



## The DMFAS Programme



## EFFECTIVE DEBT MANAGEMENT

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## 1. Introduction

1. The current debt difficulties of developing countries have a number of dimensions, involving both national and international issues. This paper deals with the development of effective debt management at the national level. Such management can assist debtor governments in overcoming current difficulties, avoiding similar difficulties in the future, minimizing borrowing costs, and ensuring the optimum use of both internal and external resources.
2. Since 1978, UNCTAD has participated in over 150 debt reschedulings within the Paris Club involving some 50 countries, in preparation for which its economists have come to know at first hand the strength and weaknesses of debt management systems in a large number of countries. This experience has given rise to the development of UNCTAD's Programme of Technical Cooperation on debt management. The core activity of this Programme consists of helping countries establish the necessary institutional environment for effective debt management, and the installation of hardware and specialized software, called the Debt Management and Financial Analysis System (DMFAS). As of December 2000, the system has been installed and is operational in 54 countries.
3. Effective debt management encompasses such issues as administration, functioning of an office, communications, information flows and legal authorizations, analysis of credit, balance-of-payments and budget, controlling borrowing and defining strategies, and computerization of information systems, as well as training and retaining staff.
4. Debt management has two dimensions: the macroeconomic and the microadministrative. In the former, debt management must be seen as an integral part of a country's overall macroeconomic management; in its microadministrative dimension, it is part of a broader process of public administration and management.
5. The present paper aims to sketch out the requirements of effective management of a country's external debt, bearing in mind the two dimensions, and to present a conceptual framework for the understanding and implementation of the corrective measures involved.

## 2. The concept of debt and the scope of debt management

6. An international working group on external debt statistics composed of the Bank for International Settlements (BIS), the International Monetary Fund (IMF), the Organisation for Economic Cooperation and Development (OECD) and the World Bank (IBRD) agreed on a core definition of external debt:

“Gross external debt is the amount, at any given time, of disbursed and outstanding contractual liabilities of residents in a country to non-residents to repay principal, with or without interest, or to pay interest, with or without principal.”<sup>1</sup>

7. As suggested by such a broad definition of external debt, a comprehensive debt (or liabilities) recording and management system would require full knowledge of all the external obligations of the country. This covers all government borrowing, central bank borrowing, and parastatal and private sector borrowing whether guaranteed by government or not, as well as other financial operations of domestic economic agents such as direct investment and leasing. Whether this complete knowledge of each component translates into complete control is another matter.
8. While a general definition of external debt is important to ensure that no essential components are omitted, for a particular country it is probably less critical than specifying the components that ought to be recorded and managed.

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<sup>1</sup> See IBRD, IMF, BIS and OECD, *External Debt (Definition, Statistical Coverage and Methodology)*, Paris, 1988, p. 19.

9. With this management purpose in mind, a commonly used narrow definition of external debt includes all medium-term and long-term debt (of one year or more) owed by, or guaranteed by, the public sector to non-residents. In principle, all private external debt guaranteed by the government or other public institutions should be considered as public, since it will be subject to the same regulations and procedures as debt owed directly by the public sector; in addition, such debt is a contingent obligation of the government. Public debt should also include liabilities of the central bank, government agencies, and the states, where a country is a federation, the debt of provincial and local governments, and so on.

10. A broader definition adds short-term public sector debt and/or private sector (non-guaranteed) debt (both short and long term). Definitions become complicated because the distinction between different types of external resources such as loans, grants, and direct investment is not always clearly discernible.

11. Leaving the issue of definitions aside, a discussion of the concept of debt and the scope of debt management must start by recognizing that external debt servicing obligations of significant magnitude can raise two problems for a country. On the one hand, there is the need to earn (or save) foreign exchange for debt service. On the other hand, insofar as debt is a governmental obligation, there is a public finance problem requiring the generation of budgetary receipts in local currency equivalent to the external obligations.

12. Approaches to debt management are sometimes oriented toward one or the other of these dimensions. For some, external management is primarily an aspect of public finance and constitutes a part of the overall problem of managing public sector borrowing and debt. For others, external debt management is seen primarily in terms of its impact on foreign exchange availability, and constitutes part of the overall problem of managing the foreign exchange budget.

13. As far as external debt is concerned, a government's immediate interest is, of course, its own external liabilities which affect both the budget and foreign exchange reserves. However, government responsibility for foreign exchange reserves and regulations may also imply responsibility for providing foreign exchange to meet the servicing of private sector debt and, eventually, the remittances of profit from direct foreign investment.

14. To conclude, it might be suggested that any system of debt management must necessarily permit successful management of public and publicly guaranteed external debt (mostly of a medium and long-term nature). This is the point of departure. However, such a system can also be extended in one of two directions (or both):

- a) to include private sector non-guaranteed debt or other external debt of the country, as deemed necessary from the foreign exchange point of view.
- b) to include public domestic debt, as deemed necessary from the public finance point of view.

15. In brief, debt management deals with both external (including private debt) and public debt (including domestic debt) and its ultimate objective is to help government manage both foreign exchange availability and public finances.

### **3. Debt management functions**

16. Effective debt management involves primarily seven basic functions: policy, regulatory, resourcing, recording, analytical, controlling and operating functions. The first three functions are part of what can be called *Executive Debt Management*. The other four functions may be considered to be part of *Operational Debt Management*.

17. *Executive Debt Management* might be viewed as the establishment of the "rules of the game" by the highest levels of government. It thus gives direction and organization to the whole which might be called the *Debt Management System*.

18. **Operational Debt Management** is the day-to-day management of debt in accordance with executive direction and organization. Operational debt management may in turn be viewed as being composed of **passive and active debt management**. Although the dividing line is not always clear, the former involves functions which do not include actions (interactions and transactions) on the debt front, while the latter does. It is obvious that passive management will strongly influence active management through the provision of information and analysis, and is of equal importance.

19. Each function of effective debt management has a major output. This may be presented as in Chart 1.

20. The various basic functions of effective debt management can briefly be described as follows.

### **3.1. Executive management**

21. The **Policy Function** involves the formulation of national debt policies and strategies in coordination with the agencies with prime responsibility for the economic management of a country. Broad policy considerations determine a country's sustainable level of external borrowing. This, in turn, is affected by the flows that the country can use efficiently, and how it can generate the additional foreign exchange earnings needed to meet service charges without risking external payments difficulties. These ramifications of foreign borrowing mean that external debt policy affects national planning, balance of payments and budget management, and all government agencies that determine that type of investment undertaken in a country. The major output of this function is a well-defined and feasible national indebtedness and external debt **Strategy**.

22. The **Regulatory Function** of debt management involves the legal, institutional and administrative arrangements for external debt management. It involves the establishment of a well-defined regulatory environment to provide for the well-coordinated, and where necessary, centralized, administration of external indebtedness, at the recording, analytical, controlling and operating levels, 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 units involved, legal reporting requirements, etc., i.e. the organization **Structure**<sup>2</sup>. The framework will in large measure define the **Degree of Control** exercised and the data which can be recorded.

23. The **Resourcing Function** ensures that the recording, analytical, controlling and operating functions pertaining to external debt management are performed by qualified staff. It involves recruiting, hiring, motivating, training and retaining staff. At times, it might involve the hiring and supervising of outside consultants to provide specialized technical expertise in the area of external debt management (i.e. computerization, debt audits, preparation for rescheduling negotiations, etc.). This function must also very broadly be understood as the provision of adequate material resources (office space, communication equipment, etc.). The main output might be termed **Staffing and Means**.

### **3.2. Operational management**

24. The functions pertaining to operational debt management, particularly the recording, analytical and controlling functions, are performed on two levels: the **Aggregate Level** and the **Single Transactions** (or disaggregated level). This distinction is not always easy to make, but is necessary for a better understanding of debt management.

#### **3.2.1. Passive management**

25. The **Recording Function** requires collecting detailed information on debt on a loan-by-loan basis. The fundamental decision to make in elaborating a recording framework for external debt is to decide what constitutes an external debt and subsequently which data will be collected. The data collected on a

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<sup>2</sup> Organization structure should be seen as a means to an end, i.e. structure is the means by which strategy is pursued and resources harnessed so that goals, objectives or outputs may be achieved (ends). See E. Kakabase, R. Luchow, S. Vinnicombe, *Working in Organizations*, Penguin Books, 1988, p. 313.

loan-by-loan basis will be aggregated to provide statistics for analytic purposes. The major result of this function is to provide **Information**, both on an aggregated and disaggregated level.

26. Very closely related to the recording function is the **Analytical Function** which utilises the information provided by the former. 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. It is necessary in order to constantly review the impact of various debt management options on the balance-of-payments and the national budget and to help judge such matters as the appropriate terms for new borrowing. At the more disaggregated level, the analytical function would look at the various borrowing instruments, the choice of maturities, etc. and could also assist in the analysis of new financial techniques such as conversion schemes. The output here of course is **Analysis**.

### Chart 1

#### DEBT MANAGEMENT FUNCTIONS AND OUTPUT

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<b>EXECUTIVE DEBT MANAGEMENT</b>	➤	<b>DIRECTION &amp; ORGANIZATION</b>
Policy function	➤	Strategy
Regulatory function	➤	Structure
Resourcing function	➤	Staffing & means
<b>OPERATIONAL DEBT MANAGEMENT</b>	➤	<b>DEBT DYNAMICS &amp; PRACTICE</b>
<i>Passive management</i>		
Recording function	➤	Information
Analytical function	➤	Analysis
<i>Active management</i>		
Operating function	➤	Operations
Controlling function	➤	Control
/Coordinating		
/Monitoring		

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### 3.2.2. Active management

27. The **Operating Function** involves the whole range of activities related to borrowing and other agreements or arrangements which imply some kind of action (interactions and transactions). This function might be divided into three different phases: **negotiating, utilization of loan proceeds** and **servicing**. The activities or actions involved in each phase will be different depending on the type of borrowing involved (bilateral and multilateral concessional loans, Eurocredits, etc.). It thus deals with techniques, among which must be included those providing for some form of debt reorganisation (such as restructuring, refinancing) and debt conversion (debt-for-equity swaps, debt-for-goods swaps, ‘debt-for-nature’ swaps, etc.). The outputs of the operating function are thus actual **Debt Operations: Negotiation, Utilization** and **Service**. (These terms must be understood as broad categories. Actual interactions and transactions taking place will depend on the type of borrowing.)

28. The **Controlling Function** is the function of debt management which 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 form’, it might be argued that control is embedded in those functions. Notwithstanding this, and at the risk of becoming too abstract, separating the controlling function enriches the conceptual approach undertaken here and underlines better the central role of this function.

29. At the aggregate level, the **Controlling/Coordinating** function is essential to ensure that operational debt management is in accordance 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 imposed limits.

30. At the transaction or disaggregated level, the **Controlling/Monitoring** function is more concerned with specific operations, i.e. negotiations, utilization and service. It must ensure, among other things, that the 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.

31. 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.) and can range from close control to coordination and monitoring.

32. At the aggregate level, the seven functions of effective debt management can be presented as shown in Figure 1.

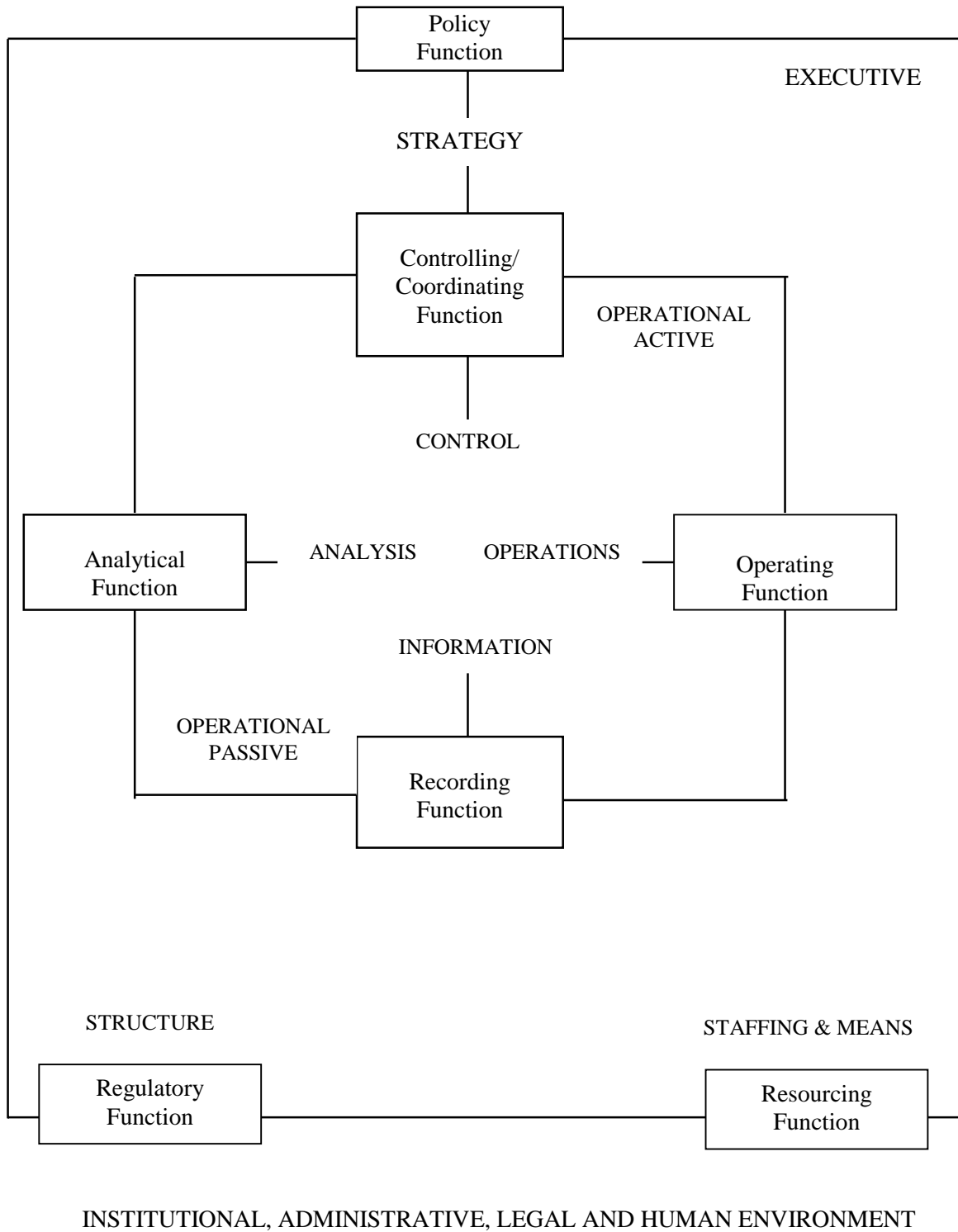
33. This diagram must be interpreted as representing the functions and their outputs as building blocks for an effective debt management system. The lines link the functions or blocks at two levels: the executive and the operational levels.

34. At the executive level, the policy, regulatory and resourcing functions will give direction and organization to the debt management system. The macroeconomic environment and the analytical, institutional, administrative, legal and human environment both affect and are affected by these functions. The evolving strategy, structure, staffing and means determine the way that debt management is performed at the operational level.

35. At the operational level, operations, information, analysis and control are the results of the corresponding functions.

36. An effective debt management system is thus constituted of seven building blocks as shown in Figure1.

**Figure 1**  
**DEBT MANAGEMENT FUNCTIONS**  
**Macroeconomic Environment**





37. While this figure presents the debt management functions at the aggregate level, a closer look at operational debt management is necessary. Indeed, debt originates at the level of individual transactions. In other words, a country's debt is the aggregation of various operations and the result of various functions performed on a loan-by-loan basis.

38. As Figure 2 indicates, various operations are going on at any one time. These operations give rise to various interactions and transactions between the lenders and the borrowers which will need to be recorded and monitored. The operations involved and the actual practice of operational debt management are complex and cannot be dealt with in detail here. Some elements can be mentioned briefly:

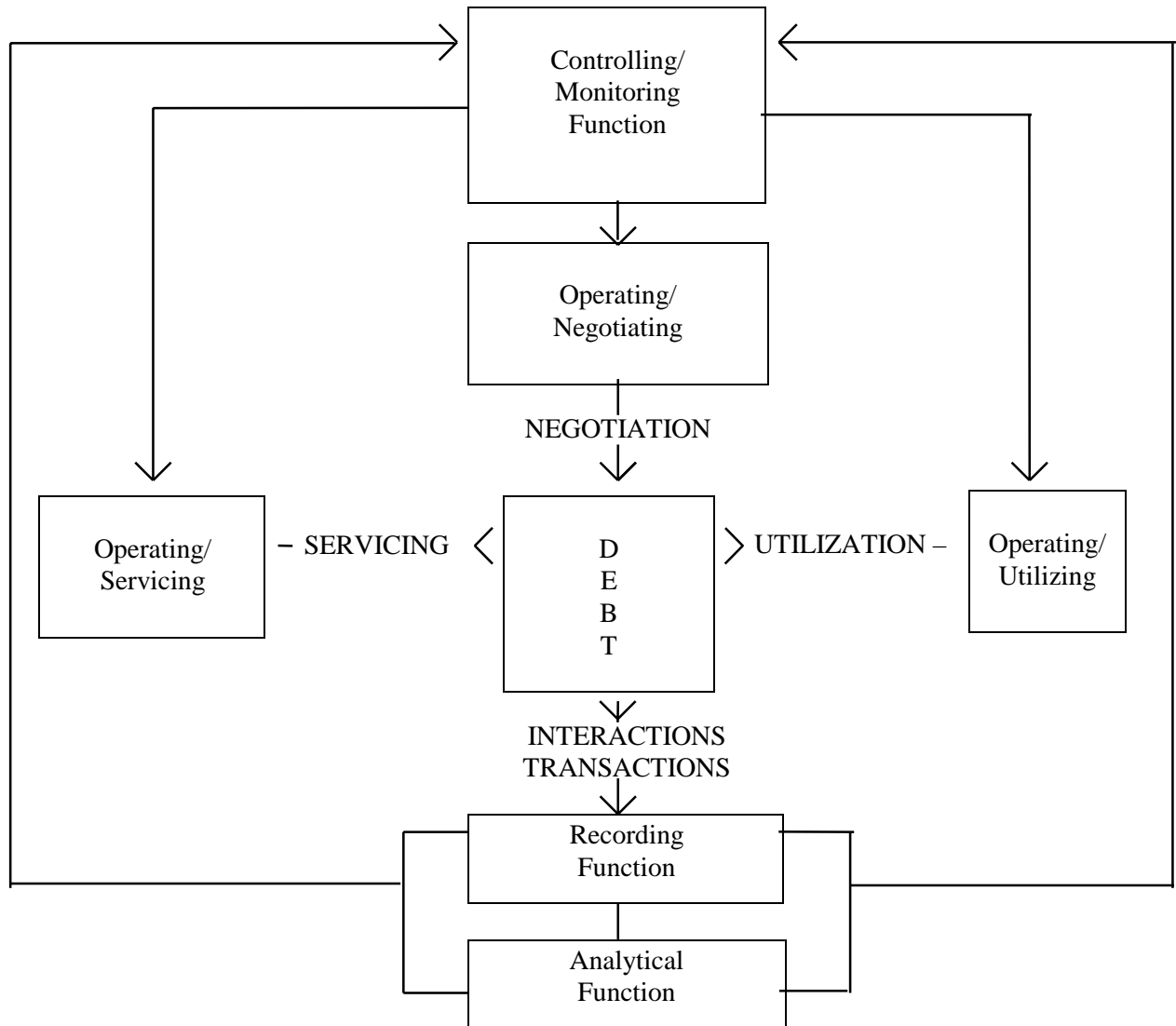
- Negotiation involves such elements as:
  - establishing a financial framework;
  - securing the necessary financial terms;
  - ensuring the legal acceptability of the loan contract;
  - ensuring the administrative acceptability of the loan contracts (authorization, guarantee, signature).
- Utilization of loan proceeds:
  - in some cases, the preparation of on-lending contracts;
  - in some cases, the provision of local counterpart funds to external financing;
  - modifications to loan contracts (i.e. deferring final date for disbursements);
  - disbursements and utilization of funds;
  - payments to suppliers;
  - follow-up on undisbursed committed amounts.
- Debt service involves:
  - payments according to schedules;
  - updating of schedules and checking;
  - follow-up to budget allocation.

39. Borrowing and other agreements or arrangements which imply some kind of debt operation can take many forms, such as bilateral and multilateral concessional loans, export credits, commercial bank loans, debt reorganization, debt conversion, etc. Negotiation, utilization, and service will vary accordingly.

**Figure 2**

**DEBT MANAGEMENT FUNCTIONS**

**Microadministrative Environment**



## 4. Debt management units and their related functions

40. Debt management systems and, in particular, their institutional framework (or which units perform the functions relating to debt management), differ from country to country and are shaped by historical precedent, constitutional division of responsibility between various tiers of government, the internal organization of the government itself, the importance of external debt in overall economic management, the relative importance of particular types of credits within the overall debt structure, and also the regulatory function of external debt management.

41. Debt management systems differ in the degree of control exercised by the authorities, the strictness of the regulatory environment, the nature of the reporting system instituted for external debt operations, which may be mandatory or voluntary, and which may require prior authorization for incurring external obligations or only ex-post reporting. They also differ in their treatment of private sector versus public sector loans, as well as their treatment of financial *versus* non-financial domestic institutions.

42. In general the various functions of debt management are not performed by the same government agencies. In other words, there are many actors in the system. We may find several units (or individual government officials), mainly in the Ministry of Finance and Central Bank, performing some of the functions mentioned above, and sometimes even overlapping each other or performing the same functions for different ministries. In such cases, the system is decentralized.

43. When the functions of debt management are all being performed either by the Central Bank, or the Ministry of Finance, or by an autonomous (or semi-autonomous) body, which belongs neither to the Central Bank nor to the Ministry of Finance, the system is said to be centralized.

44. Whether the system is centralized or decentralized, where the various functions of debt management are being performed - in other words, where there is strategy, structure, staffing and means, information, analysis, control and operations - it can be said that the necessary conditions for an effective debt management system exist. But this is not sufficient. It is also required that the debt information management, the analysis and decision-making systems are integrated into a clearly defined institutional environment. This means that each unit has been assigned functions to perform that do not duplicate efforts and that information, basic and aggregated, is shared consistently amongst them. Obviously, if the different units are located in a single integrated body this goal might be achieved more easily than in a highly decentralized system.

45. There is no universally accepted textbook model for optimizing debt management units and their related functions. Figure 3 presents a conceptual model in line with the basic functions of debt management discussed above. For the sake of simplicity, it is assumed that the system deals with public and publicly guaranteed external debt. It is also assumed that a centralized debt management system exists, although in practice the units referred to below are often administratively distinct.

46. Figure 3 shows the different units that would need to be established, within a debt management (organization) structure, to deal with the functions mentioned earlier. Figure 3 does not imply a specific location for the different units of the structure, it aims only to highlight them and their respective functions. Nevertheless, in order to facilitate the understanding of the different information-flow problems which need to be overcome, it would be useful to assume here that the whole debt management organization structure is a single integrated body.

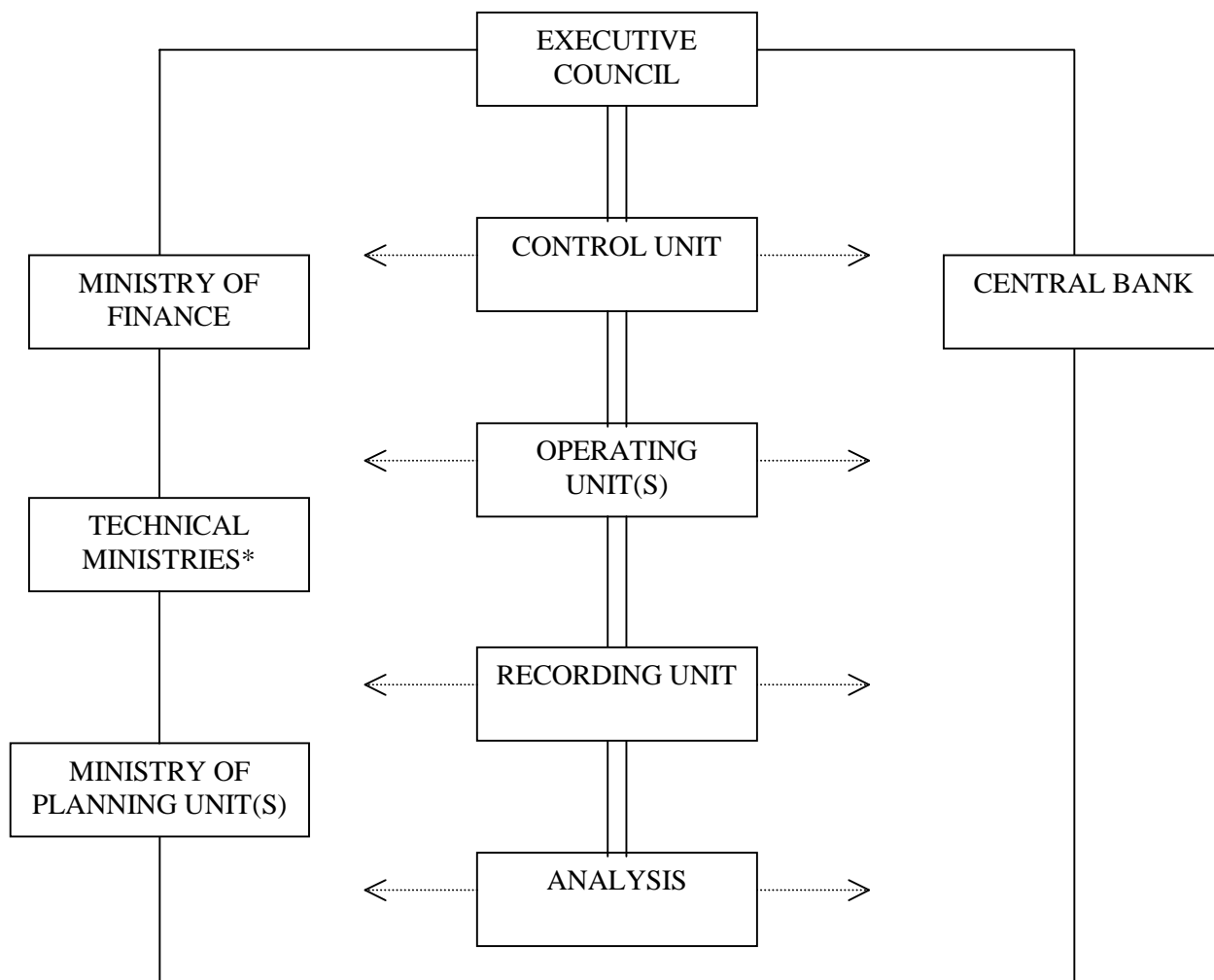
47. The top unit is the *Executive Council*. This is the highest authority regarding external indebtedness. Its members should be at the most senior level: Minister of Finance, Governor of the Central Bank, Minister of Planning, Ministers of Technical Ministries concerned with external indebtedness and, eventually, chief executive officers of parastatals that might have access to foreign resources. The Executive Council will exercise the *Policy, Regulatory* and *Resourcing Function* as far as general decisions, guidelines, and rules are concerned.

48. The *Control/Coordinating Unit* is, in fact, the secretariat of the Executive Council. Its duties are the follow-up and surveillance of *Strategy, Structure, Staffing and Means*. As its name indicates, the function performed by this unit is the *Controlling/Coordinating Function* which ensures the achievement of the defined strategy through the observation and application of rules and legal structures, as well as verifying that suitable and sufficient staff and material means are put at the disposal of the different units and consistent with the decisions taken at the Executive level.

49. *Operating Unit(s)*. The *Operating Function* has been divided into three different phases: negotiation, utilization and service. A similar division may be applied to the unit dealt with here, but other alternatives are possible. There could be an *Operating/Negotiating Unit*, an *Operations/Utilization Unit* and an *Operating/Servicing Unit*; or a single *Operating/Utilization/Servicing Unit* instead of the former two. It is, however, important to note that the negotiating function is to be separated from the other two.

**Figure 3**

**INTEGRATED DEBT MANAGEMENT SYSTEM**



\*Including parastatals.

50. The *Operating/Negotiating Unit* will study the borrowing conditions for the country in different financial markets and from different financial sources. Then, given the global strategy, negotiations will take place to ensure the best terms for the country. It is worth noting that it would be possible to have specialized sub-units or units according to the type of borrowing: multilateral, bilateral, official and commercial lending.

51. The *Operating/Utilization/Servicing Unit* follows up the different loans in order to trigger the disbursements at the right time, makes provisions for payments falling due and verifies that the amounts claimed by creditors are correct. This unit is thus also performing a *Controlling/Monitoring Function* (at this level). In order to be able to efficiently carry out this Controlling/Monitoring function, the unit has to be in close contact with the *Recording Unit*. As in the area of the Negotiating Unit, in a highly decentralised decision-making system it would be possible to have several of these units.

52. *Recording Unit*. This unit collects and records detailed information on a loan-by-loan basis, not necessarily from an accounting point of view (which can be rather inflexible for the management of estimated transactions) but from a statistical point of view. However, it is not contradictory to have in the Recording Unit an accounting and a statistical system side by side. The Recording Unit obviously performs the *Recording Function*. The Recording Unit should have access to and record all information within a country, even in the case of a highly decentralized system. This unit, in close collaboration with the Operating/Negotiating Unit, also records loans in the pipeline which have not yet been signed, so that other units, for instance the analysis units, can have access to this information.

53. *Analysis Unit(s)*. These are typically decentralized units that can be located in a number of different official bodies, such as the Balance of Payments or Foreign Exchange Departments in the Central Bank, as well as the Budget or Treasury in the Ministry of Finance. All these units are consumers of the information which comes from the Recording Unit and should channel all their analyses, in addition to the regular destinatories, to the Control Unit. Although the *Analytical Function* is naturally performed by the above mentioned units, it has to be stressed that all parts of the debt management system must constantly review and analyze their activities in order to continue to operate rationally.

54. Whether these units are located in various institutions, or in a single central integrated debt management body, the important issue is that there should be good communication between the units. Adequate information flows will have to be maintained. Effective debt management thus also entails developing and maintaining smoothly functioning relationships between the units and agencies involved. The more plentiful the actors in the system, the more difficult this will be. Complexity increases the role of the control unit. The more decentralized and complex a system, the more the need for control/coordination, which may sometimes be impossible without a loss of flexibility.

55. As far as the location of the units is concerned, there is a general institutional problem which affects many countries: should particular functions be located in the Ministry of Finance or in the Central Bank (or even elsewhere)? For instance, in the case of the operating/negotiating function of commercial credits, should the Ministry of Finance or the Central Bank be in charge of negotiating public sector borrowing? Whatever the choice may be, should it be carried out only for the central government, leaving other government agencies and public sector companies to negotiate and manage their own foreign borrowing?

56. Questions will also arise as to the location of the recording unit, the only one which clearly needs to be centralized in one location.

57. The present paper cannot offer any preconceived solution. Each country will have its own system with units both in the Ministry of Finance and the Central Bank performing some or all of the functions. The important issue is that all functions are being performed and that all units cooperate and communicate effectively within an integrated and clearly defined institutional environment.

## 5. Debt management and computerization

58. The multifunctional nature of debt management, its dependence on consistent and timely data for accurate analysis, and the sheer magnitude of operations to be handled by the system have encouraged many countries to try to develop or to acquire a computerized debt management information system as an aid to the recording, analytical, controlling and operating functions.

59. Many developing countries have attempted to install computer systems for the recording of external debt data and the outcome has been mixed.

60. The main reason for this mixed outcome is to be attributed to an error in perception: a computerized operation is not the debt management system itself, but only an adjunct to the system. The computer is useful only for countries that already have the necessary elements of a good management system, in particular structure and staffing, which are the result of the regulatory and resourcing functions. If these necessary elements of the system do not exist, a computer will not help. Automation cannot precede or be a substitute for the development of an effective management system.

61. In far too many countries, it may be observed that the database for policymaking on debt issues is inadequate because the chief financial agencies of governments do not communicate effectively with each other - the Central Bank has insufficient knowledge of what the Finance Ministry or the planning agency are doing; the Finance Ministry is not fully aware of what the Central Bank or other key government departments are doing. In such countries, a computer is unlikely to be helpful. What is needed is radical restructuring of the administrative, legal and institutional arrangements for obtaining information. In other words, the recording function must be made effective.

62. In most cases, unless the need for manual recording has already necessitated the setting up of such a unit, one institutional implication of the introduction of computerization is the centralization of the recording function into one unit, often called a 'debt office', but which is better referred to here as the recording unit.

63. The recording unit must thus have appropriate legal powers and effective data collection mechanisms to do its job properly. If these legal and administrative elements are weak, debt data will be late, incomplete, or inaccurate, and the computer system will produce poor results. (As most experts in this field know, a well kept manual recording system is a precondition for computerization since it reflects the effectiveness of the legal, institutional and administrative arrangements for the recording of debt data.)

64. Equally important is the question of trained staff. In many countries, the recording units are seriously understaffed, offering inadequate training or inadequate pay, or both. Trained staff who are poorly paid will not stay but will be attracted to better-paid jobs in the private sector. High staff turnover can pose a serious threat to the prospects for successful computerization, and has been noted as one of the most common causes of failure.

65. It must therefore be stressed that active and sustained support from senior government officials is a key to successful computerization. This support will manifest itself through the resourcing function as applied to the recording unit: the assignment of competent individuals to staff the unit and to operate the computer system, attention to training (on computers as well as on the wider issues of debt management), provision of adequate material resources (such as office space, telephone lines, office equipment, etc.).

66. As a final remark, it must be emphasized that good information in itself is not a sufficient condition for an effective debt management system. Information is not an end in itself. Analysis and control must follow and contribute to policy-making.

## 6. Debt management and technical cooperation<sup>3</sup>

### 6.1. Immediate and overall objectives

67. As has already been said, UNCTAD's technical cooperation in the area of debt management has centered upon the introduction of computerization through the installation and operation of the Debt Management and Financial Analysis System (DMFAS).

68. This computer programme has been designed to assist debt offices (in the Ministry of Finance or the Central Bank) in the recording, monitoring and analysis of external debt and other financial flows, and it has been set up both on microcomputers and in mainframe environments.

69. The immediate objective of country programmes is to improve the recording and monitoring of external debt with a view to enhancing the country's ability and capacity to produce reports and statistics. Ultimately, this increased availability of information should contribute to better policy-making with regard to external debt strategy formulation.

70. In general, the overall objectives of UNCTAD's Programme of Technical Cooperation are to assist developing countries in improving their external debt management, thereby increasing the efficient use of resources. Specifically, the Programme is designed to:

- a) Improve the capacity of national authorities to define and select appropriate external borrowing *strategies*;
- b) Assist national authorities in the development of appropriate *structures* for more effectively managing external debt including legal, institutional and administrative aspects;
- c) Assist the debt management units in Ministries of Finance and Central Banks to operate more efficiently through the strengthening of their technical capacity, and more generally, their *staffing and means*;
- d) Improve the capacity of national authorities in all operational functions of debt management and, in particular, the functions concerned with the *operations, information, analysis and control* of external debt;
- e) Promote a better understanding among developing countries of all aspects of effective debt management, i.e. structure, staffing, strategy, information, analysis, and operations.

### 6.2. Package of services

71. While the DMFAS constitutes the core of UNCTAD's activities on debt, it is only one of the elements of the package of services that is being offered to countries according to their needs. The package of services may be described briefly as follows:

#### 6.2.1. A debt management diagnosis

72. This is a global analysis along the lines presented above. Depending on the need, the various functions of debt management are analysed and, where necessary, recommendations are made. The diagnosis will look at all the elements of the system: structure, staffing, strategy, information, analysis,

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<sup>3</sup> Further information on technical cooperation may be obtained from:

Chief  
Inter-Organizational Affairs and Technical Cooperation  
UNCTAD  
Palais des Nations  
CH-1211 Genève 10  
Switzerland

control, operations. It will evaluate comprehensiveness, transparency (as evidenced by information flows and cooperation between units) and other characteristics of the system.

73. Of immediate interest with reference to computerization, the institutional, legal and administrative arrangements for collecting debt data are reviewed to ensure that the recording function can be performed efficiently.

### **6.2.2. A debt audit**

74. There are two types of audit that can be carried out: normal audit procedures of the debt management unit, and reconciliation between borrowers and lenders.

75. The first type is an essential element in setting up a centralized data recording system to support computerization. When the DMFAS is being installed, data must be collected, checked and entered into the system through data entry sheets. This is normally performed by national staff with guidelines from UNCTAD and, in some cases, with the temporary assistance of a consultant.

76. In many cases, data collection and checking has been the major difficulty during the implementation of the computerized system because, prior to computerization, there was no central recording or no normal audit procedures. In these cases, debt auditing may necessitate reconciliation of the figures with the lenders.

### **6.2.3. A debt management information system**

77. This is the DMFAS. It is a standard system, which is continuously improved upon and developed. To all extents possible, adaptations for the particular country are allowed for.

78. UNCTAD has a continuing responsibility to provide the debt offices concerned with updated versions of the DMFAS, together with the required documentation, as well as helping to facilitate the efficient use of the system.

79. Projects involving the installation of the DMFAS include, when required, the provision of equipment (microcomputers and printers).

### **6.2.4. A debt management training**

80. Training must be considered in a broad sense to include, in addition to training in the use of the computer system, organization by UNCTAD of seminars dealing with the wider issues of debt management.

81. Training in the use of the DMFAS is provided by UNCTAD through seminars in Geneva or, when feasible, in a particular region and normally attended each time by participants from most countries where the system is installed. Additional training is provided during mission to the countries. Furthermore, UNCTAD promotes the exchange of experience among countries using the DMFAS by arranging short visits by national staff members of debt offices from one country to another.

82. As far as the wider issues of debt management are concerned, UNCTAD has a close relationship with several institutions providing training in the area of debt management. Whenever possible, UNCTAD-executed and UNDP-financed projects facilitate participation of officials of the countries concerned at these seminars.



### **6.2.5. A debt policy advisory service**

83. Although not a regular service, this advisory service focuses on the policy function of debt management. It has included activities to assist some countries in the technical preparation for Paris and London Clubs negotiations. Also, the Debt Sustainability Model (DSM+) of the World Bank which is distributed with the DMFAS system (an interface has been created between both systems) helps officials to analyze the external financing requirements of a country, quantify the effects of debt relief operations or new borrowing and formulate debt strategies.

84. In addition to the above mentioned elements of the package of services in the area of debt management, UNCTAD can also provide elements which may be of direct use in the formulation of economic policy related to external financial planning and management. For example, in response to a request from the Government of a developing country, UNCTAD undertook to provide studies of the likely supply response of several important agricultural crops to a devaluation, and of the suitability of the then prevailing exchange-rate regime.