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Setting up a Treasury in Economies in Transition

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Abstract

The primary mandate of a national Treasury is to promote an optimal financial management of government resources, by ensuring that spending agencies are provided, in a timely manner, the resources needed for a smooth provision of public services, while minimizing the cost of government financing. However, international experience shows that agencies that go by the same name (the Treasury) assume a variety of responsibilities within the gamut of functions encompassed by government financial management. This paper argues that, in countries facing substantial economic and financial adjustment problems and/or rapid institutional change, it is desirable to give the Treasury a broader (rather than narrower) range of responsibilities in government financial management. This is typically the case in economies in transition, in which under central planning Treasury functions were dispersed among different agencies, including the Central Bank.

The paper presents an overview of the main issues governments are likely to face in setting up a national Treasury, in particular in economies in transition. It begins with an analysis of the main Treasury functions. It then discusses the Treasury's basic organization and structure, information system, and relationships with other public entities.

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Summary

In most countries, the primary mandate of the national treasury is to optimize the financial management of government operations. This basic institutional mandate, however, encompasses a varying range of functions in different countries. Reflecting historical and cultural factors, the economic situation of the country, and the balance of powers among government agencies responsible for economic management, the treasury may have a more or less extensive role in some, or all of the following areas:

1. the planning and control of the execution of the central government budget and the monitoring of operations of the extrabudgetary funds and subnational governments;

2. day-to-day cash management, including control of inflows and outflows into the government account(s) with the banking system; and securing the smooth financing of government expenditures;

3. the management of government debt and debt guarantees;

4. the management of government financial assets, including equity holdings in public enterprises; and

5. the accounting of government operations and the development and maintenance of government financial information system(s).

The treasury's role in budget execution can range from passive (when the treasury merely makes resources available to spending agencies, to execute their approved budgets) to fully active (when it is empowered to set limits on commitments and/or payments of expenditures, or even to authorize individual expenditures on the basis of pre-established criteria). Similarly, the treasury can share to different degrees the management of the public debt with the central bank. Finally, the treasury may or may not be responsible for the accounting function within the central administration.

This paper reviews in some detail the gamut of possible treasury functions and the implications of different assignment of responsibilities to the treasury for its organization and structure. It argues that, in countries facing substantial economic and financial adjustment problems and/or rapid institutional change, such as the economies in transition, it is desirable to give the treasury a broader (rather than narrower) range of responsibilities in government financial management.

The paper also highlights the importance of an appropriate government financial information system for the effective financial management of government operations and discusses the main desirable features of such a system. It concludes with a discussion of the relationship of the treasury with other public sector entities, in particular the central bank.

I. Introduction

It is generally accepted that national governments must have within their organizational structure an agency responsible for government financial management. However, a review of international experiences in this area shows that agencies that go by the same name (the Treasury) assume a variety of responsibilities within the gamut of functions encompassed by government financial management.

In general, it can be said that the primary mandate of a national Treasury is to optimize the financial management of government resources, by ensuring--through the careful programming and monitoring of inflows and outflows in the government accounts--that spending agencies are provided, in a timely manner, the resources needed for a smooth provision of public services, while minimizing the cost of government financing. The Treasury is also generally responsible for the management of government financial assets and liabilities.

Consequently, the role of the Treasury is closely linked to the execution of the national budget. However, the Treasury's participation in budget execution can vary from a passive one (when the Treasury does not intervene directly in the execution of the budget, but merely makes the resources available to spending agencies to execute their programs) to a fully active one (when the Treasury is empowered to set limits on commitments or payments of government expenditures, or even to authorize specific expenditures on the basis of pre-established criteria).

The structure and role of the Treasury in each country are affected by historical and cultural factors, as well as by the economic environment and the distribution of power among the various government agencies. In some cases, they reflect a long evolution, during which functions were added (or taken away) as time went by. In other cases, the Treasury was assigned from the outset a wide range of functions and powers. The latter group typically includes countries seeking to address acute problems of poor centralized financial management, lack of control over government assets and liabilities, scattered and inefficient use of public resources, or the lack of a proper system of reporting on the government's economic and financial situation.

More recently, this has been also the situation in economies in transition, seeking to replace administrative controls with indirect instruments of fiscal and monetary policy. The transition to a market-oriented management of the economy has highlighted the need in these economies for wide-ranging reforms of the whole budget process and, in particular, of the financial management of government operations. As Ministries of Finance have gained more influence and control over the allocation of public resources and the monitoring of their uses, most of them have recognized the need to establish a central unit (the Treasury) responsible for the financial management of government resources.

This paper presents an overview of the main issues governments are likely to face in setting up a national Treasury, especially in economies in transition. It begins with an analysis of the main Treasury functions. It then discusses the Treasury's basic organization and structure, information system, and relationships with other government agencies. Appendix 1 provides a summary tabular presentation of Treasury systems in major industrial countries. Appendices 2 and 3 expand on areas covered more briefly in the text (the information system and public debt management, respectively).

II. Main functions of the Treasury

The main functions of budgetary and financial management of government operations include:

a. formulation of budgetary and tax policies, within the overall framework of macroeconomic policy;

b. budget preparation: formulation and evaluation of budget estimates for revenues and current and capital outlays, and the elaboration and presentation of the budget to Parliament;

c. budget execution: execution and control of central government operations, as well as monitoring of the operations of extrabudgetary funds and local governments;

d. financial operations associated with the execution of the budget: cash management, maintenance of registers of government assets and liabilities, issue of government securities and guarantees, internal and external public debt management, and foreign aid management;

e. accounting and financial information systems: accounting for the operations of the central government, as well as the control and development of the government accounting and financial information systems;

f. auditing and evaluation: assessment of the compliance of the budget execution with the approved budget and other legal provisions, and, more recently, analysis of the cost effectiveness of the use of public resources. This function is distinct from, and complementary to, that of external auditors reporting to Parliament.

There are several other functions, of an administrative and regulatory nature, which are also carried out by Ministries of Finance. Among these are the preparation of financial legislation, monitoring and control of nonbank financial intermediaries, financial monitoring and control of state-owned enterprises, and the regulation of wages and conditions of service of government employees.

In many countries, the Ministry of Finance is primarily responsible for all the above areas. In others, one or more of these functions are assigned to other entities. Likewise, the functions of the Treasury within the Ministry of Finance also vary significantly from one country to another, reflecting each country's specific historical, institutional, and political circumstances.

Appendix 1--which presents a tabular international comparison--shows that there is no dominant model of government financial management. Among the main functions of a Ministry of Finance listed above, the Treasury is always primarily responsible for financial management. Less frequently, the Treasury also assumes responsibility for budget execution and accounting, and, in a few instances, for auditing and evaluation.

1. Financial management

a. Cash management

Cash management is the most basic and fundamental activity of the Treasury. It includes the control of all flows to and from the Government accounts, as well as operational activities in the collection and payment processes.

As its minimum and fundamental responsibility, the Treasury must secure complete, timely, and accurate information, and must exercise adequate control on all the inflows and outflows in government's accounts. These include not only budgetary revenues and expenditures, but also extrabudgetary inflows and outflows, e.g. those which the government's spending units 1/ execute on behalf of third parties, such as international aid flows.

With respect to operational activities in the collection and payment processes, the responsibilities assigned to the Treasury vary considerably across countries. These activities are often shared with the agency or agencies responsible for tax administration on the revenue side, and with those responsible for budget execution on the expenditure side, in countries where the Treasury does not assume this responsibility. These activities include:

1/ "Spending unit" is a general terminology referring to any government entity, in any hierarchical level, which carries out any kind of financial and/or budgetary operations. Specifically, spending units include the ministries, autonomous agencies, extrabudgetary funds, and their administrative units. All these units fall within the institutional field of the Treasury's action. Therefore, their budgetary and financial operations must be covered by the government financial information system.

a) on the revenue side:

- the collection of taxes and other budgetary and extrabudgetary revenues;
- negotiations with the banking system on collection through the banks;
- control of collections through the banking system; and
- distribution of revenue among the various levels of government (central and local), or to special programs.

b) on the expenditure side, the following activities are mutually exclusive, and reflect a greater or lesser degree of Treasury intervention in the payment stage of public spending:

- allocation of resources, or overall financial limits to spending units for the payment of their expenditures; <u>or</u>
- authorization and processing of requests for payment of expenditures submitted by spending units, on an individual basis; <u>or</u>
- automatic payment of requests for payment of expenditures submitted by spending units.

A side question concerns the appropriate payment instruments for various types of government transactions. As regards revenues, it is relatively unimportant whether tax or other payments <u>to</u> the government are made in cash, check or transfer of bank funds, provided that such payments are promptly credited by the receiving agency/bank to the Treasury account. By contrast, payments <u>by</u> the government should be made through payment orders (deposit transfers) up to the final payee. This would expedite payments, simplify administrative procedures, and leave a traceable trail of payments made. Issuing bank checks would only be acceptable in such cases where payment by deposit transfers are unfeasible, while payments in cash should be wholly exceptional.

b. <u>Government cash accounts</u>

The resources collected by the Government are usually deposited in financial institutions, before being ultimately used for payment of expenditures incurred in the execution of government programs. The Treasury does not generally keep its resources as cash in its own vaults, except in special circumstances, normally ones in which resources are needed for payments of very small amounts or in districts difficult to reach. This reflects obvious security reasons, but also the fact that net financial costs for the government can be reduced through the temporary market placement of these resources by the financial institution in which they are deposited.

The number of accounts held by the government in financial institutions can vary from one to thousands, depending on a number of factors, including:

- the need to control payment limits for each government agency, when expenditure payments by the Treasury are not automatic;

- the degree of development and effectiveness of the Treasury's information and control system. If the Treasury does not have a well-developed and effective system, the individual limits of each unit cannot be controlled directly by the Treasury, and the banking system is used for this purpose; and

- the size of the country, and the number of spending units.

Another important aspect is the type of financial institution, or institutions, in which the Treasury and the spending units hold accounts. The almost universal option is public banks--generally the institution that acts as the central bank. There are two basic reasons for this choice. First, in many countries the central bank is a direct and/or indirect lender of resources to the Government, which often pays interest on the loans. Thus, by holding accounts with the central bank, the Government can use its balances to reduce its net indebtedness and, consequently, also reduce its financial costs. Second, the collection of budget revenues and the payment of government expenditures frequently result in large changes in liquidity; therefore, the monetary authorities need to monitor these flows very closely, in order to take timely offsetting monetary policy measures, when appropriate.

There are also cases in which these accounts are held in public or private commercial banks. This option may be more costly for the Treasury, because it does not exploit economies of scale in the placement of the resources, and/or because the interest earned is credited to the spending unit which holds each account. It also makes it more difficult for the Treasury to control government accounts.

In some countries, though the spending units do not have individual banking accounts, the Treasury itself has accounts in commercial banks, and earns interest at market rates on its balances. This option is generally chosen by mutual agreement with the central bank, as one of its objectives is to stabilize the level of liquidity in the economy. This is achieved by the Treasury managing flows between its accounts in the banking system and its general account in the central bank, so as to keep a stable balance in the latter. However, in general, the commercial bank accounts are not used to pay government expenditures, which are channelled through the main account in the central bank. This option requires that the Treasury be sufficiently skilled and experienced in financial management techniques.

The main trend that has been adopted is one in which the Treasury, as the central financial management arm of the government, holds what is customarily called a single account in the central bank. If the Treasury takes the option described in the preceding paragraph, the accounts in the banking system are used exclusively by the Treasury and actually constitute means of market placement of government assets, while they are not needed for the execution of the budget.

In summary, the single account is an overall account held by the Treasury with the central bank, in which all government operations are recorded, and in which government funds are held (except for any Treasury placement accounts in the banking system). Under this arrangement, no spending unit is allowed to hold individual accounts either in the central bank or in the banking system, except in the cases referred to below. The spending units' accounts in the banking system are replaced by accounts in the government financial information system, as explained below. The establishment of a single treasury account need not imply less autonomy for the ministries and spending agencies in the use of their idle balances, provided that they are used in accordance with the established budget and financial limits and procedures, and, of course, it helps reduce the financing requirements of the government, and consequently the interest charges to the budget.

Specifically, the working of the single account can be summarized as follows:

- a government financial information system (GFIS) is set up, which includes ledger accounts for ministries and the other spending units. This system registers each movement in these accounts (inflows and outflows), and the balance in each account represents effective capacity to pay, up to the balance;

- each spending unit can keep one or more accounts in the GFIS, depending on the degree of detailed control that is desired. In general, cash spending limits are set, registered in the system, and controlled at a more aggregate level than those used in the budget process;

- all public revenues (those accruing to the state budget, as well as the own revenues of autonomous agencies and extrabudgetary funds) must be deposited in the single account, but would also be credited simultaneously to the appropriate account in the GFIS;

- transfers between spending units must be registered in the GFIS, but do not affect the single account;

- only payments to entities outside the system (e.g., government suppliers, public employees, holders of government debt, taxpayers entitled to refunds) are debited to the single account.

It should be stressed that the financial consolidation of government balances is perfectly compatible with the continuation of a decentralized execution of the budgets of spending units. The Treasury ensures an orderly flow of transfers from the state budget to the other agencies, and de facto acts as a bank for them.

Therefore, for the ministries and other spending units, there is little, if any, difference between the functioning of a banking account and of a financial limit account in the GFIS. As a matter of fact, these entities benefit from the availability of reliable and timely information on their accounts provided by the GFIS.

Spending units should be allowed to have accounts in the banking system in the following cases only:

- when the Treasury system does not have the technical capability to maintain and control the individual financial limits of spending units. In this case, spending units would keep their own accounts with the central bank as subaccounts of the single Treasury account. The nature of subaccounts is important because it indicates that, although these resources are available to the spending units, they belong to the single account and, therefore, should be used to reduce the Treasury's net indebtedness to the central bank;

- for spending units located in places that are difficult to reach. These agencies could have accounts with the central bank, in the banking system or, in extreme cases, could keep cash resources. They would operate using the system of advances, whereby an advance would only be granted after proving that the previous advance was used. In general, these spending units are relatively small, and account for a very small portion of public expenditures.

c. Financial planning

Financial planning involves:

- projecting inflows into the Treasury account(s), and resource requirements for the payment of government expenditures;

- programming the domestic and external financing of projected excesses of expenditures over revenues;

- in the event that projected financing requirements exceed the level consistent with other policy objectives (e.g., the growth of liquidity or the level of interest rates), taking (or recommending to the appropriate authorities) any necessary corrective steps. These may include steps to increase revenues and/or to limit expenditures.

The formulation of an initial financial plan for the budget year is an integral part of the budget preparation process, and in many countries such a plan is also presented to Parliament, along with the budget document and/or a monetary program. In addition to the overall program for the year, a more detailed quarterly (or monthly) financial plan is also generally prepared by the Treasury, as basis for the cash execution of the approved budget (see Section 2b below).

As, however, changes in economic and other factors (including policy changes) affect the actual evolution of revenues, expenditures and financing possibilities in the course of the year, the initial financial plan needs to be revised at periodic, relatively short intervals. Typically, Treasuries prepare rolling monthly forecasts of cash revenues, outlays and financing for several months ahead (preferably for the rest of the budget year).

The mechanisms of adjustment to changes in the conditions envisaged in the initial financial plan differ across countries and over time. In countries characterized by relative economic and institutional stability, and by well developed financial markets, unanticipated excesses of expenditures over revenues can frequently be accommodated through increased recourse to nonmonetary financing, without too sharp increases in interest rates. In these cases, the main adjustment variable in financial planning is the financing of the government deficit. In other cases, it may be possible to accommodate unexpected expenditure needs through increases in revenue even in the short run. In other cases, however, it is necessary to resort to limits on spending, if an excessive increase in liquidity or in interest rates is to be avoided. This is why, in countries characterized by unstable economic conditions or a rapidly changing institutional framework--such as the economies in transition--and by relatively undeveloped capital markets, Treasuries are frequently empowered to set limits on government expenditures below the approved budgetary allocation.

It should be stressed, however, that these limits should not be set only at the payment stage. Budgetary systems that only allow adjustment at that stage tend to hinder the efficient use of public funds, and often lead to an accumulation of payment arrears. It is highly advisable, therefore, that the Treasury be empowered to set, and adjust as necessary in the context of the rolling financial plans, limits on commitments as well as on bold face payments, consistent with the expected evolution of revenues and financing possibilities.

The advantages of reliable and timely financial planning are manyfold:

- it facilitates the orderly execution of the government budget, and the efficient choice and implementation of any necessary cutbacks in expenditures, avoiding the accumulation of payment arrears;

- it also facilitates the development of an orderly program of issues of government securities, and the absorption of these securities by the market, thereby moderating the cost of government financing;

- a reliable forecast of the net recourse of the Treasury to the central bank financing facilitates the control of the monetary base and the money supply, particularly in the absence of flexible instruments for the control of bank liquidity;

- in the event that government deposits are not remunerated (a practice in some countries, which is not supported in this paper) financial planning helps minimize the balances in those deposits; and

- it also offers a useful framework for simulating and assessing the effects of proposed changes in revenue or expenditure policies.

Financial planning involves a complex network of information flows between various units responsible for the management of government revenues and expenditures. Some of these units are typically within the Treasury, some in other parts of the Ministry of Finance and some in other government agencies (notably spending ministries, the tax administration and the central bank). As a consequence, it is important that the Treasury include a unit responsible for coordinating the whole process of financial planning, drawing on these information flows as appropriate.

Once the system of financial planning has been set up, the process can be implemented as shown in Table 1. Appendix 2 describes in greater detail the development of this process using the government financial information system.

d. Public debt management

Even under the most ideal conditions, small transitory budget deficits are recorded in many countries, and there is a need to finance them through borrowing operations. In economies in transition in particular, more substantial deficits may be difficult to avoid for some time. Furthermore, the coexistence of large government deficits with undeveloped markets for government securities inevitably leads to excessive government financing by the central bank. In these circumstances, it is necessary to develop rapidly forms of financing of the budget deficit which do not add to monetary creation, mainly issues of domestic government securities. These considerations point to the importance of public debt management. Other considerations support a leading role for the Treasury in this area.

First, public debt management is inextricably linked with budget management and, in particular, with government financial planning. In both the formulation and the execution of the budget, policy makers are continuously confronted with decisions at the margin among alternative ways to bridge a projected gap between revenues and expenditure needs: additional recourse to financing, increases in taxes (or other revenues), and expenditure cuts. These decisions are best taken in an integrated financial planning framework, which, as discussed above, is a core Treasury activity.

Second, it is clearly desirable that the agency responsible for the design of the government financing strategy should also be responsible for its day to day implementation. This again points to an essential role of the Treasury in public debt management.

Table 1. Financial Planning Sequence and Tasks

Tasks	Institutions Involved
Step 1 - Setting up the System	
A. Define the horizon and frequency of financial planning	Treasury
B. Set up the channels of information	Treasury
Step 2 - Preparation of the Financial Plan	
A. Agencies forward information based on these specifications	Treasury, Budget Departament, Central Tax Administration, Extrabudgetary Funds, Central Bank and ministries
B. Calculate total inflows and outflows	Treasury
C. Discuss possibilities for adjustment in the various items which comprise financial planning (including the volume of gross borrowing required and available financing options)	Treasury, Budget Department, Central Tax Administration and Central Bank
D. Prepare final financial plan	Treasury
E. Define quarterly limits on commitments and payments (optional)	Treasury or Budget Department
Step 3 - Execute and Monitor the Financial Plan	
A. Inform ministries of respective limits on commitments and payments	Treasury or Budget Department
B. Monitor inflows and outflows	Treasury
C. Manage financing of deficit in accordance with approved financial plan, and in cooperation with the Central Bank.	Treasury and Central Bank
Step 4 - Up-Date the Financial Plan	
A. Analyze and investigate deviations from plan	Treasury
B. Recommend appropriate corrective steps	Treasury, Budget Department, Central Tax Administration, Central Bank.

In what follows, a few key principles of public debt management are highlighted. They are developed in greater detail in Appendix 3.

First, decisions on debt management should aim in principle at obtaining the most favorable borrowing conditions. Normally, this would be the only aim of any borrower other than the government. However, the government cannot disregard other aspects of its borrowing activity. It is most likely that the government will be the largest single borrower in the country, so that its borrowing activity is bound to have significant repercussions on the structure and performance of the financial system, as well as on the evolution of interest rates and the conduct of monetary policy by the central bank. The government should not ignore such side effects. Thus, occasionally, its borrowing decisions will have to depart from those which a private borrower, motivated only by cost considerations, would adopt. For the same reason, the government should not assume that it is up to the central bank to take steps to offset any undesirable impact of government borrowing. On the contrary, as detailed in Section 5 below, close coordination of government borrowing decisions with the monetary authority is essential.

Second, it must be recognized that a government will not be able to obtain significant market financing without an appropriate development of the domestic financial system and capital market. Therefore, the Treasury should take an active and leading role, again in coordination with the central bank, in designing and developing the institutional reforms of the financial system and the capital market necessary to broaden and strengthen that market.

Such institutional reforms may take some time to be designed and implemented, and to start yielding the expected results, while the need to borrow may be pressing. To strike a balance between covering the short-term borrowing needs, and fostering the reforms intended to facilitate future borrowing under more adequate conditions may be one of the most difficult and important tasks to be faced by the Treasuries of economies in transition.

Government debt management entails a wide range of special administrative functions to be performed by the Treasury (accounting, planning and disbursement of reimbursements, and interest payments, etc.). In some respects, these functions are analogous to other Treasury activities, or functions performed by some spending agencies. However, it should be noted that, while in other areas of the government budget the Treasury's main role is to control decisions taken or executed by other government departments or agencies, in the area of debt management the Treasury is the main decision maker.

The Treasury functions concerning debt management should be shaped by a general principle, which should be adequately supported by the relevant legislation: the need for a unified and all-encompassing approach to them. This unified approach should cover several facets:

- the choice among different sources of financing (e.g., central bank credits, foreign credits, government securities, etc.), and, more specifically, among individual instruments, maturities, cost structure, etc. No source of finance should be left out of the scope of the Treasury activities;

- the inclusion in the debt to be managed and controlled by the Treasury of contingent liabilities and credits assumed from third parties. Contingent liabilities, that is, guarantees granted by government to third party liabilities, do not imply any short-run disbursement. As a result, there is a risk that the government may be too generous in granting them, only to find, at a later stage, that they entail substantial costs. Many provisions applicable to government debt should, therefore, be applicable to contingent liabilities as well. As regards the assumption by government of third party obligations, it should be reflected in the budget and be subject to the same limitations as apply to the government's own debt. This is so because such operations involve an implicit transfer of government funds to the third party and an increase in government debt, with an obvious impact on future debt service obligations.

In economies in transition, these two categories of operations may become particularly relevant, and a close control on them should be one of the important Treasury functions in the area of debt management. Since a formal ex-post control is likely to be insufficient, this may include, if necessary, an active Treasury interest in the macroeconomic policies that are at the source of the increase in such categories of government liabilities.

- the concentration of all government borrowing in a single borrowing agency, which, in line with the practice of most countries, should be the Ministry of Finance and, within it, the Treasury. This implies that no other Ministry should receive loans, neither from third parties, nor from the Ministry of Finance. Any proposed granting of government guarantees to third parties should also be endorsed by the Ministry of Finance. There are strong reasons to also prohibit central autonomous agencies and extra-budgetary funds from borrowing from the banking system or issuing securities. These agencies should be fully funded through their own resources or through budgetary transfers or loans. Centralization of borrowing in the Treasury will promote financial discipline in government operations, contribute to the development of the government debt market (because it will increase the relative importance of standardized instruments) and, in all likelihood, will reduce the cost of borrowing (because of the higher credit rating of the government and possible economies of scale). It should be noted that this centralization of borrowing will be the logical counterpart to the centralization of the cash resources of any government agencies in the Treasury single account, or at least, as separate deposits kept with the central bank;

- finally, in conducting debt management, the Treasury must keep a multi-year perspective. This is so because the level, composition and maturity structure of the debt affect importantly future budgets. The Treasury must, in particular, ensure that the future profile of the debt service is as smooth as possible, and does not excessively constrain future budgetary policies. This underscores the need for a reliable and timely system of recording debt obligations (including contingent ones) and projecting their future service requirements.

e. Control of the government's financial assets

Government financial assets generally consist of shares in public enterprises, mixed economy companies, and private enterprises in which the government is a minority shareholder. Also included in this category are loans extended by the government to public or private enterprises, including assumption of debts, payment of guarantees not honored by debtors, etc.

In the first case, i.e. shareholdings, the Treasury usually keeps a complete and updated register of these shares, keeps track of developments in each enterprise's business, monitors the dividend payments, participates in general meetings of shareholders, and deals with the financial aspects of privatization. This last area would require lengthy discussion of the aspects involved, which is beyond the scope of this paper.

In the case of loans extended by the Government, the Treasury usually keeps a record of each loan, tracks its progress, calculates and collects financial charges, makes principal payments, negotiates refinancing, etc.

f. Control of international aid, including aid in kind

Foreign grants must be recorded and controlled by the government regardless of the form they take, be they in cash or in kind. They may also need to be entered into the budget. An effective control of grants must have an uniform and complete coverage, and requires that a single government body be responsible for monitoring the grants and for their accounting. In some countries, there is a specific agency for this purpose; however, it may be desirable to give this responsibility to the Treasury.

2. Budget execution

As mentioned earlier, in some countries the Treasury may assume the responsibility for budget execution at the central level, while in other countries these activities are assigned to other government departments, for example Budget, Government Accounting, or Audit/Comptroller's Office. When this responsibility is assigned to the Treasury, it may include, in addition to the cash management activities discussed in the preceding chapter, activities, on both the revenue and expenditure sides, involving control of execution at all stages of the expenditure process, i.e., commitment, verification, and payment. Specifically, these stages can be summarized as follows:

◆ Commitment stage: the commitment constitutes the destination (and, as a consequence, the setting aside) of part of the budget allocations for a specific expenditure, in accordance with the approved budget. Generally, it takes a form of contracts with suppliers of goods and services. It is essential to record the commitment stage for two main reasons: to control the actual availability of budgetary resources for assuming new obligations, and to monitor the newly created obligations and their impact on the projected cash outflows from the single account.

◆ Verification stage: in the verification stage, a spending unit verifies and certifies that all requirements for payment of a particular expenditure have been meet (e.g. the good has been delivered or the service performed as contracted, an interest payment or loan redemption is due). Registering this step enables the Treasury to track liabilities incurred but as yet unpaid, and to know immediate resource needs for payment.

◆ Payment stage: this is the stage at which the obligation incurred above is paid, thereby reducing the government's liabilities.

Treasury operations in the control of budget execution may take different forms. In some cases, the Treasury sets and controls overall financial limits for the commitment and payment stages. In other cases, the Treasury reviews and approves each individual expenditure to be committed and/or paid. Finally, there are cases in which the Treasury simply disburses the payment orders issued by the spending units, without participating in the previous stages. As mentioned earlier, the appropriate modus operandi in this respect needs to reflect the economic conditions and historical, cultural, and political factors specific to each country.

The use of the government financial information systems for Treasury operations in the budget execution is discussed in some detail in Appendix 2.

3. Accounting

Government accounting is another major function for which responsibility is attributed to different government entities in different countries. In some cases, it is given to a section of the Budget Department, in others to the Treasury, yet in others to a separate department, linked neither to the Budget nor to the Treasury. In this latter case, the accounting office may also be responsible for budget execution functions, including ex ante review of commitments and payments.

In many countries, government accounting is viewed as just a formal reporting tool, rather than as an instrument of government financial management. In these countries, quite often, statements based on government accounts have considerable lags, sometimes of up to two years. By contrast, countries in which accounting is linked to another major function, such as budget preparation or execution, generally use it more effectively. It is therefore important to ensure that accounting does not represent an end in itself, i.e. that it not be established as the final objective of a series of administrative procedures.

An important feature of the government financial information system proposed in this document is the fact that every spending units' operation is recorded in the system at the time when it is executed. This provides a continuously updated picture of government operations, with clear advantages for budget management. There are important advantages in the use of accounting as the basis for this recording:

- the accounting system, if based on double entry bookkeeping, ensures intrinsic control mechanisms;

- it avoids duplication of records, which would occur if the accounting system was separate from the GFIS;

The importance of accounting for the government financial information system points to some advantages in having the Treasury in charge of government accounting, including the definition of its rules and processes.

Since accounting can be said to represent the "backbone" of the information system, a proper definition and implementation of the government accounting framework and methods is essential to the effective working of the system. A detailed discussion of the desirable features of government accounting systems is beyond the scope of this report. Nevertheless, a few main issues should be emphasized here.

- First and foremost, the system should display the characteristic of universality. Specifically, this means that any transaction involving payments or receipts of any nature, whether budgetary or extrabudgetary, effected by any government body, agency, department, or unit, on its own account or on account of third parties, must be the subject of an accounting operation. Any transaction which alters the present or future value of government assets or obligations must also be recorded in the accounts.

- Another fundamental principle is that of double-entry bookkeeping, which offers clear advantages over other systems. One of these advantages is that it ensures intrinsic control mechanisms derived precisely from the fact that each transaction is recorded in two separate accounts simultaneously.

- Great care needs to be taken in the preparation of the government General Accounting Plan. This plan must be structured so as to ensure that for each and every operation there is an appropriate account (or subaccount). The lack of an account for recording certain operations (e.g., the setting of limits on commitments or payments) would entail the unavailability of the corresponding information, thus hindering the monitoring and control of the operations.

- Also important is the proper definition of accounting processes, i.e., the set of records used for the various stages of a given operation.

For example, the purchase of a given equipment item involves various stages; the applicable accounting scheme should ensure that each stage is recorded in the appropriate account of the Accounting Plan. As with the previous item, an inadequate definition of accounting processes may result in the lack of information needed for monitoring and controlling government operations.

- The primary data pertaining to any given unit--i.e., the data on the basis of which all accounting data is generated--should be registered into the system only once. This does not mean that there should be only one data base, but rather that data for a given unit should not be registered separately in each data base, in order to avoid inconsistencies or the need for complex dual updating routines. Nor does it mean that there should not be any backup files, as these are essential to any data recording system, and to computerized systems in particular.

- The system must be designed to provide for the automatic registering of operations as they occur, so as to avoid duplication of records in the operational and accounting systems, and to ensure consistency of the data utilized by system users. This automaticity is achieved by drawing up a comprehensive table covering all types of transactions effected by the users of the system. A code is assigned in this table to each transaction, as well as to the corresponding accounting process, which the system will automatically follow once the code is activated. Thus, the accounting of the transaction, though following directly from an action by the operational agencies, does not require them to take any further action or have any technical knowledge of accounting, as it is performed automatically by the system.

4. Auditing and evaluation

From the experience of selected OECD countries 1/ three main trends have emerged in recent years in the area of public auditing and evaluation: (1) the scope of audit and evaluation is being widened; (2) audit and evaluation have increasingly become an integral part of the budget process; and (3) the development of audit and evaluation can be seen as part of a wider movement of budget system reform.

Auditing and control are increasingly going beyond the traditional role of compliance and financial auditing, taking a more comprehensive view of the economic implications of the way in which resources have been used. Specifically, audit is increasingly aimed at assessing the cost-effectiveness and efficiency of the use of public funds. The objective is to contribute "to overall expenditure management by helping to ensure that,

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1/ See "Value-for-Money Auditing, Evaluation, and Public Expenditure Management: Experience in Selected OECD Countries and Lessons for Italy," paper prepared by the Fiscal Affairs Department of the IMF, Washington, April 1994.

within a tightly controlled total, public resources are allocated efficiently."

Auditing activities are usually divided into internal and external controls. Internal control is exercised by units within the structure of the authority subject to control. By definition, external control is performed by a unit outside the authority subject to control. The latter is generally performed by an entity linked to the legislature, as an auxiliary agency of this branch of power.

There is no unique model for the placement of internal control functions within the government structure. There are countries in which they are attributed to a specific unit. In others, they are given to a subunit within the Budget or Accounting Department of the Ministry of Finance. There are also cases in which the Treasury carries out this function. This is more frequent in countries where the Treasury is in charge of a broad range of functions in the budget execution and accounting. However, it should be stressed that it is not necessary for the Treasury, in performing its main functions in the area of financial management and budget execution, to be in charge of control and auditing. Indeed, the principle of function separation may advise against placing accounting and auditing under the same unit.

III. Basic Organization and Structure of the Treasury

In this section and the subsequent ones, it is assumed that the Treasury is responsible for most of the functions outlined in Section II above. 1/ The main reason for this approach is the fact that the countries that have only recently started to set up a Treasury are, for the most part, transition economies, characterized by a difficult economic situation, fraught with many uncertainties. These conditions call for a system of government financial management that allows a quick and effective response of budgetary policy to changes in the economic environment, so as to minimize macroeconomic instability. To assure this speed in adjustment, and the necessary coordination between budgetary and financial operations, a high degree of institutional concentration of these core functions is recommended. Such concentration of functions allows the system to be more easily computerized, which in turn speeds up the flow of information. It is this access to timely information on budget execution and financial flows which allows the Treasury system to increase budgetary control, to plan and effect rapid adjustments in the execution of the budget, as required by changing economic circumstances, and to be more efficient in the cash management of government funds.

1/ If one or more of the typical Treasury functions are excluded from its responsibilities in a particular country, the structure and operations of the Treasury need, of course, to be adjusted accordingly.

Particularly in relatively large countries, it is advisable to set up the Treasury with a two-tier structure: a central one, including a number of departments and/or divisions responsible for the main Treasury functions; and a network of regional offices, responsible for the operations of the Treasury in the respective regions. For the effective functioning of the Treasury, it is crucial that the regional offices be entirely subordinate to the central Treasury, without any formal links to the local administrations. Cooperation with the latter should be viewed as a service to them, rather than a joint subordination.

It should be stressed that there is no unique model for the organizational structure of the Treasury. The number and specific functions of its divisions and offices has to be determined on a case-by-case basis, in the light of the specific needs of each country, and each one is likely to evolve over time as the Treasury develops. For illustrative purposes, Chart 1 presents one possible configuration of the Treasury's central organization, based on the key functions envisaged for the Treasury.

Regional Treasury offices would perform the following functions:

(1) process through the government financial information system the expenditures of spending units not directly linked to the system;

(2) at the end of each business day, authorize the regional branch of the central bank to carry out the payments registered into the system by the spending units directly linked to it;

(3) ensure the timely and accurate transfer to the government account of revenues collected by other agencies (e.g., taxes collected by the commercial banks), and register these operations into the government financial information system; and

(4) perform control and auditing functions with respect to the spending units in its region.

Chart 1. A Possible Organization of Treasury Functions

Function	*Tasks of Organizational Unit*
1. Analysis and Financial Planning	
a. Monitoring and Analysis of Government Operations	On basis of accounting information generated by the system, prepare analyses and reports on government operations
b. Financial Planning	In consultation with other relevant units within and outside the MOF, prepare forecasts of cash inflows and outflows into Treasury, and determine overall monthly spending limits.
2. Budget execution	
a. Budgetary Operations	In consultation with the Budget Dept., distribute overall-cash limits among ministries; monitor crediting of receipts to the Treasury Single Account
b. Special Funds	Monitor operations of extrabudgetary funds, and manage financial flows between them and the budget
c. Subnational Levels of Government	Monitor operations of the subnational levels of government
3. Debt and Asset Management	
a. Internal Debt	Maintain register of, and manage, domestic debt and debt service, including operations with the Central Bank. Monitor domestic contingent liabilities.
b. External Debt and Aid	Maintain register of government external debt, and debt guarantees; manage service of the debt; monitor foreign aid flows
c. Asset Management	Maintain asset register, deal with financial aspects of privatization
4. Accounting	
a. Accounting methodology	Set standards for, and regulate government accounting, including accounting plan and schemes, etc.
b. Accounting operations	Process budget accounts; undertake accounting operations which are not automatically executed by the system; prepare official accounts and periodic reports
5. Audit	Monitor correctness of use of public funds within the Treasury system; organize specific audit investigations
6. System management	Manage computerization and Treasury systems development; organize related training

IV. A Government Financial Information System

In any country, the Ministry of Finance needs to have a complete, reliable, and timely flow of information on budgetary and extrabudgetary operations of the central government and its agencies, and on the budget execution and other operations of the regional and local governments, so as to be able to adjust the execution of the budget to developments in the economy in an efficient manner.

The fulfillment of these needs is facilitated by the establishment of modern government financial information systems. Such systems can be designed and implemented in a number of ways. This paper provides a broad outline of a computerized, integrated system for the execution, reporting, accounting and overall financial management of government financial operations, and advocates that, in view of its institutional mandate within a typical Ministry of Finance, the Treasury be put in charge of the operation of such a system.

A key characteristic of this system is that, once it is set up, spending units can only execute their operations through the system. In turn, this provides the authorities with timely and accurate information on budget execution and on extrabudgetary operations. This information is essential for effective planning of government operations, including the setting of spending limits. This system can also be designed to process the operations of the regional and local governments (see Section 5 below).

The relation of benefits to costs of the proposed system recommends its early implementation, as soon as a Treasury is set up. Some of its benefits--such as the availability of complete and timely information on government operations--cannot be measured precisely, but clearly are likely to be substantial. One benefit that could be quantified is the financial savings for the government resulting from the elimination of idle balances held by various spending units, if they keep their accounts in the banking system.

Appendix 2 presents the main features of the proposed system, which can be summarized as follows:

(1) The system should be designed to process all operations-- whether budgetary or extrabudgetary, and include any operations which involve a change in assets and liabilities of the central government 1/--of spending units directly linked with it, as well as certain operations of other spending units which would be indirectly linked to it. If there is a large number of agencies which receive and spend government funds, decisions about the form of linkage of the spending units would need to be taken in light

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1/ If the system is designed to process also the operations of the regional and local levels, references in the paper to "operations of central government", or "agencies of the central government", extend to those levels as well.

of: a) their characteristics (such as geographic location, level of expenditures and degree of reliance on budget financing), for which an inventory is needed; and b) technical and cost considerations, regarding, in particular, the state of telecommunications;

(2) The spending units directly linked to the system would have to register in it the successive stages of expenditure implementation, from commitment to payment. The system would automatically check the conformity of each operation with the relevant budget allocation, and the compliance with the cash limits that would be set periodically for each spending unit. Only upon this verification, would the system permit the issuance of the corresponding payment order. By ensuring the conformity of actual expenditures by individual spending units with their budgetary allocations and spending limits, the system would facilitate the control by the Treasury over the execution of the budget.

(3) As explained before, the government would have only one single account in the central bank, and the accounts with the banking system of ministries and spending agencies would be replaced by ledger-type accounts in the system, and their idle balances would be used to reduce the net government debt to the central bank.

(4) All operations would be accounted for within the system according to standardized accounting rules. As explained in Section 2 above, the system would be programmed to automatically perform the accounting operations of all units directly linked to it. This would provide the Treasury, and any other entity having full (or partial) access to the information generated by the system, a continuously updated picture of the execution of all (or the relevant part of) government financial operations. The information generated by the system would be utilized by the Treasury for the preparation of periodic reports on the execution of the budget, and for the official annual accounts of this execution.

(5) As discussed further in Appendix 2, the proposed system would significantly facilitate the financial planning of government operations by the Treasury.

V. Relations of the Treasury with Other Public Entities

Clearly, the central government requires rapid and accurate information on the operations of those parts of the public sector which it controls. However, it also requires similar information on the payments and revenues of other public entities, including those pertaining to other levels of government, in order to be able to anticipate any implications of developments in those entities for the central budget, and in order to manage effectively the overall budgetary policy for the country. This monitoring should include:

- the extrabudgetary funds
- the subnational levels of government
- the public enterprises of all government levels

This monitoring can be performed in two different ways: by receiving periodic reports from those entities, or by incorporating them into the government financial information system. In the first case, it is necessary to develop and implement a set of rules and forms based on standardized accounting practices, so as to permit an accurate consolidation of the information received. The effectiveness of this system depends upon the willingness of each entity to send the information, its accuracy, and the resources available in the Treasury to process them. Therefore, this system is time-consuming and subject to delays and inconsistencies.

By contrast, the incorporation of these entities into the government financial information system entails considerable benefits, without necessary reduction in the legal autonomy of each institution. First, information flows about developments in the finances of these entities become more readily available both to them and to the Ministry of Finance. Second, the standardization of accounting practices across all levels of government, the implementation of similar expenditure authorization and control processes, as well as similar methods of financial planning, all tend to facilitate the financial management of the entire public sector. It should be also noted that this incorporation need not imply any loss of individual accounting information about the different institutions and levels of government involved, since their accounts can be maintained separately in the system.

1. Extrabudgetary funds and other autonomous public agencies

Quite often, different types of decentralized entities are set up to perform typical government functions. This strategy aims at: (1) giving these entities a greater degree of managerial autonomy which, theoretically, would allow them to better fulfil the purpose for which they were established; and (2) earmarking public revenues to the operations carried out by them. These entities may have their own legal personality, or may just constitute accounting funds, generally known as extrabudgetary funds.

Frequently, these funds are part of a social security system, such as pension, employment, health funds, etc.

As these funds perform typical government operations, and these generally involve considerable sums--often comparable to the general government budget--it is crucial for the economic authorities to have complete and up-to-date information on their financial performance. The lack of such information can significantly jeopardize the effectiveness of the central government's fiscal adjustment efforts.

For these reasons, the general procedures for budget execution should also apply to the operations of extrabudgetary funds, and their operations should be processed through the government financial information system.

However, if it were considered necessary to maintain a degree of independence for some of the extrabudgetary funds, it could be envisaged that the financial planning and determination of monthly spending limits would be carried out by these agencies themselves. If more autonomy is to be given, they can also keep their funds in a separate financial account in the central bank.

2. Subnational levels of government

The relations of the Treasury with the subnational levels of government depend basically on the institutional arrangements for intergovernmental fiscal relations in each country, including, in particular, the degree of autonomy granted to them.

In some countries, expenditures by subnational governments account for a large proportion of overall general government expenditure. Therefore, even when it is not legally or politically possible to require these entities to integrate themselves in the government financial information system, it is highly desirable to encourage such integration on a voluntary basis.

The government financial information system can be designed to provide variable levels of autonomy to any entity linked to it, without losing one of its main advantage, which is the provision of timely and reliable information. Therefore, as for the extrabudgetary funds, the subnational levels of government could take charge of their own financial programming, set their spending limits, and maintain their financial balances separate from the central government single account, while having their operations processed by the government financial information system.

3. Public enterprises

For the purpose of this paper, public enterprises must be divided into three groups. The first would include those enterprises which, although constituted as companies, perform typical government functions. In this case, the procedures discussed above for extrabudgetary funds would be applied.

The second and third groups include entities engaged in commercial or industrial activities. In this case, the relations of these entities with the Treasury should take into account primarily their degree of dependence on government contributions, in both absolute and relative terms. The second group covers enterprises that rely heavily on these contributions. From the standpoint of the government finances, it is important that the Treasury has close and effective control over the finances of these enterprises through their linkage to the government financial information system.

The third group includes the enterprises which are marginally, or not at all, dependent on transfers from the central government. In this case, the Treasury's relationship with these enterprises would typically be that of a controlling shareholder, including, inter alia, examination of the enterprises' financial statements, monitoring of their economic and financial situation, participation in their Boards of Directors, and attendance at their general shareholders' assembly.

4. The Central Bank

The Treasury functions, as described earlier, would be very difficult, even impossible, to perform without the cooperation of the Central Bank. This cooperation (summarized under the notion that the Central Bank should be the "fiscal agent" of the Treasury) includes a vast range of functions, hinging on two factors: (a) the critical position of the Central Bank in relation to the payments system; and (b) the responsibilities of the Central Bank concerning monetary policy.

In a modern economy, payments take place largely through transfers to and from bank deposits. These imply ultimately transfers among financial institutions of their deposits with the Central Bank. As the Treasury is likely to receive payments from, and make payments to, a very wide array of economic agents in the country, holding the single Treasury account at the core of the payments system is the best means to minimize the number and volume of transfers of funds, and the attendant gross flows of information.

As a result, taxes are collected through the banking system, which in turn transfers the proceeds to the single Treasury account with the Central Bank. Similarly, budgetary payments are carried out by issuing orders to the Central Bank to transfer global amounts of funds to specific financial institutions, which in turn, are requested to pay to individual deposit holders. In the case of financial transactions, the payment functions of the Central Bank and the financial institutions are even more direct, as banks themselves are most likely to be the holders of government debt, or to act as depositories for its final holders.

The cashier functions of the Central Bank, important as they are, come to a second place when the implications of the government budget for monetary policy are taken into account. The level and sign of the budget balance affect macroeconomic performance, and consequently the design and implementation of monetary policy. How the imbalances in the government budget are financed is even more significant for monetary policy.

The most direct implications of government financing for monetary policy derive, of course, from changes in the net financing provided to the government by the Central Bank. As detailed in Appendix 3, central bank lending to the government should be either prohibited or subject to very strict and objectively defined limits. However, even in the ideal case of no lending to the government, there are likely to be significant changes in the net financial position of the government with the Central Bank. This is the case since government deposits with the Bank are bound to show important short-run fluctuations. Such a result is largely inevitable. The means to avoid it (holding deposits with commercial banks, delaying payments, or modifying the tax calendar) may have undesirable side effects. This is the first and main rationale for the coordinated planning of government operations that will be detailed later on.

Government financing in foreign capital markets is also directly relevant for monetary policy, due to its implications for the evolution of foreign exchange reserves (held by the Central Bank, and a counterpart to the monetary base) and the exchange rate. Whatever the relative responsibilities of the government and the Central Bank concerning the external aspects of monetary policy, decisions to borrow abroad should not be taken by the government ignoring their implications for monetary policy, and without close consultation and coordination with the Central Bank.

A preferable source of financing budget deficits are issues of government securities in the domestic capital market. According to international practice, this is another important area of functions of the Central Bank as fiscal agent of the Treasury. Following rules agreed with the Treasury and under its guidance, the Central Bank should:

1. carry out the actual issuing of government securities through auctions, which should be the only, or at least the main, issuing technique;

2. perform the cashier functions in relation to the disbursement and repayment of government securities, as well as to interest payments;

3. set up the depository where securities would be held in book-entry form (securities accounts), and the accompanying regulations. In fact, the depository for government debt can, in principle, be kept by the central bank itself, by an independent agency, or by commercial banks. However, since transactions among institutions holding deposits with the central bank should be settled through such deposits, it would be advisable to use, to the largest extent technically feasible, the Central Bank itself as the central depository for government debt accounts (with other selected financial institutions acting as sub-depositories);

4. facilitate the settlement of transactions in the secondary market for government debt. International experience shows that developed markets for government debt are over-the-counter markets, with stock exchanges

playing a very minor role. The Central Bank, keeping both the securities accounts and the deposit balances of the main market players, would play a critical function in the settlement of such transactions with a minimum delay after trading, and on a delivery versus payments basis;

5. supervise the secondary market. Whatever the final authority responsible for the supervision of capital markets, the Central Bank should contribute to the day-to-day supervision of the market for government securities, given its close proximity to market developments and to its major institutional players;

6. collect and diffuse detailed and timely information on the volume of transactions in the secondary market for government debt, its composition (by holding agents, types of securities, kind of transactions, etc.), and the implicit market yields. This centralized information system would be an indispensable counterweight to the decentralized character of the over-the-counter market for government securities;

7. advise the government on any relevant aspect of the former activities: the institutional setup of the market, the type of securities to issue, the actual program of securities issues, etc.

Finally, the relationship between the Treasury and the Central Bank has a special economic dimension. As owner of the Bank, the government is entitled to the usually substantial profits earned by the latter, which should accrue to the budget. However, some important principles should be respected. First, clear accounting rules should lead to an unambiguous definition of central bank profits, consistent over time. Second, clear standing rules should dictate the distribution of profits between the central bank's reserve funds (to preserve the real value of capital, to cover prospective losses, and smooth out year-to-year fluctuations of profits) and the budget. Third, the government should pay a market interest rate on any loans received from the Central Bank, and should receive a similar rate on its deposits (the Treasury single account, plus other government agencies' deposits, if any). Fourth, if a remuneration for the services of the Central Bank to the Treasury appears desirable, it should be paid through flat service charges, rather than through a reduction of the remuneration of government deposits.

Given the various interactions between the Treasury and the Central Bank, there is a need for active cooperation, to ensure appropriate solutions to technical problems, and above all the mutual compatibility of monetary and fiscal policy targets. Lack of adequate communication on these issues tends to lead to difficult institutional disagreements and political problems. Policy coordination should not be conceived as something to be done once or twice a year, but as a continuous process subject to regular and frequent updating. This calls for appropriate institutional arrangements.

The importance of financial planning in Treasury management has already been stressed above. Short-, medium-, and long-term financial planning of government transactions are equally important for the Central Bank in the discharge of its monetary policy responsibilities. The Treasury should be prepared to share its information and forecasts with the Central Bank, and should also accept, even welcome the elaboration by the Central Bank of its own forecasts on government accounts. These, of course, should also be shared and discussed with the Treasury. In turn, the Central Bank should communicate to the Ministry of Finance any relevant information concerning its monetary policy targets, and any planned action which might have repercussions on the availability and cost of government financing.

The sharing of information would naturally induce the Central Bank to provide advice to the Treasury on matters of mutual concern. The advisory role of the Central Bank is not only desirable, but should be encouraged to become a formal one, even if occasionally the price of unwanted criticism has to be paid. Such advice would not exclude, of course, that final decisions on debt management should be reserved, within any applicable legal constraints, for the Ministry of Finance.

To facilitate coordination, it is desirable to create a high level policy committee between the Ministry of Finance and the Central bank. Such a single body should cover all aspects of the relations between the two institutions, though its main function would be to consider government debt management in the light of monetary and other policy objectives. While the role of this committee would be an advisory one, with the Ministry of Finance retaining ultimate responsibility for decisions in this area, it would be instrumental in ensuring a better coordination of monetary and debt management policies. This body should be supported by appropriate technical stuff, and might be complemented with permanent or temporary sub-committees dealing with specific issues.

Appendix 1. A Tabular Comparison of Treasury Functions in Selected Countries
- Part A -

Feature	AUSTRALIA	BRAZIL	FRANCE	JAPAN
Government institutional arrangement for treasury functions	Functions split between Department of Finance (DoF--expenditure control) and Department of the Treasury (macroeconomic policy and revenue collection). Both departments are of ministerial level, directly linked to Government.	There is a Treasury Secretariat (TS), a second hierarchical level unit in the Ministry of Finance, in charge of most of the treasury functions. The budget preparation is carried out by the Budget Secretariat (BS), linked to the Ministry of Planning. The Federal Revenue Secretariat (FRS) and the Federal Control Secretariat (FCS), both linked to the Ministry of Finance, also perform some of the treasury functions described in this paper.	The functions are split between the Treasury, a second hierarchical level unit linked to the Ministry of Finance, and the Direction Generale de la Comptabilité Publique (DGCP), also a second hierarchical level unit linked to the Ministry of Budget.	Treasury functions are divided among many third hierarchical level units in the Ministry of Finance (MOF): Treasury Division, Debt Management Division, and Finance Division, from the Financial Bureau, and Budget Division, Budget Execution Division, and the Legal Division, from the Budget Bureau.
General description of the development of treasury functions				
• cash management	Treasury controls recording of inflows (revenue collection and public debt) and outflows related to the public debt. The outflows related to the budget execution are controlled by the Dept. of Finance.	TS controls all inflows and outflows to/from the single account, and sets cash limits by type of expenditure for each Ministry, and the latter distributes the limits among their spending units. The BS used to set commitment limits, but this was prohibited by the Congress.	Treasury monitors flows in or out the State's account in the Central Bank. DGCP is in charge of payments and of collection of revenues (Revenues and Customs Directorates).	The Treasury Division and the Budget Execution Division follow in-and outflows to the government's account in the Bank of Japan (BOJ).
• short-term financial planning	Treasury prepares rolling financial plan at aggregate level. DoF prepares a plan for financing expenditures, broken down by quarters or months, depending on the type of expenditure.	TS prepares rolling financial plan, broken down by month, with the current month broken down by day.	Treasury prepares a rolling financial plan, broken down by month.	The Treasury Division prepares a rolling financial plan broken down on a daily basis.
• public debt management	Treasury controls the issues of government securities, decides upon the level, timing, composition, etc., but uses the Central Bank as an agent.	TS determines level, timing and conditions of any government borrowing, in close coordination with the Central Bank, which acts as the agent in the auctions and in the debt service. TS also controls the external and the indirect government debt.	Treasury controls the issues of government securities, decides upon the level, timing, composition, etc., but uses the Central Bank as an agent.	The Debt Management Division controls the issues of government securities, decides upon the level, timing, composition, etc., but uses the BOJ as an agent.
• financial asset management	DoF sets policy which is implemented by the line departments, in accordance with government instructions.	TS controls loans made by the government, as well as the financial management of government participation in public enterprises.	Treasury establishes the general policy, which is implemented by DGCP.	The MOF, by proposal of the Financial and Budget Bureaux, sets policies which are implemented by the line ministries.

Appendix 1. A Tabular Comparison of Treasury Functions in Selected Countries
- Part A -

Feature	AUSTRALIA	BRAZIL	FRANCE	JAPAN
• budget execution - collection of revenues	The Australian Taxation Office (ATO) in charge of tax administration is part of the Treasury. Therefore it interfaces with taxpayers, and receives the tax payments. The Customs Administration is in charge of external revenue collection. The banking system is not utilized in the collection. There is no direct tax sharing mechanism.	The tax collection process is coordinated by FRS, and other revenues are collected directly by spending units. All collection is done using the bank system. TS controls all inflows to the single account.	Treasury is not involved in operational tasks, but follows the overall inflows into the single account. The 2000 larger VAT taxpayers pay directly to the single account in the Central Bank. The rest is collected by Revenues Directorate (about 50 percent), DGCP (about 35 percent), and Customs Administration (about 15 percent).	The National Tax Administration and the Customs Department (both units within the MOF) are responsible for the collection. Taxes can be paid at the BOJ, authorized commercial banks (which act as BOJ's agents), the Postal System, and at local branches of the National Tax Administration and Customs Department. The ministries are in charge of the users fees and contributions collection.
• budget execution - expenditures	There is a specific legal framework for the commitment and verification, with the policy established by DoF, but carried out at departmental level. Both the Treasury and DoF are passive in the budget execution, which is done at the request of the spending units.	The line ministries and spending units carry out, through the TS system, all administrative steps in the commitments, verifications and payments, provided that they follow the budgetary and financial limits, which are controlled by the TS system. Therefore, while the more direct control is exercised by line ministries and spending units, the TS exercises a strong control through its information system and has a large discretionary power to set cash limits. TS also coordinates and oversees the payment process.	Budget execution is monitored by the Budget Directorate (DB). The pace of expenditure can be controlled, if necessary, by the DB, through its network of financial controllers. Therefore, there is a strong control of expenditures: at the commitment and order-to-pay stages by financial controllers, and at the payment stage by the DGCP.	Line ministries carry out the expenditures on the basis of the payment schedule approved by the Budget Execution Division. Commitment schedule for some expenditure items (usually the public works) also needs to be approved by the MOF. The BOJ controls the ministries' compliance with budgetary and cash limits.
• accounting	DoF is in charge of the accounting regulations, and maintains a central ledger system. Each department has its own detailed accounting system. The DoF Central Ledger System is cash based, single entry. The departments' systems are accrual based, double entry.	TS issues accounting regulations, defines accounting processes to be automatically followed by the information system, inputs non-automatic accounting registers, and coordinates the preparation of the government's annual accounts. It is a double entry system on an accrual basis. However, by the current legislation, revenue is considered collected on a cash basis.	DGCP is in charge of accounting regulations. There is a central ledger at the Ministry of Finance's (cash-based, double entry), and one system in each ministry (commitments and order to pay based, double-entry)	Direct program accounting is maintained by line ministries. The Legal Division is in charge of the methodology, and issues instructions to the line ministries. There are two accounting systems: one which is carried out by the BOJ as a MOF agent, and the other by the line ministries. Both are cash based on appropriation account.

Appendix 1. A Tabular Comparison of Treasury Functions in Selected Countries
- Part A -

Feature	AUSTRALIA	BRAZIL	FRANCE	JAPAN
• internal control and auditing	It is done by the line departments through internal audit arrangements.	TS used to be in charge of it, but a recent reform transferred this function to FCS.	Financial controllers and DGCP are in charge of control during the spending process. Ministries' inspectorates, and, for the most difficult cases, the Ministry of Finance's Inspectorate, are in charge of auditing.	Ministries conduct own internal controls and audit.
• fiscal control of subnational levels of government	Subnational levels control own budgets. However, their borrowing requirement limits are set within an overall Public Sector Borrowing Requirement (PSBR). The Treasury proposes the limits to the Government, and controls their compliance.	TS monitors, with some delays, their budget execution. It also participates in the analysis of their debt operations--which are to follow limits set by the Senate--and of guarantees given by the Federal Government to them.	About 95 percent of their revenue and expenditure are administered by DGCP.	There is a tax sharing mechanism whereby funds are allocated in favor of local governments with weak fiscal positions. Local governments' borrowing needs to be approved by the Ministry of Home Affairs and the MOF.
Is there a Treasury Single Account?	Yes.	Yes.	Yes.	There is a government consolidated account, in the BOJ. However, subaccounts are opened on behalf of line ministries, which are used to credit and control their limits to pay.
• with overdraft facility?	Yes, with limit approved by the government by joint proposal from the DoF and Treasury.	No.	No. The Maastricht Treaty forbides any overdraft facility from the Central Bank	Not directly. The BOJ's credit to the Government is prohibited, except for short-term financing. The BOJ purchases the unsold portion of issuances of Government short-term financing, which are normally made every other day. There is a global limit set in the budget for these issuances, and they must be completely redeemed by the end of each year.
• interest rate conditions	It bears market interest rates.	It bears market related interest rates.		No interest is paid on government balances.

Appendix 1. A Tabular Comparison of Treasury Functions in Selected Countries
- Part A -

Feature	AUSTRALIA	BRAZIL	FRANCE	JAPAN
Variable of short term adjustment in the government financial plan execution	The deficit fi.ancing is adjusted. Only under special circumstances can there be an increase in expenditures, but it requires parliamentary approval.	The level of expenditures is adjusted by the cash limits set by the TS. The Executive has limited autonomy to change the Budget. Beyond this autonomy, any additional expenditure requires Parliamentary approval.	The financing is adjusted. There can be reduction in expenditures if the Government finds it necessary.	Maximum deficit financing is determined by the budget and not adjustable on account of revenue shortfalls. Very short-term revenue fluctuation can be accommodated by Financing Bond issues. Supplementary budget needs to be submitted to Parliament for approval to increase expenditure and/or raise the debt ceiling. Intra-budgetary transfers and use of the contingency fund are also possible in limited cases.
Coordination between the Treasury and the Central Bank	DoF establishes terms and conditions for single account banking arrangements. Overdraft arrangements agreed jointly by DoF/Treasury. There is also day-by-day coordination between the Treasury and the Central Bank on public debt management issues.	Used to be done very actively in an informal way, but a formal committee was recently created.	There are several formal committees for policy coordination in which the Treasury participates, including for monetary policy.	There is day-to-day coordination between the MOF and the BOJ, since the BOJ serves as MOF's fiscal agent in many areas of treasury management: accounting, fiscal reporting for all levels, for both revenue and expenditures, and control of budgetary and financial limits. In the public debt area, it acts as an agent for issuance, redemption and general management of government bonds.
Coordination between the treasury and the budget department	The budget is prepared by DoF. There is a Macroeconomic Forecast Committee in which it and the Treasury participate. There is also an informal day-by-day coordination.	The BS has full access to the Treasury information system, and uses this access to consider proposals of budget modifications from the line ministries. TS participates in the initial stage of the budget preparation, in the discussions of macroeconomic parameters, revenue forecasts, and debt financing.	Budget is prepared by the Budget Directorate. Treasury is kept informed of the level of deficit forecast. Informal day-to-day coordination is maintened throughout the year	There is day-to-day coordination between the Financial Bureau's divisions and Budget Bureau's divisions.
Government Financial Information System(s)				There are two main systems: one for budget preparation (I), and another for budget execution and accounting (II).
• Department in charge of it	Department of Finance.	TS.	Ministry of Budget	(I): Budget Bureau; (II): BOJ.

Appendix 1. A Tabular Comparison of Treasury Functions in Selected Countries - Part A -

Feature	AUSTRALIA	BRAZIL	FRANCE	JAPAN
• General description: logical configuration	Budget preparation, execution (payments) on the appropriation level, revenue collection recording and accounting.	Processes all government transactions, whether budgetary or extrabudgetary, of all central government, including the Judiciary and Legislative powers, social security institutions, autonomous entities, funds, and some of the public enterprises. It automatically generates accounting registers and all kinds of financial and accounting information. All budgetary transactions stages are registered and automatically controlled by the system, which does not allow any operation beyond the budgetary and financial limits.	Budget preparation, publication of budget documents, and budget execution.	They are used for the budget preparation, and budget documents publishing (I), and budget execution and accounting (II).
• General description: physical configuration	Links on-line, real-time, to the DoF's divisions. There is data transmission between it and line departments' systems.	On line, real time system, in all levels.	The main system maintained by the DGCP, is internal to the Ministry of Budget. Others systems exist between DB and line ministries for budget preparation, dissemination of approved documents and for the follow-up of commitments and orders to pay issued by the ministries.	There are links between the MOF and line ministries (I), and MOF and BOJ (II).
• Level of functional integration	Total, at the DoF level.	Total, except for the budget preparation, which is processed in a system administered by the BS (see next item).	Total, at the DB level	Partial, as indicated by the fact that there are two systems only at the central level.
• Level of institutional integration	Total integration only at DoF level. The line departments have their own financial information systems, which transfer information on-line to the DoF's system.	Total. The BS budget preparation system is linked to the TS system network, which allows on-line exchange of information and economies of scale because the line ministries and spending units are linked to the budget preparation system through the TS network.	Integration only at DB level, but DB has a comprehensive view of the ministries' accounting through the accounts held by the financial controllers.	Only at MOF level.
• time necessary to have consolidated information	One day.	Some consolidated information is available on-line. More complex ones require one day for compilation.	One day, through the flows in the single account.	Processing times vary by report needs. Consolidated cash flow information is available daily.
• time necessary to have detailed information	On line at the appropriation level within DoF. More detailed data need to be requested from the departments.	Available promptly.	Every week. Information provided by the DGCP.	Detailed information can be requested from line ministries. Times vary by information and ministry.

Appendix 1. A Tabular Comparison of Treasury Functions in Selected Countries

- Part A -

Feature	AUSTRALIA	BRAZIL	FRANCE	JAPAN
• Number of spending units	There are 56 legally defined departments.	10,050 (Dec. 1992).		
• Number of financial transactions per year, for all spending units	About 30,000,000.	9,159,223 (1992).		
Other fiscal reporting systems	There are requirements for the departments to prepare financial statements, but they are done on the basis of data in the central ledger.	No.	Departments prepare their own financial statements, with the support of DGCP.	Line ministries have own financial information system.

Appendix 1. A Tabular Comparison of Treasury Functions in Selected Countries
- Part B -

Feature	SPAIN	UNITED KINGDOM	UNITED STATES
Government institutional arrangement for treasury functions	Functions are split between the Undersecretary of Finance (SH-budget, expenditure control, accounting) and General Directorate of the Treasury (DGT-cash and government debt management), both second hierarchical level units in the Ministry of Finance.	Functions are divided between HM Treasury (policy and debt management) and the Paymaster General's Office (account processing and recording).	The US Department of Treasury (Treasury) is a unit directly linked to the President, and has a broad range of economic and financial functions. Other units which intervene in the process are the Office of Management and Budget (OMB), in charge of the budget preparation, and the General Accounting Office (GAO), in charge of some accounting and auditing functions. The Internal Revenue Service (IRS) and the Customs Administration are part of the Treasury.
General description of the development of treasury functions			
• cash management	DGT controls all inflows and outflows to the Treasury single account with the Central Bank. Issues mandatory schedule for monthly or quarterly disbursements, but retains exceptional power to delay disbursements of certain expenditure categories.	The Paymaster General's Office processes payment orders and outflows from Consolidated Fund. Payment limits are set by parliamentary appropriations and by administrative cash limits.	The Treasury controls all inflows and outflows to the Treasury General Account, and also controls the Government's bank accounts.
• short-term financial planning	SH prepares rolling overall financial planning, on a monthly basis. DGT prepares monthly and daily planning of cash resources.	HM Treasury develops financial plan on a monthly basis for use in determining short term financing requirements.	Treasury prepares a rolling financial planning, going out 4-6 months, broken down on a daily basis, and updated each month
• public debt management	DGT determines level, timing and conditions of any government borrowing. Securities are issued using the Central Bank as an agent, but foreign or other borrowing is undertaken directly by the DGT. DGT has wide regulatory powers over the secondary market for government securities.	HM Treasury determines level, timing and composition of issue of government securities. The Bank of England acts as agent for issuing.	Treasury controls the issuance of and accounting for Government securities, and decides on the level, timing and composition of auctions. It uses the Federal Reserve for auction support. Treasury also promulgates regulations for the secondary market for Treasury securities.

Appendix 1. A Tabular Comparison of Treasury Functions in Selected Countries
- Part B -

Feature	SPAIN	UNITED KINGDOM	UNITED STATES
• financial asset management	Participations in enterprises and international agencies are distributed among two specialized MOF departments and two government holding companies. Treasury exerts only formal controls on these assets. Government loans are held by the DGT.	HM Treasury exercises control through External Financing Limits (EFL) on public enterprises and holds financial assets, except golden shares in privatized industries, which are retained by the responsible department.	Done by line departments, in accordance with policies and standards set by Office of Management and Budget (OMB) and by the Treasury. Treasury also manages programs to improve financial asset management.
• budget execution - collection of revenues	Agencia Tributaria, a separate MOF agency, collects taxes through the banking system, and acts as tax inspectorate. DGT oversees inflows to single account, and directly collects certain non-tax revenues.	Revenues are collected by Inland Revenue Service and HM Customs, and by departments for users fees. HM Treasury controls overall inflows to Consolidated Fund.	Treasury collects all taxes and custom duties, and provides centralized collection systems for individual agency fee and service charge revenues. Treasury also provides analysis of receipts against budget targets. Treasury uses the banking system to provide collection services. The funds can be kept in the banking system, in accordance with a system called "Federal Tax Deposit/ Treasury Tax and Loan Account - FTD/TT&L" and "TT&L Investment Program".
• budget execution - expenditures	Decisions on commitment, verification and payment request are made by spending units, within the framework set up by the Treasury, as indicated above. Payment orders are issued by the DGT, which also oversees actual disbursements. Control is located in line departments, taking into account budget allocations and the cash disbursement schedule. SH monitors overall execution, but no systematic schedule of commitments is enforced. Still, moral suasion and informal cabinet decisions play a significant role, and the government may, under exceptional circumstances, block certain budgetary allocations. DGT oversees compliance with the disbursement schedule, and retains full discretion to actually disburse a significant share of total expenditure.	The Paymaster General's Office makes payments on behalf of departments, within the limit of relevant budgetary appropriations, following verification by departments. HM Treasury monitors the payments.	Control over spending decisions is located in line departments. Expenditures are paid by the Treasury by request of the spending units, within budget allocations and departmental allotments. Checks or increasingly electronic transfers are utilized as payment means, with the N.Y. Federal Reserve Bank (NY Fed) as agent. Outlay patterns are monitored by both Treasury and OMB.

Appendix 1. A Tabular Comparison of Treasury Functions in Selected Countries
- Part B -

Feature	SPAIN	UNITED KINGDOM	UNITED STATES
• accounting	SH issues accounting standards. Accounts (and various kinds of reports) are automatically generated by the information system (also under the ultimate control of the SH) through which all governments transactions are carried out. It is a full double entry system, integrating the six different budgetary stages noted below. Detailed accounting is regularly available on both accrual and cash basis.	HM Treasury establishes accounting methodology. The accounting system is currently cash based on appropriation accounts, but progressively moving to accrual basis (resource accounting).	Direct program accounting is maintained by line departments. Treasury is in charge of the overall accounting, issues instructions to agencies, receives their submissions, and prepares monthly reports and annual financial statement. The Treasury system is a cash-based, double entry system for monetary assets and liabilities. Line departments' systems follow a standart chart of accounts with double entry system.
• internal control and auditing	It is a responsibility of the SH, through its financial controllers permanently assigned to the main spending units, or through special inspections and controls. Many formal controls are embodied in the information system.	Ministries conduct own internal controls and audit.	This function is performed by Inspectors General in the line departments.
• fiscal control of subnational levels of government	The DGT has no control over the budgets of regional autonomous governments and local authorities. However, both are highly dependent on government transfers, and are subject to standing borrowing rules. Ad hoc periodic political agreements play a large role in the case of regional governments.	Subnational levels (local authorithies) subject to a range of central government controls, including borrowing limits and controls on local tax levels. They have limited autonomy to borrow in their own name, with no explicit central government guarantee.	The Federal Government has an oversight role only on federally financed state and local level programs.
Is there a Treasury Single Account?	Yes, at the Central Bank.	Yes. The Consolidated Fund.	Yes. The Treasury General Account, held with the NY Fed.
• with overdraft facility?	Tradionally yes, but has been discontinued from 1.1.94, as a result of the Maastricht Treaty requirements.	No. The Consolidated Fund is balanced daily by transfer from/to the separate National Loan Fund	No. Treasury does regular weekly securities issuances, which may include cash management bills to cover short-term cash needs.
• interest rate conditions	Traditionally no interest is paid or received. Since 1.1.94, there is a legal requirement to remunerate balances held by the Treasury, but details have not yet been worked out.	Loans made through the National Loan Fund bear market interest rate.	Excess balances over US$ 5 billion hold at NY Fed are invested in commercial banks at a rate based on the Federal Funds Rate.

Appendix 1. A Tabular Comparison of Treasury Functions in Selected Countries
- Part B -

Feature	SPAIN	UNITED KINGDOM	UNITED STATES
Variable of short term adjustment in the government financial plan execution	In the event of revenue shortfalls, the deficit financing is adjusted. Additional expenditure requires Parliamentary approval. Some (usually transitory) expenditure adjustment may take place as indicated above.	Deficit requirement and financing is adjusted to accomodate changes in revenue collection, but expenditures are usually fixed at their Parliamentary appropriation levels. Additional expenditures require Parliamentary approval.	The deficit financing is adjusted. Unexpected spending is subject to supplemental appropriations approved by Congress and Congressional approval is required to raise the debt ceiling.
Coordination between the treasury and the central bank	The central bank acts as a full-fledged fiscal agent of the Treasury. A formal joint committee coordinates government securities auctions, and another (including the capital market supervisory authority) supervises the secondary market. Otherwise, coordination takes place through different informal, but active, channels.	There is coordination between the Paymaster General's Office and the Bank of England for banking arrangements, and between HM Treasury and the Bank of England for public debt management.	There are formal committees which deal with functional relationship between Treasury and the Federal Reserve. The Federal Reserve also serves as Treasury's fiscal agent in many of these areas.
Coordination between the treasury and the budget department	SH is responsible, through separate units, for both budget preparation and budget execution, with strong mutual feedbacks. Both processes are carried out through a common information system. DGT brings to the budget preparation all information concerning government finance.	The budget is prepared by HM Treasury.	Treasury prepares the revenue estimates for the budget and participates in the formulation of the macroeconomic framework. OMB prepares expenditure estimates and puts together the executive budget.
Government Financial Information System(s)			
• Department in charge of it	Ministry of Finance, through SH.	HM Treasury.	Treasury controls the central system and the telecommunications systems. OMB controls department level accounting.

Appendix 1. A Tabular Comparison of Treasury Functions in Selected Countries
- Part B -

Feature	SPAIN	UNITED KINGDOM	UNITED STATES
• General description: logical configuration	All government transactions, without any exception, must go through the system, which systematically registers up to six different execution stages: budget allocation, commitment, verification, payment request, payment order, and actual disbursement (for many categories of expenditure and revenue some of these stages may be coincident). Budget preparation (with several rounds of interaction) goes through the system as well. The system generates all formal accounting and all kinds of statistical reports. It provides different levels of on-line information to the spending agencies, and the MOF authorities.	Budget preparation, expenditure recording at appropriation level; separate system monitors revenue recording.	Budget preparation and execution on the appropriation level and asset management are at line department level. Cash flow management and debt accounting are at Treasury central system.
• General description: physical configuration	Links go from SH to line departments, and from the latter to spending units. Real-time links are limited to local networks and some trunk lines, and data are transmitted largely on a daily batch basis. The system is currently being transformed, so as to directly link spending units with local DGT offices, which are already linked to SH; also the real-time links will be expanded.	On line, real time links to ministries.	Data is transmitted between line departments' systems and Treasury's central system. Payment authorizations and collection information are available on-line.
• Level of functional integration	Total. Available at each level, in relation to lower levels.	Total, at HM Treasury level.	There is functional consolidation at Treasury level for Government-wide reporting.
• Level of institutional integration	Total. Available at each level, in relation to lower levels. The information system refers, however, only to the central government, excluding the Social Security and other autonomous government agencies.	Ministries have own financial information systems. Payment accounting is carried out by the Paymaster General's Office.	Modified home office - branch concept: Line departments' have own financial information systems but also transfer and receive information on-line with Treasury.
• time necessary to have consolidated information	One day.	Approximately 14 days for consolidated information on general Government. Earlier for central Government.	Processing times vary by report need. Consolidated cash flow information is available each day.

Appendix 1. A Tabular Comparison of Treasury Functions in Selected Countries
- Part B -

Feature	SPAIN	UNITED KINGDOM	UNITED STATES
• time necessary to have detailed information	One day. At some levels on-line, real-time.	Detailed information can be requested from line ministries to supplement HM Treasury recording at appropriation level.	Detailed information can be requested from line departments. Times vary from departament to department. Treasury issues more detailed monthly statement.
• Number of spending units			There are approximately 125 departments and agenciesand about 1,200 appropriation accounts, which are subdivided into spending units.
• Number of financial transactions per year, for all spending units			About 965 million spending actions.
Other fiscal reporting systems	The Social Security operates a separate, but fully integrated information system, similar to the Treasury system. So do several regional governments. In general, spending units are allowed to collect and publish any information additional to that embodied in the formal accounting and reporting standards, and quite a few do so.	Ministries prepare appropriation accounts against supply estimates (Parliamentary appropriations)	Line departments maintain accounting systems that are to meet a set of core requirements prescribed by the General Accounting Office.

Appendix 2

Main Issues in the Design of a GFIS

This paper has already highlighted the importance of a modern information system for strengthening government budget execution and financial management. Systems of this kind exist already, or are in the process of being set up, in many industrial and developing countries and also in some economies in transition, as governments have become increasingly conscious of the vital importance of timely and reliable information on financial operations of their agencies, and have invested in computer technology to collect and process this information.

This Appendix discusses in greater detail the main characteristics of the proposed system.

1. Physical configuration

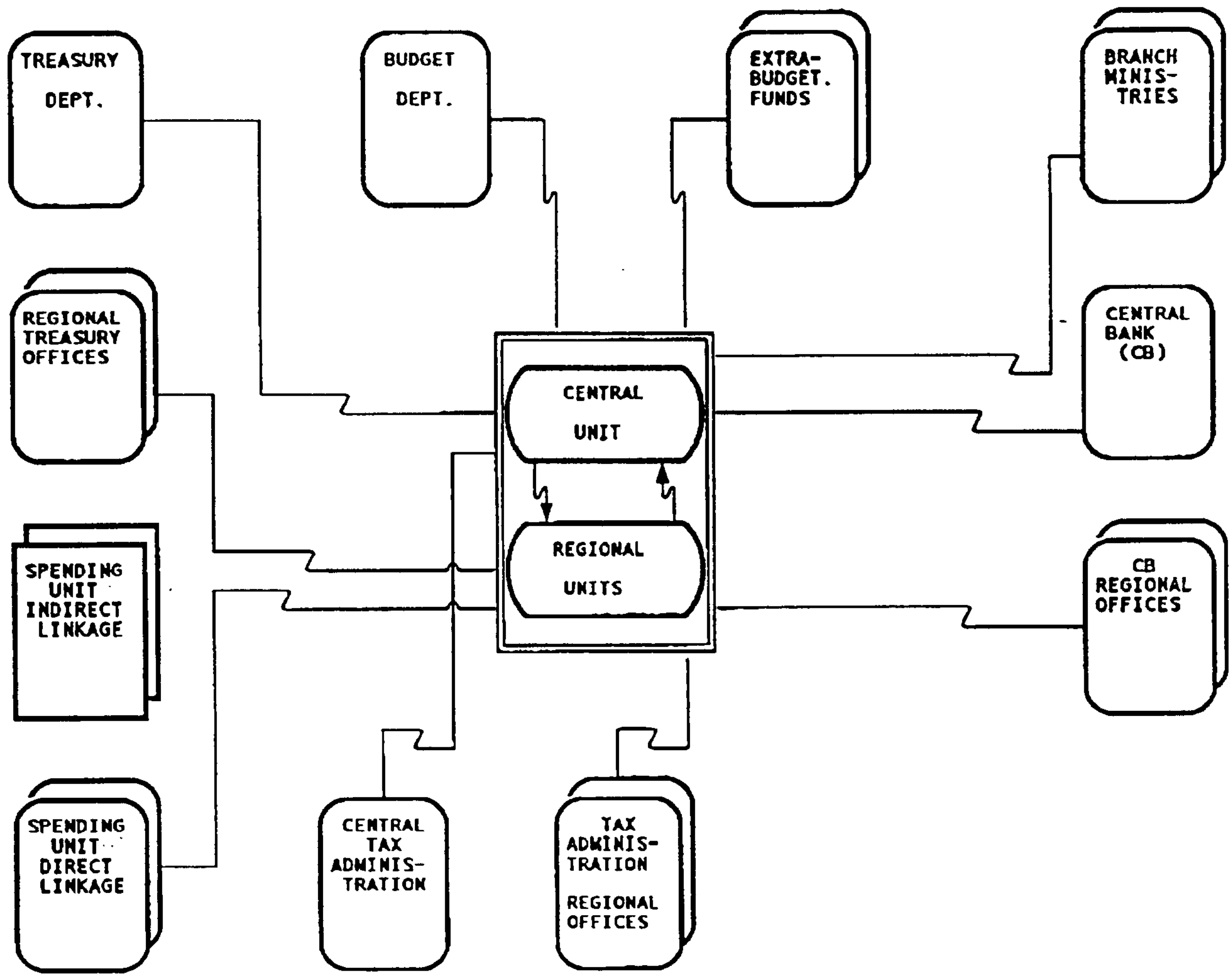
In its ultimate physical configuration, shown in Chart 2, the proposed system would be structured in two levels, with a clear functional distinction between them: level 1 would process and maintain a consolidated data base, while level 2 would execute operational functions and maintain detailed data. The main characteristics of these levels would be:

- Level 1: the central unit of the system, which would be located at the central Treasury. This unit would house the system's central data bank, into which would flow all consolidated data. Linked to this level would be the relevant entities within the Ministry of Finance, the Tax Administration, the Central Bank's headquarters and the headquarters of any extrabudgetary fund. The hardware for this unit must be defined in the light of the information that will be processed and stored.

- Level 2: the regional units (including one--or more--in the nation's capital), which would contain the detailed data banks of the system, with information on all the operations of the spending units linked to them. Linked to these units would be the respective regional Treasury offices, and the government agencies whose funds would be held in the TSA, and whose accounts would be kept in the GFIS. These agencies would include ministries, spending units (including those of the extrabudgetary funds) and other entities with direct linkage to the system. Over time, the system could be extended to process the operations of the larger local governments, even if they were not required to keep their funds in the TSA. The hardware of these units is likely to vary between regions, depending on their workload. The number of regional units will depend on the regional distribution of the agencies to be linked to them, and on the number of their operations.

This physical configuration requires that the central unit and at least one regional unit be developed and installed, in order for the system to

CHART 2. GFIS - PHYSICAL CONFIGURATION



LEGEND:

physical linkage to the System

Entities linked to the system, entitled to receive information from it

Entities not liked to the system

begin working. The form of linkage between the central unit and the regional units would be dedicated data-transmission lines, allowing the immediate transmission of information from Level 2 to Level 1 and vice versa. In this way, the system, although physically structured in two levels, would logically run as a single-level unit.

2. Logical conception

To develop the functions proposed, the system would be logically structured with the following main modules:

- Budget Execution
- Financial Programming
- Financial Execution
- Accounting
- Fiscal Reporting
- Control and Auditing
- Internal Controls

Each of these modules would carry out a set of transactions, as presented in Chart 3. Although budget preparation is not a function which is usually attributed to the Treasury, it is totally feasible to use the system also for this purpose. This could be achieved if there is good coordination between the Treasury and Budget Departments and, it would permit important economies of scale in the financial management of government operations.

The system files would be structurally organized, so as to allow, for instance, the processing of operations of different institutions with separate legal statuses, without confusion of their accounts within the system and, most importantly, permitting the automatic consolidation of such accounts. For example, the system would be able to process the operations of both the federal and the territorial governments. Depending on how the accounting plan is organized, it could even process the operations of public enterprises.

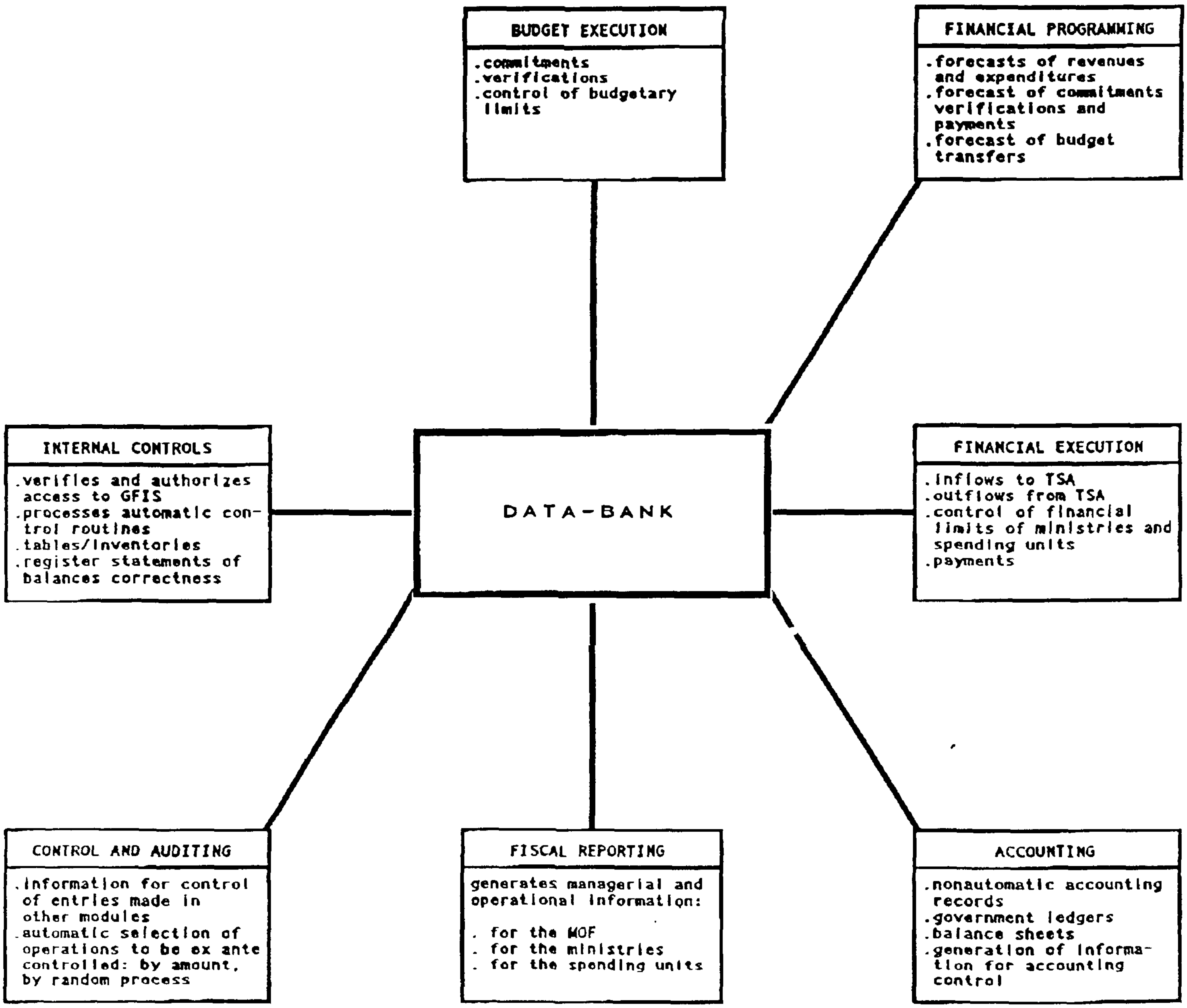
Data would be held in the system's data banks with two levels of aggregation:

a. data for the current fiscal year (n) and the preceding fiscal year (n-1) would have the highest level of detail;

b. data for the five previous years (n-2 through n-6) would be aggregated on a monthly basis.

Data for even earlier years (n-7, n-8, ...) would be removed from the system data banks and stored on magnetic files, so as to permit retrieval when necessary.

Chart 3 . GFIS - Main Logical Modules



3. Use of the system in financial planning

As the first step in developing a financial planning system, the unit in the Treasury in charge of this function would have to determine the frequency and time horizon of the planning. Financial plans should be drawn up at least every month. Preferably, they should cover the entire budget period, except for the last quarter of the year, in which the planning horizon should be extended to cover the first quarter of the following year, to provide a smooth transition between the two budgets.

As the system is consolidated, and to the extent that the information received allows, it would be desirable to complement the monthly financial plans (which would be used to set spending limits) with weekly and even daily forecasts of inflows and outflows into the single account. These short-term forecasts would also provide the central bank with important information necessary for the day-to-day conduct of monetary policy.

While the presentation of the financial plan does not need to be very detailed, clearly, the greater the degree of detail in its preparation, the more accurate the estimates are likely to be. The presentation of the financial plan should aim at facilitating analysis, as well as decisions about needed adjustments in expenditures. Thus, for example, the financial plan should present separately the categories of spending to which higher priority is attached (e.g., wages and salaries, interest payments, certain social transfers).

The Treasury's financial planning unit would have to rely to a large extent on forecasts prepared by other units, and which would be introduced by these units into the GFIS. The Treasury unit would be responsible for ensuring that such forecasts are received in due time, are appropriate to its needs, and incorporate the effects of expected changes in relevant macroeconomic and policy variables, such as tax rates, the minimum wage, interest rates or exchange rates. The forecast would be received:

- on budget revenues, from the tax administration and from the budget department;

- on extrabudgetary revenues, from those agencies (e.g. pension fund, employment funds, etc.) responsible for them;

- on expenditure needs, from the department in charge of the budget execution, 1/ which will be reviewing and consolidating information provided by spending ministries and agencies;

- on financing inflows and outflows, from the unit responsible for government debt management, from the Central Bank and from any other agency responsible for specific sources of financing (e.g. foreign credits).

1/ This, of course, could be a part of the Treasury itself.

On the basis of the information received from the other units mentioned above, the GFIS would compile for the Treasury a table showing all the projected inflows and outflows, with as much detail as necessary for subsequent adjustments (see Table 2).

This process should not be conceived as simply consolidating the information received from the reporting sources. Quite often, this information would have first to be reviewed, and adjusted as necessary by the Treasury, to eliminate any inconsistencies in data provided by different sources. The adjustments made by the Treasury would be registered in the GFIS, thereby allowing automatic recompilation of the financial plan.

After the preparation of consolidated projections for revenues, expenditures and redemption of loans and securities, the Treasury would have to review the implied volume of gross borrowing required and the available financing options, taking into account their consistency with the objectives of monetary and external policies, as well as timing and cost considerations. This process would suggest any need for policy changes--in particular any revenue raising measures and expenditure cutbacks and rescheduling--feasible within the planning horizon, and would provide a basis for a program of financing the projected deficit.

The last step of the financial planning process would be the projection of releases of financial limits to the ministries. Some of these releases, e.g. for payment of recurrent expenditures, could be made in accordance with a pre-established regular calendar. The Treasury would determine the global amount of the release and, in consultation with the Budget Department, its proposed allocation among ministries, for review and approval by the Minister of Finance. After this approval, the Treasury would introduce information about the releases in the GFIS.

The ministries, informed by the GFIS, and after separating a part for their own expenditures, would allocate the amounts transferred to them among the spending units under their respective control, again through the GFIS, thus allowing the Treasury to monitor the execution of this part of the plan through the system.

The Treasury would also coordinate the execution of the financing of the deficit within the framework or the approved plan and in consultation with other institutions, notably the Central Bank, involved in public debt management.

At the end of each month, the financial plan would be reviewed and updated. At this time, it would be important to analyze any deviation of actual inflows and outflows from the projections, to assess the likelihood of their recurrence, and to take any necessary remedial or preventive steps. In addition, any relevant new information (including information on macroeconomic developments) would need to be brought to bear on the preparation of the revised plan.

TABLE 2. ILLUSTRATIVE FINANCIAL PLANNING

	CODE	BUDGET	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DIC	TOTAL
A. INFLOWS	1=2+5	1200	87	89	91	99	98	100	105	106	105	104	110	106	1200
TAXES	2=3+4	950	67	68	71	78	77	79	84	85	84	83	89	85	950
VAT	3	650	42	43	46	59	52	54	59	60	59	58	64	60	650
...	4	300	25	25	25	25	25	25	25	25	25	25	25	25	300
NON-TAXES	5=6+7	250	20	21	20	21	21	21	21	21	21	21	21	21	250
...	6,7	250	20	21	20	21	21	21	21	21	21	21	21	21	250
B. OUTFLOWS	8=9+13+16+19	2500	162	183	187	163	263	264	203	179	213	154	163	366	2500
RECURRENT EXPEND.	9=10+11+12	1150	81	103	81	83	92	113	82	83	92	83	92	165	1150
WAGES	10	800	61	62	61	62	61	62	61	62	61	62	61	124	800
GOODS/SERVICE	11	250	20	21	20	21	21	21	21	21	21	21	21	21	250
OTHERS	12	100	0	20	0	0	10	30	0	0	10	0	10	20	100
CAPITAL EXPEND.	13=14+15	300	0	0	25	0	100	0	50	25	50	0	0	50	300
INVESTMENTS	14	250	0	0	0	0	100	0	50	0	50	0	0	50	250
OTHERS	15	50	0	0	25	0	0	0	0	25	0	0	0	0	50
INTEREST PAYMENTS	16=17+18	650	41	40	41	40	41	121	41	41	41	41	41	121	650
ON EXTERNAL DEBT	17	400	20	20	20	20	20	100	20	20	20	20	20	100	400
ON INTERNAL DEBT	18	250	21	20	21	20	21	21	21	21	21	21	21	21	250
OTHER OUTFLOWS	19	400	40	40	40	40	30	30	30	30	30	30	30	30	400
DEFICIT = A - B	20=1-8	-1300	-75	-94	-96	-64	-165	-164	-98	-73	-108	-50	-53	-260	-1300
C. FINANCING	21=22-25+28	1300	113	134	8	111	184	9	133	105	128	182	114	79	1300
BORROW INFLOWS	22=23+24	1400	96	117	67	96	167	67	116	87	187	166	97	137	1400
EXTERNAL	23	600	30	50	0	30	100	0	50	20	120	100	30	70	600
INTERNAL	24	800	66	67	67	66	67	67	66	67	67	66	67	67	800
BORROW OUTFLOWS	25=26+27	500	17	17	92	17	17	91	17	16	92	16	17	91	500
EXTERNAL	26	200	17	17	17	17	17	16	17	16	17	16	17	16	200
INTERNAL	27	300	0	0	75	0	0	75	0	0	75	0	0	75	300
BONDS	28=29-30	400	34	34	33	32	34	33	34	34	33	32	34	33	400
ISSUES	29	1200	100	100	100	100	100	100	100	100	100	100	100	100	1200
REDEMPTIONS	30	800	66	66	67	68	66	67	66	66	67	68	66	67	800
CASH BALANCE-END MONTH	31=20+21	0	38	40	-88	47	19	-155	35	32	20	132	61	-181	0

4. <u>Use of the system in the collection of revenues and the execution of expenditures</u>

The utilization of the system in the budget execution is illustrated in this section with the support of flow charts, which indicate the Treasury's role, the roles of other departments in the Ministry of Finance, as well as of ministries, spending units and other public entities. Two charts are presented: Chart 4, related to the collection of revenues; and Chart 5, related to the execution of expenditures.

Each flow in the charts represents an operation (transaction) which is to be processed by the system. The charts contain a detailed characterization of the flows, including the following information for each one:

◆ type: <u>financial flows</u> involve actual cash inflows or outflows, the final destination or the initial source of which is the TSA; <u>information flows</u> indicate information generated outside the GFIS, generally through paper forms or magnetic files; and <u>system flows</u>, which are registers into the system or information generated and provided by the system;

◆ description: indicates the transaction which originates or requires the flow;

◆ responsible for the entry: entities responsible for the transaction and/or for its register into the system;

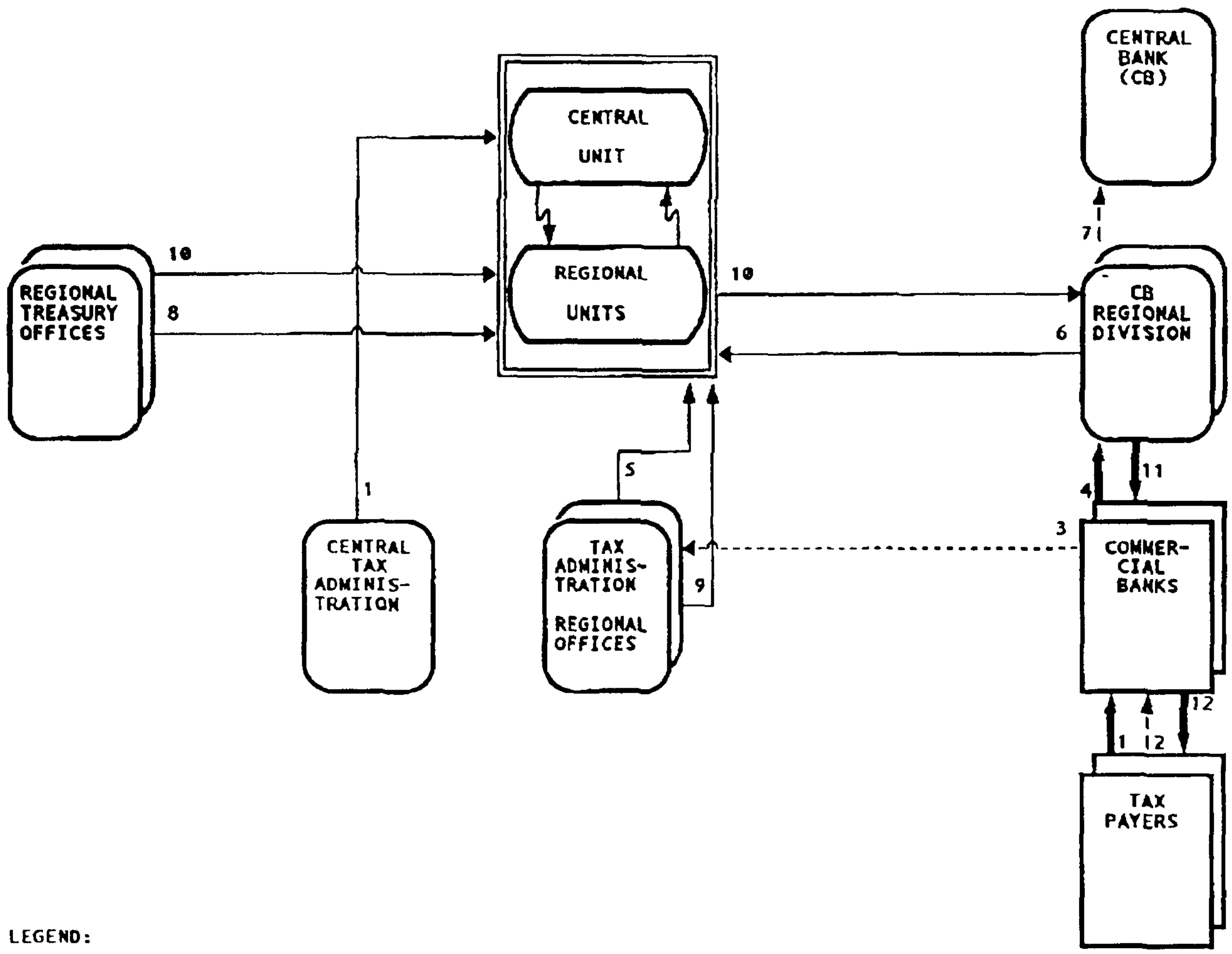
◆ main destination: entities to which the primary information generated by the flow is directed. Frequently, the main destination entity utilizes this information in a subsequent flow, for which, therefore, it will be responsible for making an entry;

◆ recurrence: some flows, by their own nature, are "recurrent", i.e., in fact they represent a set of transactions, usually in both directions, which are repeated until a result considered adequate is reached. However, each transaction of the set is registered separately. Typically, recurrent flows are those related to budget proposals and/or financial programming, in which the final decision depends upon the entity which is their main destination. By contrast, other transactions constitute an event by themselves, and they are referred to here as "single" flows;

◆ system checks: indicate the main controls the system will exercise before accepting a transaction.

The charts also indicate the units that would be directly linked to the system (rounded shapes), and therefore report to it directly and are entitled to receive information from it, and those not linked to the system (rectangular shapes). Flows of information from the system which have only a query nature--i.e. that do not constitute an operation by themselves--are not presented in the charts. However, it is important to bear in mind that consolidated (and also detailed, if necessary) information, reliable and

CHART 4. GFIS - REVENUE COLLECTION



LEGEND:

Information flow

Financial flow

Register into the system (SR) or information provided by the system

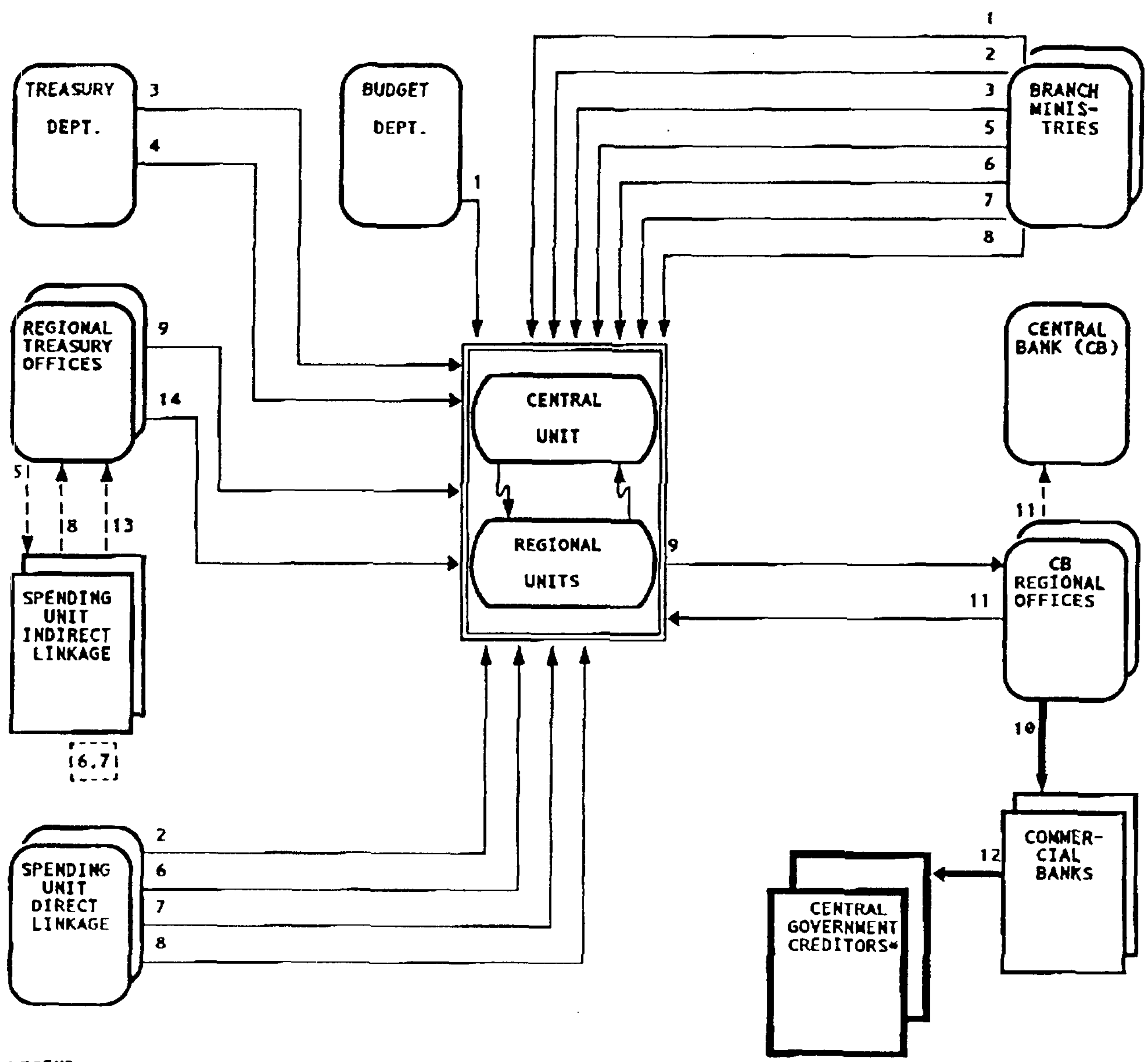
Entities linked to the system, *entitled to receive information from it*

Entities not liked *to the system*

Chart 4 - GFIS - Revenue Collection (concluded)

Flow no.	Description	Entry by	Main destination	single/ recurrent	GFIS checks
1	Introduction of revenue's and refunds' forecast	Tax Administration	Treasury	recurrent	Budget classif.
2	Payment of tax	Taxpayer	Banks	single	N/A
3	Information on tax collected	Banks	Tax Administration Regional Offices	single	N/A
4	Transfer of tax collected	Banks	Central Bank Regional Offices	single	N/A
5	Tax collected - Breakdown by tax, per day	Tax Administration Regional Offices	Budget Dept. Treasuary, and Central Tax Admin.	single	Budget classif.
6	Tax collected - Global amount per day, per bank	Central Bank	Treasury, Tax Admin.	single	N/A
7	Information on debits and credits in the single account	Central Bank Regional Offices	Central Bank	single	N/A
8	Tax collected - Match of the information provided by banks with the credits in the single account	Regional Treasury Offices		recurrent	N/A
9	Tax Refunds	Tax Admin.	Regional Treasury Offices	single	Budget classif.
10	Daily file of payments	Treasury	Central Bank	single	Tax refunds
11	Transfers of funds from single account	Central Bank	Banks	single	N/A
12	Tax refund payment to the taxpayer	Banks	Taxpayer	single	N/A

CHART 5. GFIS - EXPENDITURE EXECUTION



LEGEND:

- - - - -▶ information flow

━━━▶ financial flow

───▶ register into the system (SR) or information provided by the system

* suppliers and public employees

Entities linked to the system, entitled to receive information from it

Entities not liked to the system

Chart 5 - GFIS - Expenditure Execution (concluded)

Flow no.	Description	Entry by	Main destination	single/ recurrent	GFIS checks
1	Approved Budget	Budget Dept.	Ministries	single	budget classif.
		Ministries	Spending Units		
2	Programming of commitments and verifications	Spending units	Ministries	recurrent	approved budget
		Ministries	Treasury		
3	Programming of budget transfers	Treasury	Ministries	single	approved budget, financial planning
		Ministries	Spending Units		
4	Budget transfers	Treasury	Ministries	single	approved budget
5	Budget transfers	Ministries	Spending Units	single	approved budget
6	Commitments	Ministries, Spending Units		single	approved budget
7	Verifications	Ministries, Spending Units		single	commitments
8	Payment orders	Ministries, Spending Units		single	verifications, financial limits
9	Daily file of payments	Regional Treasury Offices	Central Bank Regional Offices	single	payment orders
10	Transfers of funds from the single account	Central Bank Regional Offices	Banks	single	N/A
11	Information on debits and credits into the single account	Central Bank Regional Offices	Central Bank, Regional Treasury Offices	single	N/A
12	Payment to the creditor	Banks	creditor	single	N/A
13	Monthly reports on the expenditures commited, verified and paid	Spending Units indirectly linked to the system	Regional Treasury Offices	recurrent	
14	Register into the system of the information provided by the flow 13	Regional Treasury Offices		single	approved budget

updated, about the budget execution, will be continuously available from the system in real time for decision-makers at various levels.

As mentioned, Chart 4 presents the flows for the revenue collection, as follows:

- forecast of tax collections and refunds: flow 1;
- tax collection: flows 2-7;
- control of the collection registered in the TSA: flow 8
- tax refunds: flows 9-12.

The Treasury role in the revenue collection would be the control of the crediting to the TSA of tax revenues collected by the banks, and of all other inflows into the account (flow 8). This control would be made by matching the informations entered into the system by the Tax Administration (flow 4) and by the Central Bank on the basis on the credits made by the banks (flow 5). The participation of the Treasury in flow 10 (daily file of payments) should be of a merely operational nature, i.e., the payment of refunds should not be subject to any discretionary power.

Table 3 presents the development in the system of the expenditure phases (commitment, verification and payment) for a specific budget program. It shows the controls that the system would exercise, with a view to avoiding any overrun over the budget limits. The register of each phase will require the register of the previous phase, and the addition of the balances of all phases, at any time, must be equal to the initial--or the amended--budget allocation. In the payment stage, the GFIS would perform a second check before clearing the payment, in the form explained in the next paragraph.

The releases of financial limits, allowing the ministries and spending units to pay their expenditures, would be made in the system as follows:

- the MOF would release financial limits to the ministries, i.e., credit their accounts in the system for the corresponding amount;
- each ministry would use the balances in its account for own expenditures and for the release of spending limits to the spending units subordinated to it, provided that these expenditures and transfers were within the relevant budget allocations. These transfers would be effected through a register in the system;
- the SUs' own revenues credited in the system would be registered directly in their accounts in the system, thereby increasing their financial limits;

TABLE 3. BUDGET EXECUTION PHASES

For a Specific Budget Program

(numbers shown are only indicative)

PHASES	Budget Allocation	Commitment	Verification	Payment	GFIS Control
Initial balances	100	0	0	0	100
Commitment	-20	20	0	0	
New balances	80	20	0	0	100
Verification	0	-12	12	0	
New balances	80	8	12	0	100
Payment	0	0	-5	5	
New balances	80	8	7	5	100

Commitment: Procurement process and contract signature

Verification: Work completed, bills received and obligation to pay checked

Payment: Register of payment order, check of limits and transfer of funds

- in this manner, the SUs would be provided financial resources in their accounts in the system, to pay for their expenditures. Of course, these payments would be limited to the cumulative balance resulting from previous transfers from the ministries or credits of own revenues, minus previous payments. The system would check this before each payment.

Chart 5 presents the flows related to the expenditure execution process. These flows are related to:

- budget execution programming: flows 1-3;

- transfers of financial limits: flows 4 and 5;

- commitments and verifications: flows 6 and 7;

- payment to government creditors: flows 8-14.

These flows show that the Treasury would not be involved in the budget execution of each specific expenditure. Rather, it will use the system to receive information for the preparation of the financial plans, to keep track of the level and profile of commitments and verifications, and to initiate the distribution of financial limits based on the approved financial planning.

5. Strategy of implementation

The design of the logical structure of the system; the development and testing of its software; the specification, acquisition and installation of the required computer hardware and telecommunications lines; and the training of officials in the Ministry of Finance and the spending agencies in the use of the system require considerable time. Furthermore, given the usual financial constrains, it appears unlikely that the system could be implemented all at once in its final configuration.

As a consequence, a progressive strategy of implementation of the system is recommended, beginning with linking to it the Treasury and Budget Department, ministries, any extrabudgetary funds and the main SUs in the country's capital. The coverage of the system could be subsequently expanded progressively to the spending agencies in other regions, and to the larger local governments.

As soon as a political decision is taken by the government to set up the Treasury and/or a government financial information system, a full-time task force should be set up within the Ministry of Finance to prepare a detailed program for implementation of the system. Such a task force should include specialists in budgetary process and legislation, financial management, government accounting, and in various aspects of computer systems development. It should be headed by a senior Ministry of Finance official, with authority commensurate to the task at hand. International specialized technical assistance should also be sought, to benefit from relevant foreign experience in this area.

Early in the process, it would be very important to gain acceptance and support by the ministries and spending units, in order to overcome resistance and obstacles to the implementation of the system. In this respect, it would be necessary to explain to all concerned that the system will serve all budget managers, not only those in the Ministry of Finance. Once the system is implemented, these entities will have access to complete and up-to-date information regarding their own budgets. As regards ministries, they will be able to greatly increase their sectoral and functional supervision capacities.

6. The inventory of spending units

In order to function properly, the system must know exactly who can access it, how, and for what purpose. This knowledge is also necessary to define the type of linkage of each SU with the system. This information must be kept in the system, and updated as needed.

In systems implemented in market economies, the general rule has been to consider as spending units only those agencies which are part of the central government, and not those which are separate legal entities. In economies in transition, however, where the state sector of the economy is still very large, there is a great number of SUs (mainly enterprises) which are legal entities outside the government but receive substantial budgetary transfers.

It is important that an adequate degree of budgetary control over these entities be ensured. Determining the precise form and extent of this control is not easy, however. If all the operations of these units were to be processed in the system, this would require very large capacity equipment. Moreover, the bulk of operations of many of these spending units is of a commercial nature and is supported by own revenues. Thus, it would not seem appropriate to require a full scale application of procedures designed for the execution of government expenditures to these operations.

Other aspects to be considered in this matter are the relevance of each SU for overall government financial management, and its physical location. SUs which account for a very small part of the government expenditures, as well as those which are located in areas not provided with telecommunication facilities, should not be directly linked to the system.

In the light of these considerations, the spending units should be divided into two groups:

(a) a first group of units which would be directly linked to the system, and would process all their operations within the system; and

(b) a second group of units which would register their operations in the system through the regional Treasury offices.

To establish the appropriate treatment of each spending unit within the system, it is recommend that an inventory be taken of SUs, on which to base the grouping of these units. This inventory should include information on relevant characteristics of the units, such as size, number of spending operations during a year, degree of dependence on budgetary funds, location, etc.

Selected Issues in Public Debt Management

1. Legal framework

A fundamental prerequisite for sound government financial management is a clear and appropriate legal framework. This framework should cover the budget preparation and execution, accounting principles, cash management and public debt management. In this latter area, the following main issues need to be addressed.

a. Limit, coverage and borrowing agency

An overall limit on government debt is equivalent to a limit on the budget deficit. Nevertheless, debt limits can, in appropriate circumstances, complement and reinforce the limits on the budget deficit. Though frequently a limit on government debt is set by Parliament in the annual budget law, it would be preferable, in order to promote medium-term fiscal adjustment, to have in the framework law a separate standing rule on the growth of overall government debt. This would provide a guiding criterion for framing annual budgets. The government debt limit should be specified net of government deposits with the central bank, and should be subject to clear accounting rules.

The definition of government debt should encompass both domestic and foreign debt, since there is significant scope for substitution between the two types of debt. Aside from some technical differences, the rules governing both should be the same. In particular, foreign credits should be included in the limit on global debt, so as to avoid lax policies in this area and the accumulation of unsustainable levels of the external debt.

For reasons detailed in the main text, appropriate legal provisions should be drafted concerning government guarantees and liabilities of third parties assumed by the government. Both should be subject to specific limits. The prohibition to any government agencies, other than the central government itself, to incur debt should have an adequate legal backing as well.

Finally, central government borrowing should be concentrated in a single borrowing agency, which in most countries is the Ministry of Finance (MOF) and, within it, the Treasury. This means that no other Ministry should receive loans, either from third parties, or from the MOF. Any proposed granting of government guarantees to third parties should also be endorsed by the MOF. Deposit balances of the Treasury should be held preferably with the Central Bank. The Treasury should be also responsible for keeping the accounting of government debts and guarantees, and for preparing any reports on them.

b. Limit on borrowing from the Central Bank 1/

The experience of many countries demonstrates that the absence of limits on the Government's resort to credit from the Central Bank is likely to hinder the implementation of non-inflationary monetary policies. For these reasons, several countries completely disallow lending by the Central Bank to the Government, or else subject it to very stringent limitations. Such provisions may be unrealistic in the short run for countries with undeveloped capital markets. However, the setting of a limit on government borrowing from the Central Bank well below the limit on the budget deficit, is necessary to induce the Government to engage in an active policy of issuing government securities in the capital market.

It would be preferable that these limits be set in accordance with a standing rule, which could link the increase in indebtedness of the government to the Central Bank to the increase in, for example, GDP or tax receipts, and which should provide for a rapid decline in this ratio over time. Such a rule should not exclude any additional downward adjustments that might be required in a particular year by a macroeconomic stabilization program.

The limit should be specified to apply to credits of the Central Bank to the government net of the latter's deposits at the Bank. From the stand point of facilitating cash management by the Treasury, it would be preferable that credit facilities for the Government at the Central Bank take the form of an overdraft facility on the TSA, without a specified maturity, within the limit set according to the standing rule mentioned above.

In line with the general recommendation mentioned above, the Central Bank should be prohibited to lend to autonomous government agencies or to the extrabudgetary funds. The deposits of such agencies and funds with the Central Bank could be deducted when calculating the specific limit on government borrowing from the Bank.

In many countries the limit on lending to the Government excludes securities purchased by the Central Bank in the market. The reason is that purchases and sales of government securities in the market constitute one of the basic instruments to control monetary expansion. Such operations should not entail an automatic decline or increase, respectively, of the ability of Government to borrow from the Central Bank, as this might offset the actions undertaken by the Bank.

A fundamental point that must be ensured, however, is the freedom of action of the Central Bank. Accordingly, the Government must not be allowed

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1/ For a more detailed treatment of the issues covered in this section see: C. Cottarelli, "Limiting Central Bank Credit to the Government", IMF Occasional Paper, December 1993.

to require the Central Bank to buy government securities, either directly or in the market. A safer and preferable solution may be to entirely prohibit any purchase by the Central Bank of government securities at issue.

In principle, it should not be necessary to replace loans to the government with securities in the portfolio of the Central Bank, provided that, as suggested below, the Government pays an interest rate on loans comparable to the market yield of securities. Instead, the Government could issue new securities for placement by the Central Bank, on an agent basis, in the market. This would serve the same purpose as a direct conversion of central bank loans into securities to be immediately sold to the public.

Limiting the ability of the Government to borrow from the Central Bank would be ineffective if the subnational governments were able to borrow in order to finance the same expenditures that the central government cannot finance. In order to ensure financial discipline, local government deficits should not be allowed to exceed small transitory levels. The system of intergovernmental fiscal relations--expenditure and revenue assignments and intergovernmental transfers--should be designed so as to ensure broad vertical balance. This would permit the setting of sustainable and enforceable limits on the debt of local governments. In addition, it would be desirable to altogether prohibit lending by the Central Bank to local governments.

Likewise, in some cases the refinancing by the Central Bank of bank loans to public enterprises may be a substitute for government borrowing from the Bank. Therefore, a stringent limit on lending by the Central Bank to the Government should be complemented by a firm policy of the Bank on refinancing of commercial banks, consistent with a disinflationary stance of monetary policy.

2. Interest rate policy for government debt

In a market economy, investors in financial assets normally expect to obtain a positive real interest rate after taxes. Consequently, nominal interest rates before taxes will tend be higher, the higher the rate of inflation, and the higher the rate of taxation on nominal capital income. In countries where income on government debt is free of tax, this would justify nominal interest rates on government debt lower than on comparable instruments subject to tax (e.g. bank deposits of enterprises or bank certificates of deposit). However, nominal rates of interest would still be high, if the average expected rate of inflation is likely to remain high for some time to come (such as have occurred in some economies in transition). In addition, any unfavorable recent experiences in servicing of bonds would require the government to pay a premium to offset a lack of confidence in its solvency.

In countries with significant government deficits, governments often are reluctant to pay market interest rates on their debt. It is argued the interest charges will increase the deficit and, therefore, the need to incur additional debt. This approach has, however, significant weaknesses.

First, not offering an attractive enough interest rate on government securities will make it impossible to develop a market for them. Governments often claim that they cannot issue securities because the capital market is not sufficiently developed. However, the opposite may be true: the capital market is not developed because the Government is not issuing debt. Most frequently, the Government does not issue debt, and the capital market is not developed, because the Government resists paying market interest rates. There is no financial engineering capable of overcoming such an obstacle to the development of a market for government debt. On the contrary, if the authorities are prepared to offer interest rates on government debt acceptable to potential investors, technical obstacles to the development of a market for the debt can be easily overcome.

Second, not paying market interest rates may lead to excessive government borrowing from the Central, rapid monetary expansion, and ultimately an increase in inflation. So, the initial reluctance to pay what are often believed to be too high interest rates may lead, paradoxically, to further increases in market interest rates.

Loans by the Central Bank to the Government should also bear a market interest rate; and the same rate should be paid on government deposits with the Bank. This could be easily achieved by applying such an interest rate to the positive or negative balance of the overdraft Treasury account suggested above. Since the overdraft would not have a specific maturity, the interest rate should be fixed in line with some relevant short-term market rate (when available, the average market yield of short-term government securities) and should be adjusted regularly, for example, every month or every quarter.

In line with international practices, the profits of the Central Bank should accrue to the government budget. Therefore, the payment of market interest on credit from the Central Bank should not have an impact on the budget deficit, since the interest payments would largely flow back as part of the Bank's profits.

3. Management of government debt

a. Institutional aspects

Within the limits on the overall level of government indebtedness discussed above, maximum flexibility in the management of the debt would be desirable, to facilitate adjustments to the changing conditions of financial markets, as well as to the rapidly evolving needs of monetary policy.

The Government should, therefore, be free to take any decision as to the type, features, amounts and timing of new loans and bond issues, including the repurchase or reimbursement of outstanding debts, to replace them with new ones. The Government should also be able to delegate such powers to the Ministry of Finance, and, for the more technical aspects, to the Treasury. International practice tends to recognize the highly technical nature and low political content of debt management decisions. However, it is also standard practice to require the Government to provide regular and detailed reports to Parliament about the evolution of the government debt, and about major decisions on government debt management. Regular, frequent, and timely publication of statistics on government debt must be envisaged.

It is also a standard international practice that the Central Bank act as the financial agent of the Government in all matters related to government debt management as detailed in section 5.d. The ultimate responsibility for decisions on debt management should rest with the Ministry of Finance. However, as discussed in the text of this paper, debt management decisions have an important impact on the conduct of monetary and financial policies, and the advice and the objectives of the Central Bank should be given due consideration.

b. Government securities

Under circumstances of persisting sizable government deficits and need for a tight monetary policy to moderate inflation, it is essential to have a regular program of government debt issues. Avoiding the inflationary consequences of government deficits would be the main aim; but it should not be forgotten that the development of a large and liquid market for government debt would also facilitate monetary management and the efficient working of money and capital markets.

Debt issues should have very simple and standard features, and no distinction should be made between issues addressed to institutional and personal investors. The aim should be to increase the size of individual issues, or at least general categories of securities, so as to encourage an active secondary market. By contrast, attempts to cater for too specific investors' preferences should be avoided, as likely to lead to excessive fragmentation of issues, and weak secondary markets. Market interest rates should be applied in any case, and auctions should be the standard placement technique. In situations in which current market interest rates need to be relatively high in nominal terms, and especially if there is not an active secondary market, it is recommended that the issues be concentrated in short maturities (in the range of 3 months to 1 year). Treasury bills issued at a discount would be the most appropriate securities to start with. Variable interest rates bonds may be the best initial approach to lengthening the maturity of the debt, which should also be achieved, as inflation subsides, through fixed rates bonds of progressively longer maturities. Bonds with the principal indexed to inflation should be avoided, so as not to encourage indexation elsewhere in the economy.

A general system for holding and trading government debt issues in book-entry form should be set in place. The debt legislation should explicitly allow this possibility. Even if issues of government debt are not to start immediately, it would be highly advisable to put in place all the required general regulations and computer facilities as soon as possible. It is important to emphasize the need for regulations on book-entries, on communications and authentication protocols, and on settlement procedures of a general character, rather than linked to specific issues. In addition, computer facilities should start being developed.

Frequent periodic auctions, according to some preannounced calendar, should be carried out by the Central Bank. Decisions on the terms of the auctions should be the taken by the MOF. However, the Ministry should receive advice by a joint standing committee made up of high-level representatives of both institutions.

Trading in government debt should be possible in the form of outright transactions and repurchase agreements of any maturity. The aim should be to allow both the Central Bank and the commercial banks to use short-term repurchase agreements as an efficient and reliable instrument for central bank lending to, and borrowing from, banks, as well as for interbank lending. This should induce financial institutions to hold a significant portfolio of government debt.

Holdings and transactions in government debt by financial institutions and enterprises should be the core of the government debt market. Priority should be given to developing such a market, which will by itself facilitate the subsequent development of the retail market among individuals.

Developed markets for government debt are over-the-counter markets, with stock exchanges playing a quite marginal role. The development of the market requires, therefore, avoiding any attempt to limit trading to the stock exchanges, as well as identifying and removing any legal or administrative restrictions to direct trading among banks and other financial intermediaries, and between these and their clients. Such a "hands-off" approach is likely to prove more fruitful than trying to devise ad hoc trading mechanisms, or to artificially encourage the role to be played by brokers, dealers or market-makers. By contrast, the decentralized character of an over-the-counter market for government debt will need, as a counterweight, a very active and transparent policy on the part of the Treasury and the Central Bank concerning the dissemination of frequent, detailed, reliable and timely information on market developments.

In the wholesale segment of the government debt market, among institutions having both deposits and direct government securities accounts with the Central Bank, trading over the telephone, fax or any other communication link should be possible. The same means should be used to communicate with the Central Bank, which should strive to offer same-day clearing and settlement and to insure delivery versus payment. In general, setting up an efficient system for the settlement of transactions in government debt is likely to be a promising area for government initiatives intended to develop the market for government debt.

In all countries with developed financial markets there are very close links between the money market and the government debt market, both under the influence and supervision of the Central Bank. Development of the money market is therefore important for the development of the wholesale government market.

In some countries, the Central Bank issues its own paper to financial institutions. Such issues might be conceived, under special circumstances, as a substitute for government debt issues; but it is preferable to think of them as a complement to the latter. The very short-term end of the market (say, up to 1 or 2 months) might be reserved for the Central Bank, the Treasury taking over at longer maturities (say, from 3 months upward), trying in any case to avoid an overlap of maturities.