgrounds. The problem here is to determine the amount and type of playground facilities to be provided; but the decision to provide for such facilities does not tell us whether they should be supplied by public enterprises or through contract by private construction companies.

To bring out this distinction, we may visualize two economies, one in which all goods are produced by the government and sold on the market, and another in which all goods are produced privately but purchased by the government and distributed free of direct charge. In the former case, there is no provision for public wants, while all production is under public management. In the latter case, there is no public production, but all resources are devoted to provision for public wants. Provision for public wants, therefore, does not

require public production management, just as public production management does not require provision for public wants. Quite different criteria apply in determining the proper scope of each.

The Function of Expenditure and Taxes in the Allocation Branch.

Suppose that the satisfaction of certain public wants is decided upon and that the cost of the necessary resource withdrawals is to be placed upon certain people. It remains to be seen how this plan can be carried out.

The desired transfer of resources may be accomplished by commandeering such resources or products directly. This is done customarily in the case of military service, where the soldier's wage falls short of the value determined in a free market; a somewhat similar situation exists where use is made of the right of eminent domain. The same procedure could be followed in other cases as well. If, for instance, the government wishes to obtain a battleship, and steel is needed, steel may be commandeered and transferred from the production of passenger cars, and labor may be conscripted and transferred from other uses to produce more steel. This would accomplish the purpose of securing the battleship for government use, but it would place the entire cost on the producers of steel. It would be an absurd cost allocation, avoidable by tax finance. By levying taxes, private demand is reduced and resources are released. By spending the proceeds, these resources are transferred from private to public use. The desired result in resource transfer is obtained in both cases, but the distribution of cost is now independent of the particular resources that are transferred. It can be spread in any way that may appear desirable.

The tax-purchase mechanism as a means of resource transfer thus permits a cost allocation quite independent of the ownership distribution of the resources that are to be transferred. The entire process may be thought of as a combination of direct resource transfer by commandeering with a tax-compensation scheme so as to obtain the proper allocation of costs. For the Allocation Branch, the need for securing a cost distribution independent of the particular resource transfer is the function and *raison d'être* of taxation. This must be kept in mind, lest overemphasis on the function of the Stabilization Branch lead to the misleading conclusion that the only function of taxation is to prevent inflation.

Requirement of Balance in the Budget.

The basic task of the Allocation Branch is to choose among alternative uses of resources. Thus, the problem is essentially one of opportunity cost. If resources are to be used for the satisfaction of certain public wants, they will not be available for the satisfaction of other public or private wants. In this basic sense of opportunity cost, the budget of the Allocation Branch must always be balanced. The amount of resources withdrawn from private use must equal the amount of resources added to public use. This much follows from our initial rule that the budget of the Allocation Branch must be planned in a full-employment context.

At the same time, it does not follow that the budget of the Allocation Branch must always be balanced in the sense that expenditures are matched

by tax receipts. Such will be the case if the satisfaction of all public wants is in the nature of current consumption, but not if capital outlays are made. In the case of capital outlays, the release of resources from private use and their transfer to the satisfaction of public wants may be accomplished properly through a borrowing-purchase mechanism rather than a tax-purchase mechanism. The charge to be covered currently by tax receipts equals the cost of current services and depreciation in value of public capital assets. Nevertheless, the cost of capital outlays must be imputed to the beneficiaries and be covered in taxes over the lifetime of the capital asset.

With this qualification, we may conclude that the budget of the Allocation Branch must be balanced, even in the financial sense of equality between expenditures and tax receipts. The financial balance merely expresses the underlying real balance between the benefits derived from the satisfaction of public wants and the opportunity cost of withdrawing resources from the satisfaction of private wants. At the same time, we shall find that there is no conflict whatsoever between this principle of balance in the budget of the Allocation Branch and the quite different principle of imbalance in the budget of the Stabilization Branch.

C. THE DISTRIBUTION BRANCH

The function of the Allocation Branch may be considered the classical function of budget policy. Indeed, there was a time when the provision of public services was considered its only legitimate function, and it was argued that "the fiscal problem pure and simple" should not be confused with "lien consideration of social and economic policy". Subsequently, however, most people came to recognize that the revenue-expenditure process of government is bound to have social and economic effects, and that these may be aimed usefully at purposes not directly connected with the immediate objective of satisfying public wants. Adjustments in the state of distribution are one such purpose.

In formulating the budget of the Allocation Branch, we assume that there exists a desired or proper state of distribution to begin with. This is necessary for two reasons. Unless the state of distribution is given, individuals cannot translate their preferences, whether for private or public wants, into a pattern of effective demand. And unless the given state of distribution can be accepted as the proper one, the resulting pattern of effective demand cannot be accepted in furnishing a guide to the efficient use of resources. It is the task of the Distribution Branch to determine and secure this proper state of distribution. In so doing, the Distribution Branch may assume that the satisfaction of public wants is determined correctly by the Allocation Branch and that full employment and price-level stability are maintained by the Stabilization Branch.

The Tax-Transfer Process of the Distribution Branch.

The distribution of income and wealth in a market economy depends on a number of factors including the laws of inheritance, the distribution of innate talents, the availability of educational opportunities, social mobility and the structure of markets. As a result of these factors, a state of distri-

bution, with a given degree of equality or inequality, comes about. This state will seem appropriate to some, while others will prefer a greater, and still others a lesser, degree of equality.

Social philosophies or personal predilection with regard to equality or inequality differ. Yet within certain limits there is likely to exist at any time and place more or less widely accepted mores with regard to certain basic aspects, of the problem. In our society it is agreed that babies should not go short of milk, that old people should be cared for, that cases of extreme poverty should be taken care of, and so forth. Beyond this, opinions differ, but few will deny that some situations arise in a democratic society where an interference in the state of distribution is called for. This being the case, a mechanism must be provided by which corrections in the state of distribution can be made in an orderly fashion and in a way that does the least damage to an efficient functioning of the economy.

Such a mechanism is given by the tax and transfer system of the Distribution Branch. This, to be sure, is not the only way in which adjustments in the state of distribution can be made. Minimum-wage legislation, price support for certain farm crops, tariff protection, fair-trade legislation, and so forth are all policies with important distributional results and, to a large degree, distributional objectives. From the economist's point of view there is however, an a priori preference for the budgetary approach. This approach to income transfer, if implemented properly, involves a minimum of interference in the allocation of resources as determined by the pricing system. Unless such interference is warranted as an objective in itself, this quality of neutrality renders the budgetary approach a superior technique. Budgetary action is also more efficient in that it permits us to reach all members of any desired group and not only those who engage in particular occupations or sets of market transactions, such as farmers, importers, or unionized workers.

Suppose now that the proper state of distribution has been determined. The corrections to be applied are found by comparing this norm with the prevailing state. The easiest and most direct way of implementing the desired adjustment is through a system of taxes and transfer payments. In fact, the latter may be thought of simply as negative taxes.

Contrary to the expenditures and taxes of the Allocation Branch, which are designed to move resources from the satisfaction of private to the satisfaction of public wants, the taxes and transfers of the Distribution Branch are designed to shift resources from the disposal of one individual to that of another. As in the case of the Allocation Branch, the budget of the Distribution Branch is planned on the assumption that full employment is provided for by the Stabilization Branch. The budget must again be balanced in real terms. Since the problem is viewed against the backdrop of a full-employment income, the same amount of real resources that is withdrawn from X will be placed at the disposal of Y.

As with the Allocation Branch, this balance in real terms need not exclude the use of loan finance as a means of accomplishing distributional objectives. For instance, low incomes may be taxed heavily during a war, but refundable taxes may be used to arrange for a subsequent readjustment. As in the preceding case, this is a temporary matter only. Over a longer period, the

transfer budget will have to be balanced in both the financial and the real sense.

The "Proper" State of Distribution.

It is easy to conclude that distributional adjustments may be needed at times and that such adjustments should be implemented through the budget of the Distribution Branch. The difficulty is to decide what the proper state of distribution should be. This decision evidently cannot be made by a market process, since the nature of exchange presupposes title to the things that are to be exchanged. A political process of decision making is needed, and before this can function, there must be some distribution of weights in the political process. There must be a distribution of rights to vote.

Leaving for later consideration how this political process can be determined, let us note some of the issues inherent in the matter of distribution. Democratic thinking, based on the postulate of man's individual worth, seems to establish a presumption in favor of equality, both political and economic. But equality applied to economic matters can be interpreted in different ways, and the choice among different interpretations is a matter of value judgment. To some, equality may imply actual equality in economic welfare at any given time; to others, it may imply the quite different concept of equality of opportunity; and still others may interpret equality in terms of maximum welfare to all members of society.

If the criterion of welfare is accepted, this does not necessarily require actual equality in the distribution of income, which would follow only if all people are similar in their propensity to enjoy income. More likely than not, they will differ in this as in other respects. The conclusion, therefore, may well be one of uneven distribution, a result that hardly corresponds to the commonly understood meaning of equality. Moreover, there is doubt whether interpersonal comparisons of welfare can be made at all in meaningful sense. Indeed, economists now widely hold to the view that such comparisons must be ruled out. For these reasons, it is tempting to interpret the concept of equality (or degree thereof) as outright equality of objectively measurable income or wealth rather than as subjective equality of welfare. In other words, social policy could be based on the assumption of equal capacity to enjoy income even though capacities are, in fact, unequal.

If the criterion of equality of opportunity is accepted, we are still faced with a number of different interpretations. Equality of opportunity can be taken to mean equal educational facilities, allocation of jobs on the basis of competitive performance rather than connections, and so forth. Above all, the idea of equal opportunity involves mobility between various positions in the income scale. Fiscal policies aimed at greater equality in the one sense of the term may interfere with other aspects of equality, thus requiring a careful weighing of the various objectives.

Finally, we must allow for the fact that the total income (defined to include goods and leisure) available for distribution may itself be a function of the state of distribution. Desired changes in the state of distribution may increase the total cake to be divided, or they may decrease it. If there is a conflict, the case is not necessarily in favor of the greater income and

against the preferred state of distribution. This is a matter of taste, but it is clear that the cost of lesser output must be weighed in such a case against the advantages of distributional change. Similarly, account must be taken of such changes in social or political environment as may be induced by various distribution policies.

It is evident from all this that the concept of a proper state of distribution, necessary though it is to the formulation of a complete budget theory, leads into a most difficult set of ethical, social, and economic problems. In addition, the implementation of distributional objectives raises difficulties of a technical sort. It is by no means obvious how to measure the relative economic positions that are to be adjusted. While the most widely accepted criterion is income, this is not the only possible one; and granted that income is to be taken as the criterion, it is by no means obvious how income is to be defined.

A proper definition of income is important, not only to establish equity in a vertical sense - that is, to plan taxes and transfers so as to adjust relative positions; it is important also to establish equity in a horizontal sense - that is, to give equal treatment to people in equal positions. The complexity of modern economic organization is such that income may accrue in a variety of forms and through many different channels. Thus, there arises the problem of designing the tax and transfer structure so as to give equal treatment to people who are in basically equal positions but who differ regarding the form in which their income accrues.

Relation to Taxation in the Allocation Branch.

In discussing the function of the Allocation Branch, our premise has been that the satisfaction of social wants must be related to individual evaluations of the benefits received. If we assume that this can be done effectively, a clear distinction may be drawn between taxation by the Allocation Branch and taxation by the Distribution Branch. Tax payments to the Allocation Branch may be progressive, proportional, or regressive, depending on the income elasticity of social wants. The tax-transfer mechanism of the Distribution Branch, in turn, may be progressive or regressive, depending on the desired type of distributional adjustment.

The proper state of distribution, as determined by the Distribution Branch, will be defined in terms of income earned, minus such taxes or plus such transfers as the Distribution Branch chooses to impose. Taxes and transfers of the Stabilization Branch, as noted presently, will be distributionally neutral, and the Distribution Branch will disregard taxes collected by the Allocation Branch. Such taxes, like other personal uses of income, may be looked upon as expenditures, whether for consumption or capital formation, that are made in relation to the taxpayer's own evaluation of the social wants being satisfied.

At the same time, there remains an interdependence of the two budgets. The programs of the Allocation Branch depends upon the pattern of effective demand as set by the adjustments of the Distribution Branch. The program of the Distribution Branch depends upon the distribution of factor incomes in the market, as affected by the policies of the Allocation Branch.

Unfortunately, such a clear-cut distinction between taxation at the two levels is not quite permissible. For one thing, we have noted that there is no single optimal solution to the satisfaction of social wants even if preferences are known; and the choice between the various possible solutions involves distributional considerations. For another, the satisfaction of merit wants is associated frequently with distributional considerations. Subsidies in kind, for instance, may be given for the satisfaction of certain private wants. Free charity clinics may be furnished, or subsidies may be given to low-cost housing, the benefits of which will accrue to low-income families. Such programs have a dual nature. They may be looked upon both as operations of the Allocation Branch in the satisfaction of merit wants and as operations of the Distribution Branch in the redistribution of income. Alternatively, the same objectives may be achieved through cash subsidies to individuals based on the condition that the payments must be spent in a prescribed way. Thus, subsidies in kind may be looked upon as redistributive arrangements made conditional upon certain uses of the grants received. The Distribution Branch, accordingly, must allow for the distributional implications of provision for merit wants in the Allocation Branch; and the Allocation Branch, in considering the satisfaction of merit wants, must allow for distributional adjustments in kind made by the Distribution Branch.

Notwithstanding these difficulties and overlaps, I think it useful to maintain a distinction between the problems of the Allocation Branch and those of the Distribution Branch. This, at least, is preferable to the other extreme, inherent in the ability-to-pay approach, of discarding the assignment of benefits from public services and of considering the placement of the entire tax bill as a distributional problem. If this is done, nothing is gained by maintaining a distinction between taxation by the Allocation Branch and taxation by the Distribution Branch. To be sure, we may still think of the taxes of the Allocation Branch as allocated on a proportional basis, and of the tax-transfer process of the Distribution Branch as providing for a proper state of distribution, defined now with reference to income left after payment of taxes to the Allocation Branch. Or we may assume that the Allocation Branch initially sets aside such resources as are needed to satisfy public wants, and that the Distribution Branch concerns itself with the distribution of the remaining resources only. The result is the same either way. Unless the Allocation Branch succeeds to a significant degree in imputing benefits to individual tax-payers, there is no point in distinguishing between tax distributions by the two Branches.

D. THE STABILIZATION BRANCH

The function of the Stabilization Branch differs sharply from that of the other two. Its concern is not with the allocation of resource between public and private, or between alternative private wants. Rather, it is with maintaining a high level of resource utilization and a stable value of money. Though the newest of our three branches of budget policy, the Stabilization Branch has been in the limelight during the last 20 years. The problem of compensatory finance was posed first by the depression of the thirties and recast subsequently by the inflation pressure of the war and the years that followed. There is little reason to expect that future decades will provide a more stable setting unless appropriate policies are undertaken. Even if the shadows of war should pass, the problem of instability will remain. A free

economy, if uncontrolled, tends towards more or less drastic fluctuations in prices and employment; and apart from relatively short-term swings, maladjustments of a secular sort may arise towards unemployment or inflation. Public policy must assume a stabilizing function in order to hold within tolerable limits departure from high employment and price stability.

No one can predict whether the bias in the years ahead will be towards inflation or deflation. Much depends on the outlook for peace and war and on the resulting level of military expenditures in the budget. In any case, there is little reason to expect that stabilizing policy will become unnecessary. While much has been said in recent years about the growing strength of built-in stabilizers, these remain to be tested; and contrary to current belief the inherent tendency toward instability may increase rather than decline as the economy develops and gains in complexity. At the same time, the social climate grows less tolerant toward the hardships of unemployment, and similar attitudes may develop with regard to inflation. It is thus of paramount importance for the success of free economic systems to develop compensatory measures which can maintain high employment when private economic activity threatens to slacken and which can maintain price-level stability when demand threatens to exceed available supplies.

Underlying Principles.

The basic logic of compensatory finance is simple enough, and may be summarized in a few rules:

1. If involuntary unemployment prevails, increase the level of demand so as to adjust aggregate expenditures upward to the value of output produced at full employment.

2. If inflation prevails, reduce the level of demand so as to adjust aggregate expenditures downward to the value of output measured in current, rather than rising, prices.

3. If full employment and price-level stability prevail, maintain the aggregate level of money expenditures to prevent unemployment and inflation.

The first rule is based on the propositions that fiscal policy may be used to increase the aggregate level of expenditures and that this will raise the level of employment. The level of demand may be raised in a number of ways. The government may undertake to increase its own expenditures on goods and services; it may take steps leading to an increase in the level of private expenditures is desired, this may be secured by raising transfer payments or reducing taxes, thus increasing the amount of income available for private use. If both public and private expenditures are to be increased, an increase in public goods and service expenditures will be combined with a lesser increase in transfers or a reduction in taxes. The required magnitude of adjustment under the various approaches will differ in order to obtain the same result. Some measures may serve to induce an independent increase in private expenditures, or have pump-priming effects; others may lower private investment. However this may be, total expenditures on currently produced goods and services can be increased through continued fiscal action, and such an increase can be obtained either by increasing government expenditures on goods and services

and/or by increasing disposable income available for private expenditures.

Under conditions of depression, an increase in expenditures ordinarily leads to an increase in real output and employment. Unemployment will be substantial, business will have excess capacity, and the supply of additional output will be highly elastic. If there is an increase in demand, supply will increase initially along a more or less horizontal schedule. In the process of approaching full employment, total supply will become less elastic, and increasing expenditures will be dissipated more, largely in rising prices. The level of prices may well begin to rise before reasonably full employment is restored; but this may happen whether the increase in employment is due to public policy or an autonomous recovery of private spending.

The second rule of compensatory finance relates to a situation where total expenditures exceed feasible output valued at current prices. Let us assume a situation of more or less full employment, so that the supply of total output is quite inelastic. An increase in the level of aggregate demand now produces inflation. Fiscal adjustments must be made that prevent a potential increase in the level of expenditures from coming about. The required adjustments are the inverse of those used in the depression case. Government expenditures on goods and services may be reduced, tax rates may be increased, and transfer payments may be cut.

Again, there is no doubt that fiscal adjustment can be made that will hold expenditures down. However, a number of difficulties may arise that render control of the inflation more troublesome than control of depression. The rates of taxation needed to reduce expenditures sufficiently to check inflation may be so high as to deter work incentives. More important, market structures and the behavior of power groups may be such that a basic conflict arises between the objectives of price-level stability and full employment. This difficulty again is not peculiar to fiscal measures but has become one of the major problems of stabilization at large.

Turning now to the third rule of compensatory finance, we note that maintenance of a high level of employment with price-level stability does not imply a constant level of aggregate demand. Stabilization policy in a growing economy does not mean that the level of income is to be stabilized. On the contrary, the policy must provide for an expansion of demand commensurate with the growing capacity to produce. It must be designed to result in a rate of growth that moves along an equilibrium path, so that high employment and price-level stability are maintained in the process of expansion. Whether it will always be possible to satisfy all three objectives remains for later consideration; it also remains to be seen how a choice can be made between alternative rates of equilibrium growth. We shall find that the problem of growth enters at the level of the Allocation and Distribution Branches as well as in connection with stabilization. For this reason, growth has not been assigned a separate branch; but the system may be readily adjusted to include it.

Nature of the Budget Plan.

In its simplest terms, the budget planning of the Stabilization Branch may be described as follows; First, the manager of the Stabilization Branch must appraise the level of aggregate expenditures that will be forth-

coming in the absence of such a budget. This includes expenditures on goods and services by the Allocation Branch as well as private expenditures on investment, consumption, and net exports. Since private expenditures depend on the distribution of income, the plans of both the Allocation and the Distribution Branches must be taken as given. Next, he must estimate the level of aggregate demand needed to maintain full utilization of resources at the present level of prices. Finally, he must compare this hypothetical level of demand with the level of expenditure forthcoming in the absence of a stabilization budget, and provide for taxes or transfer payments to compensate for the difference.

If expansion is needed, the Stabilization Branch will provide for the required level of transfer payments. It will operate with transfer payments because these do not involve decision over the allocation of resources. The Stabilization Branch will not raise the level of public expenditures on goods and services because this would interfere with the satisfaction of public wants as planned by the Allocation Branch. If contraction is needed, the Stabilization Branch will impose the required level of taxation. It will refrain from reducing goods and service expenditures, so as to avoid interfering with the satisfaction of public wants. In other words, countercyclical variations in the level of goods and service expenditures of government will be undertaken only to the extent that the Allocation Branch finds itself confronted with such fluctuations in the demand for the satisfaction of social wants.

Since the Stabilization Branch does not pursue distributional objectives, its transfer payments or taxes will be proportional to the proper distribution of income as determined by the Distribution Branch. Provided that the budget of the Allocation Branch is determined on the basis of individual preferences, taxes paid to, and benefits derived from, the budget of the Allocation Branch will not be deducted in defining the proper state of distribution.

By the very nature of the stabilization function, the budget of the Stabilization Branch will include at any one time either taxes (if the level of expenditure is otherwise excessive) or transfers (if demand is otherwise deficient). It will never include both taxes and transfers. The budget of the Stabilization Branch, if it exists at all, will be a surplus or a deficit budget. It will be in balance only in a situation that requires both taxes and transfers to stay at the zero level; that is, a situation where private expenditures plus expenditures by the Allocation Branch are at just the right level in the absence of a stabilizing budget policy.

The function of taxation in the context of the stabilization budget is only to prevent inflation, just as the function of transfers is only to prevent deflation. Thus, we have a third function of the revenue-expenditure process, quite distinct from those observed in the Allocation and the Distribution Branches.

Monetary and Debt Policy .

Fiscal adjustments are not the only means by which economic stabilization may be secured, Other approaches such as monetary and debt policies, or possibly wage and price controls, must be considered as well. Just as the

budgetary function of the Allocation Branch must be seen in the broader context of all public policies aimed at adjustments in allocation, so the budgetary function of stabilization must be seen in the broader context of other stabilization policies. The budgetary action required by the Stabilization Branch thus depends upon the restrictive or expansionary nature of other measures that are taken. The more that is done by other techniques such as monetary and debt policy, the less need be done through budgetary action. In this way other techniques of stabilization policy may be readily built into our framework.

For purposes of this study, the array of other approaches to stabilization enters primarily in the form of monetary and debt policy. These policies offer the major alternative to stabilization by budget policy, and they are linked directly to budget measures that involve a deficit or surplus. Since the budget of the Stabilization Branch is necessarily a deficit or a surplus budget, it must be decided how to finance the deficit or how to dispose of the surplus. In either case, there results a change in the structure of claims, which in turn may affect the level of private spending. The most effective solution is through the creation or the destruction of money. This follows from the hypothesis that investment is related inversely to interest and that private consumption is related positively to the value of total claims held.

If tax rates are raised and the additional proceeds are withheld, the resulting effect upon the level of private expenditures will be restrictive in various respects. Not only will consumption expenditures decline because disposable income has been reduced (the income effect on consumption) but they may decline even further because consumer holdings of money claims are reduced (the asset effect on consumption). Moreover, investment may contract because the ratio of money supply to debt supply has been reduced, thus increasing the rate of interest (the claim effect on investment). If the surplus funds are not retained but used to pay off debt, the income effect on consumption will be the same; the asset effect on consumption will prove more questionable, as it now operates through a reduction in the holding debt; and the claim effect on investment will be reversed, since the withdrawal of public debt depresses the rate of interest, thus inducing investment. The net result, therefore, will tend to be less restrictive.

For similar reasons, expansionary action is more effective if the additional expenditures are financed out of new money than if they are financed out of borrowed funds. If new money is used, all effects are expansionary. More income is received, more claims are held, and the mix of outstanding claims has become more liquid. If the transfers are financed by borrowing, the asset effect on consumers is again positive, since total holdings of money and public debt are increased; but the claim effect on investment becomes restrictive, since the asset mix has become less liquid. Thus, the net expansionary effect is weakened.

Similar considerations hold with regard to policies of debt management. The choice in meeting deficit or surplus is not only between money and debt finance but also between various forms of debt finance, involving different types of obligations. Moreover, the problem of debt management is not limited to decisions that relate to changes in the total volume of claims but includes

the much broader problem of possible changes between types of claims within a given total. It follows from all this that no sharp line of distinction can be drawn between fiscal and monetary policies for stabilization. In dealing with the former, considerable attention must also be paid to the latter.

Since stabilization may be approached by alternative routes involving different fiscal measures or combinations of fiscal and debt or monetary measures, there remains the question of which policy or which policy mix should be chosen. This decision must be made partly in terms of administrative feasibilities, but they do not decide the whole issue. Consideration must be given as well to important collateral effects - effects that may differ under various approaches. They may bear upon the efficiency of resource use, the state of distribution, or the rate of growth, thus rendering the choice of optimal policy a difficult matter.



CHAPTER 2

INTERDEPENDENCE AND CONSOLIDATION OF SUBBUDGETS

Thus far we have considered the general problems encountered in preparing the budget plans for each of the three branches. We now turn to a more specific statement of the subbudgets -their interdependence and consolidation into a single net budget plan.

A. ILLUSTRATION OF A HYPOTHETICAL BUDGET

While the subplans of the three branches pursue distinct objectives, they nevertheless comprise an interdependent system. This we have emphasized already by instructing the manager of each branch to assume that the managers of the other branches will do their respective jobs. The formulation of the three budgets in an interdependent system may be shown best by a simple model of equations, but we shall begin with a numerical illustration.

To simplify matters, the illustration of Table 2-1 involves a community consisting of two individuals, X and Z. We begin with the situation shown in case 1. Total expenditures or sales receipts in the economy equal \$1,000, including \$800 of sales to private buyers and \$200 of sales to government. To simplify matters, we assume that earnings from all sales are divided so as to give 30 per cent to X and 70 per cent to Z. We thus obtain the distribution of total earnings shown in lines 1 to 3, where X receives 30 per cent and Z receives 70 per cent. Total earnings equal \$1000 which is the full-employment income at prevailing prices.

In dealing with the subbudget, let us begin with the Allocation Branch. Since we are confronted with an interdependent system, any other sequence will do as well. If social wants are to be satisfied in accordance with individual preferences, outlays will depend on how much X and Z wish to spend for this purpose. This depends on their preferences and on the amounts of income available to them. These amounts are shown in line 5. They include earnings (line 3), taxes or transfers of the Distribution Branch (line 13), and taxes or transfer of the Stabilization Branch (line 16). Both lines 13 and 16 are given for purposes of planning the budget of the Allocation Branch so that line 5 may be computed readily.

Let us now overlook all the difficulties noted in the preceding chapter and proceed on the heroic assumption that X wishes to spend 10 per cent of his income for the satisfaction of public wants, while Z wishes to spend 20 percent. They are billed the corresponding amounts of tax, as shown in line 8. The proceeds are used to purchase goods and services for the satisfaction of social wants (line 9). These expenditures are not reflected as private receipts in line 9 because they are recorded already as earnings in line 2. We assume that the outlays of the Allocation Branch do not involve capital formation, so that the question of loan finance does not arise. As shown in line 10, the budget of the Allocation Branch is balanced.

We now turn to the budget of the Distribution Branch. The receipt

TABLE 2-1 BUDGET DETERMINATION AND CONSOLIDATION (*)
(In Dollars)

| | CASE 1 | | | CASE 2 | | | CASE 3 | | | BUDGET |
|--|-------------|-------|-------|-------------|-------|-------|-------------|-------|-------|--------|
| | INDIVIDUALS | | | INDIVIDUALS | | | INDIVIDUALS | | | |
| | BUDGET | | | BUDGET | | | BUDGET | | | |
| | X | Z | X+Z | X | Z | X+Z | X | Z | X+Z | |
| Private sector: | | | | | | | | | | |
| 1. Earnings from sales to private buyers (6 - 7) | 240 | 560 | 800 | 211 | 493 | 704 | 228 | 533 | 761 | |
| 2. Earnings from sales to government (9) | 60 | 140 | 200 | 89 | 207 | 296 | 72 | 167 | 239 | |
| 3. Total earnings (1 - 2) | 300 | 700 | 1000 | 300 | 700 | 1000 | 300 | 700 | 1000 | |
| 4. Available income after-distributional adjustment (3 - 13) | 400 | 600 | 1000 | 400 | 600 | 1000 | 300 | 700 | 1000 | |
| 5. Available income, final amount (3 - 13 - 16) | 500 | 750 | 1250 | 369 | 554 | 923 | 420 | 981 | 1401 | |
| 6. Private expenditures on investment | | | 150 | | | 225 | | | 75 | |
| 7. Private expenditures on consumption | 350 | 300 | 650 | 258 | 221 | 479 | 294 | 392 | 686 | |
| Budget of the Allocation Branch: | | | | | | | | | | |
| 8. Taxes | - 50 | - 150 | - 200 | - 74 | - 222 | - 296 | - 42 | - 197 | - 239 | + 239 |
| 9. Purchases..... | | | 200 | | | 296 | | | | - 239 |
| 10. Balance (8 - 9) | - 50 | - 150 | - 200 | 0 | - 74 | - 222 | 0 | - 197 | - 239 | 0 |
| Budget of the Distribution Branch | | | | | | | | | | |
| 11. Taxes | | - 100 | - 100 | + 100 | - 100 | - 100 | + 100 | | | |
| 12. Transfers | + 100 | + 100 | + 100 | + 100 | + 100 | + 100 | | | | |
| 13. Balance (11 - 12) | + 100 | - 100 | 0 | 0 | + 100 | - 100 | 0 | 0 | | |
| 14. Taxes..... | | | | | - 31 | - 46 | - 77 | - 77 | | |
| 15. Transfers | + 100 | + 150 | + 250 | + 250 | | | + 120 | + 281 | + 401 | - 401 |
| 16. Balance (14 - 15) | + 100 | + 150 | + 250 | - 250 | - 31 | - 46 | - 77 | + 77 | + 120 | + 281 |
| Net Budget: | | | | | | | | | | |
| 17. Taxes, total | - 50 | - 250 | - 300 | + 300 | - 105 | - 368 | - 473 | - 473 | - 42 | - 197 |
| 18. Transfers, total | + 200 | + 150 | + 350 | + 350 | + 100 | + 100 | + 100 | + 120 | + 281 | + 401 |
| 19. Purchases (9) | | | 200 | | | 296 | | | | - 239 |
| 20. Balance (17 - 18 - 19 -) | + 150 | - 100 | + 50 | - 250 | - 5 | - 368 | - 373 | + 77 | + 78 | + 84 |

(*) The figures shown in this table are derived from the system of equations given in section B of this chapter; certain simplifications have been made, however.

For case 1, we assume that $Y = 1000$, $j = 0.4$, $m = 0.3$, $n = 0.3$, and $I = 150$. To simplify matters, eqs. (2-2) to (2-5) are replaced by the simple assumption that $T_a^x = 0.1 (E^x - T_d^x - T_s^x)$ and that $T_a^z = 0.2 (E^z - T_d^z - T_s^z)$. Also, eqs. (2-12) and (2-13) have now been replaced by simple assumption that $C^x = 0.7 (E^x - T_d^x - T_s^x)$ and that $C^z = 0.4 (E^z - T_d^z - T_s^z)$.

For case 2, we assume $I = 225$, $T_a^x = 0.2 (E^x - T_d^x - T_s^x)$, and $X_a^z = 0.4 (E^z - T_d^z - T_s^z)$. Otherwise.

For case 3, we assume $I = 75$ and $J = 0.3$. Otherwise, the assumptions are as in case 1. Were items do not.....

of earnings in the market, as shown in lines 1 to 3, is given for purposes of planning by the Distribution Branch. Of total earnings of \$1,000, 30 per cent goes to X and 70 per cent goes to Z. Let us suppose, now, that it has been decided to raise X's share to 40 per cent, putting aside again the difficulties that arise in reaching such a decision. The tax and transfer measures required to accomplish this redistribution are shown in lines 11 to 13. If line 13 is added to line 3, we obtain the available income shown in line 4. This adjusted position conforms to what we have assumed to be the proper state of distribution. As seen in line 13, the budget of the Distribution Branch is in balance. Payments and receipts cancel out for X and Z as a group.

There remains the budget of the Stabilization Branch. From an analysis of available resources, the full-employment output or income at prevailing prices is found to equal \$1,000. To obtain full employment, \$1,000 must be spent on current output, including private outlays on consumption and investment as well as goods and service expenditures of the Allocation Branch. Suppose, now, that private investment is independent of income and budget policy and is fixed at \$150, as shown in line 6. There is no need to specify how this total is divided between X and Z. Since goods and service expenditures by the Allocation Branch have been determined at \$200, private outlays on consumption must equal $\$1,000 - \$200 - \$150 = \650 .

The manager of the Stabilization Branch now determines the amount of disposable income needed to call forth this level of private consumption and imposes taxes or pay transfers to provide for it. To simplify matters, let us assume that past experience shows that X will consume 70 per cent and that Z will consume 40 per cent of his disposable income. We may then determine what consumption would be in the absence of any action by the Stabilization Branch. By applying these ratios to the adjusted available incomes, as shown in line 4, we find that total consumption would amount to \$520. This falls \$130 short of the required level of \$650. The Stabilization Branch, therefore, must make transfer payments so as to raise consumption by \$130.

We know that 30 per cent of these payments must go to X and 70 per cent to Z, so as to leave the "proper" state of distribution undisturbed. We also know that X will spend 70 per cent of his transfers, while Z will spend 40 per cent. From this we can conclude that total transfers of \$250 are required. The resulting payments to X and Z are shown in line 16. The resulting total available income is recorded in line 5. The corresponding level of consumption expenditures is shown in line 7, and total expenditures are at the desired level of full employment.

As shown in line 16, the budget of the Stabilization Branch records a deficit equal to its transfers. X and Z together show a net receipt of this amount.

The reader should keep in mind that this model is based on highly simplifying assumptions. The difficulties involved in determining social wants and the proper state of distribution have been assumed away. The relationships by which the level of income is determined have been oversimplified, and functional relationships that are not easily determined have been taken as given. These simplifications will be dropped as our study proceeds. Now we are interested only in the basic principle of simultaneous planning of subbudgets, and this principle continues to apply even if more complex systems are introduced.

Thus, investment may be made a dependent variable, asset effects on consumption may be allowed for, and liquidity preference may be introduced. All this complicates the picture, but the general nature of our problem remains the same.

The planning of the subbudgets has thus been completed, and the objectives of all three branches have been met. The manager of the Allocation Branch is satisfied that social wants have been provided for and that the cost has been allocated in accordance with individual preferences; the manager of the Distribution Branch is satisfied that the proper distribution of income has been established; and the manager of the Stabilization Branch is satisfied that aggregate demand has been set so as to maintain full employment and price-level stability.

Turning now to the implementation of the subbudgets, it appears that the goods and service expenditures of the Allocation Branch must be carried out as provided for in its budget. All other items may be submitted to a clearing procedure. Consider, for instance, the case of X, who is to pay \$50 in taxes to the Allocation Branch, to receive \$100 in transfers from the Distribution Branch, and to obtain another \$100 in transfers from the Stabilization Branch. Matters will be simplified by paying him a net transfer of $\$100 + \$100 - \$50 = \150 . In the case of Z, by a similar procedure we arrive at a net tax obligation of \$100.

This consolidation is shown in lines 17 to 20 of Table 2-1. We find that X receives net transfers of \$150, while Z pays net taxes of \$100. The excess of transfer over taxes is \$50. The net budget, as shown in line 20 runs a deficit of \$250, obtained by adding the excess of transfers over taxes to the goods and service expenditures of the Allocation Branch. The deficit in the net budget, moreover, equals the deficit of the Stabilization Branch, since the budgets of the other two branches are in balance. Finally, the deficit equals the excess of available income (line 5) over the sum of private expenditures (lines 6 and 7) and public expenditures on goods and services (line 9).

These numerical results follow from our particular assumptions, and a different picture could readily be obtained by varying them. In case 2, we double the fraction of income spent on the satisfaction of public wants and raise private investment by 50 per cent. In case 3, we reduce private investment by 50 per cent and omit distributional adjustments. Otherwise the assumptions of case 1 are held unchanged. The result in case 2 is a situation where both X and Z are subject to tax payments in the net budget, which now incurs a surplus. In case 3, we obtain a situation where both X and Z receive transfers in the net budget, and a large deficit is needed. Case 2 could be taken to reflect a war or a high-level defense economy or a boom situation; and case 3 could be taken to reflect a state of potentially deep depression. Other illustrations may be added to show how various objectives in the subbudgets can combine to different patterns of net budget, but the table should suffice to illustrate the principle involved.

B. A SIMPLE MODEL

We now turn to a more precise statement of the problem in terms of a simple system of interdependent equations. We retain our assumption that there are two taxpayers and only one type of public service, and make use of

the following symbols:

Parameters

- Y - income at full employment
- I - expenditures on private investment
- U_a - cost of goods provided for by the Allocation Branch
- U_p - cost of goods supplied to satisfy private wants
- m - fraction of earnings from sales to private buyers, going to X
- v - fraction of earnings from sales to government, going to X
- j - fraction of available income under proper distribution going to X

Variables

- E - factor earnings
- C - private consumption
- G - goods and service expenditures of Allocation Branch
- T - tax payments (-) or transfer receipts (-)
- B - budget balance, surplus (-) and deficit (-)
- p_p - price of goods purchased privately
- p_a^x - price payable by X for goods provided by the Allocation Branch
- p_a^z - price payable by Z for goods provided by the Allocation Branch

Throughout, we shall use superscripts x and z to indicate individuals X and Z respectively, and subscripts a, d, and s to indicate transactions by the Allocation, Distribution, and Stabilization Branches, respectively. Subscript n will be used to refer to transactions in the net budget.

We may now state the conditions that must be met by the budget plans of the three branches, holding constant in each case the variables determined in the budgets of the other two branches. Thereafter, the three subbudgets will be consolidated into a net budget.

The Subbudgets.

The budget of the Allocation Branch must meet the following conditions:

$$G = T_a^x + T_a^z \quad (2-1)$$

$$T_a^x = T_a^x \left[(E^x - T_d^x - T_s^x), \frac{p_a^x}{p_p} \right] \quad (2-2)$$

$$T_a^z = T_a^z \left[(E^z - T_d^z - T_s^z), \frac{p_a^z}{p_p} \right] \quad (2-3)$$

$$\frac{p_a^x}{p_p} = \frac{p_a^x}{p_p} \left(U_a, U_p, \frac{T_a^x}{T_a^z} \right) \quad (2-4)$$

$$\frac{p_a^z}{p_p} = \frac{p_a^z}{p_p} \left(U_a, U_p, \frac{T_a^z}{T_a^x} \right) \quad (2-5)$$

Holding constant the values of T_d^X , T_d^Z , E^X , and E^Z as determined by the budget of the Distribution Branch, and the values of T_s^X and T_s^Z as determined by the budget of the Stabilization Branch, the above five equations permit us to determine the values of G , T_s^X , T_s^Z , P_a^X/P_p , and P_a^Z/P_p .

According to equation (2-1), total expenditures for the satisfaction of public wants are determined as the sum of the contributions of X and Z. The budget of Allocation Branch is in balance, assuming that the social wants provided for are in the nature of current consumption. The contributions of X and Z are determined, according to equations (2-2) and (2-3), as functions of available income, of the relative prices of goods provided for by the Allocation Branch, and of goods purchased privately. (1) Available income is defined as earnings minus taxes (or plus transfers) of the Distribution and the Stabilization Branches. Taxes imposed by the Allocation Branch are not deducted, since they are the very item that is to be determined.

Note that the prices of public services are not the same for X and Z. While both share in the same amount of public services, the allocation of the unit cost of such services between them depends upon their respective valuations of social wants. The nature of these wants is such that differences in effective demand by different consumers must be reflected in different prices. At the same time, both X and Z pay the same price in their private purchases. Thus they are confronted with different sets of relative prices when choosing between goods purchased privately and goods provided for by the Stabilization Branch. The respective price ratios are determined in equations (2-4) and (2-5). They are functions of costs as well as of the shares in which X and Z respectively contribute to the outlays of the Allocation Branch. (2)

 (1) If public wants cannot be determined on the basis of individual evaluations, the taxes of the Allocation Branch must be allocated by some pattern determined on an authoritarian basis. Suppose this is proportionate to the "proper" state of distribution. At the Allocation Branch level, eqs. (2-2) and (2-4) are replaced by

$$T_a^X = j(T_a^X + T_a^Z)$$

The three equations for the Distribution Branch remain unchanged. Those for the Stabilization Branch remain unchanged as well, with the exception of (2-12) and (2-13). Equation (2-12) now becomes

$$C^X = C^X (E^X - T_a^X - T_d^X - T_s^X)$$

with corresponding adjustments for (2-13). We thus have three equations less. The two price ratios previously counted as unknown drop out, as does G , which is now given by authoritarian decision.

(2) To simplify matters, we assume that goods produced to satisfy social and private wants are both produced under conditions of constant unit cost. Introduction of variable unit costs requires the addition of cost functions and substitution of absolute values for tax ratios in eqs. (2-4) and (2-5).

The budget of the Distribution Branch must meet the following conditions:

$$E^X = m(C + I) + vG \quad (2-6)$$

$$E^Z = Y - E^X \quad (2-7)$$

$$E^X - T_d^X = j(E^X + E^Z) \quad (2-8)$$

$$T_d^X = - T_d^Z \quad (2-9)$$

Holding constant the value of G as determined by the Allocation Branch, and of C as determined by the Stabilization Branch, the above four equations permit us to determine the value of E^X , E^Z , T_d^X , and T_d^Z .

The Distribution Branch determines what fraction of total income X and Z are to receive and provides for the required transfers of taxes. According to equation (2-6), the share of X in total earnings is given as a function of the allocation of the product between goods and services supplied to satisfy social and private wants. This function, here represented by the simple coefficients m and v , depends upon the resources supplied by X and Z and the production functions of goods supplied to meet the two types of wants. Equation (2-7) shows that the sum of factor earnings, including the shares of X and Z , is equal to income. Equation (2-8) shows the tax on X or the transfer to X needed to set his share at the desired fraction j . If a transfer is made, T is negative and the term $- T_d^X$ becomes a positive amount.

Since outlays for payments to the Allocation Branch are considered a use of income, the Distribution Branch does not deduct taxes paid to the Allocation Branch in defining income for distributive purposes. Taxes or transfers of the Stabilization Branch may be left out of consideration as well, since they are proportional to income as adjusted by the Distribution Branch. As shown in equation (2-9), the tax on X is equal to the transfer to Z , or vice versa, the budget of the Distribution Branch being again in balance.

The budget of the Stabilization Branch, finally, must meet these conditions:

$$Y = G + C + I \quad (2-10)$$

$$C = C^X + C^Z \quad (2-11)$$

$$C^X = C^X \left[(E^X - T_d^X - T_s^X), \frac{P_a^X}{P_p} \right] \quad (2-12)$$

$$C^Z = C^Z \left[(E^Z - T_d^Z - T_s^Z), \frac{P_a^Z}{P_p} \right] \quad (2-13)$$

$$T_s^X = j(T_s^X + T_s^Z) \quad (2-14)$$

Holding constant the values of G , $\frac{P_a^X}{P_p}$ as determined by the Allocation Branch, and the values of T_d^X and T_d^Z as determined by the Distribution Branch, these five equations permit us to determine C , C^X , C^Z , T_s^X , and T_s^Z .

and $\frac{P_a^Z}{P_p}$

As shown in equation (2-10), full employment income Y is equal to the total of goods and service expenditures, including purchases by the Allocation Branch as well as private consumption and investment. According to equation (2-11), total consumption expenditures for the satisfaction of private wants equals the sum of consumption expenditures by X and Z. In equations (2-12) and (2-13) such expenditures are shown as functions of available income and of the relative prices of goods needed in the satisfaction of public and of private wants. Available income is defined again as earnings minus taxes paid to the Distribution and Stabilization Branches, plus transfers received from them. It is thus similar to the concept of available income used in equations (2-2) and (2-3), taxes of the Allocation Branch being again disregarded. Equation (2-14) shows that taxes or transfers of the Stabilization Branch must be in line with the proper distribution of income as determined by the Distribution Branch. The policy of the Stabilization Branch, as noted before, should be distributionally neutral.

Thus the substance of the budget determination is completed. We have, in all, fourteen equations that permit us to determine our fourteen unknowns, that is, G , T_s^X , T_s^Z , P_a^X / P_p & P^Z / P_p , E^X , E^Z , T_d^X , T_d^Z , C , C^X , C^Z , T_a^X , and T_a^Z .

Consolidation.

There remains the more or less clerical task of consolidating these subbudgets into a single net budget plan. Adding together the various taxes and transfers, we obtain the following three equations:

$$T_n^X + T_n^Z - G = B \quad (2-15)$$

$$T_n^X = T_a^X + T_d^X + T_s^X \quad (2-16)$$

$$T_n^Z = T_a^Z + T_d^Z + T_s^Z \quad (2-17)$$

Equation (2-15) defines the balance (+ for surplus, - for deficit) in the consolidated budget. This balance equals net tax receipts (tax receipts minus transfers) minus expenditures by the Allocation Branch. Equations (2-16) and (2-17) define net tax payments (+) or transfers (-) for X and Z as the sum of their respective taxes and transfers under the three subbudgets. Since all values except T_n^X , T_n^Z and B have been determined by our preceding set of equations, these additional unknowns may be found from equations (2-15) to (2-17).

Some Complications.

The above model is based on highly simplified assumptions regarding not only the determination of social wants and distributional objectives but also the relationship by which income is determined. While nothing would be gained for present purposes from a more complex model, let us note briefly certain difficulties relating to the homogeneity of the G terms in equations (2-1), (2-6) and (2-10). The term G in equations (2-6) and (2-10) expresses

goods and service expenditures of government as included in the national income accounts. The term G in equation (2-1) expresses the absorption of resources in the supply of goods and services for the current satisfaction of social wants. The two concepts may differ for various reasons.

Purchases by the Allocation Branch may involve existing assets rather than current output. In this case, they will not appear in the G term of equations (2-6) and (2-10), but they may be paid for by taxes and be included in the G term of equation (2-1). Further differences arise in the case of capital outlays by the Allocation Branch. Since the G term of equation (2-1) records the cost of public services consumed during the budget period, capital outlays must be spread over the lifetime of the asset. The G term of equation (2-1), therefore, may be smaller or larger than that of (2-6) and (2-10), where the capital outlay is included at the time when it is made. Further complications develop in the case of public subsidies. Subsidy payments by the Allocation Branch, or operation of government enterprise at a loss, involve the purchase of goods and services for the satisfaction of social wants and are properly included in the G term as used in equation (2-1) and (2-6); but they are not part of G as defined in connection with (2-10). These and other complications must be kept in mind; in a more elaborate model they would have to be taken care of.

Next, there is the more basic difficulty that the process of evaluation which applies to the case of public wants differs from that which applies to private wants. Yet, our model implies that the values of C and I , as measured in terms of market price, are homogeneous with the value of G , as measured by cost. Thus, there remains the general problem of valuation of public services in the social accounts - a problem that will be examined in some detail later on. Finally, the government may engage in adjustments, such as controls over imperfections in competition, where no transfer of resources to the satisfaction of social wants is involved and no corresponding value of G results. Such adjustments are not accounted for, or are recorded imperfectly, in the above system. Notwithstanding these omissions and simplifications, the system serves to bring out the essential problems to be met in connection with the different budget functions.

C. FISCAL EFFICIENCY AND FISCAL POLITICS

The administrative case for budget consolidation is self-evident, since it would be clumsy and wasteful to operate three separate sets of budget transactions when the very same objectives can be accomplished in consolidated form. But this consolidation is a matter of administrative expediency only; we must not lose sight of the basic principle that the consolidated budget has no rationale on its own and is nothing but a result obtained by the clearing of distinct subbudgets, each of which involves quite different considerations and planning objectives.

Consolidation, to be sure, presents no dangers in our imaginary model of efficient budgeting. It is an administrative device, an uninteresting clerical operation undertaken after each of the subbudgets has been formulated on its own merits. But in the real world the matter is regarded differently;

there the tendency is to view the budget in consolidated terms from the outset, and thus to confuse the underlying issues in the planning stage.

Compensatory Adjustments and the Allocation Branch.

In our normative model, expenditures of the Allocation Branch are taken as given for purposes of the Stabilization Branch, just as the condition of full employment and price-level stability is given for purposes of the Allocation Branch. The Stabilization Branch, accordingly, is restricted to tax and transfer operations; and the allocation of resources between the satisfaction of public and private wants must be planned on the assumption that all available resources are utilized fully.

In this efficient system, individual X, who places little value on the satisfaction of public wants and favors a small budget for the Allocation Branch, may consistently advocate compensatory action to check depression. Similarly, Z, who favors a large budget for the Allocation Branch, may consistently argue for vigorous compensatory action in a boom. By supporting anti-depression action, X argues for transfer payments; he contemplates increased service programs only if, and to the extent that, there has been a bona fide increase in the demand for the satisfaction of social wants. By supporting anti-inflation action, Z favors higher taxes and no cutbacks in service programs unless justified by a reduced demand for the satisfaction of social wants. Putting it differently, there is no place in such a system for artificial ditch-digging programs. Such measures, to be sure, are better than unemployment, but they are inferior to transfer payments that lead to the employment of resources that satisfy the more important private wants. By the very same token, there is no excuse for cutting useful public services to curtail demand, since demand may be curtailed by raising taxes.

The reader will recognize readily that this is not precisely what happens in practice. The enthusiasm for budgetary measures to check depression in the thirties was considerably greater among those who emphasized the satisfaction of social wants; and the case for budgetary measures in the current inflation setting is argued with more enthusiasm by those who favor an incidental cutback in social services. These relationships are of great interest and are crucial to an understanding of fiscal politics, but they do not contribute to an efficient policy of budget determination.

Efficient policy must recognize the basic distinction between the satisfaction of social wants as a matter of allocation, on the one side, and the stabilizing action of budget policy as a transfer measure on the other. At the same time, situations may arise where countercyclical variations in goods and service expenditures of the government are justified. Countercyclical variations in the timing of public works may be desirable where unemployment is of a regional rather than a national character, or in order to avoid the waste of excess capacity caused by temporary dislocation. Moreover, we shall note that cyclical fluctuations may involve a countercyclical shift in the demand for services aimed at the satisfaction of social wants. For these and other reasons, the activities of the Allocation Branch may be influenced to some degree by the requirements of the Stabilization Branch, and some countercyclical fluctuation of public services will be in order. Nevertheless, the

basic principle remains - that the stabilization function may be performed without inferior resource allocation - that is to say, without causing an excessive or a deficient level of public service.

Compensatory Adjustments and the Distribution Branch.

Similar considerations apply to the relation between the Stabilization and the Distribution Branches. In the efficient system, the desired adjustments in distribution are applied to the distribution of earnings at a full-employment level of income, and the tax or transfer policies of the Stabilization Branch are distributionally neutral. This is the case, even though changes in the state of distribution may have repercussions upon the level of demand and upon the required budget of the Stabilization Branch.

Suppose that, under conditions of depression, regressive taxes are more deflationary per dollar of yield than progressive taxes. If it is desired to conduct compensatory policy with a minimum deficit, progressive taxes are required. Thereby compensatory action is rendered attractive to those who favor progression and unattractive to those who do not. Other objectives may lead to different pairings. In the efficient budget, such distortions are not permitted to occur. Distributional correctives are applied by the Distribution Branch without reference to Stabilization; and the Stabilization Branch makes its proportional transfers or imposes its proportional taxes at whatever level may be required, in view of the resulting level of private expenditures.

Again, we can recognize how the mixing of objectives may enter the politics of fiscal policy. The case against consumption taxes in the thirties was made with particular emphasis by those who not only favored compensatory policy but who sympathized with some degree of income redistribution. And the post-war case against progressive taxes is made with particular vigor by those who not only favor growth and price-level stability but whose distributional values are such as to oppose equalizing taxes.

Distributional Considerations and the Allocation Branch.

Similar consideration, finally apply to the relationship between the Allocation and the Distribution Branch. In our efficient system, the degree of income redistribution is determined independently of the scope of resource allocation for the satisfaction of social wants; and the distribution of taxes imposed by the Allocation Branch is a matter of income elasticity of social wants, not of redistribution. In practice, the two issues are mixed with each other. The degree to which distributional objectives are feasible to attain may depend upon the level of public services, and the level of public services may be determined by distributional considerations rather than by a bona fide demand for the satisfaction of social wants.

The direction of bias will differ with the state of fiscal development. When the budget is still small, relative to national income, the degree of equalization will be a direct function of the level of resource allocation to social wants - that is, a function of the level of public goods and service

expenditures. The voters can expect new services to be financed by additional taxes on the "rich", and the voting coalitions will form accordingly. The poor will favor a large budget for the Allocation Branch, since little or no net cost is involved; the rich will oppose it, since the unit price of additional services is excessively high. In an early state of development, the poor will tend to outnumber the rich, and the bias will be toward a budget for the Allocation Branch which exceeds that permissible in the efficient system.

As this development continues and the relative weight of the budget increases, the high incomes are absorbed more and more in taxation. The tax base begins to extend downward; the marginal dollar in the tax base is now located at the lower rather than the upper end of the scale. The marginal cost of additional services becomes excessively expensive for the lower-income groups, while the higher-income groups tend to maintain their opposition to a large budget. The weight of voter opinion shifts, and we arrive at a situation where the bias tends to be towards an excessively small budget for the Allocation Branch.

Whatever the merits of this particular diagnosis, a proper separation of functions not only serves to classify the requirements of efficient budget planning but also offers a key to an understanding of the politics of fiscal policy. With all this, we do not wish to suggest that various issues of public policy may not be combined in the efficient system and voted upon in conjunction. On the contrary, we shall find that reaching an agreement on issues is facilitated precisely where the proper combinations can be devised; and that the constructive contribution of the politician lies in his ability to assemble such combinations. At the same time, this combining of inherently independent issues to secure agreement differs sharply from a linking of issues that is accomplished not by choice or bargaining but by failure to understand that, in fact, the issues may be handled independently. It is this latter practice that gives rise to the inefficiencies dealt with here.
