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20 Years of technical cooperation in debt management

Twenty years ago, in 1979, UNCTAD started to execute its first technical assistance project on external debt. The first difficulty I found was the lack of information on external debt: how much did the country owe? To which creditors? In which currencies? When were the payments falling due, and in which currencies? Who were the national debtors besides the central Government?

The idea of creating a Computer-Based Debt Management System (CBDMS) emerged very naturally from this experience. My participation as the UNCTAD representative in the meeting of the Paris Club in the early 1980s confirmed that this lack of information applied generally to developing countries as a whole. The question that arose at this stage is, why did countries not develop their own CBDMS?

There are two major reasons why the debtor countries did not have accurate debt data and performing CBDMSs. The first was the lack of centralized infor-

mation on foreign debt and inadequate legislation on public guarantees. The second was the unavailability of debt managers to produce comprehensive specifications for the computer specialists. The urgent nature of the problems facing debt managers would lead them to address a specific problem, for instance preparing for the Paris Club and then for the negotiations with private banks. This implied the collection of data for two different databases and the develop-

ment of two different computer systems. Once developed, these two systems would be interfaced, the outcome being an inflexible and unpractical computer patchwork, expensive to maintain.

Four countries, in 1981, formed the initial pool that allowed the development of the first DMFAS version. The development of a CBDMS is a complex matter, for many reasons. Let me give only two major examples here. First, each creditor has its own methodology to calculate accrued interest, fees and rounding for the



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principal repayments. Second, the imagination of financial engineers is boundless, and the CBDMS has to be enhanced in keeping with the new financial products coming on the market.

There are two major comparative advantages to the central development of a CBDMS. The first is the huge economies of scale created by the DMFAS Programme itself. The second is that, when addressing the institutional issues, the Programme has become the institutional memory of the beneficiary countries.

Regarding the economies of scale, the core of the system is common to all countries, which avoids having to repeat the same development in each country. The development and enhancement of the DMFAS is demand-driven, so that the system reflects all the functionalities that users request. The DMFAS staff produces specifications that lead to a comprehensive and coherent CBDMS. The final product is then a user-friendly, flexible and efficient tool.

As far as the institutional memory is concerned, the DMFAS Programme creates procedures manuals for inter- and intra-institutional tasks

and information flows. Should the debt unit collapse, the Programme recreates it and brings the local management capacity into operation once again.

Twenty years on, the initial four countries have become 50 and 20 more are interested in obtaining DMFAS. More countries are expected to request it in the incoming century. In addition to English, DMFAS is operational in French, Russian and Spanish. All the non-English versions are able to print reports in English. And the DMFAS Programme staff has grown from three to 20 persons.

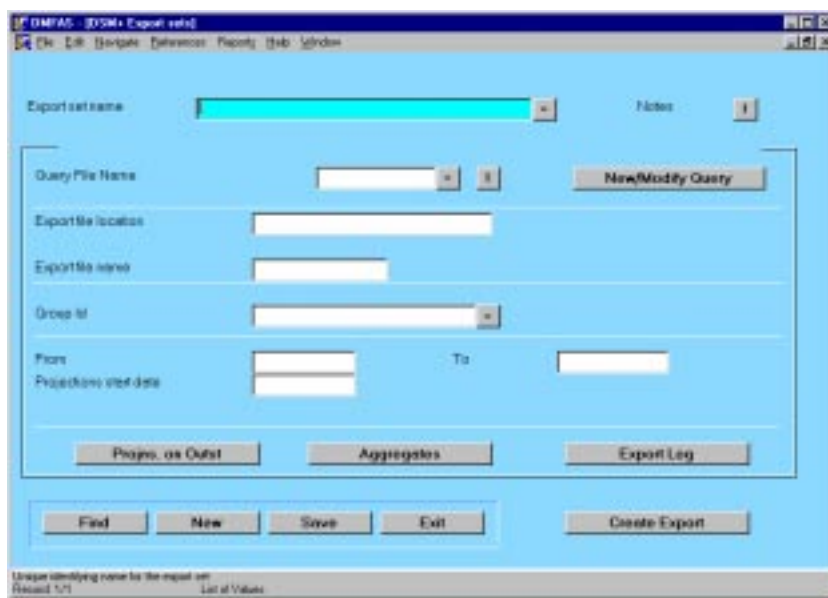
At the dawn of the third millennium, the DMFAS Programme is a successful enterprise and one of UNCTAD's technical cooperation flagships. The Programme has gone beyond capacity-building: it has become a permanent service for beneficiary countries thanks to the economies of scale it creates and to the role of institutional memory it plays. This new approach has inspired the initiative among different UNCTAD member States that the beneficiary countries should pay a modest maintenance fee. This fee should be complementary to the traditional sources of financing, namely, regular budget with overheads and donations paid by bilateral donors. The last year of the twentieth century will probably see an important decision by the UNCTAD Trade and Development Board on this issue.

RELEASE OF DMFAS 5.2

UNCTAD will start the new millennium with the release of version 5.2 of DMFAS. This new version will incorporate a number of new features, which have been requested by the user countries (please refer to DMFAS newsletter no. 11, *Possible new functional areas of DMFAS*).

One of the most important new features is the link with the World Bank's Debt Sustainability Model, DSM+. According to the cooperation agreement between the World Bank, the Commonwealth Secretariat (Comsec) and UNCTAD, UNCTAD and Comsec are in charge of distributing this analytical tool to their client countries. DMFAS 5.2 will be delivered with the DSM+ if the user country so wish-

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Box 1: New features of DMFAS 5.2

es. Thus, with the addition of projections based on outstanding and present value calculations already included in version 5.1, DMFAS 5.2 will have a set of powerful analytical features. DMFAS and DSM+ will allow various scenarios of debt policies to be simulated, along with a debt sustainability analysis under the heavily indebted poor countries (HIPC) initiative.

DMFAS users will also appreciate being able to report on their debt portfolio directly to the World Bank using the reports module, which generates Forms 1 and 2 directly. It is also possible to send these forms electronically. Apart from these new features, DMFAS 5.2 will include various improvements requested by user countries. It will, for example, be possible to compute accrued interest at a given date.

DMFAS 5.2 also includes changes in order to manage debt in Euros. For example, it will be possible to produce all reports in Euros (see *Questions to the DMFAS* below).

Moreover, DMFAS 5.2 will be the first DMFAS version certified to run on an Oracle 8 platform. It will also be able to run on Oracle 7.3.4.

Another important improvement is the increased size of decimal places in all relevant DMFAS tables. Thus, DMFAS 5.2 will allow exchange rates to be used with more than 5 decimals. This change will not only enable the

Registers arrears automatically	The user will be able to determine whether arrears will be automatically registered once the grace days expired.
Allows registry of exact amounts of share trading	Ability to register the exact amount of share trading in addition to the percentages currently allowed.
Displays amount outstanding, currency, amount of interest and principal, arrears in payment screens	Additional information about the tranche displayed in the payment screen. This includes the tranche currency and the sum of principal and interest arrears.
Displays amount of equivalent in USD in debt service operations and allow user to modify it	Additional field added to the payment operations screen, which displays the equivalent amount in USD. The user is able to modify this field. Reports in USD will take this amount into account.
Allows registry of actual date of write-off, etc., operations	A new date field is added to the write-off and rescheduling operations screen to account for the date on which the operation actually occurred.
Calculates accrued interest	DMFAS 5.2 allows the user to compute accrued interest at any point in time, thus visualizing interest accrued between payment dates.
Allows registry of longer exchange rates, local amounts, etc.	DMFAS 5.2 will have larger numerical fields to allow exchange rates with more than the current 5 digits.
Expands handling of grants general information	Ability to register additional information on grants and produce user-defined reports on grants.
DSM+ integration	DMFAS 5.2 includes an automatic link to the DSM+, allowing the user to produce simulations in DSM+ with DMFAS data. DSM+ can be installed at the same time if the user country so desires.
WBXD interface	DMFAS 5.2 includes 2 pre-defined report formats to produce World Bank Forms 1 and 2 of the Bank's debtor reporting system. It enables the user to provide this information electronically to the World Bank.
Euro	See also <i>Questions to the DMFAS</i> below. DMFAS 5.2 includes the Euro as a new main currency: it allows reports to be produced in Euros and converts all payments automatically into Euros.
Addition of function for maintaining query files	DMFAS 5.2 has a facility to maintain and manage query files (SQL) more easily from within DMFAS.
Technical changes:	
Certified system for Oracle version 8	DMFAS 5.2 will be certified for Oracle 8.
Y2K- display four-digit year in all reports	All reports will display a four-digit year.
Y2K - display four-digit year in all date fields	All date fields will display a four-digit year.

Euro to be managed, it will also accommodate such accounting units as the World Bank Pool Unit Value more comfortably in the system.

In addition, DMFAS 5.2 will be able to register 3-digit interest rates, a practice which is common for many domestic loans.

The increase in space for the DMFAS tables, however, will require a technical conversion of the database to the new format. The conversion will be fully automatic; no user intervention is required. More information on this subject can be requested closer to the release date.

An upgrade to the new version can be requested and planned with the staff member responsible for the country in the DMFAS central team in Geneva. For more details, please refer to Box 1.

UNCTAD DEBT MANAGEMENT CONFERENCE 2000

In April 2000, it will again be time for UNCTAD's biennial debt management conference. The last conference, in December 1997, was a huge success, attended by some 220 participants from 60 countries and 15 international institutions. Next year's conference will base itself on recent developments in financial markets and will analyse actual and potential consequences for national debt offices.

Over the last two years, the world's financial markets have seen a number of dramatic events. The Asian debt crisis and the private sector debt problem sent shock waves not only through the economies of that region, but affected economies all over the globe. Eleven European countries relinquished their national currencies for the Euro on 1 January 1999. These developments have had both short- and long-term consequences for debt managers. Amortization tables, risk management models and debt strategies will now have to be reconsidered. The conference attempts to address the challenges faced by debt managers at the dawn of the twenty-first century.

Important factors also include the rapid development in computer technology. Sophisticated integrated computer systems open up new possibilities

and challenges that affect the institutions where they are used.

More specifically, the conference will:

- Analyse the implications that recent events in the financial markets have had and will continue to have for debt managers into the next century;
- Analyse how institutions, procedures and financial instruments have to adapt to the new international financial architecture;
- Discuss what contributions debt managers can make in order to ward off future debt crises;
- Discuss new financing techniques and their impact on risk management; and
- Analyse the new requirements for computerized debt management tools in changing environments.

Countries interested in participating in the conference are asked to contact the staff member responsible for their country in the DMFAS team.

MEETING OF THE INTER-AGENCY TASK FORCE ON FINANCE STATISTICS

The following institutions participated in the meeting held in Basel on 17-18 June 1999: Bank for International Settlements (BIS), Commonwealth Secretariat, European Central Bank, EUROSTAT, IMF, OECD, Paris Club Secretariat, UNCTAD and the World Bank.

The main objective of the Task Force is to review the "Grey Book" (*External Debt, Definition, Statistical Coverage and Methodology*, the World Bank, IMF, BIS and OECD, Paris 1988), which defines the foundations for international statistical reporting on external indebtedness, and the "Red Book" (*Debt Stocks, Debt Flows and the Balance of Payments*, the World Bank, IMF, BIS and OECD, Paris 1994). The outcome was an agreement on the outline of the updated publications, the *Guide to the Compilation and Use of External Debt Statistics*. The DMFAS Programme, in cooperation with the Com-

monwealth Secretariat, will be in charge of drafting several chapters of different sections of the Guide.

This document, intended for use by statistical compilers, data users and policy officials, will provide an overview of methodological issues relating to statistics on external debt; practical matters that arise in the compilation of these statistics; and selected topics in the use of external debt data to analyse macroeconomic sustainability and external vulnerability. The Guide will also discuss additional data and concepts important for the assessment of foreign currency liquidity exposure, such as guarantees and other off-balance-sheet items, the notional values of derivatives positions, the use of currency of denomination as a complementary focus, and the data and concept of ultimate risk.

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To illustrate the ways that various institutions have dealt with these issues, the Guide is expected to include case studies on the external debt and international investment position (IIP) data systems maintained by a number of developing and industrial countries. It will also provide information on debt monitoring techniques, related publications and technical assistance programmes offered by the participating agencies.

The task force intends to produce the new Guide as soon as possible, through a multi-stage process. In the first stage, a core body of material

on methodological and compilation issues will be prepared by late 1999, with the aim of making the material available for training and consultations with data compilers beginning in early 2000. Agencies will gradually supplement the core material with additional submissions on analytical issues, case studies, data sources, publications and technical assistance programmes. Once a full text is available, it will be opened up to a broad consultation process. Participating agencies hope to be able to make the Guide available both in printed form and free of charge on the Internet.

WORKSHOP ON ACCESSING PRIVATE CAPITAL MARKETS

Bratislava, Slovakia, 19 to 22 July 1999

This was the last in a series of four debt management workshops arranged jointly by UNCTAD, UNDP and UNITAR for countries of Eastern Europe and the CIS. Its title was "Accessing Private Capital Markets".

The workshop concentrated on how to access domestic and international financial markets. It discussed the planning and execution of borrowings and the interaction between markets. The role of

domestic legislation and capital markets organization was discussed, as were international markets and their financial and legal requirements. The credit rating process was also covered.

The workshop was attended by approximately 40 representatives from 16 countries: Albania, Azerbaijan, Bulgaria, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Poland, Romania, Tajikistan, the former Yugoslav Republic of Macedonia, Turkmenistan, Slovakia and Ukraine, as well as by representatives of UNCTAD, UNDP, and UNITAR.

FIRST REGIONAL MEETING OF DEBT MANAGERS

Tbilisi, Georgia, 23 April 1999

Actively supported by the President of Georgia, the Minister of Finance offered to host the constitutional meeting of a regional association of debt managers in Tbilisi, Georgia, on 23 April 1999.

The meeting was attended by representatives of 11 countries (Bulgaria, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Poland, Republic of Moldova, Romania, Ukraine and Uzbekistan) and of UNCTAD, UNDP and UNITAR. Of the participating countries, three were not authorized to express official opinions. The representatives of Romania, Ukraine and Uzbekistan therefore offered their personal opinions to the meeting.

The delegates agreed unanimously on the need to establish a regional association of debt man-

agers and adopted a resolution to that effect. The resolution provides guidelines for the way ahead and concludes that additional consideration needs to be given to the name, objectives, organization and funding of the association.

A working group was therefore established in order to continue working on the proposed statutes of the association and to prepare its next meeting in Bratislava in July 1999. The working group was composed of representatives from Georgia (Chairman), Kazakhstan, Poland and Bulgaria. In addition, UNCTAD and UNDP provided input through a consultant.

At the end of the Tbilisi meeting, Mr. Vladimir Todria, Vice-Minister of Finance of Georgia, read an address from the President of Georgia, Mr. Eduard Shevardnadze, pledging full support to the association and offering to host its regional headquarters in Georgia.

WORKSHOP ON MANAGEMENT OF A DEBT OFFICE

Tbilisi, Georgia, 19 to 22 April 1999

This was the third in a series of four debt management workshops arranged jointly by UNCTAD, UNDP and UNITAR for countries of Eastern Europe and the Commonwealth of Independent States (CIS). Its title was "Management of a Debt Office".

The workshop concentrated on the legal, institutional and organizational arrangements for a debt office as well as on the challenges of recent economic and financial developments for debt managers. It addressed various issues relating to the management of a debt office, including an analysis of how the tasks of a debt office change under different borrowing conditions. It further

addressed the role of computerization, the use of different types of computerized debt management systems in the debt office, risk management techniques and techniques for measuring the performance of a debt office.

The workshop was attended by more than 40 representatives of the following 14 countries: Azerbaijan, Belarus, Bulgaria, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Poland, Republic of Moldova, Romania, Slovakia, Ukraine and Uzbekistan, as well as by representatives of UNCTAD, UNDP, UNITAR, Gesellschaft für Technische Zusammenarbeit (GTZ) and the United States Treasury.



Mr. Balliram Baball, Mr. Enrique Cosio-Pascal (UNCTAD), Mr. Juan Luis Laraburre (UNDP), Ms. Giovanna O'Donnell (UNITAR) at the Tbilisi workshop

SECOND REGIONAL MEETING OF DEBT MANAGERS***Bratislava, Slovakia, 23 July 1999***

The second meeting of the regional association of debt managers took place in Bratislava on 23 July this year. In that meeting, the working group that was elected in Tbilisi presented an improved proposal for statutes, including the proposed name, structure and objectives of the Association.

The Bratislava meeting was devoted to the adoption of the statutes of the regional association and to the admission of its first members. The meeting was attended by representatives of 17 countries (Albania, Azerbaijan, Bulgaria, Czech Republic, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Poland, Republic of Moldova, Romania, Slovakia, Tajikistan, Turkmenistan, the former Yugoslav Republic of Macedonia, and Ukraine) and of UNCTAD, UNDP and UNITAR.

After a very constructive discussion on the statutes, some important amendments were made to the draft presented by the working group. The statutes were thereafter adopted by the delegations present. The meeting decided that the association will be

called the Debt Association for European and Asian States (DAFEAS).

Five countries have already become members. Prior to the meeting, Armenia had sent an official letter approving the statutes of the association and officially asking to join it. Georgia, Kyrgyzstan and Ukraine declared they would join during the meeting. The Russian Federation was not represented at the meeting, but an official letter expressing its wish to join as an affiliate, was presented. The other delegations announced their support for the statutes in their present form, but said they needed to consult with their respective headquarters, as the statutes had changed since they were last reviewed by the institutions responsible.

The meeting also adopted a resolution which provides guidelines for the activities of the working group until the first general assembly of the Association, to be held by the end of 1999 in Tbilisi, Georgia. Mr. Vladimir Todria, Vice-Minister of Finance of Georgia and chairman of the working group, was elected Acting Secretary-General of DAFEAS. The working group will prepare a proposal for funding of the Association, as well as its "business plan".

DSM+ SEMINAR IN HARARE

From 12 to 16 July 1999 the Macroeconomic and Financial Management Institute of Eastern and Southern Africa (MEFMI) organized the first DSM+ seminar at its headquarters in Harare, Zimbabwe. The seminar was attended by participants from the MEFMI member countries who are using DMFAS to manage their public debt. The objective of the seminar was to teach officials the use of this analytical tool for debt sustainability analysis. Presentations were made by MEFMI, UNCTAD, the World Bank

and others. The DMFAS Programme presented the interface between DMFAS and DSM+, which allows debt data contained in the DMFAS database to be exported to DSM+. This enables countries to conduct a debt strategy analysis of their debt portfolio using the DMFAS database. The response to this exercise was very positive. DMFAS received a number of requests for the installation of the analysis package. DSM+ and the interface will be part of the next upgrade of DMFAS, version 5.2.

PRIVATE SECTOR EXTERNAL DEBT: MAJOR ISSUES FOR MONITORING

Introduction

To date, countries have placed relatively little emphasis on monitoring of private sector non-government-guaranteed external debt (PSNGED). This was to some extent deliberate, with attention being firstly addressed to developing comprehensive databases on public and publicly guaranteed external debt (PPGED). However, recent experiences, including the South-East Asian financial crisis, the growth of the private sector and related external debt, have motivated many developing countries to place more importance on monitoring PSNGED.

This article discusses some of the main issues related to monitoring medium- and long-term private sector non-guaranteed external debt.

Private sector non-government-guaranteed external debt vs. public and publicly guaranteed external debt

Monitoring PSNGED, especially in the case of full liberalization of exchange controls, can be more complicated than public and publicly guaranteed external debt. Some of the main differences are described below.

Ownership

In the case of PPGED, the Government either owns the debt, has full or partial ownership of the company which owns the debt; or has guaranteed the debt, in which it is a contingent liability of the Government. It therefore has a significant degree of

authority and control to collect the related information. In the case of PSNGED, it is neither owned nor guaranteed by the Government, and the degree of authority and control is much less powerful.



Institutional arrangements

The institutional arrangements for monitoring PSNGED can be more complex than for PPGED. In the latter case, the information may be centralized/collected in a few departments within one or two institutions. In the case of PSNGED, the institutional arrangements can vary from the simple to the very complex, depending on the exchange control regime.

Methods of collection

While in the case of PPGED, information is obtained through the loan documents provided by the departments/companies and the forms or actual transaction documents on a periodic basis, in the case of PSNGED the data to be collected can include a combination of surveys, different forms to be completed by the enterprises, commercial banks' returns, customs forms and balance sheets. Some experts have even recommended that private sector external debt monitoring be included in a more comprehensive integrated business enterprise survey (IBES). This would, among other objectives, provide information on all external inflows, including foreign direct investment and portfolio investment, and enable the determination of the international investment position.

* This is an abridged version of a longer article.

Types of debt

The various types of PSNGED can also pose additional challenges. Two particularly problematic types are inter-company loans, and debt transactions that do not flow through the domestic financial system. With respect to inter-company loans, where the parent company provides a loan to a subsidiary, the arrangements and flows can be internal to both the parent and the subsidiary, and more difficult to trace and keep track of than a loan from an independent external creditor. In the second case, companies can receive non-cash disbursements and payments can be made through offshore accounts. In these cases, data will not flow through the financial system and data capture can become more challenging.

Private sector non-guaranteed external debt monitoring under different exchange regimes

Monitoring of PSNGED can vary in complexity depending on the exchange regime in place. Three different regimes can be identified: full exchange controls, semi-controlled, and fully liberalized. While monitoring external private debt under full and limited exchange controls usually does not represent a major problem, it is particularly challenging under a fully liberalized regime.

Objectives

In the extreme case of full controls, the objective is to control the flow of external resources into and out of the country. Under the semi-controlled regime, the objective is more to influence the flow of foreign exchange rather than control, while under a fully liberalized system, the objective is largely to collect debt information for debt statistics, balance-of-payments and macro-economic purposes. Those statistics, collected in a timely manner, should enable an early-warning system to be established in order to avoid or contain financial crisis.

Data requirements

Under fully and semi-controlled regimes, the information is usually available, since loans and related amendments as well as related payment and inflows may have to be approved. In the case of the semi-controlled regime, some loans and transactions may be exempt from approval.

In the case of a fully liberalized system, no approval is required. Companies can borrow, disburse and repay on terms they can secure. The information required is primarily for statistical purposes, and while information on a loan-by-loan basis may be still required, summary information on standard forms reported periodically may suffice.

Legal mandate

In the case of full exchange controls, the authority to manage, approve and collect information on PSNGED is generally fully vested in an exchange control act and supported by other legislation. In the semi-controlled regime, different legislation, including debt acts and decrees, the central bank and banking acts and statistical legislation can provide the mandate and information necessary. In the fully liberalized system, the debt acts, supported by the central bank, banking and statistical legislation can provide the authority required.

Institutional arrangements

Generally, the responsibility for private sector external debt monitoring is vested in the central bank. In the case of full exchange controls, an exchange control department of the central bank with a large complement of resources is generally in place. This department will interact with the borrower and generally secure all information required from this source.

As a country moves from a controlled to a semi-controlled regime, the exchange control department is restructured and its responsibilities and resources are reduced. Generally, the exchange control department, the research department or a committee is

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given the responsibility for approval and/or monitoring of the private sector external debt.

With the complete relaxation of exchange controls, the main objective is collection of information for statistics. In many cases, the exchange control department is disbanded or restructured and the responsibility for monitoring is placed in this restructured department or the research department.

Borrowings by the financial and non-financial sectors under fully liberalized regimes

The financial sector

In the particular case of the financial sector reporting on its own external borrowings, the process of collection need not be as challenging as for the non-financial sector. Whatever the exchange regime, the legal and institutional arrangements relating to financial institutions should provide the necessary authority to enable the effective collection of the information needed. The central bank, banking and financial institutions, and other related acts and legislation provide sufficient legislative authority for the collection of the necessary information in routine forms.

The non-financial sector

For countries undertaking full liberalization of their exchange control regimes, little attention has been on the need to keep the legal mandate to collect information on non-government-guaranteed external debt of the non-financial private sector. As a result, those countries have lost their ability to collect information, and the related statistical systems have become severely weakened.

After liberalization, some countries have tried to maintain, re-introduce, or introduce periodic reporting on standard forms, but these have largely been unsuccessful, as they have lacked legal support.

Key factors to be considered when developing a system for private sector external debt monitoring

As a country decides to strengthen its system for private sector external debt monitoring, the following key areas have to be considered:

Definition of information requirements

This will depend on whether the objective is to control private sector external debt, influence it or monitor it for statistical purposes. As a country moves from a controlled regime to a fully liberalized state, the information requirement lessens, but certain key information will continue to be required.

Clarification of main sources

Having decided the information required, the different sources have to be considered and determined. For the non-financial sector, these would include commercial banks, borrowers, boards of investment, chambers of commerce, customs authorities, creditors and possibly other sources.

Methods of collection

The methods of collection would have to be decided. Standard forms to be completed and submitted periodically and bank statements are two of the more popular methods. Many countries newly embarking on the exercise of monitoring have had to develop new forms. Many good examples of these forms exist (e.g. Malaysia, Indonesia, South Africa, Zimbabwe) and can be referred to.

Legal/administrative framework

The legislation may have to be reviewed. Existing legislation may in some cases provide sufficient authority to allow the debt department effectively to collect the necessary information. In other cases, the legislation has to be strengthened. It has sometimes been found that, while there are clauses in the relevant legislation to authorize collection, companies

still do not comply, partly because the penalties are not strict enough. The provisions relating to penalties in the case of non-compliance should therefore also be examined/re-examined to ensure that there are sufficient disincentives to non-compliance.

Institutional framework/coordination

The institutional framework may have to be strengthened. The structure of the main department/unit may have to be reviewed and revamped. The role of the different institutions/departments/units in the process of monitoring have to be clarified, and a coordinating body (a committee or working group) may be useful, at least in the early stages.

Resources

The size of the debt under consideration, and particularly the volume of work involved (number of companies, loans, transactions, follow-up action required), may require strengthening the resources devoted to this exercise. This should be regarded as a substantive long-term effort, and the necessary investment should be made at an early stage.

Computerized debt management systems

To date, computerized debt management systems have largely been devoted to addressing public and publicly guaranteed external debt. These systems may have to be reviewed to determine if they can be applied in their present configuration to monitoring private sector external debt. Some issues of relevance are loan details, transactions monitoring, classifications, validation mechanisms and constraints. Depending on the response to these and other questions, some modifications may have to be made to the system being used.

Awareness creation

During the beginning of the exercise it is very important that the private sector be made aware of the objectives for the information requirement. A programme of awareness creation should be mounted at the beginning of the exercise, including brochures, public statements, awareness creation seminars and visits, as appropriate.

Follow-up

After the above have been completed, it may be useful to undertake visits to a strategic subset of companies and to other institutions involved, to ensure they are fully conversant with their responsibilities and even to provide assistance at the early stages, if necessary. Hotline support should also be strongly promoted.

Conclusions

This article has attempted to highlight some of the main issues related to monitoring PSNGED. In conclusion, two additional points need to be made.

First, few examples of best practices on monitoring of PSNGED debt exist, especially under fully liberalized regimes. Countries and international organizations alike are now intensifying efforts to develop/enhance systems to generate the necessary information effectively.

Second, this task can be even more difficult than the exercise of developing a comprehensive database on public and publicly guaranteed external debt. Depending on the size and complexity of the private sector external debt and also because of the additional challenges noted above, countries embarking on this exercise should prepare carefully, secure adequate resources and be willing to undertake a medium-term project.

THE NEW IBRD FINANCIAL PRODUCTS: IBRD MAKES RISK MANAGEMENT TOOLS AVAILABLE TO ITS CLIENTS

New IBRD loan and hedging products will be available on 1 September 1999.

Increasingly, developing countries are focusing on the importance of debt management and need financial products that can assist them in implementing their evolving asset and liability management (ALM) strategies. Yet most borrowers have limited flexibility to change the risk characteristics of their existing obligations. This is because the financial terms are set from the outset and borrowers have limited access, principally because of their creditworthiness, to market-based tools to transform their obligations as their needs change. Borrowers have asked the World Bank (IBRD) to offer financial products that meet these needs.

In response, on 1 September 1999, the IBRD will introduce new loan and hedging products which will give clients more flexibility and ability to manage their financial risks. The new products consist of:

- a fixed-spread LIBOR-based loan platform with increased flexibility in repayment terms, and embedded options to convert the currency and/or interest rate as well as to cap/collar the interest rate; and
- free-standing hedging products (currency swaps, interest rate swaps, caps/collars and commodity swaps) linked to existing IBRD loans to assist borrowers in managing their currency, interest rate and commodity price risks.

The fixed-spread loan (FSL) will have the following features:

- an interest rate based on LIBOR, plus a spread that will be fixed for the life of the loan;
- a choice of currency denomination, including the Euro, Japanese yen, United States dollar and other currencies in which the IBRD can

fund itself efficiently. The IBRD does not make loans in the domestic currencies of its borrowing member countries;

- flexibility for borrowers to fix the interest rate on disbursed amounts at any time during the life of the loan;
- flexibility to cap or collar the interest rate on disbursed amounts at any time during the life of the loan;
- flexibility to unfix or refix the rate on disbursed amounts at any time during the life of the loan;
- flexibility to change the currency of disbursed and/or undisbursed loan amounts during the life of the loan; and
- flexibility, at the time a loan is made, to tailor loan repayment terms, within financial policy limits, to meet the needs of a specific project or country debt management strategy.



Borrowers choosing FSL terms will establish the repayment terms and initial loan currency at the time of loan negotiation, and the initial interest rate will be LIBOR plus a fixed spread. The loan documentation will include provisions describing the choices borrowers have to change the interest rate and currency characteristics of the loan in the future, and the transaction fees that will apply. Borrowers will be able to use the embedded interest rate and currency conversion provisions at any time after loan effectiveness.

* Mr. Jose Molina is a financial officer at the World Bank's Financial Products and Services Department. He has been with the Bank since 1984, and previously worked on the Bank's borrowing operations and derivatives. For inquiries on the Bank's financial products, Mr. Molina may be contacted at 202 458-0743 (phone), 202 522-3264 (fax) or jmolina2@Worldbank.org (e-mail).

The following free-standing hedging products will be introduced:

- currency swaps (for all IBRD loans);
- interest rate swaps, caps and collars (for existing single currency loans (SCLs) and FSLs); and
- commodity swaps (on a pilot basis for all IBRD loans, negotiated case by case).

The IBRD intends to make use of master derivatives agreements to enable borrowers to modify the financial terms of their outstanding IBRD obligations. The main difference between the conversion features embedded in the new FSL loan agreements and the hedging transactions in respect of existing IBRD loans is that through the former a borrower will be exercising an option included within the loan agreement, while through the latter a borrower and the IBRD will be entering into a separate legal agreement, the master derivatives agreement.

For FSL conversions and free-standing hedging transactions the IBRD will pass through to clients the rates or cost of the hedge prevailing at the time of trade execution plus a transaction fee ranging from 1/8 per cent to 3/8 per cent of the principal amount involved.

Status of existing loan products

Variable-spread LIBOR-based single currency loans (VSCLs): The IBRD is maintaining the VSCL as a choice for new loan commitments because of concerns that borrowers might view the withdrawal of this product as imposing a price increase. The FSL will carry a slightly higher spread above LIBOR than the VSCL because of a risk premium which is part of the FSL's fixed spread. Moreover, some borrowers may wish to accept the interest rate risks associated with variability in the IBRD's funding spread of the VSCL. Nevertheless, if in ensuing years demand for the VSCL is low because most borrowers are taking advantage of the higher value of the FSL features, the IBRD will seek to withdraw the VSCL, in order to simplify its management information systems.

Fixed-rate single currency loans (FSCLs): FSCLs will be withdrawn. The new FSL incorporates

(at no additional cost compared to the historic pricing of FSCLs) a more flexible rate-fixing option on disbursed amounts that can be exercised at the borrowers' choice (including automatically each semester, as under the FSCL) and a range of additional features not available with the FSCL.

To provide for an orderly withdrawal, and in recognition of the fact that borrowers are encouraged to consider the choice of loan terms by the time of loan appraisal and may not be authorized to revisit their choice during negotiation, borrowers will continue to be able to access FSCL terms for loans for which the invitation to negotiate is issued prior to 1 December 1999.

Currency pool loans (CPLs). CPL terms will continue to be available for new loan commitments. The IBRD expects little demand for this product, since borrowers who want multicurrency exposures can obtain them by selecting single currency loans or FSLs in desired currency proportions currently at lower cost than through CPLs. The IBRD intends to examine during FY2000 a number of financial policy, liability management, and shareholder issues before this product can be withdrawn.

Hedging products are extremely valuable tools for managing financial risks. Developing countries have the least financial capacity to bear these risks. Yet despite the exponential growth of the derivative products markets in recent years, only a small share of hedging transactions involve these countries. The IBRD's new financial products were designed to address its clients' needs for tools to manage their financial risks. These new products are a natural extension of a demand-driven process that began in 1993 with the introduction of SCLs and was followed by the currency pool loan conversion offer. By introducing these products, the IBRD aims to enhance its effectiveness in promoting sustainable development, reducing poverty and improving standards of living by offering market-based financial products to support individual projects and programmes and enhanced asset-liability management. The ultimate objective is for the IBRD to be increasingly able to intermediate on its clients' behalf the full range of financial instruments that are available in financial markets.

World Association of Debt Management Offices (WADMO)

Several governments and international organizations have recently voiced the need to establish an international association or forum for debt managers. During UNCTAD's interregional debt management conference in December 1997 this issue was raised for the first time, and UNCTAD, being the focal point for debt management within the United Nations system, was asked to facilitate international discussions among Governments on this issue and took on the task of drafting its statutes. The interregional association is provisionally referred to as the World Association of Debt Management Offices (WADMO).

Since then, the WADMO initiative has been discussed in several workshops for countries of Eastern Europe and the former Soviet Union arranged jointly by UNCTAD, UNDP and UNITAR. Participants at these meetings agreed that there is a great need for regular exchange of experience, know-how and information about debt management at the regional level. For this reason, the countries represented expressed the wish to move ahead as soon as possible with a regional initiative. The regional association held its first meeting in Tbilisi, Georgia, on 23 April 1999.

On 1 October 1999, WADMO held a working group meeting at UNDP headquarters in New York. The objective was to prepare the first WADMO meeting, to be held in Geneva in April 2000.

TECHNICAL FOCUS

How will DMFAS 5.2 manage the Euro?

On 31 December 1998, the exchange rates between the Euro and the 11 European signatories of the Maastricht Treaty were fixed irrevocably. Before the national currencies are definitively replaced by the Euro on 31 December 2001, most creditors are giving the option to repay either in Euro (EUR) or in national currencies (NCU). Taking this practice into account, the adaptations made to the DMFAS are the following:

Exchange rates: The former European currency unit (ECU) is replaced by the Euro in DMFAS 5.2. The exchange rates of NCU to EUR will be entered only once. A specific programme will calculate the NCU exchange rates to SDR, USD and local currency every time a calculation is required (Triangulation).

Amortization table: Creditors manage the conversion from national European currencies (NCU) into the Euro quite differently from one other. Until 2001, the majority allows the choice for payments to be made in either NCU or Euros. DMFAS 5.2 will keep the amortization table in NCU and convert all the amounts automatically into Euros. The tranche

currency will remain NCU. Amortization tables can be printed in NCU or in Euros.

Drawings: DMFAS 5.2 makes it possible to record the drawing amount in effected currency in EUR or in NCU, the amount in tranche currency in NCU, the amount in loan currency in NCU.

Debt service: Two possibilities are considered for the transition period:

- The debtor repays in NCU: The amount in effected currency, the amount in tranche currency and the scheduled amount in tranche currency.
- The debtor repays in Euro: The amount in effected currency is in EUR, the amount in tranche currency is NCU and the scheduled amount in tranche currency is NCU.

All other debt service operations are recorded in NCU.

Reports: Since the Euro is added as a new base currency (such as SDR, USD, local currency), all reports can be produced in Euros. This is also true for standard reports, such as amortization tables and loan account statements.





Lately the response time of DMFAS 5 (5.0 or later) seems to have slowed down. It takes us longer to add, modify and delete records and to produce reports.



When users of an application like DMFAS query, insert, update or delete data in the database, Oracle computes the optimal access path to these data using existing statistical information on the table in question and their indexes. However, over time, as new data is entered into (or removed from) the database, the statistical information is not automatically updated by Oracle to reflect the changes in the data. The result is that the statistical information is out of synchronization with the data and therefore not very useful for defining the optimal path. In fact, the data-

base management system is now calculating its access path using obsolete information, thus slowing down database access and consequently slowing down the DMFAS system.

The solution is regularly to recompute the statistics on all DMFAS tables and their indexes. This is done from the DMFAS Administrator's PC (or the server) by selecting the Optimize activity from the ORAdmin menu option. Alternatively, if this facility has not been installed under a menu option, ask your DMFAS Administrator or DBA to create an SQL*Plus shortcut for this. This shortcut should be set up to execute the script CompStat.sql that is available from the /DMFAS/ADMIN/ADHOC directory. In order to ensure that DMFAS 5 is running optimally, the Optimize activity should be run at least twice a month.



When we generate some of the reports from the system, for example the user-defined reports, the report is "cut" from the right-hand side when printed, although the full report is displayed on the screen. The result is that some of the data on the right-hand side is missing from the report.

The problem is probably caused by the use of letter-size paper for printing. The reports will print perfectly when A4 or legal-size paper is used, but these sizes are not always available. If this is the case, the solution is to change the font used in the reports as follows:

Modify the file UIFONT.ALI, located in folder <ORACLE_HOME>\TOOLS\COMMON, adding or changing the following lines:

```
[ Printer ]  
"Courier New" = "Courier New".7  
Courier       = "Courier New".7
```

It is important to note that this will change the font of all ALL reports of the system where the font Courier New or Courier is used.



We are experiencing one or more of the following errors with the display of some screens of the DMFAS system:

- **User-defined reports screen is too big and the columns on the right side are not displayed.**
- **Labels of columns and buttons are partially displayed.**
- **The display font is too small.**

First, ensure you are getting the best resolution supported by your hardware. Second, perform the following:

1. Start the "registry editor" (START/RUN/regedit). Go to

HKEY_LOCAL_MACHINE\SOFTWARE\ORACLE\forms45_defaultfont

Modify it to any of the following fonts:

```
"Courier New".9  
"Arial".10  
"Ms Sans Serif".9
```



(Continued on page 16)

TECHNICAL FOCUS

2. Restart DMFAS and check if the user-defined reports screen is displayed correctly.

IMPORTANT:

If in doubt, check in the DMFAS technical document, Configuration of workstations and servers, for a detailed explanation of how to modify the registry.

User-defined reports screen should be used for testing because it uses the full display.

After changing the registry it is not necessary to restart the computer or close the registry editor; just close and restart DMFAS application to see the changes.

Always use ' ' ' to enclose the font name.

Check in file README.ALI, located in folder <ORACLE_HOME>\TOOLS\COMMON, for a detailed explanation of the supported values for the FORMS45_DEFAULTFONT parameter.

Copied from the readme.ali file

<Face>.<Size>.<Style>.<Weight>.<Width>.<CharSet>

The <Face> must be the name (string/identifier) of a font face. The <Style>, <Weight>, <Width>, and <CharSet> may either be a numeric value or a predefined identifier/string. For example, both US7ASCII and 1 are valid <CharSet> values and re-

fer to the same character set. The <Size> dimension must be an explicit size, in points. Following is a list of recognized names and their numeric equivalents:

<i>Styles</i>	<i>Numeric value</i>	<i>Widths</i>	<i>Numeric value</i>
Plain	0	Ultradense	1
Italic	1	Extradense	2
Oblique	2	Dense	3
Underline	4	Semidense	4
Outline	8	Normal	5
Shadow	16	Semiexpand	6
Inverted	32	Expand	7
Overstrike	64	Extraexpand	8
Blink	128	Ultraexpand	9

<i>Weights</i>	<i>Numeric value</i>
----------------	----------------------

Ultralight	1
Extralight	2
Light	3
Demilight	4
Medium	5
Demibold	6
Bold	7
Extrabold	8
Ultrabold	9

All strings are case-insensitive in mapping. Font faces are likely to be case-sensitive on look-up, depending on the platform and surface, so care should be taken with names used on the right-hand side; but they will be mapped case-insensitively. See your platform documentation for a list of all supported character sets and available fonts.

MISSION ROUND-UP

Burkina Faso: A mission of two officials to Geneva took place in April, to be trained in DMFAS and on technical aspects, as part of an interface between DMFAS and local budgetary software.

Central African Republic: DMFAS undertook a mission to Bangui in May to reassess the objectives of the previous project following the disappearance of the Caisse Autonome d'Amortissement (CAADE) and the transfer of debt management responsibilities within the Ministry of Finance. A new project was drawn up and financing is now pending.

Costa Rica: The DMFAS installation in the Central Bank was upgraded to version 5.1 in July.

Dominican Republic: A mission of one consultant was fielded to the Central Bank of the Dominican Re-

public in July to advise on the establishment of the DMFAS database and to provide further training to officials.

Ecuador: A delegation of Ecuadorian IT staff participated in a workshop on the incorporation of DMFAS into the Ecuadorian integrated system, SIGEF, from 13 to 24 September.

El Salvador: A DMFAS 5.1 installation mission to the Ministry of Finance took place in January and its users were trained in basic functionalities during the same month. A chief technical advisor supervised the establishment of the database for two months. The advanced training mission (DMFAS Reports) took place in August.

Ethiopia: two officials from the Ministry of Finance were trained in Geneva on reporting features of DMFAS 5.1 in March.

Georgia: In June, an installation mission of DMFAS 5.1 (Russian version) was fielded to the Ministry of Finance and the staff trained on its use. Several DMFAS staff participated in a seminar in Tbilisi in April (see *Workshop on management of a debt office*, page 6).

Gabon: A demonstration mission was fielded to the Ministry of Finance to demonstrate DMFAS 5 to debt management officials.

Guatemala: DMFAS 5.1 was installed in the Ministry of Finance in July. Training in the basic functionalities took place from 5 to 23 July. A chief technical advisor is supervising the establishment of the database for three months.

Haiti: A mission took place to install DMFAS 5.1 and train the users at the National Bank of Haiti in January.

Honduras: A mission took place to Honduras in order to examine the database prior to its conversion. The database will be converted in Geneva in September, and an installation and training mission will take place in October.

Jordan: DMFAS 5.1 was installed and its users trained at the Ministry of Finance in June.

Kazakhstan: In January, the Russian version of DMFAS 5.1 was installed in three institutions located in two cities. A training seminar on new functionalities of the system was also organized.

Kyrgyzstan: One DMFAS staff member participated in a workshop in August.

Moldova: In March, a study tour to Romania was organized in order to assess new functionalities of DMFAS in a country with a similar debt problem. The tripartite review of the activities for both projects took place in April.

Nigeria: The DMFAS Programme sent a facilitator in August to present several topics during the West African Institute for Financial and Economic Management (WAIFEM) course on debt management.

This course was attended by approximately 30 officials from WAIFEM member countries (Nigeria, Sierra Leone, Ghana, Liberia and The Gambia), mostly working with or in national debt offices. Some of the topics presented included the role and computerization of a debt office and the use of performance indicators in debt management.

Panama: DMFAS 5.1 was installed in Panama in July. The users were trained in the new features of version 5.1. A needs assessment mission on the use of DMFAS for managing Panamanian domestic debt instruments took place in June.

Romania: UNDP sent a resident advisor on mission for six months for the development of a grant module integrated into DMFAS.

Slovakia: DMFAS staff participated in a workshop on accessing private markets in Bratislava, Slovakia, in July (see *Workshop on accessing private markets*, page 5).

Sudan: The implementation of DMFAS 5.1 and training in its use took place in February. A DMFAS consultant was based in Khartoum for all February and March. An advanced training mission was organized in July.

Sweden: UNCTAD participated as an observer in the debt relief steering committee meeting in Stockholm in June.

Switzerland: DMFAS staff participated in a task force meeting on the Grey Book of International Debt Statistics, organized by the Bank for International Settlements, in Basel in June.

Trinidad and Tobago: The implementation of DMFAS 5.1 in the Central Bank and training in its use took place in June.

Turkmenistan: A needs assessment mission was fielded to the Ministry of Finance in August. A project document will be submitted shortly.

United States: A mission of DMFAS staff took place to UNDP in New York in March 99 in order to discuss further collaboration and funding issues.



MISSION ROUND-UP

Venezuela: A basic training mission on the use of DMFAS 5.1 took place from 8 to 19 March.

A workshop on the integration of the Venezuelan Financial Administration system and DMFAS took place in April. An advanced training mission on the use of DMFAS reports took place in October.

Viet Nam: In April, a debt management training mission for debt officers of the Ministry of Finance and the State Bank of Viet Nam took place. The mission also completed the creation, together with the different relevant government agencies and interested donors, of a new three-year debt management project to commence in late 1999, involving all functional aspects of debt management and all interested government institutions.

Yemen: One staff member from the Ministry of Finance was trained in Geneva on the functions of DMFAS 5.1 in July.

Zambia: A mission will take place to the Ministry of Finance and the Central Bank of Zambia in October to install DMFAS 5.1 and the databases, which will be converted in Geneva beforehand.

Zimbabwe: A DMFAS mission took place to the Macroeconomic and Financial Management Institute of Eastern and Southern Africa (MEFMI) in Harare to hold the first DSM+ seminar. During this workshop, the link between DFSA and DSM+ was presented. Seminar participants were trained in the use of DSM+ and the link with the DMFAS database.

COMING EVENTS

UNCTAD X conference in Bangkok , Thailand, February 2000

From 12 to 19 February 2000, the tenth quadrennial conference of UNCTAD (UNCTAD X) will be held in Bangkok (Thailand). Some 250 policy makers from UNCTAD member States are expected to participate. The Bangkok Conference will allow the international community to take stock of past development experience, so as to define appropriate policies for addressing long-standing economic and social challenges facing developing countries. The DMFAS Programme will present its technical cooperation activities to the conference at an information stand.

DMFAS interregional conference in Geneva, Switzerland, April 2000

See page 4 for details.

Regional workshop on Arab external debt in Abu Dhabi, 2000

Objective: To review the experiences of debt management in Arab countries and its relation to the balance of payments. Date: Spring 2000. Please contact the DMFAS team for further details.

Constituent assembly for WADMO, April 2000

On 1 October, a preparatory meeting on WADMO has been held at United Nations headquarters in New York. The objective of the meeting was to draft the statutes and objectives for the association, in order to prepare for the constituent assembly planned in April 2000.

The DMFAS team would like to thank Ms. Susanne Riise, who worked temporarily as a programme officer, and Ms. Marina Silberman, temporarily working as project manager for Latin America, for their excellent work and dedication to the team. Likewise, we would like to thank Ms. Diana Walters-Ballet, temporarily working as a secretary.

Mr. Raúl Javaloyes joined the DMFAS team as a programme officer in August 1999. He is in charge of coordinating Programme finances and managing DMFAS country projects.

Mr. Ruben Guillen joined the DMFAS IT team in March 1999 as a programmer. The IT team was further reinforced by Mr. John Barrozo, programmer, in August.

DMFAS consultants

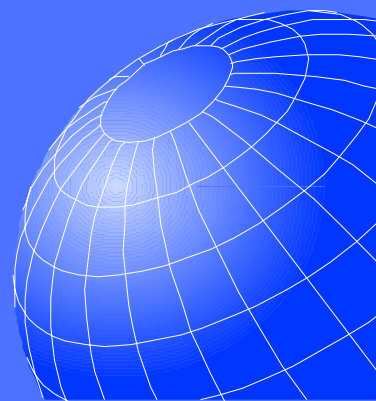
The DMFAS team would like to introduce its consultants and thank them for their collaboration:

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