

# Chapter 2 The Structure of the Budgetary Process<sup>1</sup>

## Demand and Supply in the Public Sector

Market economies are characterized by the public protection of private property rights. In such economies, goods can be alienated only on the basis of mutual agreement between proprietors. Usually such alienation involves exchange between suppliers and demanders, where suppliers are households that want to sell certain economic goods at a certain price and demanders are households that want to purchase certain economic goods at a certain price. The exchange decision is a contract that specifies quantities and sums of money to be transferred. The term ‘market mechanism’ is commonly used to denote the rule that relates the result of a contract or a set of contracts to the characteristics of demand and supply.

However, many households in market economies consist of more than a single individual. As far as the private sector is concerned, one can think of business corporations, families, foundations and association. As far as the public sector is concerned, one can think of governments and incorporated public agencies. Since such a collective household can own property, it needs a mechanism of internal coordination in order to express its demand or supply in markets.

The term ‘budget mechanism’ is commonly used to denote the rule that relates the characteristics of demand or supply by a collective household to the preferences of its members. Note that the budget mechanism is not an alternative for the market mechanism, but rather a necessary complement to it for the case a household comprises more than a single individual.

In order to coordinate its members, a collective household needs decision rules that specify how binding collective decisions are to be made. For this purpose, these rules must not only indicate how collective decisions are to be derived from sets of individual decisions (for instance, by establishing an ‘absolute majority’), but also whose individual decisions have to be taken into account to begin with. In the latter area, two classes of actors must be identified.

- 1) Those whose individual decisions carry a certain weight in the counting procedure specified by the decision rule
- 2) Those whose individual decisions do not enter the counting procedure at all, although

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<sup>1</sup> This part draws heavily from Dirk-Jan Kraan (1996).

they are bound by the result

The members of the former class make up the decision-making body or 'authority'.

Participation in collective decision-making can be wide or narrow. A referendum is an example of a decision in which the entire electorate participates. Most decision-making competences in governments, however, are attributed to relatively small bodies (ranging from two to perhaps 600 members) or to single officers. Whether participation is wide or narrow, if we want to explain collective decisions, we have to look at the underlying individual decisions and to study the working of decision rules.

Individual decisions as contributions to collective decisions are known as 'votes'<sup>2</sup>. It must be emphasized at the outset that a 'vote' in this sense is a theoretical concept that should not be identified with the practical act of issuing a vote. Incidentally, voting takes place by raising hands, or standing up, or by pronouncing 'yeas' and 'nays', but by far the largest part of votes is expressed by silent acquiescence when the chairman of a body states a conclusion.

A decision rule of particular interest is the one that reduces participation to the absolute minimum of a single officer. The decisions of the officers who decide by this rule, regardless of whether it concerns the President of the United States or a humble civil servant, are collective decisions, although they are taken by single person.

Until the beginning of the 1970s government was mainly conceived in economic literature as a consumption household. This conception eliminated the need for a separate theory of public supply. Public economics basically consisted of a theory of public demand revelation in external markets<sup>3</sup>. This view was challenged by Niskanen's seminal 1971 study on the economic theory of bureaucracy (Niskanen, 1971). In that book, a model of public decision-making was developed that treated public agencies as separate economic households engaged in selling services to political committees, representing the consumers. This approach amounted to the conceptual breaking up of the governmental household into a number of production households on the one hand and a consumption household on the other. Niskanen's view implied the existence within government of internal markets where 'bureaux' were selling services to political 'sponsors'.

Niskanen's view does not lead to a theory of collective decision-making. Essentially, his

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<sup>2</sup> A 'vote' in the sense of an individual decision should not be confused with a 'vote' in the sense of a 'round of voting'. Note also that in the latter sense the term is not synonymous with 'collective decision': often more than one round of voting is needed in order to establish a collective decision. More will be said about this matter in the section on procedural rules in this chapter.

<sup>3</sup> In spite of its title, Buchanan's important work, *The Demand and Supply of Public Goods* (1968) is still representative of this tradition. According to current terminology it is devoted exclusively to the theory of public

proposed theory of bureaucracy is concerned with market decision-making. By conceiving public agencies as separate economic households, Niskanen had, as it were, transformed hierarchical relations between authorities of the same household into contractual relations between authorities of different households. This conception enabled Niskanen to apply a known microeconomic theory (that of discriminating monopoly in private sector markets) to the transactions in the internal markets of government and to shed a new light on some important aspects of the allocative and distributive process within the public sector.

## Budgetary Decisions

The term ‘budgetary decision’ will be used here to denote a collective decision by a competent authority of a government that authorizes expenditures from public funds or revenues to public funds. If a government takes part in a capitalistic economic system there are four kinds of budgetary decisions:

- 1) The purchase and sale of production factors and products from and to other households
- 2) Subsidies and regulatory levies, such as pollution fees, on goods traded by other households
- 3) (Money-)transfers to other households
- 4) Taxes charged to private households, including earmarked taxes, such as social insurance contributions, and non-regulatory price levies on goods traded by private households, such as sales taxes and taxes on value added.

In order to gain an insight in the nature of these kinds of decisions, it is helpful to make use of a flow chart of public expenditure and revenue, as shown in Figure 1.

Figure 1 shows a single government indicated by the large rectangle in the middle of the chart. Markets 1-6 are indicated by ellipses. In accordance with the traditional view – as opposed to the Niskanen’s view – the government is provisionally conceived as a single integrated household. Hence the smaller rectangles *A* and *B* within the large rectangle can temporarily be ignored. This assumption will be dropped in the next section.

The arrows in Figure 1 show the course of the money flows into and out of the government. Commodities flow in the opposite directions. The chart is set up in such way that the markets above the middle of the Figure (markets 1, 2 and 6) determine ‘what’ is being produced in the economic system. The decisions concerned are called ‘allocation’. The chart also shows

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demand.

‘for whom’ products are being produced. The decisions concerned are taken in the markets below the middle of the Figure (markets 3, 4 and 5) and are called ‘distribution’ (of income). In a capitalistic system, markets apparently fulfill an allocative as well as a distributive function.

**Figure 1 Flow Chart of Public Expenditure and Revenue**

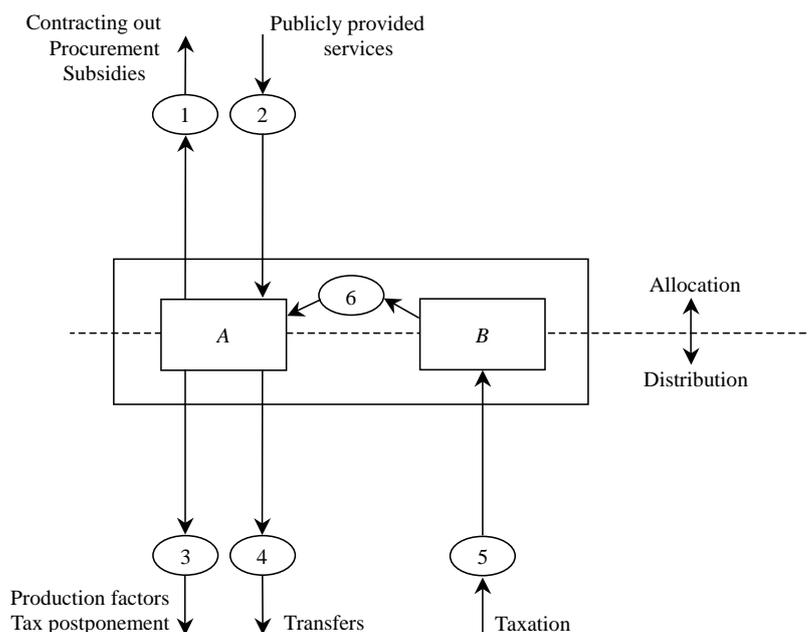


Figure 1 shows two external allocative markets. Market 1 is the market where the government purchases products from the private production sector. One can think of procurement (for instance, office equipment) but also of the ‘contracting out’ by government of such goods as road construction or weapon systems. The private production sector is supposed to consist not only of profit-making firms but also of other private households that produce for the market and are accordingly counted as business households in standard statistical accounts: private hospitals, museums, homes for the elderly, etc. (the private non-profit sector). Market 2 concerns the products that government sells to other private and public households for money (charges, fees). One can think of postal services, public transportation, public education, etc.

Markets 3, 4 and 5 are the distributive markets. In market 3 the government purchases production factors (capital and labour) from other households (as far as capital is concerned, one should think of banks, pension funds, etc.). Capital borrowing should be conceived of in

this connection as a commodity flow and interest payment as the reciprocal money flow. Furthermore, the commodity and money flows through market 3 should be considered as net flows, so that they include capital lending by government to the private sector and received interest.

The government not only borrows for productive purposes but also to supplement income from taxation ('consumptive credit'). In this case, the distributive transaction in market 3 has to be interpreted as the purchase of a 'good of tax postponement' (rather than of a production factor)<sup>4</sup>.

Distribution of income is not exclusively dependent on the sale of factors of production for money. In the first place, there is 'redistribution', effected by money flows among private households (not indicated in the chart because the government is not involved) and by money flows from the government to other private and public households (market 4). One can think, for instance, of social security benefits. In the case of redistribution the offsetting commodity flow should be conceived of as the immaterial good of poverty prevention or, more generally, availability of an equitable income in certain groups of households. Income redistribution via market 4 includes revenue-sharing systems through which a government contributes to the revenues of another government. Since in the case of redistribution the money flow between households must originate in transactions to which both the granting and receiving party agree, it seems appropriate to consider redistributive transfers as market transactions.

In the second place, there is taxation, which is the main source of government income (market 5). Taxation leads to money flows from the private production and consumption sectors to the public sector.

Whereas the distribution of income resulting from the transactions in market 3 are known as primary distribution, the distribution resulting from the transactions in markets 4 and 5 is known as secondary distribution<sup>5</sup>.

The question arises whether the tax flows can be supposed to originate in market transactions. In the case of transfers in the opposite direction (from the public to the private sector), this is fairly evident. The case of taxes, however, is less obvious.

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<sup>4</sup> The value of capital originates in time preference or profitable investment opportunity: debts must be redeemed so that less taxation now means more taxation later. From a micro-economic point of view tax postponement is a public good like any other. People may like it mildly or strongly, but the fact that these preferences are often intertwined with beliefs of a theoretical nature about the consequences of public debt upon the economic system as a whole should not be considered as something special. Preferences for publicly provided services are in general dependent on theoretical beliefs as, for that matter, preferences for economic goods in general are. People demand vaccinations not because they like to be pricked, but because they believe it furthers their health.

<sup>5</sup> Note that according to conventional terminology the 'secondary distribution of income' includes public but not private redistribution.

For a correct interpretation of these tax flows it is necessary to keep in mind that an individual relates to a government – whether a central or a local government – in two fundamentally different ways first, as a member of certain private households<sup>6</sup> that happen to be in the sphere of influence of the government concerned, and secondly as a citizen, or member, of that government. In the latter case she is bound by the collective decisions of the governmental authorities, in which she may or may not participate herself. In the former case, on the other hand, she stands to the government in a contract relation. This is obvious in the case where a private household purchases from the government (public transport, etc.) or sells to the government (office equipment, labour, capital, etc.). It is less so in the case of the special type of ‘contract’ that obliges the payment of taxes (the ‘fiscal contract’).

In this respect, it is helpful to compare taxes with contribution fees of a private association. Although it is true that the magnitude of such fees is determined by the competent authorities of the association, anybody who does not want to pay them can avoid doing so by withdrawing from the association. Similarly, fiscal obligations can be interpreted as originating in a bilateral contract of association between a public and a private household. For local governments such as municipalities or special purpose corporations such as school districts, this interpretation seems natural. Association with such governments is mainly performed by choice of residence. In the case of the central government, the foundation of the fiscal obligation in a bilateral contract of association seems a little artificial; emigration is no serious alternative for the overwhelming majority of private households in most central governments. In this respect, it is important that the voluntariness which characterizes market decision-making in general is not a purely factual concept. Indeed, from the factual point of view one could query the voluntary nature of many kinds of private contracts: think of labour contracts, house-renting contracts, etc. But then, actual voluntary behavior is not essential in this respect. What is essential is the conceptual distinction between on the one hand the actual necessity for private households to be in the sphere of influence of a government, including the necessity to enter a fiscal contract, and, on the other, the legal obligation of subjects to obey the decisions of governmental authorities.

A related aspect of taxation concerns the question of why tax payments should be considered as bilateral transactions. In this respect, it is important to distinguish between, on the one hand, the specific services that are available free of charge to subjects after the conclusion of the fiscal contract and, on the other, the right of members of private households

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<sup>6</sup> The average citizen is a member of many private households apart from his own family: sporting club, private business firm, labour union, etc.

to become subjects and to receive the entire bundle of unspecified services that is acquired by the conclusion of the contract. Only the latter right can be seen as the reciprocal of the tax payment. The provision of free services after the contract has become operative is an entirely internal affair within the public household. For this reason, free services are supposed to be consumed by the public household itself. This does not only apply to services for which pricing is technically impossible, like national defense or foreign development aid, but also to services for which pricing is theoretically possible but not applied in practice, like free public education or free highroads (tolls are technically possible).

The presented definition of a budgetary decision covers all kinds of incoming and outgoing money flows into and out of the government, as shown in Figure 1 by the middle rectangle. The outgoing flows via markets 1 and 3 and the incoming flow via market 2 refer to the purchase and sale of production factors and products. The incoming flow via market 5 refers to the tax flow: mainly income and payroll taxes, corporate taxes and taxes on sales and value added. The outgoing flow via market 4 refers to transfers to the private consumption sector.

It remains to be seen how the last mentioned incoming and outgoing money flows, namely those of subsidies and regulatory levies on goods traded by the private sector, should be interpreted. Levies in this sense include pollution fees and excise duties (alcohol, tobacco, etc.). How have these flows been dealt with in Figure 1

Subsidies flow from government to the private production sector. They are attached to concrete units of product. The sale of a subsidized product by a private production household can thus be conceived as a sale to two buyers simultaneously. The private purchasing household and government both pay a part of the price. As far as the government is concerned, the sale can be seen as a transaction in market 1. Comparable to subsidies are sales of services by public agencies below cost price in market 2. In this case, a part of the cost price is paid by a public contribution in narrow sense (a public contribution to the price of a good other than a subsidy), which leads to a lower market price.

Such contributions are even conceivable with respect to the payment of taxes (market 5). Since taxes are prices for service bundles, the size of the public contribution can in this case be identified as the difference between some kind of normatively optimal tax price (for instance the so-called 'Lindahl tax price') and the actual tax price.

Regulatory levies can be seen as the mirror image of subsidies. In this case, the private production or consumption household purchases as it were a 'license to buy' from government simultaneously with the good that it purchases from another private household. As far as the government is concerned, this sale can be seen as a transaction in market 2 in Figure 1.

With this, the identification of all kinds of budgetary decisions is completed. As it turns out, the definition covers all money flows entering and leaving the government. This means that the 'budget', as the complete set of budgetary decisions for a certain year, completely describes the external financial transactions of government (all transactions in markets 1-5).

## **Budgetary Decisions as Transactions in Internal Markets**

The question now arises what can be learned from the Niskanen view of government for the explanation of budgetary decisions. Assume that public agencies can be considered as separate households that are producing services which are either sold directly to the private sector or to politicians who are representing the citizens. This assumption would lead to an adjustment of the chart of the economic system as indicated by the small rectangles *A* and *B* in Figure 1.

The question may be asked in what respect this assumption would lead to a different economic interpretation of budgetary decisions than would result from the traditional assumption that a government is a single, integrated household. What can we know about decision-making in the internal market? Niskanen's basic idea is very simple in this respect: insofar as decisions with respect to the transactions of public agencies in external markets are formally taken by political authorities, these decisions might as well be considered to concern transactions in the internal market. To see this, note that apart from saving and dissaving – which require separate authorization – the balance of all money flows into and out of agencies from and to external markets must necessarily equal the money flow via the internal market. In other words, by deciding formally about the external expenditures and revenues of agencies, the political authorities materially decide about the money flows into the agencies via the internal market – that is, about their own expenditures for the services delivered by the agencies<sup>7</sup>.

The change of perspective involved in the Niskanen view of the governmental organization is fundamental. By the somewhat abstract way its basic idea has been expressed above it might seem that its value is mainly theoretical. This is not the case. The Niskanen view of government is first and foremost inspired by practical experience. Participants tend to perceive the budgetary process as an annual market where public agencies in a very real sense are trying to 'sell' their services to political authorities. This involves marketing strategies,

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<sup>7</sup> In a strict sense, budgetary decisions are not external transactions themselves, but merely authorizations to

clientele building, public relations and so forth.

Nevertheless, it should be firmly kept in mind that from the formal point of view there is always the important difference that budgetary decisions do not involve the services flowing through the internal market but only those that are externally sold or purchased. Expenditure and revenue estimates are tied to the descriptions of commodities acquired from and delivered to private households ('civil service salaries', 'subsidies for orchestras', 'educational fees', 'material expenses', etc.). Public budgets are therefore necessarily 'input oriented'. This characteristic is not a curable defect of a public budget, as has sometimes been alleged, but rather an essential feature of it. However, from the specific point of view of the political authorities that have to decide about the money flows into the agencies, this formal aspect of the budget is a serious obstacle to control. The more autonomous an agency is, and the less it can be controlled by hierarchy alone, the more interest the political authorities will have in controlling it via the budget. For that purpose, output data for public agencies are essential.

Although output data for public agencies are not included in the budget, the question arises whether they can be derived from the budget, in a similar way as the financial means flowing into the agencies via the internal market can be derived from it. It turns out that this is not the case. Whereas the money flow is closed within the government as a whole, so that it is possible to derive the internal flow into the agencies from the external flows entering and leaving them, value is added to commodities in the public agencies, so that it is not possible to derive the internal service flow leaving the agencies from the external flows leaving and entering them. Whereas by inspection of the budget it is possible to judge whether government as a whole is buying 'value for money' from the private sector, it is not possible to judge in this way whether the political authorities are buying 'value for money' from public agencies. The latter is possible only if the agencies provide separate data about the services produced for internal consumption.

This explains the emergence of a variety of practices involving the addition of data about internally supplied services (output data) as an appendix to the budget. Practices of this kind are known as 'performance budgeting'.

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conclude such transactions. Something more will be said about this distinction in the next section.

## **The Competence Rules of the Budgetary Process**

Every model of the budgetary process has to be based upon assumptions about decision rules. The following two questions have in particular to be dealt with: (1) which authorities are taking demand and supply decisions in internal and external markets according to the prevailing competence rules, and (2) which procedural rules apply to the generation of these decisions. In the remaining part of this chapter an attempt is made to answer these questions for the main variants of representative democracy.

Since we want to focus on key characteristics, it seems sensible to start with a broad description of the stages and phases of the budgetary process that are common to the main forms of representative government.

Budgetary decision-making is a cyclical process. Usually, the budget authorizes expenditures and revenues for one year. Consequently, the cycles succeed one another with an interlude of one year. Since the duration of every cycle is at least three years, there is a large overlap between subsequent cycles. If everything happens on time, the first stage of the cycle, namely that of budget preparation, has been completed at the beginning of the fiscal year. After the beginning of the fiscal year two more stages follow, namely those of budget execution and auditing.

The distinction between budget preparation on the one hand and execution and auditing on the other has to do with the necessity recognized by every but the most simple household to plan expenditures and revenues in advance. Without such planning there would be a continuous need to adjust revenue decisions to expenditures decisions and vice versa, in order to keep the household solvent. In order to avoid such ad hoc decision-making, the budgetary process is split up in an annual authorization process, which results in decisions with respect to legitimate future transactions, and an actual spending and revenue-raising process, consisting of these transactions themselves. The authorization process is called 'budget preparation', the spending and revenue-raising process 'budget execution'. In order to secure consistency between both processes, a further stage of 'auditing' is added, in which the legitimacy of realized transactions is retrospectively controlled on the basis of prevailing authorizations. Since for the purpose of modeling the distinction between authorization and execution is immaterial, this study focuses on decision-making only in the preparatory stage.

The general character of the competence rules in the preparatory stage, depends upon the participation rule for the supreme executive authority. In this respect, three major variants of

representative government must be recognized. The crucial distinctions with respect to budgetary decision-making are indicated in Table 1.

In both the presidential and the parliamentary system the supreme executive authority has its own constitutional competences. These competences include the right to submit budgetary proposals for legislative consideration, and the right to approve or disapprove (veto) the ensuing legislation. The stage of budget preparation can therefore be partitioned into two substages in these systems, namely those of executive budget preparation and legislative budget preparation, both of which lead to 'budgetary decisions'. Only in the situation where the supreme executive authority lacks the right of approval or of veto with respect to budgetary and substantive legislation will budget preparation consist of only one stage. Under such circumstances, it makes no sense to assume that this authority, for instance the 'City manager', is taking 'budgetary decisions'. This situation is characteristic of the 'conventional system' which is mainly applied in local government.

**Table 1 Major Variants of Representative Government**

Constitutional system	Supreme executive authority <sup>a</sup>	Participation rule for the supreme executive authority	Executive approval of legislation
Parliamentary system	Cabinet <sup>b</sup> , Executive council, etc.	Rule of parliamentary confidence	Required
Presidential system	President, Governor, Mayor, etc.	Election by the electorate (directly or indirectly)	Required
Conventional system	City manager, etc.	Nomination by representative assembly	Not Required

<sup>a</sup> In some forms of representative democracy no supreme executive authority exists. Instead, separate executive competences are attributed to a number of elected officers. This arrangement can, for instance, be found in some cities in the USA. Budgetary requests are submitted directly to the legislature under this arrangement. A central executive budget is lacking. This system, that may be considered as a fourth principal variant of representative democracy, will not be further considered.

<sup>b</sup> In the parliamentary system, the executive competence at the level of central government may formally be vested in a (non-elected) President or King 'under ministerial responsibility'. In practice under this arrangement, the executive competence is wielded by the Cabinet.

Within the stage of executive budget preparation, the following six phases can usually be identified:

- 1) An extrapolation and target-setting exercise on the part of the executive budget bureau, sometimes followed by a round of preliminary political decision-making about targets or ceilings by the supreme executive authority
- 2) Submission of request estimates by the administrators of agencies
- 3) Investigation of request estimates by the budget bureau

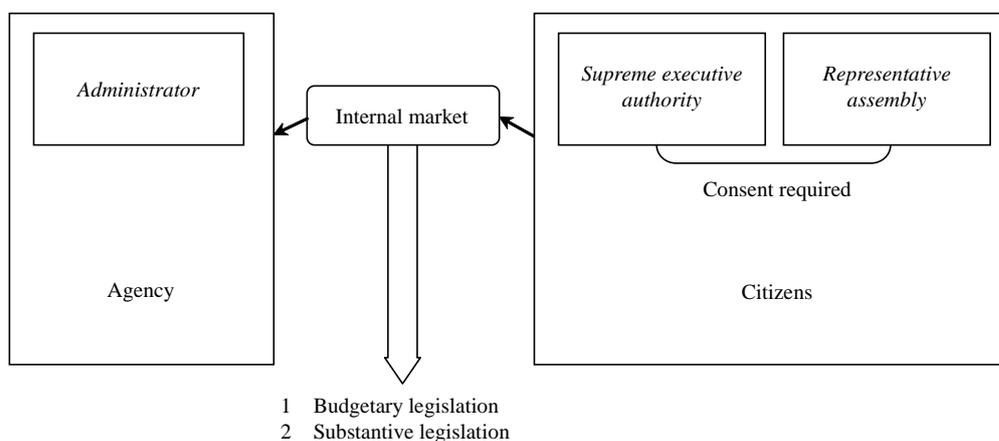
- 4) Negotiations between the separate agencies and the budget bureau
- 5) Decision-making by the supreme executive authority about the remaining points of difference
- 6) Submission of the executive budget to the legislature, and related proposals to change substantive law.

Legislative budget preparation is less uniform than executive budget preparation. An important factor in this respect is the constitutional position of the supreme executive authority. In the parliamentary system, that authority consists of a collective body, for instance the cabinet, whose members are dependent on the confidence of parliament for their continuation in office. In the presidential system the executive authority consists of a single officer who is elected periodically by the electorate (or an electoral college).

In general, the representative assembly has greater impact upon the budget in the presidential than in the parliamentary system. The cause of this difference is not that in the presidential system the competences of the supreme executive authority with respect to legislation are more restricted than in the parliamentary system. In particular, the veto right which is usual in the presidential system is equivalent to the right of approval which is usual in the parliamentary system. The difference rather originates in the rule of confidence, which is a distinctive characteristic of the parliamentary system. Contrary to what is often supposed, the rule of confidence largely works in favour of the executive authority. The members of that body can make use of the fact that their continuation in office is dependent on the confidence of the representative assembly by attaching their political fate to the implementation of particular policies, regardless of whether such policies belong to their formal competence. The British Cabinet, for instance, treats all budgetary legislation as a matter of confidence, so that all potential amendments on executive bills are suppressed. Although in a parliamentary system parliament is certainly entitled to abandon confidence on account of budgetary matters, such action would often, and in a two party-system virtually always, amount to political suicide by the incumbent party. Under such circumstances, the influence of parliament on budgetary matters is often dependent on persuasion and informal pressure behind the scenes rather than on formal competence.

In the presidential system, on the other hand, the veto threat is often the only means by which the executive authority can influence the legislative process. In budgetary matters, the efficacy of the veto competence is dependent on the possibility of a so-called 'line item veto'. If this possibility is lacking, only entire laws can be vetoed. Often the consequences of such a decision are so grave that the veto threat lacks sufficient credibility to be effective.

**Figure 2 Basic Competence Rules of the Budgetary Process in the Parliamentary and Presidential System**



Under the circumstances mentioned, the legislative process tends to be better developed in presidential than in parliamentary system. Some phases of legislative budget preparation are lacking in parliamentary systems, or exist only in a rudimentary form. With this proviso, the legislative stage can be divided in the following phases:

- 1) An extrapolation and target-setting exercise on the part of the legislative budget bureau or staff unit, sometimes followed by a round of preliminary decision-making about targets or ceilings for broad expenditure and revenue categories by the representative assembly<sup>8</sup>
- 2) An investigation of the executive budget and related proposals to change fiscal and substantive law in standing committees<sup>9</sup>; hearings of agency administrators
- 3) Development of legislative proposals (in the parliamentary system, amendments on the executive proposals) in the standing committees
- 4) Consideration of the committee proposals in the representative assembly; submission of amendments; decision-making by the representative assembly
- 5) In the case of a bicameral assembly, steps 1-4 are repeated – possibly in a rudimentary form – in the other House; if the other House has the right of initiative or amendment, a

<sup>8</sup> In the US federal government this phase is formalized in the 1974 Congressional Budget Act. According to this law, decisions about targets are taken in the form of a 'budget resolution'.

<sup>9</sup> The committee structure of the representative assembly may vary. Most assemblies have a standing committee for every executive department or agency, which investigates appropriations as well as substantive bills. In contrast, many American legislatures, including the US Congress, have separate committees for substantive legislation and appropriations.

mediation phase and an additional round of decision-making may be necessary in order to attain the agreement of both Houses

- 6) The legislative budget and related fiscal and substantive bills are returned for approval to the supreme executive authority.

In view of these procedures, the competence rules of executive and legislative budget preparation can be schematized as indicated in Figure 2.

The scheme amounts to an operationalization of some of the theoretical concepts that were introduced in the preceding sections. It indicates that decisions about public demand are taken by the representative assembly and the supreme executive authority on behalf of citizens, and that decisions about public supply are taken by administrators on behalf of agencies. The empirical plausibility of the scheme is obviously open to discussion, and some considerations in support of the proposed operationalizations are therefore in order.

First, the question arises which officers must be considered as administrators of agencies, in the sense of suppliers of public services. According to Niskanen, the officer who decides about supply is the 'senior official of a bureau with a separate, identifiable budget'. In Niskanen's analysis this official is supposed to deal directly with the Appropriations Committees of the US Congress. Although Niskanen is not explicit in this respect, it seems probable that he was mainly thinking of the secretaries of departments and directors of bureau and offices of the US federal government. However, in European parliamentary systems the position of ministers is rather different from that in the US federal government. First, as far as the budgetary process is concerned, they not only bear administrative, but also (ultimate) political responsibility. Indeed, as members of cabinet, ministers decide themselves about the executive budget. Secondly, in these systems ministers are usually prominent members of their parties. Often they are also elected members of parliament, even if there are rules that oblige them to resign from parliament within a certain period after nomination. Consequently, their motivation is generally more political than bureaucratic. In this light, it seems hardly compatible with the assumptions of the Niskanen model to consider ministers in parliamentary systems primarily as administrators who bear the responsibility for public supply.

A more appropriate way of applying the model to these systems could be to consider the top officers of the permanent civil service as the administrators who bear this responsibility. However, this raises a question with respect to the autonomy of agency administrators *vis-à-vis* the political authorities that the model assumes. In the UK and the Netherlands there has been a movement in the direction of greater autonomy for executive agencies, but this is a relatively

recent development. On the other hand in most West European countries, including the UK and the Netherlands, there exists a variety of executive public agencies that exhibit a large degree of autonomy by virtue of special statutes, alongside departmental divisions. In the UK, some of these agencies are known as ‘quangos’ (quasi-autonomous non-governmental organizations). One can also think of public enterprises and foundations. In Sweden, and to a certain degree in Denmark, there is a long tradition of separating execution from policy-making as a matter of principle. In those countries, execution is organized in independent public agencies and withdrawn from political intervention in general. It appears, then, that officers of public agencies can hold different degrees of autonomy depending on the competences attributed or delegated to them in particular cases. The scheme assumes, in accordance with the Niskanen criterion, that budget-holding officers can be considered as administrators of public agencies. In order to build an empirically relevant model it is necessary to make a further distinction among agency administrators. In particular, it will be proposed that the supply behavior of an officer who is subject to effective hierarchical control has to be analyzed by a different type of model than the supply behavior of a more autonomous officer.

A second aspect of the scheme presented that needs some comment concerns the role of administrators during legislative budget preparation. Various observers of the legislative budgetary process have noted that the discussions with the representative assembly and its committees are a delicate affair for the responsible administrators. On the one hand they must secure the interests of their agencies, on the other they are formally bound to their agreements with the supreme executive authority as recorded in the executive budget. The extent to which administrators can afford to advocate the interests of their own agencies after having voiced some formal support for the executive budget varies according to political culture, personal reputation and specific circumstances. In general, however, it may be assumed that experienced administrators have little trouble in revealing the salutary policies that could be implemented if more money were furnished than asked for in the executive budget<sup>10</sup>.

Thirdly, it is indicated in the scheme that budgetary decisions are not only taken in the form of acts commonly designated as ‘budgetary legislation (appropriation acts and annual authorization acts with respect to revenues and borrowing)<sup>11</sup>. This follows from the fact that

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<sup>10</sup> Fenno and Wildavsky have described and illustrated with amusing examples the peculiar situation that may arise when an American Congressman attempts to gain information from an administrator that was initially concealed from him (Fenno, 1966, pp.329-32; Wildavsky, 1964, pp. 80-90, 1988, pp.179-81).

<sup>11</sup> Annual authorization practices with respect to revenues and borrowing vary substantially between countries: in the UK, the term of operation of the main tax laws is limited to the current fiscal year, so that a large part of the

the presented definition of budgetary decision is based on material criteria.

There are two main differences between the formal and the material concept of the budget. The first difference is that in spite of the so-called ‘universality principle’, which has been a basic principle of public finance since the times of the French Revolution, ‘off-budget expenditure’ exists in most governments. The major sources of off-budget expenditure exist in most governments. The major sources of off-budget expenditure are tax expenditures, contributory expenditures and loans.

Tax expenditures are not authorized by appropriation acts but by fiscal legislation in the form of exemptions; for the purpose of empirical analysis, they should be considered as normal expenditures.

Contributory expenditures are funded by fees, charges or earmarked taxes such as social insurance premiums. In many governments considerable efforts have been made in recent years to (re-)integrate contributory expenditures into the regular appropriations process. Nevertheless, substantial financial flows of this kind often remain withdrawn from budgetary control. For the purpose of empirical analysis, the substantive laws that authorize such expenditures should be considered as budgetary decisions.

Loans are treated in various ways. Direct loans from government to the private sector are often authorized through regular appropriations but sometimes are not<sup>12</sup>. Usually, public guarantees on loans provided by private financial institutions are not authorized by appropriations either<sup>13</sup>. Loans and guarantees on loans should for the purpose of empirical analysis be considered as normal expenditures, and the substantive laws and decrees that authorize these expenditures as budgetary decisions.

The second difference between the formal and the material concept of the budget is that substantive legislation may fully determine subsequent budgetary legislation. Expenditures that are effectively authorized by prior substantive legislation are known as ‘back-door expenditures’. Back-door spending should be distinguished from off-budget spending. Back-door expenditure is reflected in the (expenditure side of the) formal budget, off-budget expenditure is not. The main forms of back-door expenditure are entitlement legislation and substantive legislation that establishes contract authority (the authority to incur obligations

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revenues of central government must be authorized by an annual renewal Act (the so-called ‘Finance Act’); in the USA, public borrowing is constrained by an annual Act that authorizes the debt ceiling; in the Netherlands, neither tax revenue nor the debt ceiling needs annual authorization.

<sup>12</sup> In the US federal government, for instance, direct loans from unappropriated funds are common practice. For a survey see Wildavsky (1988, pp.122-33).

<sup>13</sup> Guarantees are sometimes authorized by substantive legislation. Of course, the settlement of loss declarations

concerning future expenditures). In some governments, certain expenditures on the basis of entitlement legislation need not even be appropriated on an annual basis. In the US federal government, for instance, a substantial part of entitlement spending is exempted from the annual appropriation requirement. In view of the fact that in these cases the material decisions are taken in the process of substantive legislation rather than in that of budgetary legislation in the formal sense, it is appropriate to consider the substantive laws in question as the true 'budgetary decisions' in the sense of the definition presented.

## **The Procedural Rules of the Budgetary Process**

The competence rules surveyed so far show that political authorities sometimes consist of single officers and sometimes of collective bodies. The question that must be dealt with now is how these authorities decide about transactions in internal markets.

It is useful to make a distinction between two types of procedural rules, namely voting rules and agenda rules. Voting rules define a collective decision on the basis of one or more sets of individual decisions known as votes. The votes may be nominal (a single choice from a pair or set of alternatives), ordinal (a ranking of alternatives according to preference), or cardinal (a numerical evaluation). If a single proposal must be selected from a set of more than two alternatives by pairwise nominal votes, more than one round of voting is required. In that case, the alternatives must subsequently be paired against each other and the voting rule must specify the order of voting (so-called binary agenda procedures). Agenda rules select the proposals that committee members can put forward against a given status quo proposal (the proposal to refrain from a new decision). The selection is made from the universe of proposals that political authorities can potentially approve according to the prevailing competence rules.

The voting rules in use by political authorities are remarkably uniform throughout the western world. Authorities consisting of single officers use the obvious rule that the individual decision of the officer automatically becomes the collective decision. Authorities consisting of collective bodies decide by absolute majority rule. Tie-breaking rules may differ. Often the chairman casts the decisive vote. If there are more than two alternatives, binary agenda procedures are used and the order of voting is determined by (some variant of) 'Robert's rules of order' (Robert, 1893).

As far as agenda rules are concerned, the situation is more complicated. Many kinds of

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requires regular appropriations, regardless of how the loans or guarantees are authorized.

formal and informal agenda rules are in use, and not all of them are easily observable. It will appear that under many circumstances modeling is simplified by assuming restrictive agenda rules. Such assumptions might eliminate theoretical problems that are induced by less restrictive rules. From a methodological point of view, however, it seems desirable to start the analysis from a minimum of agenda structure and not to take refuge too easily in assumptions that are more or less begging the entire question of explanation and prediction of outcomes.

The least restrictive agenda rule is that of the so-called 'open agenda' procedure. This rule implies that every member of a collective body is entitled to put any proposal on the agenda at any time, and that all proposals are voted against the status quo proposal in the order in which they are proposed. The open agenda procedure is a theoretical minimum; each more specific assumption has to be justified, both factually (in the sense that it exists) and normatively (in the sense that its existence is explainable).

An important aspect of agenda rules is the definition of the status quo proposal employed. As far as budgetary decisions are concerned two possibilities arise: (1) the 'current law budget', which is the budget authorized by the last approved budgetary or substantive law, and (2) the 'current services budget', which is the budget that follows from continuation of prevailing output levels (output levels funded by budgetary or substantive law at the time of decision-making), accounting for future real and inflationary cost increases and for changes in the number of eligible consumers. The current law budget is zero after expiration of prevailing authorizations and therefore a quite impracticable status quo proposal. In many governments, provisions have therefore been made in order to secure that the current services budget shall prevail if new budgetary authorizations have not been approved in time (so that the status quo proposal is the current services budget).

It is one of the strong features of the public choice approach to the analysis of budgetary decision-making that it does not appeal to rapidly to institutional aspects of the process that are neither easily observable nor explainable in themselves as a rational outcome of a hypothetical process of constitutional choice. Why should members of collective bodies acquiesce in the existence of agenda rules that systematically discriminate against them? And how do such rules arise in the first place?

## Some Simple Model Economics<sup>14</sup>

In the Musgrave tradition, we might ask how the problem would look in a simple model economy, consisting of two people; let us call them A and B.

### Taxes and Transfers: Intratemporal

To capture the basic distributive problem, consider a world with just one private good – call it X – in addition to labor. Each person  $i$  acquires a quantity  $x_i$  of X by working  $l_i$  units of time subject to a budget constraint determined by his productivity (assumed equal to his wage),  $w_i$ , less a lump-sum tax paid to the government,  $Ta_i$ , plus a lump-sum transfer received from the government,  $Tr_i$ :

$$x_A = w_A l_A - Ta_A + Tr_A \quad (1)$$

$$x_B = w_B l_B - Ta_B + Tr_B \quad (2)$$

$$Ta_A = Ta_B - Tr_A + Tr_B \quad (3)$$

where (3) expresses the government's budget constraint.

Note that the aggregates of taxes and transfers are uninformative about the distributive properties of the budget. They could both be large but each person's tax could exactly equal his transfer. To describe the government's program in this economy, it suffices to record the net tax paid or net transfer received by each of the two citizens; let us call the net tax  $Tan_i$ .

Then all we need to know about the government's policy is captured unambiguously by the pair  $(Tan_A, Tan_B)$ <sup>15</sup>.

### Taxes and Transfers: Intertemporal

Bringing in time poses serious challenges to meaningful budgetary language. To isolate the key issues, consider a two-period world. Now we need to add period superscripts, 1 or 2, to

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<sup>14</sup> This section draws heavily from Bradford (2003) pp.101-9.

<sup>15</sup> Because of the government's budget constraint, we only need to specify  $n-1$  of these, where  $n$  is the number of people. When, as in the example, there are just two people, this makes a big difference. In the more general

everything in sight. The following system describes the budget constraints as of period 1 in terms of the basic economic system plus net taxes:

$$x_i^1 + \delta x_i^2 = w_i(l_i^1 + \delta l_i^2) - (Tan_i^1 + \delta Tan_i^2) \quad \text{for } i = A, B \quad (4)$$

$$Tan_A^1 + Tan_B^1 + \delta(Tan_A^2 + Tan_B^2) = 0 \quad (5)$$

where the wage rates are presumed the same in both periods and where  $\delta$  is the discount factor in the model economy.

In this depiction, I have taken for granted that the budgetary information will have dealt with the netting of taxes and transfers. Specification of the net transfers in period 1 is, however, uninformative about the impact of the fiscal plan on the two people in the economy. Thus, we could give everyone a “tax cut” in period 1, so that both  $Tan_A^1$  and  $Tan_B^1$  are negative. This would accord with usage in policy debates in the United States today. The government’s budget constraint tells us, however, that this is, at best, an incomplete description of policy.

In the intertemporal framework, one needs to specify the full set of net taxes through time, or, sufficiently, their discounted value, to capture the distributive impact of the budget. Here, that would mean specifying the discounted net transfers to each taxpayer (or class of taxpayers),  $Tan_A^1 + \delta Tan_A^2$  and  $Tan_B^1 + \delta Tan_B^2$ . (In this case, the government’s budget constraint makes one of the two redundant but, as before, this is an artifact of the two-person example.)

In a real-world setting, with an indefinite horizon, policy is never projected through time in a way consistent with the government’s intertemporal budget constraint. More practically, one could hope to specify some sort of current projection of the future net taxes, say in the form  $Tan_A^1 + \delta Tan_A^{2,projected}$  and  $Tan_B^1 + \delta Tan_B^{2,projected}$ . Some summary of the unresolved intertemporal budget requirement would be needed to complete the budgetary description. In our simple economy, it could be a statement of the net tax in the aggregate that remains to be assigned to the two people in the next period,  $Tan_{aggregate}^{2,residual}$ . Using the intertemporal budget constraint, we relate this quantity to the known and projected net taxes by

$$Tan_{aggregate}^{2,residual} = \frac{Tan_A^1 + Tan_B^1 + \delta(Tan_A^{2,projected} + Tan_B^{2,projected})}{\delta} \quad (6)$$

The idea generalizes to the setting of an indefinite horizon, except that some way is needed

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case, with large  $n$ , the government’s budget constraint will provide very little information.

to normalize, in order to express the net tax residual on an annual basis. For example, one could ask what uniform annual aggregate net tax, starting next period,  $Tan_{aggregate}^{starting\ in\ 2, residual}$ , would be sufficient to satisfy the intertemporal budget constraint. This quantity would be related to the projected net taxes by

$$Tan_{aggregate}^{starting\ in\ 2, residual} = -r \sum_{j=0}^{\infty} \delta^j (Tan_A^{j+1, projected} + Tan_B^{j+1, projected}) \quad (7)$$

where  $r$  is the discount rate implicit in the discount factor,  $\delta$ . Alternatively, and perhaps more helpfully, one could express the undetermined residual as the constant per capita amount, or as the constant fraction of some measure of per capita income, that would do the job.

## Public Goods

Returning to the single-period context, let us add a public good,  $G$ . Assume it is measured in units of its cost in the private good forgone to produce it; in these units, the production possibility frontier of  $G$  and  $X$ , given labor inputs, is linear with slope  $-1$ . The budget constraints of the two citizens would be the same as in the previous case, but the outcome that they would value would now be expressed in terms of a quantity of the private good and the level of provision,  $g$ , of the public good. The government's budget constraint would become

$$Ta_A + Ta_B = Tr_A + Tr_B + g \quad (8)$$

Now, to describe the impact of the government on the two citizens, we need the three items  $(Tan_A, Tan_B, g)$ . In other words, we need to add to the net (private good) distributive impacts of the budget the amount of the public good provided.

One might, in addition, be interested in the *valuation* placed on the public good. Public good provision would be the province of the Allocation Branch in Musgrave's scheme. He conceived of the Allocation Branch as assessing the amount citizens would be willing to pay for the public good. In his illustrative analysis, in my notation, the Allocation Branch sets a tax on citizen  $i$  of  $Ta_i^a$ . These taxes would be set to balance the Allocation Branch budget:

$$Ta_A^a + Ta_B^a = g \quad (9)$$

A perhaps minor matter: The surplus generated by optimizing the choice of  $g$  drops out of this account. (Also omitted are the shortfalls that might be generated for one or another citizen if the level of the public good is inefficient or if the willingness to pay is incorrectly estimated in setting the Allocation Branch taxes.)

We would then need to put a Distribution Branch superscript on the net taxes charged by that branch, and they would always satisfy

$$Ta_A^d + Ta_B^d = 0 \quad (10)$$

By construction, the Distribution Branch net taxes would capture the idea of “true” redistribution of the consumption equivalent generated by the economy.

Musgrave’s ideal Allocation Branch taxes raise an interesting philosophical issue about the purpose of budgetary data. One might argue that the objective of the budgetary figures is to give us “the facts” about the policies of the government, leaving it to further, and more controversial, analyses to decide on the valuation of what government does or proposes. By contrast, Musgrave’s Allocation Branch’s further step of estimating the value placed on public goods requires a higher order of analysis that is, indeed, “utopian”, relative to today’s practice which, at best, stops at accounting for the level  $g$  of the public good provided.

### **Distorting Commodity Taxes and Subsidies**

A further set of issues arises when we have more than one private good, with the possibility of taxes and subsidies applied to them. Let the second good be Y. To simplify, let us maintain the linearity of the production possibility frontier and choose the units of Y so that the marginal rate of transformation between X and Y is always one. Let the rate of tax on purchases of commodity  $j$  be  $t_j$  and the rate of subsidy be  $s_j$ . With these new policy instruments (and abandoning the separate Allocation and Distribution Branch distinction), the three budget constraints of our little one-period economy become

$$(1 + t_x - s_x)x_A + (1 + t_y - s_y)y_A = w_A l_A - Tan_A \quad (11)$$

$$(1 + t_x - s_x)x_B + (1 + t_y - s_y)y_B = w_B l_B - Tan_B \quad (12)$$

$$Tan_A + Tan_B + t_x(x_A + x_B) + t_y(y_A + y_B) = s_x(x_A + x_B) + s_y(y_A + y_B) + g \quad (13)$$

where the previously defined tax and transfer terms refer now just to the lump-sum components of the government's program.

An obvious point to make about this system is that it is redundant in policy instruments. Present budgetary language would, however, attach significance to the separate pieces. The bits labeled "subsidies" would be identified as expenditures, characterized not by the rates but rather by the product of rates and quantities. So the expenditure on the subsidy to good X would be recorded as  $s_x(x_A + x_B)$  and the subsidy to Y as  $s_y(y_A + y_B)$ .

It seems that the distinction between a subsidy and a tax in the conventional sense is a matter of intent. A subsidy in the conventional sense is "on purpose" and a tax in the conventional sense (apart from a Pigouvian offset to an externality is an unfortunate necessity. It is unclear, however, whether one can construct a satisfactory accounting distinction based on intent. If consumers and producers are looking only at real trade-offs, rather than labels, the economically significant quantities are the net tax (or subsidy) rates. If we normalize on earnings and denote the net tax on good X by  $tn_x$  and so forth, the system of budget constraints becomes

$$(1 + tn_x)x_A + (1 + tn_y)y_A = w_A l_A - Tan_A, \quad (14)$$

$$(1 + tn_x)x_B + (1 + tn_y)y_B = w_B l_B - Tan_B, \quad (15)$$

$$Tan_A + Tan_B + tn_x(x_A + x_B) + tn_y(y_A + y_B) = g, \quad (16)$$

The key budgetary information, expressed in revenue terms, would be the net tax revenue totals,  $tn_x(x_A + x_B)$  and  $tn_y(y_A + y_B)$ . Typically, such net tax revenue quantities would include both positive and negative (i.e., net subsidy) values. Note that this accounting would neglect the deadweight loss that might be due to the distorting taxes. Including estimates of these distortionary effects raises the same philosophical and analytical issues as does including estimates of the valuation of public goods.

Even with normalization on earnings along the lines described (so there is no tax or subsidy on working), there remains a question of how to summarize the impact of the government

budget when there are many commodities. How do we summarize the set of effective taxes that come between the producer prices (unity, by choice of units) and the prices facing the consumer or worker? I have not tried to identify an answer, but perhaps one could choose some reasonable aggregates of goods and services (say, food, housing, transportation, all others) and use an aggregation of their before-and after-tax/subsidy prices derived from the index number literature.

Some thought needs to be given to how best to characterize the distributive impact of net commodity taxes on individuals. In the illustrative case, if there were no lump-sum taxes, we would have no obvious distributive information. The budget situation of the individual would nonetheless be changed by the policy compared with the situation of no net taxes and no public good provision. The impact of the policy on each individual would be captured, from a formal perspective, by the statement that the net price of X is increased by  $tn_x$ , the net price of Y by  $tn_y$ , and the level of the public good by  $g$ . All three of the measures have, in this case, the quality of public goods. But this is too much information. A useful budgetary convention would be based on a measure of the incidence of the policy package, a measure I have not tried to derive here.

### **Taxes on Earnings**

The big enchilada of distorting taxes is the tax on labor supply. Suppose only a labor income tax and lump-sum taxes are used, and that the labor income tax rate applied to person  $i$  is  $\tau_i$ . Then, for the single-commodity case, our budget constraints become

$$x_i = (1 - \tau_i)w_i l_i - Tan_i \text{ for } i = A, B, \quad (17)$$

$$Tan_A + \tau_A w_A l_A + Tan_B + \tau_B w_B l_B = g. \quad (18)$$

Present practice in this case would be to define the net tax on citizen  $i$  as  $\tau w_i l_i + Ta_i$ . This gets the story wrong, in the first place by failing to net taxes and transfers, to make it  $\tau w_i l_i + Tan_i$ . Further, the “proper” sign convention would call for treating the tax on labor as a negative net tax (subsidy) on non-market time that we conventionally call leisure. Consistency with the suggested description of commodity taxes and subsidies would suggest describing the budget in terms of the net lump-sum tax elements plus the leisure subsidies.

(Also, although not strictly speaking an element of budgetary aggregates, the common characterization assigns an incidence to one transaction tax instrument – the tax on labor – that neglects proper treatment of leisure forgone as well as general equilibrium effects.)

An approach that I find intriguing is a normalizing convention such that all distorting taxes are expressed as what we conventionally call commodity taxes. This would capture the idea of a fundamental trade-off between work and various desired goods. So a 10 percent tax on earnings would be expressed, instead, as a uniform 11 percent (i.e.,  $1/(1-0.1)$ ) tax on goods. Where the earnings tax rate varies from worker to worker, such net taxes on goods would be person-specific, an awkward but accurate description of economic substance. Note, however, that the approach would require identifying not simply earnings in general, but earnings at a specific time (e.g., the present), if this idea were extended to an income tax context. In that setting, there would typically be a different rate of tax on the same good at different distances into the future. Thus the rate of tax on a standard consumption good at successive dates in the future, expressed in terms of current earnings, would be higher and higher, reflecting the penalty on saving imposed by an income tax. Such a way of describing the budget's impact might affect people's attitudes toward an income tax.

Alternatively, one could normalize on some standard private good. To illustrate, consider A's budget constraint with an earnings tax and a pair of net commodity taxes, as discussed earlier:

$$(1 + m_x)x_A + (1 + m_y)y_A = (1 - \tau_A)w_A l_A - Tan_A \quad (19)$$

Suppose we were to take good X as numeraire. Then the normalized budget constraint would be

$$x_A + \frac{1 + m_y}{1 + m_x} y_A = \frac{1 - \tau_A}{1 + m_x} w_A l_A - \frac{Tan_A}{1 + m_x} \quad (20)$$

The normalization would need to be carried through all the budget constraints, including the government's. Let me describe the resulting net tax rates, and so forth, by putting a superscript on them, so the new budget constraint looks like

$$x_A + (1 + m_y^x)y_A = (1 - \tau_A^x)w_A l_A - Tan_A^x \quad (21)$$

where

$$tn_y^x \equiv \frac{1 + tn_y}{1 + tn_x} - 1 \quad (22)$$

$$\tau_A^x \equiv 1 - \frac{1 - \tau_A}{1 + tn_x} \quad (23)$$

$$Tan_A^x \equiv \frac{Tan_A}{1 + tn_x} \quad (24)$$

A normalization of this kind can reveal some surprises. To put some illustrative numbers on the story, suppose taxpayer A is paying a 25 percent tax on earnings and getting a \$1,000 net transfer; there is a 20 percent tax on commodity X and a 10 percent tax on commodity Y. Such magnitudes might well be encountered in a system with a VAT and an income or a payroll tax. With the suggested normalization, we would say that taxpayer A faces an earnings tax of 37.5 percent (reflecting the impact of the system on his ability to trade working for the numeraire good, X) and gets a net transfer of 833 units of X, with a subsidy of his purchases of Y at a rate of 8.33 percent.

Of course, the choice of numeraire good is arbitrary. More plausible than a single commodity, a standard bundle of consumer goods – purchasing power – would be a more natural choice in a real application. Thus if, in this example, we had chosen to normalize the net-of-commodity-tax prices of the goods based on some bundle of X and Y, instead of on X alone, the story would imply some small (less than the 20 percent nominal rate) net tax on X and a smaller than 8.33 percent net subsidy of purchases of Y.

Before leaving this set of issues, I might add yet one more complicating factor: If the linearity assumption about the production system is invalid, specifying for each person the applicable rate of earnings tax, the appropriate net commodity taxes, and the lump-sum tax (together with the level of public goods provided) is, in principle, no longer sufficient to determine the impact of the government's program on that person. That is because the program overall will generally affect wage rates, quite possibly the most important way a program affect wage rates, quite possibly the most important way a program affects a person. Allen (1982) provides a striking example in which "standard" views about the progressivity of a tax are overturned by general equilibrium effects on skill-related wages.

## Tax Expenditures

Finally, this setup of the problem may yield some insight into the problem of tax expenditures. Returning to the two-commodity example, take the case in which the taxes and subsidies on X are zero (or where we have normalized on commodity X), but a deduction is allowed from the earnings tax base for the purchase of Y. Then the budget constraints become

$$x_A + (1 + t_y - s_y)y_A = (1 - \tau_A)[w_A l_A - (1 + t_y - s_y)y_A] - Ta_A + Tr_A, \quad (25)$$

$$x_B + (1 + t_y - s_y)y_B = (1 - \tau_B)[w_B l_B - (1 + t_y - s_y)y_B] - Ta_B + Tr_B, \quad (26)$$

where I have neglected the government's budget constraint in the interest of reducing the clutter. These budget constraints can be reduced to a "canonical" form (prices times quantities of goods on the left, and after-tax wage times labor supply plus lump-sum transfer on the right) by some algebra. I reproduce here A's budget constraint:

$$x_A + [1 + t_y - s_y + (1 - \tau_A)(1 + t_y - s_y)]y_A = (1 - \tau_A)w_A l_A - Tan_A. \quad (27)$$

One way to describe this constraint is to say it involves a net tax,  $tn_{y,i}$ , on Y, specific to person  $i$ , which is defined (for the case of person A) by

$$tn_{y,A} \equiv t_y - s_y + (1 - \tau_A)(1 + t_y - s_y). \quad (28)$$

If we wanted to describe the resulting government program as "spending" on Y (e.g., as a subsidy program for housing), we could multiply the implicit subsidy rates and quantities, to obtain a total:

$$tn_{y,A}y_A + tn_{y,B}y_B. \quad (29)$$

## **A Framework for Analyzing Budget Rules<sup>16</sup>**

Two recent developments have stimulated growing interest in fiscal institutions. First, there are evident differences in the size and persistence of budget deficits across nations. These do not seem obviously related to short-term spending needs, such as wars, or to intertemporal variation in the marginal cost of raising revenue, as theories of optimal debt policy such as Barro (1979) would suggest. The inability to explain cross-national differences solely in terms of economic factors has led to a search for other factors, notably politico-economic explanations for deficit policies. Roubini and Sachs (1989) wrote one of the first studies in the modern revival to explore how political institutions such as the presence or absence of divided government affect fiscal policy outcomes.

The second factor driving recent interest in fiscal institutions is the rise of large peacetime budget deficits in the United States during the late 1970s and even more during the 1980s. The possibility that fiscal policy is biased toward deficit finance, and toward spending that yields concentrated benefits and diverse costs that nevertheless exceed the benefits, has been recognized for decades. Buchanan and Wagner (1977) and Weingast, Shepsle, and Johnsen (1981) are relatively recent statements of these central points. Yet until the early 1980s, fiscal deficits in the United States and most other developed nations had been relatively small except during wars or deep economic downturns. As Poterba (1994a) and others have noted, the substantial tax cuts of 1981 and the failure to achieve the spending reductions that President Reagan had promised would coincide with these tax reductions led to unprecedented peacetime deficits. The rise of such deficits was the proximate cause of the discussion, beginning in the mid-1980s, of a federal balanced budget amendment and of the related enactment of the Gramm-Rudman-Hollings anti-deficit legislation. To evaluate the potential effects of such fiscal rules, public finance and macroeconomists have embarked on new research programs that draw substantially on previous work in positive political theory and in public administration.

### **What Role Do Budgets Play?**

Economic research on budget institutions has taken three forms. The oldest line of inquiry asks, What are budgets for? and considers issues of budget measurement and definition. Budgets can serve at least three functions: to inform the fiscal policy debate, to structure the

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<sup>16</sup> This section draws from Poterba (1997) pp.56-9, pp.62-4.

debate on government programs, and to affect fiscal policy outcomes. With respect to information provision, it is possible to envision budgets defined over various horizons, with the nearest-term measuring the government's expenditures and revenues in only the current period and the longest-horizon measure describing the present discounted value of government outlays and revenues under current or projected policies. The current horizon for most aspects of the federal budget process is five years, although political maneuvering in 1996 involved promises of budget balance by 2002. There are examples, such as the annual report produced by the trustees of the social security system, of much longer budget horizons. In the social security case, projections of cash flows and account balances for seventy-five years are presented each year.

With regard to structuring debate, the budget has important effects along many dimensions. Many features of actual budgets, such as the distinction between on- and off-budget programs, the categorization of spending into mandatory and discretionary, the "pay as you go" requirement that certain programs be fully funded when enacted, and even the sequencing of approval of overall budget targets (the budget resolution) and individual appropriation measures, affect the debate on government programs and revenue sources. The information provision and debate-structuring role of budgets are clearly linked together, in that with multi-year budgets it is possible to consider a wider range of budget balance concepts than with a single year's account.

The final role of budgets, to affect fiscal policy outcomes, has attracted the most attention in recent policy discussions of balanced budget rules. The central objective of such reforms is to affect the relative likelihood of some budget outcomes rather than others. Tax limitation laws and requirements for popular approval of debt issues at the state level are examples of similar budgeting rules that are explicitly designed to reduce spending and tax levels relative to the size of the private economy.

### **How Do Budget Rules Affect Outcomes?**

A second line of research on budgets has built on the recent advances in positive political economy to provide theoretical insights into the effect of budget institutions. This literature is directed toward a range of questions relating to the "industrial organization" of the legislature and the budget process, such as whether it matters if legislators vote first on the size of the budget and then on its allocation across spending programs, or vice versa. The findings of this literature are often sensitive to modeling assumptions. Ferejohn and Krehbiel (1987) illustrate

this difficulty with respect to the timing of votes on budget size and allocation. They show that provided legislators form rational expectations about the allocative stage of the budget game, reversing the timing of the budget votes will not have any effect on fiscal policy outcomes. Masia (1995) presents a related analysis of how budget institutions can alter the political power of the executive and thus affect the nature of budgetary bargains.

One explanation of the role of budget rules, which has not been emphasized in the political economy literature to date, is that these rules provide a form of “self-control” for political actors. If society exhibits dynamically inconsistent preferences with respect to fiscal policy, always preferring a larger budget deficit in the current period than it would have agreed to in previous periods, then budget rules may provide a mechanism for constraining the discretion of future budget deliberations. Laibson (1994) discusses a similar set of issues with respect to individual saving behavior. He suggests that in the presence of hyperbolic discounting, individual preferences with respect to saving will be time inconsistent and that individuals may develop institutions that restrict their future ability to consume. Formal analysis of budget rules in a framework such as this, while promising, remains an issue for future research.

### **Empirical Evidence on the Effects of Budget Rules**

The final strand of research on budget institutions has taken an empirical tack, analyzing how various rules for developing, enacting, and enforcing budgets affect the nature of fiscal policy. This work has exploited differences across nations, across states within nations, and within nations over time to search for effects of budget rules on fiscal outcomes. A number of studies in this tradition have identified substantial effects of fiscal rules; this is the primary subject of this chapter.

The central empirical problem in the research program on fiscal institutions and their effects is the potential endogeneity of budget institutions. Riker (1980) argues that essentially all political institutions reflect the “congealed preferences” of the electorate. In this view, institutions that no longer suit a majority of the electorate will be overturned, and the institutional structure of a nation or state contains no information other than some aggregation of information on current voter preferences. Skidmore and Alm (1994) demonstrate that state fiscal conditions, notably the level of state taxes, are related to the probability that voters will pass a tax limitation law; this finding underscores the institutional endogeneity problem for budget rules.

The institutional endogeneity problem with respect to budget deficits is similar to the

problem that has plagued the macroeconomic research program on the effects of central bank independence. Posen (1995) argues that whether a central bank is independent is largely explained by the degree of opposition to inflation in the financial community within a nation. This suggests that the independence of the central bank cannot be viewed as an exogenous variable for explaining outcomes such as a nation's inflation rate.

With respect to budget institutions, the counterargument to the institutional endogeneity view emphasizes the difficulty of changing these institutions and the costs of revising fiscal rules. Alesina and Perotti (1996) argue that at least some of the international differences in budget rules should be viewed as exogenous. The difficulty associated with changing the federal budget process is evidence for this view, as is the fact that in many of the U.S. states, the current budget institutions are those that were established when the state joined the union.

There are at least two ways to reduce, if not solve, the problem of endogenous fiscal institutions. One strategy is to control for some measure of voter preferences, such as the political party of elected officials, or an objective index of voter preferences on the political spectrum. This reduces the potential for observed correlations between budget rules and fiscal outcomes to reflect a correlation of both of these variables with an omitted third variable, voter tastes for fiscal outcomes. The difficulty with this approach is that any set of control variables may not completely capture the potential omitted variables that underlie spurious findings.

A second approach involves modeling the evolution of budget rules and using variables that affect budget rules but not fiscal policy as instrumental variables in a simultaneous equations econometric framework. The difficulty with this approach is finding valid instrument. Although it is unlikely that any instruments will be beyond dispute, this approach provides a potentially promising method of addressing the institutional endogeneity problem. Exploiting these strategies represents an important part of the empirical agenda for research on budget institutions.

### **The Balanced Budget Amendment and the Passage of Gramm-Rudman-Hollings**

The shift from near balance in fiscal policy to persistent peacetime federal deficits starting in the mid-1970s led to emerging policy concern about fiscal policy. This concern first reached a critical juncture in August 1982, when the Senate passed the balanced budget amendment (BBA) by a 69-31 margin, two votes more than the two-thirds majority needed for a constitutional amendment. The proposed amendment required Congress to adopt a balanced budget before the start of each fiscal year, although it incorporated limited override provisions

for deficits in wartime or if approved by 60 percent of Congress. Despite support from the White House, the BBA did not pass the House of Representatives by the required two-thirds majority.

Although the BBA could not command sufficient legislative support for passage, it indicated a desire to alter the budget process in ways that would reduce the chance of future deficits. As chronicled in Poterba (1994a), this desire surfaced again in late 1985, when the senate took up legislation to raise the federal debt limit from \$1.8 trillion to \$2.1 trillion. The expansion in debt authority was needed to avoid a federal financial crisis, since increased borrowing was required to make federal interest payments. During the debate on the debt ceiling bill, Senators Phil Gramm, Ernest Hollings, and Warren Rudman took the initiative on broad deficit issues and introduced a bill requiring a phased-in program of deficit reduction, leading to budget balance in fiscal 1991.

The Gramm-Rudman-Hollings (GRH) bill that passed the Senate by a wide majority had two components. The first altered the timing of the federal budget process, accelerating budget discussions and placing deadlines earlier in the calendar year in an effort to permit more deliberation before the start of the fiscal year. The second objective was to introduce a set of deficit targets and a mechanism for ensuring that actual deficits did not exceed them. There were five central provisions in the bill:

- 1) The president would be required to submit budgets with forecast deficits no greater than the target for a given year.
- 2) The office of Management and Budget (OMB) and Congressional Budget Office (CBO) would prepare estimates of the projected deficit from the enacted budget and tax legislation.
- 3) If the average of the CBO and OMB deficit computations exceeded the target, then the president would have two weeks to issue a sequester order, requiring permanent reductions in budget authority for all outlays other than a set of exempt programs, which included means-tested entitlement programs, interest on the federal debt, government pensions, and existing contractual obligations.
- 4) Half of the sequester cuts would come from entitlement programs with automatic spending increases, such as Medicaid, Aid to Families with Dependent Children, and food stamps, while the other half would come from other discretionary programs.
- 5) A suspension clause rendered the need for spending cuts inoperative if the economy was in recession. This would occur if actual economic growth fell below 1 percent for two consecutive quarters, or if the CBO or OMB projected negative growth for two quarters.

The suspension clause would also apply in periods when there was a war declared by Congress or whenever a three-fifths majority of Congress voted for such suspension.

The Gramm-Rudman-Hollings bill represented a substantial change in the rules governing budgetary politics in the United States. The conference bill that President Reagan signed called for a deficit target of \$171.9 billion in fiscal 1986, declining to zero by fiscal 1991. Half of the automatic cuts would come from defense and half from nonexempt nonmilitary programs, including AFDC, Medicaid, and social security. All programs would have to be cut proportionally, thereby limiting presidential discretion. A key provision required the General Accounting Office (GAO) to calculate the average of the OMB and CBO deficit estimates and transmit an estimate of the needed sequester to the president. AFDC, Medical, and social security were excluded from the sequestration process.

The GAO provision was the basis for a constitutional challenge to GRH. In July 1986, the Supreme Court declared GRH unconstitutional, on the grounds that because Congress can dismiss the head of the GAO, the bill provided executive authority to an organization under legislative control. The Supreme Court decision derailed the first GRH deficit limitation plan. A year later, the Senate passed new legislation, sponsored by Senators Gramm, Chiles, and Comenici, in which the final step in the sequester process required GAO to submit its report to OMB, an executive agency. OMB would review the GAO report, and the president would then issue an order based on it to enforce spending cuts. The deficit targets were loosened from levels in the previous year's legislation to require a deficit of \$144 billion in fiscal 1988, declining to zero in fiscal 1993. In addition, the law permitted a \$10 billion margin of error in all years until 1993. President Reagan signed this bill in September 1987. Although it was technically different from the original Gramm-Rudman-Hollings bill, this legislation is frequently referred to as Gramm-Rudman or Gramm-Rudman-Hollings, and it shall be referred to as GRH in what follows.

## **Empirical Facts in Japan<sup>17</sup>**

### **Structure of Budget**

In Japan, under the Constitution, the cabinet is solely responsible for preparing and submitting the budget to the parliament every year. Fiscal year begins on 1<sup>st</sup> April. The Ministry of Finance (MOF) has general jurisdiction over public finance. Other government departments are also involved in formulating economic and fiscal policies. The Cabinet Office which was established in January 2001 consolidating several government departments such as the Economic Planning Agency is in charge of overall policy-planning and coordination in order to support the cabinet's strategic function. The Council of Economic and Fiscal Policy (CEFP) under the Cabinet Office is also important (discuss later).

The national government budget consists of the General Account, 37 special accounts and government affiliated agency budget.

The General Account budget, commonly referred to as "the budget", accounts major government's programs such as public works, social security, education, science, national defense, and economic cooperation. All national taxes are treated as the revenue of the General Account except for several earmarked taxes, such as road taxes. In FY2002 general taxes finance approximately only 60 per cent of the total General Account expenditure, 40 per cent of the remaining revenues depend on government bonds.

Special accounts could be established by legislation when the government needs to carry out specific projects, to administer and manage specific funds, or to administer revenues and expenditures separately from the General Accounts. Each special account generally has its own distinct source of revenues, such as social insurance contributions. Some accounts can finance balance by borrowing and received funds from the General Account. The government's loan and guarantee program is managed through one of special accounts under the name of "Fiscal Investment and Loan Program (FILP)" (See Appendix 1).

There are a number of government affiliated agencies which established under special laws, separately from the government, in order to provide them with flexibility in personnel management and accounting, as well as to achieve greater efficiency through corporate-style management. These agencies are fully capitalized by the government. In general budgets of these agencies are not to be approved by the parliament, although subsidies from the

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<sup>17</sup> This section draws from Tanaka (2002, Chapter 3-5).

government are to be appropriated on the General Account or special accounts. Budgets of seven public financial corporations and two banks among agencies are however to be tabled on the parliament because their activities are closely to overall government policies.

The Japanese budget system is characterized by the comprehensiveness which covers almost all government activities and high degree of parliamentary control. There are few extra-budget items among government activities. Exceptions are budgets of some government affiliated agencies such as the National Highway Agency. Some countries put expenditure of entitlements which benefits are decided by their own laws outside of the government budget and the amount of revenues are not usually that of approved by the parliament. Japan does not follow these traditions.

Unlike that of many other countries, Japan's budget to be submitted to the parliament is composed of both revenue and expenditure side and the revenue budget is formulated to clarify resource necessary for programs<sup>18</sup>. The sources of revenues include government bonds in addition to tax so that the total amount of revenues in the budget equals to the total amount of expenditure ever year.

Principal budget rules in Japan stipulated in the Public Finance Law of 1947 are the balanced budget rule and so-called the golden rule. Article IV prescribes any expenditure of the state shall be financed by revenue other than public bonds or borrowing. However, public works, investment and loans can be financed by public bonds or borrowing within a specific amount approved by the parliament as an exception. This is considered the exceptional clause in principle.

In spite of these principles, bonds to finance investments have been issued continuously since FY1966. Deficit-financing bonds to finance not investments but current expenditure were issued in the supplementary budget FY 1975 in response to a drop in tax revenues caused by the recession following the first oil crisis. The special law that enables the government to finance current expenditures by public bonds overriding the principle in the Public Finance Law is required to enact every year. Since then, deficit-financing bonds have been issued almost every year to make up for shortfalls of revenues over current expenditure with some exception of from FY 1991 to FY 1993.

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<sup>18</sup> See Ishi (2000).

## **Budgeting Process**

The most striking event in recent financial management reforms was the creation of the Council of Economic and Fiscal Policy (CEFP) in January 2001. It was a new institution set up through the Administrative Reform 2001 in which one of agendas was to strengthen the political leadership of the cabinet and the prime minister over public administration. CEFP is an advisory board to research and deliberate on some key issues including policies on economic and fiscal management and guideline for budget formulation. The Finance Minister is one of members of CEFP and contributes to policy-making for economic and fiscal management. CEFP played a major role in formulating FY 2002 budget for the first time.

The latest budgeting process in Japan, which was realized in 2001 is summarized as follows.

The Fiscal Year in Japan begins on April 1<sup>st</sup>. The budget formulation process starts in summer season of previous year, normally July, with the approval of guideline for the next year budget request. At the initial stage, spending ministries submit their next year budget request to the Ministry of Finance by the end of August. Before request submission, the Cabinet approves the “Guideline for Budget Request”, which sets out expenditure ceiling for major programs such as public works and social security for the next fiscal year’s budget request. These ceilings are usually expressed in terms of absolute or percentage increase or decrease vis-à-vis the previous fiscal year’s amount. The ceiling for budget request has been functioning as the most important institution to control total expenditure in the annual term in Japan. We may call it the top-down approach in the budgeting.

The last year’s, namely FY 2002 budget formation was a little bit exceptional. The government first decided “Structural Reform of the Japanese Economy: Basic Policies for Macroeconomic Management” on the end of June in 2001, which originally drafted by CEFP. This “Basic Policies” presents seven key priority areas along with principles for reforms of public works, social security system and local government finance, and it also sets a target to restrict issues of government bonds to a maximum of 30 trillion yen. The Guideline of FY2002 Budget Request was formulated in August 2001 based on this “Basic Policies”.

After spending ministry submits its next year budget request at the end of August, budget examiners of the Budget Bureau start a series of hearing with each spending ministry or agency on details of its budget request. Budget examiners review intensively whether its request follows the Guideline of Budget Request or not from September to December.

At the beginning of December 2001, the government decides “Guidelines for Foundation of FY 2002 Budget, which is also drafted through CEFP. Following this Guidelines, Ministry of

Finance finalizes its Draft Budget and presents it to the cabinet for final considerations. In actual it takes approximately a week to have negotiations between Ministry of Finance and spending ministries. After some adjustments to the Ministry of Finance's Draft, the government's next year draft budget is approved by the cabinet, usually at the end of December.

The cabinet tables its draft budget to the parliament in the latter half of January. The Japanese Constitution gives some sort of superiority to the House of Representatives (the Lower House), for example parliamentary discussions should take place first in the Lower House. After the budget speech by the Finance Minister at the House, government's draft budget is deliberated by the Budget Committee, which includes statutory public hearings. Once the budget committee approves the draft, it put to a vote at a plenary session of the Lower House. After the Lower House's deliberation, then is a session in the House of Councilors (the Upper House) in almost same manner of the Lower House. Normally the budget is enacted at the end of March before starting the new fiscal year.

When the decision of the Upper House differs from that of the House of Representatives, a special joint committee comprised of selected members from both houses is convened for reconciliation. If the committee cannot come to an agreement, or if the Upper House does not make a final resolution within 30 days after receiving the draft budget approved by the Lower House, the resolution made by the Lower House shall be that of the parliament.

In Japan, as well as countries of the parliamentary system such as the UK, the government budget is almost always approved without any substantial amendments. There have been only four times of amendments since the end of the World War II, although the parliament is given the authority to amend the government budget proposal in a certain scope.

### **Medium-term Fiscal Planning**

Medium-term fiscal planning<sup>19</sup> has been realized again in OECD member countries as an important tool to increase fiscal discipline over budget although the old version of medium-term fiscal planning in 1960s and 1970s had been not necessarily successful in controlling government expenditures<sup>20</sup>. A number of countries have been exercising

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<sup>19</sup> There are several terms to express planning, such as medium-term budget framework, multi-year budgeting, medium-term expenditure. They are normally not multi-year appropriations which authorize spending legally but rolling plans or estimates which a government decides and presents by itself.

<sup>20</sup> OECD (1997) explains that there are three broad problems in predecessors of medium-term fiscal planning. First, there was a tendency to overestimate the future growth of the economy. Second, ministers and departments

medium-term fiscal planning although its institutional characteristics vary from country to country.

Japan has also a long history to develop medium-term fiscal planning. There were a lot of arguments in 1960s for introducing medium-term fiscal planning among the parliament, academics as well as the inside of government. Then the first one was published in 1976 by the Ministry of Finance, and it was continuing until 1980. These preliminary attempts were replaced by the “Medium-term Fiscal Projection” in 1981, which basically survives until now although there were some changes in the style of presentation. The title of this projection was changed to the “Projection of the FY2002 Budget’s Effect on Expenditures and Revenues in the Coming Years” in 2002 on an occasion of introduction of the “Structural Reform and Medium-Term Economic and Fiscal Perspectives” in January of 2002 which was released by the government through drafting by CEFP.

The “Projection of the FY2002 Budget’s Effect on Expenditures and Revenues in the Coming Years” (hereafter called “Projection”) shows how the FY2002 budget will affect future expenditures and revenues up until FY 2005 under the following conditions. First, economic indicators for FY2003 and after are based on those assumed in the “Structural Reform and Medium-Term Economic and Fiscal Perspectives”. Second, the projection is calculated on current services basis assuming that the FY2002 budget policies and measures are to remain unchanged in the coming year.

Importantly, the “Projection” is not a so-called “baseline” which is supposed to be the basis of budget negotiations for the following year, but a simple “estimation” which provides the parliament with information on medium-term fiscal implications of the current budget. In the past, the government sometimes set a target of fiscal consolidation that budget should be formulated without deficit-financing bonds within certain timeframe. The latest one was set in 1983 with the targeted year of 1990. The “Projection” was useful for analyzing how much deficit-financing bonds should be decreased every year.

When we discuss the prospect of medium-term fiscal planning in Japan, it is extremely important to understand the experience of introducing the Fiscal Structural Reform Act of 1997 and suspending it.

The government under then Prime Minister R. Hashimoto argued the necessity for fiscal structural reform as well as economic structural reform and finally made the cabinet decision on Fiscal Restructuring Targets on December 1996. In order to make this decision fully

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viewed their forecast expenditure as an entitlement. Third, the multi-year budget frameworks were in real terms rather than in nominal terms.

effective, the Fiscal Structural Reform Act was enacted in November 1997. The Act articulated specific fiscal targets and imposed caps on some individual expenditure lines. We can call it “medium-term consolidation plan” placing limits on future expenditures line by line with clear fiscal targets.

Unfortunately, soon after the enactment of the Act the Japanese economy encountered numerous unanticipated adversities from the latter half of 1997 to 1998. On the domestic side, several financial institutions including some leading banks and securities companies in Japan went bankrupt, while on the international side, some Asian economies encountered severe financial and economic turmoil. These shocks had severely worsened the domestic economy, which was already ailing unable to overcome the negative aftereffects of the bubble era.

Against this backdrop, in May 1998 the Parliament amended the Act so as to enable government to issue additional deficit-financing bonds in an emergency situation without contradiction with the Act which tightly disciplines the issuance of deficit-financing bonds. In addition, the fiscal consolidation target was amended as well. Finally, the Act was suspended in December 1998 because the government concluded that the fiscal expansion was urgent to counter extremely severe conditions of its economy.

The newly formed government under the Prime Minister J. Koizumi in April 2001 has changed the overall macroeconomic policy from expansion to consolidation, asserting “no growth without structural reform”. The new government’s economic policy was embedded in the “Structural Reform of the Japanese Economy: Basic Policies for Macroeconomic Management” which was decided in June 2001. The most noticeable break with this reform packages is the intention to limit new borrowing by the central government to 30 trillion yen in FY2002, which is projected by the OECD to lead to a tightening of 1/2 per cent of GDP<sup>21</sup>.

The limit of new borrowing was considered to be to large extent effective in controlling government expenditure which was extremely under pressure for increasing, for example, the government achieved over 1 trillion Yen cut in subsidies for public corporations. However there were a lot of arguments of whether using nominal fiscal balance as a fiscal target was good at managing fiscal policy from the macroeconomic point of view. Because other countries experiences such as the 1985 Gramm-Rudman-Hollings Act in the U.S. showed ineffectiveness of targets such kinds. FY2002 Budget was formulated keeping the limit of new borrowing under 30 trillion yen, some economists however criticized that the government manipulated fiscal balance in the General Account which was under constraint of the limit of

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<sup>21</sup> See OECD (2001).

new borrowing, using accounting technique which transferred deficits from the General Account to some special accounts. The hidden borrowing was supposed to be about 1.5 trillion Yen.

In the middle of FY2002, it becomes almost difficult to keep the limit of new borrowing to 30 trillion yen through the fiscal year 2002 due to tax shortfalls projected by the lower economic growth. The supplementary budget for FY2002 is expected to be tabled in the beginning of 2003 in order to finance some revenue shortages with an additional issue of bonds.

The other prominent event of the current fiscal policy in Japan was the “Structural Reform and Medium-term Economic and Perspectives” (shortly called “Reform and Perspectives”) which was released by the government in January 2002. The “Reform and Perspectives” sets out the government’s vision of the future society and also sketches a picture of medium-term macroeconomic management policies, defining the five years from 2002 to 2006 as the periods targeted for structural reform.

In the “Reform and Perspectives”, it is projected that the central and local government primary balance deficit combines will decrease and its percentage of GDP will be approximately half of the current level (4.3 per cent in FY2000) in the final year of targeted periods, as a result of steady economic growth led by private demand and fiscal structural reforms. Furthermore, if efforts to decrease fiscal deficits continue even after the targeted periods of the “Reform and Perspectives”, a primary balance is expected to be surplus by the early 2010s. Considering the fact that our population will start to decrease by sometimes around 2008, and the fact that the baby-boomers who were the core of the working population will soon become pensioners, it is hoped that a primary balance surplus is to be achieved by the beginning of the 2010s.

The “Reform and Perspectives” was supplemented by the “Reference Estimates” which was estimated by the Cabinet Office and presented to the CEFPP for discussion. Although the “Reference Estimates” are not part of “Reform and Perspectives” which was formally authorized by the cabinet, they are based on calculations of the macroeconomic model. We can call the “Reference Estimates” almost the first attempt which projects the medium-term fiscal balance using macroeconomic model. The “Reference Estimates” do not show the government’s policy targets and do not bind coming years’ budgeting, therefore it is not a kind of other countries’ planning system which is able to place limits on an individual expenditure for a following years based on integrated medium-term macroeconomic and fiscal forecast with clear fiscal policy objectives.

## **Appendix 1**

### **Outline of Fiscal Investment and Loan Program (FILP)<sup>22</sup>**

#### **Function of FILP**

##### **FILP as a Fiscal Policy**

Generally, in a market economy, goods and services are distributed according to the market mechanism, but when the economy is completely entrusted to this, it may lead to such problems as failed supply of necessary goods or services to the entire society, or the rise of drastic economic inequalities. Fiscal policies or economic activities of the government are implemented to solve those problems. The nature of funds provided by the government for executing fiscal policies can be divided into two categories:

- 1) **Grant funds** which do not impose a repayment obligation, such as subsidies of budgetary measures with taxes as the main fiscal source.
- 2) **Loan funds** which assume a future return, such as loans and investments with redemption of capital, interest or dividends, etc.

Of these two, FILP is a fiscal policy tool by “loan funds”. By providing funds in the form of loans and investments in sectors which are difficult for private funding to handle, FILP plays a role with the General Account (budget and taxes), in promoting smooth flow of funds in the economy, in solving social and economic issues, and in creating demand and employment.

It is generally said there are three fiscal functions in governmental economic activities: adjusting resource allocation, redistributing income, and stabilizing the economy. FILP performs the functions of adjusting resource allocation and economic stabilization, as follows.

##### **Resource Allocation Adjustment Function**

FILP, which is one mechanism of fiscal policy, has a function of adjusting resource allocation. Since goods and services are not sufficiently provided if the economy is completely entrusted to the market mechanism, the government supplies them.

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<sup>22</sup> This part is extracted from FILP Report 2012, Ministry of Finance (2012).

FILP supplies funds that are difficult to be procured in the private sector, to FILP agencies such as government affiliated financial institutions, incorporated administrative agencies and such FILP agencies play a role in adjusting resource allocation by supplying various goods and services using these funds. For instance, although small and medium enterprises play an important role in the Japanese economy, they have weak credit and collateral compared to large enterprises, and they have a difficulty to obtain necessary funds from private financial institutions alone. To solve this problem, loans are provided by government affiliated financial institutions using FILP.

### **Economic Stabilization Function**

In addition to its function of adjusting resource allocation, FILP plays a role in stabilizing the economy. This function alleviates rapid economic changes by both helping the recovery when business conditions have deteriorated and putting a brake on overheated business conditions.

FILP demonstrates its economic stabilization function through providing funds required to respond to economic conditions.

### **Features of FILP**

With regard to Fiscal Loans and Government Guarantees of FILP, the borrower is obligated to repay the debt as stipulated in the terms of the contract. In the case of Industrial Investments, the receiver of the capital must return profits to the Investment Account of the FILP Special Account, which acts as the investor. When the government involves itself financially in a specific business, the involvement may take the form of grant funds such as subsidies. However, in the case of FILP, the involvement takes the form of loans provided on the assumption of future returns. Generally speaking, the execution of business using FILP loans has the following features.

### **Reducing the Tax Burden**

Fiscal Loans use funds procured at low interest rates on the basis of the government's creditworthiness through the issuance of FILP bonds. The repayment of the principal and interest on those bonds is covered by the principal and interest repaid by the borrowers of

Fiscal Loans. Therefore, Fiscal Loans can be regarded as a policy instrument that is not accompanied by tax burdens. When government-affiliated financial institutions or incorporated administrative agencies, etc. execute business using Fiscal Loans, subsidies/grants-in-aid from the General Account, etc. may be disbursed simultaneously. Even in such cases, however, the tax burden is lighter than when the business is executed with the use of subsidies or grants-in-aid alone.

### **Efficient Execution of Business**

When the government supports a specific business for a policy reason, providing loans instead of subsidies may raise cost consciousness and improve the efficiency of business execution in some cases due to the need for repayment. For example, loans may be more appropriate in the case of support for small and medium-size enterprises, ODA, etc.

### **Beneficiary Liabilities**

Since the beneficiaries can be specified in the case of the establishment and improvement of social infrastructure such as airports, requiring them to bear a certain financial burden rather than covering the cost through taxes alone can be appropriate from the viewpoint of fairness. In this case, the use of FILP can be considered as a way to have the beneficiaries bear a financial burden.

When the government involves itself financially in a specific business, it must take account of the above-mentioned features of FILP in determining the cases where FILP with loan funds is to be utilized. Generally speaking, the use of FILP is regarded as appropriate in cases where the business concerned has a certain level of profitability, and where the need for repayment leads the business operator to be cost conscious and execute the business effectively as a result.

### **Mechanism of FILP**

There are three different methods for supplying funds under FILP: (1) Fiscal Loans, (2) Industrial Investments and (3) Government Guarantees.

## **Fiscal Loans**

Fiscal loans are mode of financing which utilizes the Fiscal Loan Fund for funding the national government special accounts, local governments, government-affiliated financial institutions, incorporated administrative agencies, etc.

The Fiscal Loan Fund consists of funds procured by issuing FILP bonds which are a kind of government bonds, or from sources of funds such as reserve funds or surplus funds set aside from the special accounts of the government. This is loaned to necessary fields for government policy. Fiscal Loan Fund is accounted for in the Fiscal Loan Fund Account of the FILP Special Account.

Before the FILP Reform in FY2001, the major source of revenue in the Trust Fund Bureau Fund (predecessor of the Fiscal Loan Fund) came from the deposits of postal savings and pension reserves. But the institutional linkage with postal savings and pension reserves was terminated by the reform, and at present FILP bonds become the main means fo raising funds.

The Fiscal Loan Fund is financed based on the national credit under the most favorable terms and can provide long term, fixed and low-interest funds. Moreover, the Fiscal Loan Fund Account of the FILP Special Account is managed independently without transfers from the General Account, and its secure and efficient management is required.

## **Industrial Investments**

Industrial investments are investments for the industrial development and the promotion of international trade. These use dividends from stocks of NTT and JT, etc. held by the Investment Account of the FILP Special Account, and payments to the national treasury by Japan Bank for International Corporation, etc. These industrial investments are accounted for in the Investment Account of the FILP Special Account.

In contrast to fiscal loans which have fixed interest rates, industrial investments provide funding (in the form of investments and loans) to essential policy projects that have expected returns and high risks, which cannot be funded sufficiently by the private sector alone.

## **Government Guarantees**

Government Guarantees are the guarantees provided by the government for bonds issued by government-affiliated financial institutions, incorporated administrative agencies, etc. for

raising the necessary capital for business in a smooth and efficient way in the markets.

Due to the FILP Reform, the capital raised by the government by the way of FILP bonds could thereafter be lent out as fiscal loans. As government-guaranteed bonds are off-balanced debts for the government, and cost more than the issuance of FILP bonds, it was decided to make restricted and limited use of them.

Issues of the government-guaranteed bonds will continue to be temporarily and respectively approved after through scrutiny under each of the following 4 patterns.

- 1) Issues of government-guaranteed bonds as a measure for organizations to be privatized to achieve a smooth transition toward raising capital from the markets.
- 2) Issues of government-guaranteed bonds from the viewpoint of ALM (Assets and Liabilities Management) of government-affiliated financial institutions.
- 3) Issues of government-guaranteed foreign bonds to meet the capital requirements for foreign currency loans.
- 4) Issues of government-guaranteed bonds for those organizations which are not able to borrow from the Fiscal Loan Fund.

## **History of FILP**

The history of FILP dates back to the beginning of the Meiji Era (1868-1912). Since private financial institutions were not well developed in those days, various funds were amassed at the government. Initially, the government only took custody of funds, but later began accepting deposits (postal savings) and started investing the funds in government bonds. In accordance with the increase of postal savings, the government gradually began using the funds for investment in domestic industry and government-backed entities. Some of them, however, became irrecoverable.

In order to ensure that the Trust Fund Bureau Fund is managed securely and efficiently, the recipients of FILP financing were limited by the law to the government (the General Account and Special Accounts), local governments, and their wholly owned corporations.

Under the current Fiscal Loan Fund, a similar idea is followed. As the Fiscal Loan Fund manages funds raised based on the national credit, the recipients of FILP financing are limited to the government, local governments and government related institutions that are legally supervised by the government, to manage the funds in secure and efficient ways.

## Chronological table of FILP

Early Meiji Era	Reserve Funds Handling Bylaws	Miscellaneous income accumulated as “saving and later as “reserves”.
1876		Deposits of funds to the Government Bond Bureau of the Ministry of Finance, which was also responsible for their management.
1878		Postal Savings deposited with the Government Bond Bureau for management
1885	Deposit regulation	Depositing funds to Ministry of Finance was legalized and the Deposits Section was set up. Initially, the Ministry focused on custody business rather than investments.
Mid-late Meiji Era to Taisho Era		Investments by the Deposits Section shifted from government bonds to bonds issued by industrial banks and special-purpose banks. In the early Taisho Era, some loans became irrecoverable, like the Nishihara Loan (note). Improvement of the Deposits Section system became necessary in order to ensure proper custody and management of funds.
1925	Deposits Section Deposit Act	Basic principles of “management in secure and efficient ways” and “for the benefit of the state and public” were clarified. “Deposits Section Fund Management Committee” was established.
Around WWII		With the country placed on a war footing, investment of funds gradually shifted to state-backed entities and war industries, and focused on China. As result, the investments resulted in a huge loss.
1946	Laws concerning Special Treatment of Losses incurred by Deposit Section of the Ministry of Finance, etc.	Liquidation of assets and liabilities of the Deposits Section.
Under U.S. occupation		GHQ ordered that recipient of the Deposits Section funds should basically be limited to the state and local governments.
1951	Trust Fund Bureau Fund Act	For post-war restoration, demand for long-term funds arose from industrial circles. - Unified management of state funds - Investment of funds in secure and efficient ways - Contribution to the promotion of public interest
1973		Low on Special Measures for long-term management of the Trust Fund Bureau Fund and Postal Life Insurance Reserve was enforced.
1987	Revision of Trust Fund Bureau Fund Act	Development of interest deregulation and other changes in the economic and financial environment - The legal system for interest rates on deposits was amended and entrusted to government decree Foreign government bonds were added as targets for asset management of Trust Fund Bureau Fund
2001	FILP Reform Act	Reflecting changes in environment, the focus of policies shifted from industry to living environment. - Elimination of the requirement that all Postal Savings and Pension Reserves be deposited with the Trust Fund Bureau - Market-based fund-raising - Introduction of policy cost analysis - Enhanced information disclosure
<p>Note: Nishihara Loan is a series of loans extended to China in 1917-1918. Some of the funds were financed from the Deposits Section but became irrecoverable. The state assumed the irrecoverable principal and interest payments.</p>		

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