#### UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT

# ROLE AND ORGANIZATION OF A DEBT OFFICE

by

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#### 1. Introduction

The debt crisis contributed heavily to the social and economic crisis in most developing countries in the 1980s, and its impact on the poorer developing countries continued through the 1990s, affecting their macroeconomic stability and international creditworthiness. The debt overhang stunted investment, growth and world trade, and debt payments crowded out public expenditure on education, health and other social needs. An important contributing factor to the debt crisis was the neglect by many countries of the basic elements of debt management.

Active management of public debt is a relatively recent phenomenon in most countries. Before the debt crisis of the 1980s it hardly existed. In the early 1980s, UNCTAD's Debt Management and Financial Analysis System (DMFAS) started its technical cooperation activities in this field, and this paper attempts to present the experiences of the Programme over the years.

The paper examines various models for the role, organization and location of a public debt office; the regulatory framework and institutional memory of debt management, involving the creation of procedure manuals for the inter- and intra-institutional tasks and information flows; and the degree of autonomy that a debt office can and should have.

The negative impact of neglecting debt management has been widely recognized by now. As a result of this, many countries have sought to improve their basic infrastructure and analytical capacity for debt management, starting with implementation of the best possible organizational set-up for a national debt office.

#### 2. The role of the debt office

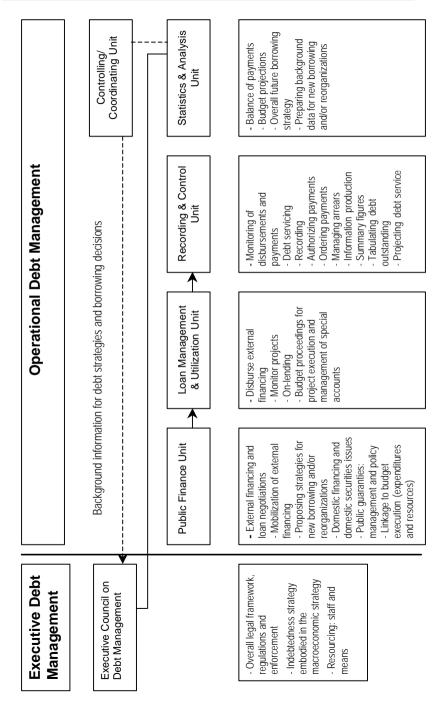
The role of a debt office depends on its debt management functions, such as the duties that laws and regulations assign to it, on the strategy it chooses to adopt and on the means placed at its disposal to achieve its goals. This section deals with these aspects.

#### 2.1 Debt management functions

The execution of the different functions involved in debt management at the national level is shown in figure 1 (see page 9). A separate organizational unit represents each function, although in reality the same unit may be responsible for several functions. The figure also attempts to organize the functions by categorizing them as executive or operational functions of effective debt management, while at the same time following the loan through its different phases within the sequential framework.

<sup>&</sup>lt;sup>1</sup> See UNCTAD (2000).

Figure 1



In the figure, the arrows from the Public Finance Unit to the Loan Management and Utilization Unit and to the Recording and Control Unit represent the historical path of the loan from negotiation through to full repayment; they show which units are responsible for the different phases of operational debt management. The National Debt Office will normally be directly responsible for the functions on the Operational Debt Management side and will provide substantial feedback to the executive functions in order to enable adjustment of the strategy and/or the legal framework in response to ongoing developments. In figure 1, the Recording and Control Unit, together with the Loan Management and Utilization Unit, constitute the "back office"; the Statistical and Analysis Unit, the "middle office", and the Public Finance Unit and the Controlling/Coordinating Unit, the "front office".

The institutional responsibilities of public debt management are allocated to the appropriate units, giving them the mandate and resources to accomplish their mission and coordinate their activities. The debt office could be an integrated office for all aspects of active – and passive – debt management<sup>2</sup> or it could be a coordinating body for all agencies involved in debt management.

### 2.1.1 Executive debt management

Executive debt management might be viewed as the establishment of the "rules of the game" by the highest levels of government, represented in figure 1 as the Executive Council on Debt Management<sup>3</sup>. This level gives direction and organization to the whole through its policy, regulatory and resourcing functions. The executive management functions have an overall macroeconomic and macro-administrative dimension.

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<sup>&</sup>lt;sup>2</sup> See UNCTAD (2000).

<sup>&</sup>lt;sup>3</sup> This is normally the board of ministers or a sub-set of it, including the governor of the central bank and, some- times, senior officials of some large key parastatals, such as the domestic development banks, whose major activity is to borrow abroad in order to on-lend domestically.

The *regulatory function* involves the establishment of a well-defined legal environment to provide for good coordination of recording, analysis, controlling and operation, supported by efficient information flows. The major output of this function is the establishment and continuous review of the administrative and legal framework of organizational responsibilities, rules and procedures among the units involved, and of the legal reporting requirements. In figure 1, this is the first item in the list of functions under Executive Debt Management. This function defines the degree of control exercised and the data that need to be recorded and monitored.

The *policy function* involves the formulation of national debt policies and strategies in coordination with the agencies that have primary responsibility for the economic management of a country. Broad policy considerations – for example, deciding which sectors should have access to external financing and on what terms, as well as fixing borrowing ceilings by creditor category – determine a country's sustainable level of external borrowing. External debt policy, through foreign borrowing, affects national planning, the balance of payments and budget management, and it also affects all government agencies that determine the types of investment undertaken in a country. The major output of this function is a well-defined and feasible national indebtedness and external debt strategy. In figure 1 this policy function is referred to as *Indebtedness strategy embodied in the macroeconomic strategy*.

The *resourcing function* involves recruiting, hiring, motivating, training and retaining staff.<sup>4</sup> At times, it might involve

<sup>&</sup>lt;sup>4</sup> The major obstacle to the success of debt offices' operations was found to be the rotation of qualified staff, as was pointed out empirically by UNDP (1989). Efforts should be made to retain qualified personnel in the public debt offices. The profile of an employee equipped to manage the public debt is very similar to that of a banker or a financial manager of a multilateral organization. If the debt office does not offer competitive wages and good career development prospects, its employees will seek to work either with private financial institutions or with multilateral organizations. Indeed, a key reason for creating independent debt offices or agencies in developed countries is to be able to escape from the straitjacket of the public-sector wage structure in order to retain qualified personnel.

the hiring and supervision of outside consultants to provide specialized technical expertise in particular areas of external debt management (e.g. computerization, debt audits and preparation for rescheduling negotiations). This function must also be interpreted very broadly to include the provision of adequate material resources (e.g. office space or communication equipment). In figure 1 the main output of this function is termed *staffing and means*.

#### 2.1.2 Operational debt management

At the operational level of debt management, the responsibilities of a debt office will include recording, analysis and coordinating/monitoring. These functions take two forms: passive and active. This distinction is not always easy to make, but it is necessary for a better understanding of debt management. The operational debt management functions have a micro-administrative level (disaggregated level), but they also produce a synthesis of information at the macro level (aggregated level), both levels requiring feedback to the executive debt management functions for evaluation and decision-making. The recording and analytical functions are regarded as passive functions in the sense that their performance does not imply a change in the debt profile. In contrast, the operating and controlling functions, the immediate effect of which would be a modification of the debt profile, are thus regarded as active functions.

The *recording function* records information. In spite of the apparent simplicity of this function, it is often the source of bad debt management. Good debt management requires accurate and up-to-date information. Prompt updating of debt data files necessitates a well-organized and efficient system of information flow to the office in charge of the registering function. This information flow is necessary at all levels, including new loans, transactions, disbursements and arrears created. This function is part of what is sometimes referred to as "back office" activities, and the efficiency with which it is performed depends on good implementation and enforcement of the overall legal framework and regulations. This

function also needs good (computerized) information management support. In figure 1, the Recording and Control Unit performs this function.

The analytical function provides elements for analysis and decision-making, utilizing the information provided by the Recording and Control Unit. At the aggregate level, it involves macroeconomic analysis to explore the various options available, given economic and market conditions, and the future structure of the external debt. The function is necessary in order to constantly review the impact of various debt management options on the balance of payments and on the national budget and to help with assessing such issues as the appropriate terms for new borrowing. At the disaggregated level, the analytical function would look at such things as the various borrowing instruments or the choice of maturities. It could also assist in the analysis of new financial techniques such as hedging, swaps and risk management. If the debt office has benchmarks to comply with, this function will also measure the performance of the office in regard to those benchmarks. The output here is, of course, analysis. This function is part of what are sometimes called the "middle-office" activities, which in figure 1 are performed by the Statistics and Analysis Unit.

The operating function is divided into three different phases: negotiating, utilization of loan proceeds and servicing. The activities or actions involved in each phase will differ depending on the type of borrowing involved (bilateral and multilateral concessional loans, euro credits, etc.), but these activities could also be different in nature. Utilization of loan proceeds and servicing are closer to the monitoring of projects and budget execution. They are sometimes called "back-office" activities, and in figure 1 they are performed by the Loan Management and Utilization Unit. Negotiating, in broad terms, is negotiations over external financing, including new borrowing and eventual rescheduling of operations. The negotiating activity decides on micro financial strategic issues and fixes benchmarks based on the output of the analytical function. These

activities are sometimes called "front-office" activities, and in figure 1 they are located in the Public Finance Unit.

The controlling function is the function of debt management that is the most difficult to define separately. Indeed, control is intrinsic to a debt management system. While the recording, analytical and operating functions are described here in their "pure forms", it might be correctly argued that control is embedded in those functions. However, separating out the controlling function enriches the conceptual approach undertaken here and better underlines the central role of this function.

At the transaction (i.e. *disaggregated*) level, the controlling/monitoring function is more concerned with specific operations, utilization and service. It must ensure, among other things, that the amounts and terms of new borrowings fall within current guidelines, that funds are being utilized on time and appropriately, and that repayments are made according to schedule within the budget allocations. In practice, the degree of control can vary widely (according to the different classes or types of debt and debt operations, the different public or private borrowing entities involved, etc.), ranging from close control to coordination and monitoring. This function is performed in different ways by all the units in figure 1.

At the *aggregated* level, the controlling/coordinating function is essential to ensure that operational debt management conforms with executive debt management. A strategy may, for instance, impose statutory limits or overall guidelines on how much borrowing can be done by the public sector and/or by the country as a whole. In this case, controlling/coordinating must ensure that borrowing is kept within the prescribed limits. Another important activity of this function is to serve as the information interface between the operational debt management functions and the executive ones. This makes the whole system dynamic, in that the feedback of this function to the executive level will allow it to modify the strategy in line with what is happening at the operational

level and to reflect this back, through this function, to the units performing the operational functions. In figure 1, the Controlling/Coordinating Unit performs this function, and its place in the figure shows its key strategic position – interfacing the operational with the executive functions (i.e. the Executive Council on Debt Management). In fact, the Controlling/Coordinating Unit is a kind of technical secretariat to the Executive Council. These activities could also be among those of the "front office".

#### 2.2 Performing effective debt management functions

There are two basic elements for effective debt management: the organizational structure of the debt office and its management information systems.

#### 2.2.1 Organization of the debt office

The debt office should have clearly defined functions as well as the skills required to do the work. It is useful to review the organizational set-up of the debt office on a regular basis to identify the functions that the office should be carrying out and to check them against the skills required for fulfilling its responsibilities. The outcome of this study should be compared to the functions being performed and the skills of the existing staff, to determine what new staff and/or training programme(s) might be required. The result should be a list of the required new staff or training requirements, with corresponding job descriptions and training terms of reference.<sup>5</sup> The organizational study should also help to produce the basic managerial documents that are essential for the efficient functioning of the debt office:

<sup>&</sup>lt;sup>5</sup> If management planning and analysis in the debt office are limited, the task of developing an organizational plan and associated staffing policies may be best assigned to an external consultant with experience in the organization of debt offices, such as UNCTAD or the Commonwealth Secretariat.

- A **functions manual** with a detailed description of the various responsibilities and functions of the debt office;
- A **procedures manual** with a detailed description of information flows;
- An **organizational chart** for the debt office; and
- A **job description** for each officer.

The functions manual should specifically describe the role, functions and responsibilities of the debt office in accordance with existing legal provisions, rules and regulations. The functions manual should set out the organizational structure — including supervision at senior, intermediate and operational levels, as well as a description of the debt office — with enough precision to enable the debt office to execute all the operations for which it is responsible.

The procedures manual should establish the flow and composition of the information in the operational cycle of the debt office, including the frequency of receipt of documentation and a detailed description of information concerning internal and external financing, how to register this information in the database, and the steps to follow for the registering of disbursements and public debt service. In addition to the flows of information, the manual should describe the functional groups involved in the process. It should also describe the outgoing information flow from the debt office to other government bodies and to private entities and international organizations, including the regularity of this flow and a description of the information that it should contain. The procedures manual will thus link the operative activities with the structure and functions established by the functions manual. These two manuals should constitute the organizational and functional framework of the unit, indispensable for guaranteeing efficient executive and operational The functions and procedures manuals need to be management. supplemented with a chart of the debt office and a detailed job description for each staff member.

The *resourcing function* is of basic importance in order to have a specialized staff with the necessary training. Attracting and retaining qualified staff members requires that the salary scale and career opportunities in the debt office be fully competitive with other job opportunities in the public and private sectors. Attention should be given to training, including training abroad, when appropriate. High staff turnover can pose a serious threat to the prospects of success of a debt office and, as mentioned earlier, has been observed as one of the most common causes of failure of performance.

It is also necessary to evaluate the office space and equipment requirements. Space is a prerequisite for effective performance of daily duties. Also, staff members should have at their disposal the required hardware and software, including e-mail and Internet access, as well as facsimile and long-distance telephone services.

The debt office should also have appropriate legal support and effective data collection mechanisms. If these legal and administrative elements are weak, debt data will be late, incomplete and/or inaccurate, and the debt office will produce poor results.

#### 2.2.2 Debt management information systems

Computers bring flexibility and rapidity to debt data processing, thereby allowing debt managers to review the information in ways that are not otherwise practicable. Within minutes, computer systems can calculate the current balances of hundreds of loans, sum them up and print reports organized by lender, borrower, currency and so forth. Even more important, computers allow debt managers to answer "what-if" questions about the profile of future payments if interest rates and/or exchange rates rise or fall, and thus to rapidly analyse changes in the country's debt burden resulting from hypothetical changes in financial markets. In the same way, a computerized system can allow debt managers to check the debt data against the real economy's macroeconomic variables so that projections of financing needs to close the balance –

of payments and/or the national budget deficit are obtained. For these reasons, today it is impossible to effectively manage the national debt without a computerized system. In addition, if the system is decentralized, as is explained later in this paper, modern technology is required for the different actors to communicate quickly and efficiently. For these reasons the adoption of management information systems (MIS) is vital for debt managers.

The tendency nowadays is to recommend installing a software package, available from the major suppliers of technical assistance in this field. At present, at least two well-tested debt management software packages are available. Compared to the cost of designing, programming and maintaining an entirely new system, the packages are relatively inexpensive. Their designers and users have debugged them to the point where they are likely to have fewer operating problems than custom-made systems. They can be implemented quickly and their maintenance is centralized, creating economies of scale. The maintenance of a system is of vital importance: it has been proven that the personnel turnover in the typical MIS department makes domestically developed systems very vulnerable. All these direct and indirect cost factors should be analysed carefully in selecting a debt management software package.

In a computerized environment, it is of paramount importance that senior officials make clear their support for the information management needs of the debt office. The most important manifestation of this support is the assignment of competent individuals to staff the debt office and operate the computerized debt management system. This involves a strategic decision to define the debt office's relationship with the MIS department, so as to make sure that the debt management system receives the necessary support in all its daily-computerized activities.

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<sup>&</sup>lt;sup>6</sup> UNCTAD's DMFAS and the Commonwealth Secretariat's CS-DRMS. These two systems can be considered back-office systems, but both of them are linked to a middle- and front office software package, the DSM+ that was developed by the World Bank. The three institutions have a partnership agreement to maintain and distribute this software.

This means that the debt office needs to allocate computer specialists with well-defined terms of reference, defined by the MIS department, in order to provide regular daily services, including resolving any technical problems that may arise.<sup>7</sup>

#### 2.3 The duties of a national debt office

In theory, the duties of a debt office are, or should be, quite simple, namely to conduct activities that it has been mandated to undertake under existing laws and regulations concerning public indebtedness policies. Any sovereign borrower should have such laws and regulations in place. In practice, however, this mandate is often not as straightforward as it might seem. Several institutions are usually involved in the debt management process, and, depending on the strengths and weaknesses of individual units, it is not unusual to find a de facto debt office in an institution that does not have the corresponding mandate.

Furthermore, the role of a debt office is not static. As a country advances as a borrower, the role of the debt office will change, and, accordingly, the organizational set-up will need to be adjusted. Sovereign borrowers fall into different categories, each having its own specific requirements for the execution of the debt management functions. The category determines the sources of external funding to which a country will have access. For this purpose, we can distinguish between the following four categories<sup>8</sup>:

(i) Countries that are members of the International Development Association (IDA) – "IDA-only" countries;

<sup>7</sup> In the budgetary planning process for computerization, it is important to remember that the debt office will need regular access to paper supplies, computer maintenance services and spare parts. In some countries, work at the debt office has come to a standstill because these components are not routinely available.

<sup>&</sup>lt;sup>8</sup> All categories of countries fund themselves to a smaller or larger extent in their domestic markets.

- (ii) Other low-income countries;
- (iii) Middle-income countries; and
- (iv) High-income countries.

The main sources of financing for IDA-only countries are bilateral and multilateral creditors with concessional funds. These countries deal mainly with international institutions. Bilateral funds are mostly in the form of official development assistance (ODA), rather than commercial loans. Some low-income countries have access to commercial sources of money, including suppliers' credits and foreign private banks – through buyers' credits – in addition to the bilateral and multilateral institutions. Middle-income countries and countries with economies in transition have some degree of access to international capital markets, but they still depend to a large extent on suppliers' credits and bilateral and multilateral funding. High-income countries obtain funding almost exclusively in domestic and international capital markets.

A debt office needs to be organized and staffed taking into consideration the types of lenders it will be dealing with. While international development agencies are coordinated and driven by development objectives and political decisions, the players in the international financial markets are international banks driven by competition and the profit motive. In any environment, the organizational challenge lies in pragmatic and firm decisions concerning which units will hold what data for what purpose, how these units will exchange information, and which unit will be responsible for what part of the effective debt management function. These functions must be made known to all the institutions involved.

The first decision to make regarding a national debt office is to define the scope of its activities. As was already mentioned, the national debt office could be an integrated entity covering all aspects of debt management, or it could play more of a coordinating role, with debt management functions distributed between several units. In IDA countries and other low-income countries, a debt office

would focus on relationships with international organizations and bilateral donors. Most financing to these countries is either for balance-of-payments/public budget support or for projects. In terms of coverage, a national debt office will be directly or indirectly involved with:

- External debt and foreign grants
  - Government debt
  - Government-guaranteed debt
  - Public enterprises debt
  - Short-term debt
  - Private non-guaranteed debt
  - Grants
- On-lending agreements
- Monitoring of project execution
- Domestic debt.

Some countries choose to give their debt offices monitoring responsibilities for all these sources of financing, while others limit their offices' role to external debt only. Middle-income countries are "mixed" borrowers, and therefore also oriented towards the international capital markets. The debt offices of these countries may therefore need a specialized department dealing with international market operations. The debt offices of high-income countries are mainly market oriented and are organized accordingly. Certain national debt offices even go beyond the borrowing functions, as the example of the Swedish National Debt Office shows (shown in box 1).9

<sup>&</sup>lt;sup>9</sup> The Swedish National Debt Office (1990/1991).

# Box 1 The Swedish National Debt Office

- \* Manages the state debt as cost-effectively as possible by borrowing:
  - in the money and bond market mainly through
    - treasury notes
    - treasury bills
  - in the private market through
    - lottery bonds
    - savings certificates
    - the National Savings Account
    - the National Debt Account
  - in foreign markets mainly through
    - bonds in the Euro market and national markets
    - treasury bill programmes in foreign currency
    - modern debt management techniques (swaps, forward contracts, etc.)
  - from state authorities and funds in the form of deposits
- \* Grants credit to state corporation
- \* Issues guarantees on behalf of the state
- \* Coordinates state guarantee operations and loans to industry and trade and monitors the cost of these
- \* Determines rates of interest for the National Savings Account and the Young People's Housing Saving System
- \* Makes forecasts for payments to and from the State and ensures that these transactions are managed as cost-effectively as possible.

The debt office of a country will, at a minimum, be responsible for monitoring government debt. Other management functions related to debt will vary considerably from country to country. For example, the Swedish National Debt Office exercises a wide range of management functions; however, in other countries the management functions are often distributed among several different offices. The more integrated the government's financial management system, the more actively the debt will have to be managed, and the more active the debt office will normally be in terms of overall public debt management, including budgeting, public accounting, cash flow and strategic decision-making.

To what extent the debt office should have a monitoring or management role will be a decision that each country will have to evaluate, depending on the importance of the external debt within the national economy. One issue to be taken into account concerns the availability of skilled management resources, and whether management of currencies, exchange rates and interest rates is a priority use of these resources. Experience shows that there is a greater tendency towards a management-oriented debt office than in the past.

Also, the scope of the monitoring tasks may vary considerably, depending on what type of borrower a country is. Low- and middle-income countries are often charged with the monitoring of on-lending agreements, parastatal and private sector non-guaranteed debt, and grant flows and project execution. The debt offices of high-income countries do not have these monitoring responsibilities.

# 3. Location and level of autonomy of the debt office

The debt office's physical location in the national organizational set-up is, of course, closely linked to its role, responsibilities and mandate. This section looks at the location of the debt office in the overall organizational structure of the national

debt management framework, and at the interaction between this unit and other institutions in the national set-up. The debt office's links to other units will depend on the distribution of functions, the delegation of authority and the configuration of responsibilities among various government ministries and agencies.

The unit responsible for monitoring central government debt should logically be located in the ministry of finance, with close links to the budget office. This is because the process of monitoring central government direct debt is tied to the budgetary process, both in budget preparation and in budget execution. However, in some countries these responsibilities may be distributed between several different institutions, depending on the organization of government services and on historical precedent.

## 3.1 Centralized organization

The ministry of finance or the central bank has, historically, been the institution in which the debt management function has been centralized. The following section describes models that have been implemented by different countries.

# 3.1.1. Office at the ministry of finance

As was mentioned above, the ministry of finance is a logical location for a central debt unit. Loan negotiations are often coordinated by a team representing both the ministry of finance and the central bank, while monitoring of payments is done by the debt office, the budget office, the treasury department, the accountant general's office and/or the central bank. As a general rule, the debt unit at the ministry of finance monitors only government debt and publicly guaranteed debt, including that of the parastatals. A common problem facing ministries of finance, however, is that they often operate within restrictions imposed by the government budget and government personnel policies, which may prevent them from

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<sup>&</sup>lt;sup>10</sup> Normally, the formal accounting operations of debt management are performed at the level of budget implementation.

offering the salaries, training and other facilities necessary for attracting qualified staff members and for retaining trained and experienced officers. The central bank performs the role of financial agent of the government and manages the payments and the treasury accounts. The central bank is also in charge of managing the foreign reserves and provides a link to the debt service.

#### 3.1.2 Office at the central bank

If a country is monitoring private-sector non-guaranteed debt, in many cases this will be the responsibility of the central bank. Some countries have, for this reason among others, chosen the option of establishing their debt office at the central bank. Since foreign currency for debt service payments is monitored by the central bank, this institution is in the best position to gain a complete picture of the debt situation of the country. Occasionally, other considerations may also influence the decision to use the central bank. Central banks operate on a budget that reflects their own earnings, and, therefore, they usually have a more generous administrative budget and more room for extra-budgetary expenses than a ministry of finance. The pragmatic solution is thus to establish the unit in the central bank because it is likely to have better facilities, more qualified personnel and more competitive salary levels. All these factors will, of course, make it easier to retain trained employees. Locating the registering function in the central bank does not preclude the ministry of finance from having direct access to the database or from performing other operational functions such as implementation of the budget.

#### 3.1.3 Autonomous debt office (agency)

An alternative to establishing the debt office either at the ministry of finance or at the central bank is to establish an autonomous unit, as has been done by the Irish and Portuguese governments, for example. This model requires a very efficient and well-organized structure for information flows. The problem with this choice is that it appears not to work as intended in countries where poor organizational structures exist within the government, a

situation that often arises from a lack of resources. For example, a number of French-speaking countries in Africa have applied this model without major success because of a lack of institutional strength. In such cases, the autonomous unit may face problems with data collection because of a lack of coordination between the different institutions involved in debt management. On the other hand, an advantage of having an autonomous debt office is that it can be independent of the government payroll system, permitting the remuneration system to resemble that of the private sector – for instance, in offering performance-based bonuses and thereby attracting and retaining better-qualified personnel. In some instances, specific tax or other public revenues (e.g. from lotteries) may be allocated directly to this office.

In an autonomous unit or agency, the minister may wield control through regular meetings with the agency's chief executive. In the Irish National Treasury Management Agency, for example, the chief executive clears the budget once a year with the minister of finance. In addition, the chief executive appears before Parliament once a year in discussions concerning the budget execution. In any case, the establishment of such a debt office represents a high investment to start with.

Generally, the sole purpose of an autonomous debt office or agency is to fund the budget deficit at the optimal combination of cost and risk.<sup>12</sup> Consequently, the agency is needed only if there is a budget deficit to be financed. If the budget deficit decreases, as

<sup>12</sup> The International Monetary Fund and the World Bank have recently issued a paper, Draft Guidelines for Public Debt Management (2000) that takes this approach; it defines the objectives of debt management as being "to ensure that the government's financing needs and its payments obligations are met at the lowest possible cost over the medium to long run, consistent with a prudent degree of risk."

<sup>&</sup>lt;sup>11</sup>For example, the Caisse nationale d'amortissement de la dette publique was very popular in the countries of French-speaking West Africa in the 1980s. However, this model has been gradually abandoned and the corresponding responsibilities transferred to the ministries of finance.

occurred in Ireland in November 1999, the need for this institution will diminish. It therefore makes sense for an agency to have its staff on relatively short-term contracts (e.g. fiscal year by fiscal year). This argument can be used to justify paying employees higher salaries than those offered within the government structure.

Debt offices in countries where capital markets are the main source of financing generally have an organizational structure that incorporates the back, middle and front offices. The back office processes (and makes) payments, settles accounts and does the registering and accounting, as well as the debt reporting and statistics; the middle office does risk management and performance assessment by fixing benchmarks; and the front office devises strategy and conducts borrowing in capital markets, including negotiating with lenders.

The trend in developed countries during the 1990s has been towards the agency model. An example often looked to is the National Treasury Management Agency of Ireland, which again took inspiration from the Swedish National Debt Office. Before concluding that this is a model that may be implemented in any environment, however, it is important to understand its purpose and limitations.

- This model is generally designed for floating government securities, not for bilateral and multilateral borrowing, although some countries, such as Hungary, manage the latter type of financing in the same agency. The model's primary purpose is reflected in its organizational set-up, the type of staff employed and the risk management model used. Countries using this model have a full range of choices of financial instruments and, therefore, tap the capital markets that provide the greatest flexibility at a reasonable cost.
- Countries using this model generally have very little foreign debt: loans are practically all in domestic currency. For example, Belgium has less than 2 per cent of foreign

currency debt in its portfolio, <sup>13</sup> and the debt office of the Danish central bank does not even include the foreign debt stock in its risk management models.

• The use of the funds is not an issue for most agencies, as they are merely the executive arm for the budget and do not perform the executive functions of debt management. Thus, the model has generally been chosen in order to separate debt management (funding) function from fiscal and monetary policy. It may therefore be regarded as a "funding machine" for the government budget. However, as was mentioned earlier, it is important to bear in mind that if the institutional structure does not function in other respects, it is not possible to set up an agency where one function, namely funding, is pulled out and operates on its own.

This type of organization entails the risk of lack of coordination of public debt management with the treasury and budget systems. According to the modern concept of government financial management, it becomes necessary to have the public debt module as a subsystem of an integrated financial management system (IFMS). An IFMS contains the treasury, cash flow, budget operations and public accounting of the central government. Thus, if an IFMS is implemented in a country, it is more efficient to have the debt office at the ministry of finance.<sup>14</sup>

As was already noted, the establishment of such a debt office represents a high investment. In addition, an agency of this type needs a well-organized secondary market for the different debt instruments that are issued in order to function efficiently.

finance.

<sup>14</sup> For instance, the DMFAS is integrated with budget and treasury systems in Argentina and Guatemala and is being integrated in Bolivia, El Salvador, Paraguay and Venezuela. In all these countries, the debt office is located at the ministry of

<sup>&</sup>lt;sup>13</sup> As of November 1999.

#### 3.1.4 Other cases 15

#### The former Soviet Union

The governmental structure of the former Soviet Union had a cabinet of ministers, directly supporting the president, where important decisions were made, and the central bank and various ministries, including the ministry of finance, played a relatively modest role compared to what is usual in other countries. This, of course, had important implications for the debt management functions. The generally accepted rule of thumb for where the debt office should be located no longer applies. For historical reasons, the State Bank of Foreign Trade (the Veneshkombank) until recently played a key role in the management of the external debt of the Commonwealth of Independent States (CIS) – a fact that these now independent countries cannot ignore. In the particular case of the Russian Federation, the Veneshkombank manages not only the country's external debt but also the debt owed to it by third countries. In addition to the Russian Federation, some other CIS countries have retained this structure, and it will take some time to replace it.

#### Contracting a commercial bank

For issues of special bonds, in particular retail bonds, a sovereign borrower may consider the possibility of contracting the issue to a commercial bank. The debt office would retain overall policy responsibility for the issue but could enter into a performance contract with the commercial bank. Subcontracting the entire sovereign debt management function of a country to a commercial bank, however, is generally not considered a desirable option because it does not permit a sufficient degree of control. Besides, a commercial bank probably would not have the necessary expertise in monitoring loans linked to projects from multilateral organizations. The minister of finance would retain full responsibility for public

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<sup>&</sup>lt;sup>15</sup> Useful material on other cases can also be found in Klein (1994).

debt management but would, in this case, lack some of the control mechanisms available within the government structure.

#### 3.2 Decentralized organization

It is clear that control/monitoring or control/coordinating functions are best assumed by the ministry of finance or by the central bank. Nevertheless, other functions can be well handled by other actors, because they have the historical know-how. Many therefore decide on some kind of decentralized countries organization with shared responsibilities. As was mentioned above, the decision regarding the actual location of the unit should be considered in the context of each institution's specific functions of external debt management, rather than based on the staffing and means at their disposal. A recent trend, in countries where public debt has traditionally been managed by a Veneshkombank-type institution or by the central bank, has been to transfer the responsibility to the ministry of finance. However, in many such cases, the role of financial agent is left to the central bank along with, in some cases, responsibility for monitoring non-guaranteed private debt. A more formal linkage of public debt management with budget execution and fiscal policy has led to this transfer of responsibility to the ministry of finance and to a change in the formal status of the central bank (i.e. it has been made autonomous). In most cases, however, the changes take place as a result of the current trend of central banks' reverting to "core" central banking functions. Recording of central government debt is not necessarily considered a core function of a central bank.

Decentralization of operations will work only if the information flow and legal framework are in place. Otherwise, a central statistical office may not be able to collect the data it needs to compile management reports. To quote Kalderen (1986):

"It may not be feasible to combine all functions and responsibilities and centralize them in one Debt Office. The more pragmatic approach is to establish a centralized statistical office that coordinates and integrates the data gathered by the various decentralized participants of the system and prepares a comprehensive report for the highlevel policy committee."

Decentralization of the different functions must not jeopardize the principle of central control. Thus, in a decentralized system, a wide range of control/coordination problems will need to be resolved concerning the collection and recording of data; who should be responsible for compiling data on the country's total debt; who will analyse the data; and who will have the main responsibility for dealing with and reporting to international organizations and foreign creditors.

The choice of agency responsible for collecting and recording data on government debt, public enterprise debt, privatesector debt and short-term debt entails a consideration of the institution's primary responsibility and its access to primary data The location of the debt office will be influenced by historical precedent in the concerned country, since certain data collection procedures will already be in place. Nevertheless, in a computerized environment this factor may not be decisive, because with modern telecommunication networks two recording units can be through wide-area network. facilitating a specialization of the different institutions concerned. It has to be kept in mind that the size of the debt being monitored – not in value terms, but in the volume of instruments and transactions - is also very important. Complexity in the terms of instruments may necessitate the dividing of responsibilities for data collection and recording between different units, as well as better coordination.

The unit responsible for compiling data on the total debt situation of the country, analysing this data and reporting it to various national and international institutions will need a strong mandate for this task in order to secure the necessary data flows. In a decentralized environment it is important to avoid constant overlapping of data collection so as to avoid the risk of different

institutions' reporting different figures on the same debt. If this were to occur, the central statistical unit as well as international organizations compiling debt statistics (such as the International Monetary Fund [IMF] and the World Bank) would have the unnecessary task of verification. This is why specialization of the different institutions involved is of paramount importance. For instance, the ministry of finance could specialize in public and publicly guaranteed debt, and the central bank in non-guaranteed private debt. With good coordination, the two institutions could exchange information on a regular basis so that both would have access to the whole database. When the treasury and or the accountant general are not formally part of the ministry of finance they should also be linked to the computerized information system.

There is a recent trend towards privatisation of state enterprises, contraction of the non-government public sector and a relaxation of exchange control regimes. This has resulted in increased borrowing by the private sector and the reduced ability of the public sector to monitor private borrowing, since the private sector now gets foreign currency directly from the banking system. At the same time, many governments are extending the scope of their monitoring activities and moving into monitoring of short-, mediumand long-term private-sector external debt, in addition to short-term external debt, public domestic debt, aid grants and project linkages, on-lending and foreign loans to local governments. This trend enforces the need for integrated systems, because more than one debt recording office may be involved. Also, there is a need to interface with other financial management systems, such as budgeting, aid management and on lending.

# 4. Organizational models

The organizational model used for the debt office will depend on several factors: the historical background, the legal division of responsibility between different government bodies, and the importance of external debt in the overall public indebtedness, as

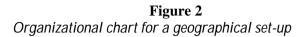
well as the volume of data and its complexity. However, the organizational structure of the debt office should be oriented towards a global and efficient debt management approach capable of responding to all needs and responsibilities.

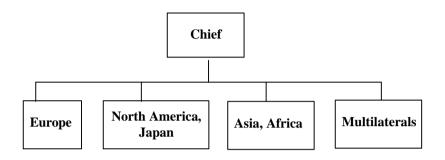
The debt office is frequently organized along geographical or institutional lines, with each officer responsible for all actions taken on his or her assigned set of loans. However, this is not the only possible approach. If the required expertise exists in the debt office, it would be ideal to have different officers specialize in different types of financing, <sup>16</sup> rather than divide the loan files along geographical or institutional lines.

# 4.1 Geographical organization

Many debt offices divide work according to geographical regions, with each officer being responsible for all creditors within his or her assigned country or region. In addition, some staff members are usually responsible for multilateral organizations, which are treated as countries or regions. This is a better approach than giving the same desk officer responsibility for multilateral organizations as well as creditors from a given region. The rationale behind this organizational structure seldom goes beyond the intention to distribute the workload evenly among desk officers. The organizational chart for this type of organization is shown in figure 2.

<sup>&</sup>lt;sup>16</sup> In such an organizational set-up, at least one officer should specialize in loans from institutions using currency pooling. These loans are not a special type of financing as such, but with regard to accounting and monitoring, they represent a very particular problem.





An alternative to the geographical model is an organization based on loan source or type of financing, or on type of transaction. The following section describes how the work of the debt office can be organized by types of activity undertaken – an organization that may in some cases be more effective than geographical organization. Broadly speaking, this model is generally implemented in one of two variants, which for the sake of classification could be called *creditor-oriented organizations* and *task-oriented organizations*.

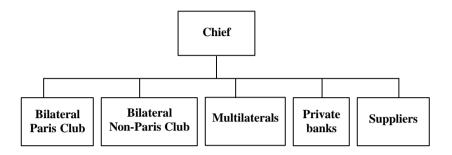
#### 4.2 Creditor-oriented organization

It has been suggested that a country's external debt management should be organized according to types of loans<sup>17</sup> (i.e. bilateral loans, multilateral loans, export credits and private bank loans). The reasoning behind this suggestion is that these different types of financing have different characteristics, especially in the way they are negotiated and monitored. If a country follows this model (see figure 3), it should have experts specializing in the different types of loans: bilateral Paris Club loans, bilateral non—Paris Club loans, multilateral loans, private bank loans, suppliers, and bonds.

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<sup>&</sup>lt;sup>17</sup> See Kalderen, (1986).

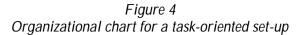
Figure 3
Organizational chart for a creditor-oriented set-up

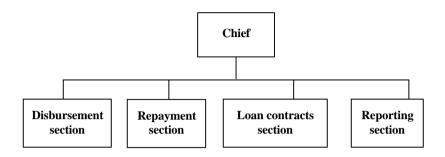


This organizational structure needs a well-established information flows network. If this requirement is not satisfied, this structure may not be efficient.

#### 4.3 Task-oriented organization

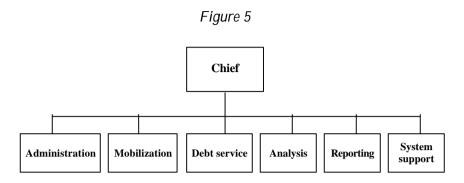
Task-oriented data collection may be particularly useful in cases where adequate information flows are not very well established or where data has to be collected by visiting different beneficiaries, ministries and institutions. An example of this type of organization, still used in many countries, is shown in figure 4. This model is organized according to four main tasks: handling disbursements information, handling payments information, handling contract information and reporting.





This type of organization may be needed in countries where the information is located in different institutions and ministries. However, interventions by staff members of the debt office should not result in their visiting the same ministry or parastatal entity during the same week to collect similar information. It is necessary to assign a specific task force with the job of collecting all information regarding transactions. However, it is also imperative to establish procedures so that the debt office automatically receives copies of all needed information on a regular basis.

Another example of a task-oriented organization was developed by UNCTAD/DMFAS in connection with the release of version 5.0 of the DMFAS software. This organizational structure is more dependent on well-established information flows than the creditor-oriented model. The task-oriented model has its foundation in the different phases in the lifetime of a loan in relation to the Effective Debt Management Functions. It is reflected in the Main Menu of the versions of DMFAS from 5.0 onwards, as illustrated in figure 5.

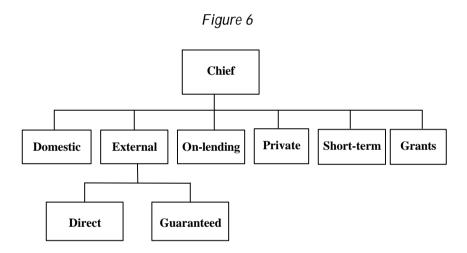


In this type of structure, there is a risk of dispersion of responsibilities between the registration of information about a new borrowing and the execution of its operations. The separation of disbursements and debt service can also create excessive specialization, which can prevent employees from acquiring an understanding of the entire process of debt management and thereby have a negative effect on the training and rotation of personnel. Furthermore, this form of organization often leads to bottlenecks in various units as a result of the separation of responsibilities: a payment order cannot be processed if information on the disbursement was not entered in time by the unit in charge of that function. All these reasons suggest that, to be efficient, a model should integrate all the operative processes in a more vertical manner.

# 4.4 Organization of large debt offices

In debt offices whose mandate goes beyond external debt, more complex organizational structures will be required. The higher-level structure could then be organized according to categories of debt, for example. The lower-level organizational structure for data collection, however, would probably still follow one of the models presented earlier in this section. This paper will not go into detail concerning these options, but simply shows two examples of more complex organizational structures, one of them hypothetical (figure 6) and the other actual (figure 7).

Debt offices in countries where capital markets are the main source of financing generally have an organizational structure that incorporates the back, middle and front offices. <sup>18</sup> Sweden offers a typical example of a full-service debt office. Usually this type of debt office also has its own information technology unit operating from either the middle or the back office, as well as an internal auditor reporting directly to the chief executive, as shown in figure 7. By contrast, in some developing countries debt offices perform only certain back-office functions limited to the processing and recording of payments.



In some developing countries, it is common for middleoffice functions to be missing, often because they are considered unnecessary. Most developing countries borrow from concessional multilateral or bilateral sources, where the rules of the game have been defined in advance and negotiations primarily concern the use of funds, rather than the terms. Since interest rates and repayment terms are not much of an issue, the perception of a reduced need fora middle office is understandable. Nevertheless, this perception is

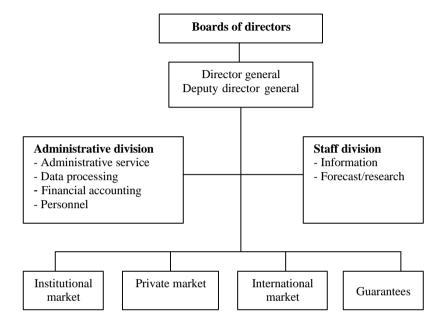
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<sup>&</sup>lt;sup>18</sup> This aspect was mentioned earlier in the discussion of the autonomous debt office.

changing, and some developing countries are implementing middle-office functions, often in conjunction with assets and reserves management. This is because the elements of risk management and the associated organizational structures applied in developed countries are potentially useful for developing countries. However, they cannot be transferred to developing countries without appropriate adaptation.

It is important to point out that the front-office function is quite different in a developing country than in a developed country such as Ireland or Sweden. While the front office in a developed country spends its time conceiving strategies for tapping capital markets, in a developing country it is involved in negotiating with the IMF and multilateral development banks. A developing country's debt office also devotes considerable effort to developing the domestic capital market. Therefore, the skills and other attributes required of the front-office staff in a developing country's debt agency are different in some respects from those needed in the front office of the Irish debt agency, for example. The front office of a developing country requires people with decision-making power at the national policy level.

Figure 7<sup>19</sup>
Organizational Chart of the Swedish National Debt Office (1991)



#### 5. Conclusions

- Countries at different levels of development need different organizational structures for their debt office. For a developed-country market borrower, it may be desirable to separate the debt management (funding) function from fiscal and monitory policy, while in a country with a "mixed" source of funding, it may be important to integrate the two.
- Irrespective of a country's level of development, it should, in one way or another, organize its debt management office according to the types of financing sources to which it has access. This is in line with Kalderen's suggestion (1986) that

<sup>&</sup>lt;sup>19</sup> The Swedish National Debt Office (1990/1991).

- a country's external debt office should be organized according to the type of available funding.<sup>20</sup>
- A well-organized debt management structure will improve information flows, the quality of information produced, the productivity of personnel and the handling of responsibilities. Therefore, the structure should be organized with a distribution of operations that clearly defines and establishes the sources of financing and the coordination and monitoring functions of public debt management. An efficient model for a debt office integrates all the operative and monitoring processes vertically.
- Information management technology is an essential tool for debt managers, and a careful choice has to be made among the advantages and disadvantages of developing a proprietary system and using a ready-made one. The development of an in-house system can be far more expensive and risky than the adoption of a commercial one.
- An autonomous debt office can have serious drawbacks in spite of it flexibility. It is designed for floating government securities, not for bilateral and multilateral borrowing. The countries using this model generally have very little foreign debt, and nearly all their loans are in their domestic currency. The use of the funds is not an issue for most agencies they are merely the executing arm for the budget. Therefore, they do not perform the executive functions of debt management. This type or organization is more prone to a lack of coordination of the public debt management function with the treasury and budget systems. And, last but not least, the establishment of this model of debt office represents a high initial investment and needs a well-organized secondary

<sup>&</sup>lt;sup>20</sup> Kalderen (1986).

market for the different debt instruments that are issued in order to function efficiently.

 Whichever organizational set-up a country chooses, in order for the model to function well, the country needs a good regulatory and legal framework. It also needs to have effective debt management functions in place both at the executive and operational levels.

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