

DMFAS INFO

The Newsletter of the Programme on Debt Management and Financial Analysis System

United Nations Conference on Trade and Development

No. 14, Autumn 2002

IN THIS ISSUE:

EDITORIAL.....	2
DMFAS HIGHLIGHTS	3
COST-SHARING ARRANGEMENTS: UNCTAD INTRODUCES A NEW MAINTENANCE AGREEMENT FOR CURRENT AND FUTURE DMFAS USER INSTITUTIONS	3
DSM + UPDATE	4
NEW BONDS FUNCTIONALITY FOR DMFAS.....	4
WORLD BANK DEBTOR REPORTING SYSTEM AND DMFAS	8
COUNTRY FOCUS.....	10
DMFAS IN MONGOLIA	10
PROJECTS UPDATE	11
TECHNICAL CORNER.....	12
ORACLE 8I AND ORACLE 9I.....	12
DMFAS AND NEW WINDOWS SOFTWARE.....	15
FREQUENTLY ASKED QUESTIONS IN DMFAS	16
ECONOMIC FOCUS	17
SUB-NATIONAL DEBT: THE BAILOUT PROBLEM	17
DMFAS EVENTS	20
THIRD INTER-REGIONAL DEBT MANAGEMENT CONFERENCE.....	20
WORKSHOP ON DEBT STATISTICS USING DMFAS IN LIBREVILLE (GABON).....	21
OTHER	21
DMFAS TEAM	23

EDITORIAL

Cooperation for excellence in debt management is the aim of DMFAS users, DMFAS donors and UNCTAD. These three groups meet annually in the DMFAS Advisory Group, where they review the activities and financing of the DMFAS programme with the intention of furthering their common interests. The group, which meets this year in September, has so far brought significant improvements to the financial sustainability of the programme.

At its last meeting, the Advisory Group agreed that user institutions should take on a more active role in supporting the development of the programme. It was decided to establish a cost-sharing mechanism through which, by contributing to costs, users could help the programme meet their global and individual user needs. In this newsletter we outline how the mechanism will work.

The DMFAS programme is fully committed to a policy of responsive maintenance, advice and ongoing product development in line with the latest trends in debt management and technology. One such development is its new software version 5.2.1, currently being finalized. The article on bonds describes one of the key enhancements of this forthcoming version, namely a new bonds module. Designed to satisfy user requests from many of the country projects, this functionality will help users to manage domestic and external bonds. The article defines the scope and functionality that the new version will provide to clients that sign the new maintenance agreement.

Increasingly involved in a large range of training and advisory services, the programme organized its third international debt management conference last December. The conference is now a major international event in the area of debt management. One of the main items discussed at the most recent conference was the issue of sub-national government debt. Mr. Fausto Hernández Trillo, Professor of Economics at CIDE in Mexico City, who has been studying this issue for a number of years, was one of the invited speakers at the conference. You can read more on the issue in his article.

The conference, like the Advisory Group meeting, is also an opportunity for DMFAS to meet and reinforce cooperation with its major partners, in particular with the Bretton Woods institutions and regional organizations involved in debt management. For example, since December, UNCTAD and Pôle Dette of the Banque des Etats de l’Afrique Centrale (BEAC) and the Banque Centrale des Etats d’Afrique de l’Ouest (BCEAO) have elaborated a major new collaborative debt management arrangement for DMFAS users in West Africa. In March of this year, Pôle Dette

and UNCTAD jointly organized a workshop on debt statistics in Libreville. It is hoped that financial resources will soon be available to allow the launch of the new DMFAS regional support.

At the crossroads between international finance, information technology and governance, the challenges ahead for the DMFAS programme are numerous and exciting. We hope you enjoy reading about those we have wished to outline in this issue of the DMFAS newsletter.

DMFAS HIGHLIGHTS

Cost-sharing arrangements: UNCTAD introduces a new maintenance agreement for current and future DMFAS user institutions

The demand for services provided by the DMFAS programme continues to expand, as does the number of institutions wishing to use the DMFAS system. As this trend accelerates, the long-term sustainability of the programme and the resulting quality of the services it delivers become increasingly important. This question was discussed at the last meeting of the DMFAS Advisory Group, held in June 2001.

The Advisory Group of the DMFAS programme is composed of technical representatives of interested member States, including existing and potential donors, beneficiaries and the secretariat. In its discussions, the Group recommended the introduction of a standard cost-sharing mechanism for new and existing DMFAS user institutions in order to partly ensure the long-term financial sustainability of the programme. This mechanism was also strongly recommended by the DMFAS programme's donor community, which actively supports the programme.

The major component of the mechanism will be the introduction of a yearly maintenance fee for all DMFAS user institutions. The fee will allow user institutions to benefit from the privileged types of maintenance services provided by the DMFAS programme's technical team and from future upgrades of version 5.2 of the DMFAS. In particular, the user institutions will receive the following services:

1. Provision of future maintenance releases of version 5 of the DMFAS ensuing from the following types of maintenance service:

- **Adaptive maintenance**

This involves modifying characteristics of the DMFAS system to ensure compatibility with changes made to versions of operating systems, database management systems and network systems currently supported by the DMFAS system.

- **Perfective maintenance**

This involves adding new functionalities to satisfy urgent or important DMFAS user requests.

- **Corrective maintenance**

This involves correcting system errors.

2. Provision of helpdesk support that will allow the institution to benefit from enhanced hotline/helpdesk support provided by the DMFAS team in Geneva. This relates to the use of the DMFAS system for both operational and technical issues.

It is hoped that cost sharing will further reinforce the long-term relationship between UNCTAD and the DMFAS user institutions. To that end, a maintenance contract document has been formulated detailing the cost-sharing mechanism's modalities, benefits and responsibilities. It will be sent to each user institution for its agreement and signature in the near future.

For more information, please contact your DMFAS project officer.

DSM+ update

The front-end screens and reports of the World Bank's Debt Sustainability Model Plus (DSM+) have been translated into French and Spanish. The translated files have been incorporated by the World Bank as part of the software for the installation of DSM+. The DSM+ User Guide and Training Manual have been translated into French and Spanish and have been published, as has the English version.

New bonds functionality for DMFAS

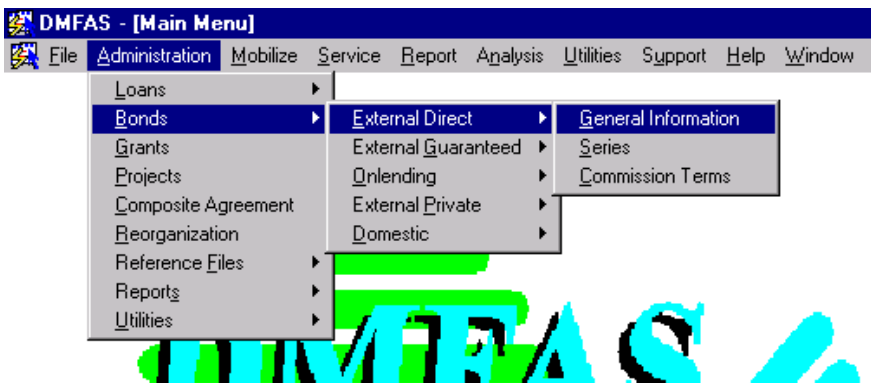
DMFAS is to include a bonds module in the new version 5.2.1 of its system software. Meeting a wide range of user needs in bonds management, the new bonds module will cover both domestic and external bonds (securities).

Two new concepts are fundamental to the new bonds functionality. They are bonds and series.

In DMFAS, **bonds** are defined as certificates of indebtedness that oblige their issuer to pay a specified amount in the future. Bonds are classified as debt instruments owed by a Government, public body or company. The term “bond” is used as a generic term covering government “papers”, promissory notes, treasury bills, notes, bonds, eurobonds, and so forth – that is, short- medium- and long-term obligations. In DMFAS, each bond consists of general information (as for loans) and one or more series.

The concept of **series** is similar to the concept of tranche: it is an autonomous entity with its own principal repayment schedule, its own currency and its own interest terms. More precisely, a series is a group of certificates of indebtedness belonging to the same bond and sharing the same characteristics and repayment conditions. In addition, it may have its own participants. Series are identified by a unique reference and by their own amortization table. Every bond must have at least one series.

The bonds functionality has been added to that of the main menu screen. At this level, a new option "**Bond**" is included between "**Loans**" and "**Grants**". In the case of "**Series**", it is included at the same level as that of the "**Tranches for loans**".



As for loans and tranches, information is entered at both the bond and the series levels, using the corresponding bonds' general information module and series module.

1. Entering bonds general information

The following are two of the new screens for entering general information on bonds:

The screenshot shows the 'General Information' screen for a Domestic Bond. The interface includes a menu bar (File, Edit, Navigate, References, Reports, Help, Window) and a title bar (DMFAS - [Domestic Bond]). The page is labeled 'PAGE 1 OF 4'. The form contains the following fields:

Bond id.	bt006	Maturity	MEDIUM/LONG TERM
Status	ACTIVE LOAN		
Name	metodo 10		
Creditor Ref.	bono del tesoro6		
Other Reference			
Issue date	01.01.2001	Issue end date	02.03.2001
Date Effective Limit	01.01.2001	Date Effective	01.01.2001
Date Authorized	01.03.2001	Authorization ID.	Dec 25
Authorization Type			
Amount	10,000,000	Base Currency	USD

The new added fields are Date Authorized, Authorization ID and Authorization Type.

The screenshot shows the 'General Information' screen for a Domestic Bond, specifically Page 3 of 4. The interface includes a menu bar (File, Edit, Navigate, References, Reports, Help, Window) and a title bar (DMFAS - [Domestic Bond]). The page is labeled 'PAGE 3 OF 4'. The form contains the following fields:

Issue Category	NOTES	Instrument Type	Letras del tesoro tipo "
Net Amount	10,000,000	Discounted Amt	50,000
Quantity	5		

This is an additional screen to allow the entering of bonds financial information.

2. Entering bonds series

After entering the bonds general information, the user passes to a new set of screens to enter the particular financial characteristic for each series. Additionally, the new module handles concepts such as daily periodicity, years of 364 days, bimonthly payments and capitalized interest. The "Series" screen also has new sub-screens to handle the concept of certificates, issue price and denominations of a particular issue.

The following are the new screens for series:

Screen 1: New buttons for entering range and denomination information

DMFAS - [Series (Domestic Bond)]
 File Edit Navigate References Reports Utilities Help Window

Bond id. = Page 1 of 2

Characteristics

Serie No.

Credit Type = Financing Source =
 Financing Type = Credit Terms =

Amount Currency = Notes

Screen 2: New screen to allow the entering of series financial information

DMFAS - [Series (Domestic Bond)]
 File Edit Navigate References Reports Utilities Help Window

Characteristics Page 2 of 2

Dated Date Accounting Date
 Net Amount Discounted Amt
 Reimbursed Amt
 Subscription Mode = Subscription Type =
 Negotiability = Sending Date

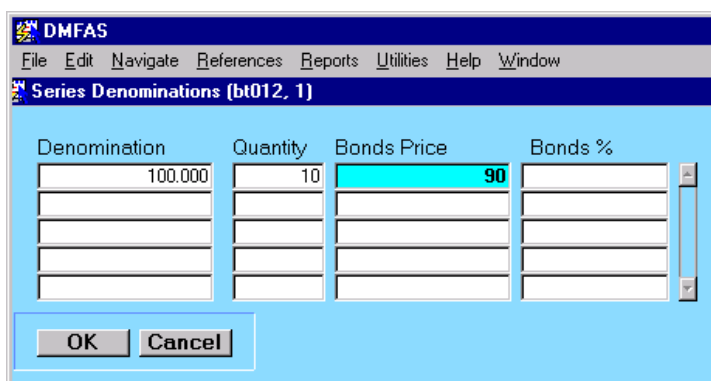
Screen 3: New screen to allow the entering of series certificate range information

DMFAS
 File Edit Navigate References Reports Utilities Help Window

Series Ranges (bt012, 1)

Range No.	First id.	Last Id.
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>

Screen 4: New screen to allow the entering of series financial denomination



3. Reporting on bonds

The bonds module includes a new set of standard reports. Moreover, the user-defined reports have been enhanced in order to provide information on bonds:

- New totals related to bonds (e.g. discount amount);
- New fields in the loan/tranches view;
- Possibility to select only bonds or bonds with loans.

4. Tried and tested with DMFAS user

The bonds module has so far been tested and validated on site as part of technical assistance missions to Bolivia and Colombia during the first half of 2002. In Bolivia, users entered information on domestic bonds into the DMFAS, including treasury bonds and notes denominated in local currency and in US Dollars. During the testing, additional user requirements for validation, calculations and defaulting were included. In Colombia a demonstration of the new tool entering information of internal and external bonds was given. As a result, the DMFAS programme has received valuable feedback, which is being applied to further enhance the bonds module.

World Bank Debtor Reporting System and DMFAS

Although an electronic facility (often referred to as a “bridge”) for transferring data from the DMFAS to the Debtor Reporting System (DRS) of the World Bank has existed for many years, relatively few DMFAS users have utilized this option so far. Its use obviously requires that the DMFAS database be fully up to date with all agreements and transactions, but once this has been achieved, the facility greatly facilitates reporting to the World Bank.

According to loan agreement terms, World Bank debtor countries are required to provide information on their external debt. This information is published every year in the World Bank publication *Global Development Finance* and is used by the World Bank to assess the ability of countries to service outstanding debt and to support future foreign borrowing. The aggregate data on external debt are also used to analyze and project global economic developments.

For debtor reporting the World Bank uses the following forms:

Form 1	Description of Individual External Public Debt and Private Debt Publicly Guaranteed
Form 1A	Schedule of Drawings and Principal and Interest Payments for Individual External Public Debt and Private Debt Publicly Guaranteed
Form 2	Individual External Public Debts and Private Debts Publicly Guaranteed Current Status and Transactions during Period
Form 3	Revisions of Forms 1 and 2
Form 4	External Private Non-Guaranteed Debt

The timely receipt of complete and accurate reports is extremely important, not only to the borrower and to the Bank but also to many other users of the data, especially Governments, international institutions, commercial banks and other private lenders.

Forms must be submitted to the World Bank in accordance with the following dates of submission:

Forms	Frequency	Deadlines
1 and 1A	Quarterly	Within 30 days of the close of the quarter
2*	Annually	31 March
3	As required	-
4*	Annually	31 March

** Fiscal year countries should submit Form 2 and Form 4 within 90 days of the end of their fiscal year*

Form 1A is required where code 4 "other" of Form 1 (under Principal repayments) is filled in. In practice, this concerns loans where repayment is irregular. The loan's amortization table such as it is produced by the DMFAS can be communicated to the World Bank.

The DMFAS allows the user to produce forms 1 and 2 in either hard or electronic format. Detailed instructions on the filling in of forms are presented in the DMFAS User Manual (pages 5.3–1 to 5.3–4).

In accordance with World Bank wishes, we recommend that the user employ the electronic format rather than the hard format for forms 1 and 2. Both files can be attached to an e-mail and sent to **DDG_FinFiles@Worldbank.org**

Should you experience any problems with the use of the facility please do not hesitate to contact the DMFAS hotline at dmfas@unctad.org; tel: # 41 22 907 6291.

COUNTRY FOCUS

DMFAS in Mongolia



Mr. James Wolfensohn, President of the World Bank, and Mr. Jacques Baert, DMFAS consultant, during Mr. Wolfensohn's visit to Mongolia's Debt Office, 17 May 2002

The debt database in Mongolia is officially up and running. Since May 2002, the country's debt managers have been able to use DMFAS in their daily work.

UNCTAD began implementing a technical assistance project on debt management with Mongolia in September 2000. The project is financed by the World Bank and is part of a larger fiscal technical assistance project. During its implementation, the Debt Management Division was created in the Treasury Department of the Ministry of Finance and Economy. This division was entrusted with the management of domestic, on-lending, external debt using a unique database. Before this date, no debt database existed.

DMFAS was installed in the Debt Management Division in September 2001 on a wide area network, linking loan managers in the Ministry of Finance with those of the External Relations and Balance of Payments Department in the Bank of Mongolia. A resident Chief Technical Advisor has been providing on-the-job training throughout the duration of the project.

The Ministry of Finance and Economy now has a state-of-the-art tool to report debt for internal purposes (budget, Parliament, Government etc.) and for external purposes (donors, international organizations). Moreover, it is able to report electronically to the Debt Reporting System of the World Bank.

Thanks to the great motivation of the Ministry staff and especially the staff of the Debt Management Division, this project has been successfully implemented. Good coordination between the World Bank and UNCTAD has also contributed a great deal to its success. On 17 May, Mr. James Wolfensohn, President of the World Bank, personally inspected the progress of the fiscal technical assistance project. He expressed his appreciation for the successful outcome of the project, of which DMFAS is a major part.

Projects update

Since the last newsletter (November 2001), UNCTAD has signed new technical cooperation project documents with the following countries/institutions:

Angola. The existing DMFAS project in the Central Bank of Angola has been extended, starting in the second quarter of 2002. The extension will base a DMFAS Advisor in Luanda for an overall period of five months. The DMFAS Advisor will train National Bank of Angola officials in general public debt issues and design and implement specific reports and manuals. A debt specialist will also be hired to train officials of the National Bank in debt sustainability analysis using DSM+ and an IT expert will install the DMFAS in the Ministry of Finance and the Ministry of Planning.

Chile. The Central Bank of Chile chose DMFAS as the tool for managing the country's public debt. Negotiations on the project document are currently under way.

Congo. A new country project provides for the installation and training of DMFAS 5.2 in the Caisse Congolaise d'Amortissement starting in September 2002.

Dominican Republic. A new country project provides for the installation of DMFAS 5.2 in the Department of State of Finance and a link with the Central Bank, where the DMFAS is already installed and operational.

Mongolia. See article on Mongolia above.

Palestinian Authority. Despite the tremendous conflict-related difficulties, the DMFAS project was started in November 2001. Since then, there have been two UNCTAD missions to the region, during which UNCTAD experts

installed the system and trained the Palestinian Authority's Ministry of Finance staff for a period of two months. The first phase of the country project has been completed with concrete results and is about to enter its second phase, which will include the Arabization of the DMFAS and additional in-house and external training of staff.

Syrian Arab Republic. A new country project started on 1 October 2001. The DMFAS software was installed in the Central Bank of Syria and staff were trained in its use during June 2002. The project also covers part of the cost of the Arabization of the DMFAS. It includes training in the formulation of debt strategies and debt sustainability analysis.

Training in the development of debt strategies using the DSM+ for capacity building has been provided in Argentina, Chad, Gabon, Guatemala and Pakistan.

TECHNICAL CORNER

Oracle¹ 8i and Oracle 9i

Oracle, like all vendors of database management systems, continually improves its database product, resulting in the release of new versions. A consequence of this is that older versions are periodically de-supported by Oracle and thus become obsolete. In order to ensure that users of the DMFAS system benefit from technological advances, as well as continued Oracle support, the DMFAS programme migrates new versions of its own system to comply with the new Oracle releases. This article provides an overview of two recent Oracle database releases, Oracle 8i and Oracle 9i, and explains their impact on the DMFAS system.

The DMFAS system has been certified for Oracle 8i and Oracle 9i, having undergone extensive testing. DMFAS version 5.2.1 works with both Oracle versions. It is envisaged that version 6 will work with Oracle 9i and later versions.

DMFAS policy is to take advantage of Oracle's database technological development so as, likewise, to continually improve the future version of its own system.

Since Oracle has discontinued support to its database versions 7.x and 8.0.x, the DMFAS programme advises its users to upgrade to Oracle version 8i or 9i. In this respect, it is happy to announce the signing of a new agreement

¹ Oracle is a trademark of Oracle Corporation.

between the United Nations Office at Geneva and Oracle Corporation. The agreement enables DMFAS users to benefit from a 40 per cent discount on all Oracle software purchased through UNCTAD.

There is a long list of new features and enhancements for both new Oracle database versions (Oracle documentation "Oracle 8i new features", "What's new in Oracle 9i", and "Getting started" identify more than 200). This article concentrates on just some of the most important features for local technical staff supporting the DMFAS installation.

Oracle 8i (Oracle RDBMS Version 8.1.x)

Oracle 8i contains improvements to areas such as database administration and memory usage. It also includes support for object-oriented technologies, built-in support for the Internet, extensions to SQL for working with Java (including a Java Virtual Machine), enhanced security features, and the possibility of managing terabytes of data. This version also contains enhancements to areas such as database administration and memory usage, and includes support for the LINUX operating system.

Some additional features are:

- Support for PL/SQL and Java stored procedures, which can be used to create business objects to run inside the database server. All this in turn facilitates the choice of a language to solve a particular problem, since Java stored procedures can call PL/SQL stored procedures and vice versa.
- A large number of improvements to PL/SQL, with the addition of features such as "Autonomous Transactions" to allow the execution of Data Manipulation Language (DML) statements without affecting the overall session's transaction, and the "Invoker rights" model to restrict access to database objects indicating if a program (or a set of programs in a package) should be executed using the access rights of the user that is currently calling the program or as the owner of the program itself. Elimination of the need for the RESTRICT_REFERENCES pragma; thus any PL/SQL function can be called from SQL DML statements.

Oracle 9i (Oracle RDBMS Version 9.x)

9i Database is the latest RDBMS released by Oracle. It significantly improves database administration by using highly graphical tools based on a Java interface. It includes features that allow the running of a single database on a group of servers clustered together; new high-availability technology to reduce downtime, thus allowing maintenance procedures on online databases; and tools to reduce disk fragmentation and improve applications performance. It also includes tools to define both e-mail and pager alerts for common database events – in fact, a wide range of tools, including wizards and assistants to help keep databases up and running.

Among the new features are the following:

- New Management Server utilities allowing the Database Administrator to manage multiple nodes on the network. Created to replace the Oracle Enterprise Manager, this tool is highly graphical, being based on a Java interface. It allows the control of multiple database nodes, as well as other DBA functions such as the creation of user roles with different access levels ranging from DBAs to back-up operators.
- Oracle Performance Manager enables administrators to keep track of database performance and user activities. It provides details on CPU, disk and queries performance, thus simplifying the identification of bottlenecks in the system.
- Oracle 9i Application Server supports Java Web applications, including Java Server Pages (JSPs) and servlets modelled using Oracle Business Components for Java.
- Support for multiple development technologies and programming languages, including Java and XML. Database developers can quickly use PL/SQL knowledge to build dynamic Web applications with Oracle Internet Developer tools, such as JDeveloper and Forms.

Some new features belong only to the “Enterprise Edition” version; however, the DMFAS programme’s policy is to use only the features of the “Standard Edition” in the DMFAS system in order to keep maintenance costs lower. *For more details please contact the UNCTAD officer responsible for your project.*

DMFAS and new Windows² software

Microsoft Corporation has released new network and client software in the form of Windows 2000 server, Windows 2000 professional and Windows XP, including different versions and service packs, which working together with the new Oracle 8i features will make working with the DMFAS system easier and more reliable. The DMFAS software has already been fully tested and certified as compatible with all of these operating systems.

DMFAS experience indicates that the Windows 2000 server version used with Oracle 8i provides a solid and performing platform on which DMFAS can operate. Combined with the new Oracle security standards such as Data Encryption, this combination provides more secure and robust network security for the DMFAS database. The Windows 2000 professional and XP, together with the DMFAS and Oracle client software, provide all the benefits of stability, reliability and security needed to create the conditions for a very satisfying user experience.

For more information about these operating systems, including the additional system requirements they necessitate, please see the Microsoft web page.

² Windows is a trademark of Microsoft Corporation.

Frequently asked questions in DMFAS

<p>Question : How do you load user-defined reports into Excel?</p> <p>Answer: To load user-defined reports into Excel, follow these steps:</p> <ul style="list-style-type: none"> ⇒ Go to DMFAS 5.2 menu, REPORT -> LOANS USER DEFINED REPORTS -> GENERATE REPORT. ⇒ Query for any existing user-defined report, or create a new one. ⇒ Enter a valid DOS file name on the field "<i>File Name</i>". You will note that the field "<i>ASCII File Location</i>" will be automatically filled up with a value such as <i>drive:\PROGRAMS\ASCII</i>. ⇒ Press button <i>Save</i>, then button <i>Generate Report</i>. When the report is finally generated, you will receive the message "The report output is in <i>drive:\PROGRAMS\ASCII\filename</i>. Please use any text editor to view it – M 3093". ⇒ If you have the field <i>Print Parameters</i> clicked, the parameter report will be displayed on the Oracle Reports Previewer. Close the Previewer. ⇒ Open Microsoft Excel and select menu option FILE/NEW and select "DMFAS.XLT". Click on "<i>Enable Macros</i>" if asked. ⇒ If you do not see the template "DMFAS.XLT", obtain the file from the DMFAS CD (directory \DMFAS52\admin\setup\Program Files\Microsoft Office\templates\) or from other configured workstations. Copy the template to the workstation directory where the Excel templates are located by default (e.g. c:\Program Files\Microsoft Office\Templates). 	<ul style="list-style-type: none"> ⇒ Select menu option TOOLS -> MACRO -> MACRO ⇒ Select OPEN_DMFAS_REPORT and click on RUN. ⇒ Open the user-defined report file created in step 3 above, from directory <i>P:\ASCII</i> (where <i>P:</i> is the mapped drive for the server directory <i>drive:\PROGRAMS\</i>). ⇒ The report should be automatically loaded and formatted for Excel. ⇒ To add loan and tranche characteristics on the user-defined report and thus on the final Excel report, you must include those characteristics when you formulate the query in Browser. For instance, to include the loan name and the creditor name on the Excel report, click on the columns NAME and CREDITOR_NAME as displayed fields in Browser so that your resulting query is something like ⇒ 'SELECT LOAN_ID, TRANCHE_NO, NAME, CREDITOR_COUNTRYFROM LOAN_TRANCHES WHERE ... ORDER BY ...' ⇒ The selected loan/tranche characteristics will then appear on the Excel report after the loan number and tranche number, and before the debt totals. <p><i>For answers to other frequently asked questions, check the DMFAS website www.unctad.org/dmfas or e-mail dmfas@unctad.org or telephone + 41 22 907629.</i></p>
---	--

ECONOMIC FOCUS

Sub-national debt: the bailout problem

By Fausto Hernández Trillo³



Sub-national government (SNG) debt bailouts appear from time to time in countries in which local governments have autonomy regarding the amount they want to borrow. When a SNG is unable to meet its debt payment obligations without drastically cutting its expenditure, like other sovereign borrowers it faces the dilemma of affecting its creditors and its future access to borrowing, of reducing the level of services that it provides to its constituency, or of increasing local taxes. The difference between the case of a SNG and that of a country is that the former affects other levels of government that could also be responsible for the well-being of the constituency, for example the federal government. The federal government, even if it did not create the conditions for the crisis, has to face the consequences of cutting local services or increasing taxes, or – if there is no payment – of affecting the financial system or access to the credit market of a particular SNG or other local governments. That is, the typical dilemma of a sovereign borrower is passed on from the SNG that incurred the debt to the higher authority. A typical response of the higher level of government that has more access to financial sources is to bail out the indebted entity. The problem with this behaviour is that it provides incentives for the SNG to acquire unsustainable levels of debt in the future.

The world has seen many SNG bailouts in explicit or implicit forms. The latter occur when a SNG decides to underprovide public services with important externalities, and the shortfall is then made up by the central government even though the responsibility for this lies with the lower level of government. Bailouts in explicit form occur when a higher-level government assumes obligations of a lower-level one, because of the latter's inability or unwillingness to meet these obligations.

Bailout processes contain an element of time inconsistency (*à la* Kydland and Prescott). Even if the higher-level government knows perfectly well that the lower-level government caused its own financial distress by irresponsible behaviour, it may be willing to provide a bailout for many reasons – for example, because the central government cares

³ Mr. Fausto Hernández Trillo is Professor of Economics at CIDE (Centro de Investigación y Docencia Económicas), a leading research and teaching institution located in Mexico City.

about the welfare of the citizens of the jurisdiction in question, because it benefits politically from extending the bailout, or because in the absence of a bailout there would be negative effects for the rest of the country.

There are many recent cases of the two types of bailout. The central Governments of Argentina, Australia, Brazil, Chile, Colombia, France, Germany, Italy, Mexico, Sweden and Uruguay, among others, have bailed out SNGs.

Von Hagen et al.⁴ document the first four cases. Germany and Australia are two countries with a federal structure, but whose State Governments have different degrees of financial autonomy. German State Governments are unrestricted in their borrowing autonomy, while State Governments in Australia relinquished that autonomy. Italy and Sweden are unitary States, but again whose local governments have different degrees of financial autonomy. Italy's regions have no authority to borrow at all, while Sweden's municipalities are largely autonomous financially and form a sizeable part of the Swedish public sector.

The wide differences in the fiscal regulations of those countries suggest that bailouts cannot be traced simply to the distinction between unitary and federal States, nor to that between a large and a small degree of financial autonomy at the local level. According to von Hagen, explaining bailouts and, consequently, trying to prevent them through institutional design require a closer examination of the distribution of powers and obligations between different levels of government.

The Inter-American Development Bank (IADB)⁵ conducted a study in different Latin American countries and reached a number of conclusions. First, in the case of countries with a high degree of borrowing autonomy, bailouts have generally been large and have taken the form of debt restructuring. In some cases (i.e. Brazil and Colombia), several jurisdictions were subject to repeated bailouts by the central Government, because debt restructuring per se did not eliminate the incentives to behave in an undisciplined way. On the contrary, in some cases the bailouts increased the incentives to misbehave.

Second, limited borrowing autonomy for sub-national governments does not completely eliminate bailouts. Sub-national governments can and do find loopholes to stray from discipline once the more traditional avenues for incurring debt are closed. Examples of this are the accumulation of arrears with public utilities by the regional governments in

⁴ "Subnational Government Bailouts in OECD Countries: Four Case Studies." J. von Hagen, M. Bordignon, B.S. Grewal, P. Peterson and H. Seitz, IADB, R-399, November 2000.

⁵ "Decentralization and Fiscal Discipline in Sub-National Governments: The Bailout Problem." IADB Research Network, 2000.

Uruguay, and some Chilean municipalities' failure to comply with teacher pension contributions. However, the aggregate macro consequences of undisciplined fiscal policy are greater in countries whose sub-national governments have a high degree of borrowing autonomy (i.e. Argentina and Brazil). Third, while a high degree of decentralization can make bailouts more serious from a macro perspective, bailouts can also be associated with a high degree of centralization. For example, in Costa Rica, local governments are responsible for less than 5 per cent of total government expenditures. As a result, people expect the central Government to solve all their problems whether or not they are the local governments' responsibility. Local governments in Costa Rica are responsible for three basic areas: solid waste disposal, potable water and sewerage, and the construction and maintenance of local roads. There have been central Government bailouts associated with all three local activities.

Finally, bailouts have been regressive in several countries. Bailouts per capita in rich jurisdictions were higher than in poor jurisdictions. Rich jurisdictions tend to have more robust tax bases. These higher revenues are able to incur higher debt per capita. The 1997 Brazilian bailout was related to the amount of bonded debt of the States; and the tequila bailouts in Mexico are good examples of regressive bailouts. In these cases, addressing the bailout problem is good not only for efficiency considerations, but also for equity considerations. Furthermore, discretionary transfers are often (but not always) a bailout mechanism. In several cases, the allocation of these discretionary transfers tends to follow deficits, generating incentives for undisciplined fiscal policy.

In sum, bailouts of SNGs may occur independently of the type of government (federal or unitary), size (large or small) or the economic condition of a nation (poor or rich). In terms of policy lessons it is advisable to limit the borrowing autonomy of SNGs, but this is only a necessary condition. Other issues such as vertical fiscal imbalances and fiscal discipline have to be addressed. Adequate design of intergovernmental fiscal relations is also a necessary condition.

DMFAS EVENTS

Third Inter-regional Debt Management Conference

More than 180 debt managers from 70 countries worldwide were in Geneva to attend the Third Inter-regional Debt Management Conference in December 2001. Also attending were senior representatives of a dozen international and regional institutions such as BEAC, the Commonwealth Secretariat, Debt Relief International, the Economic and Social Commission for Western Asia (ESCWA), EURODAD, the IADB, the Islamic Development Bank, UNITAR and the World Bank.

The conference brings together professional debt managers from around the world and serves as an important forum for the discussion of recent developments affecting debt management and for the exchange of experiences and ideas. Prominent topics at the last conference included the institutional set-up for effective debt management, the management of sub-national debt (see the article by one of the conference speakers, Mr. Fausto Hernández Trillo), the compilation of debt statistics and the auditing of debt offices as well as the monitoring of private sector non-guaranteed debt. A special symposium was organized as part of the conference in order to share experiences in the area of debt systems and their role in broader integrated financial management systems.

For all participants, the conference is an extremely valuable opportunity to establish contacts. For the DMFAS programme, it also means meeting with other players in the area of debt management capacity-building. At this last conference, for example, UNCTAD worked on a cooperation agreement with Pôle Dette. Furthermore, UNCTAD and ESCWA were able to restart cooperation negotiations and involve ESCWA members directly in the design of a cooperation framework. UNCTAD was also able to meet with the IMF on the co-publication of "External Debt Statistics: Guide for Compilers and Users", a publication to which the DMFAS programme has contributed substantively. The conference also enabled UNCTAD to discuss closer coordination in the area of technical assistance with the World Bank as well as the International Organization of Supreme Audit Institutions (INTOSAI).

The proceedings of the conference will be published and can be ordered over the Internet. See the DMFAS website www.unctad.org/dmfas for information on how to order this publication as well as previous conference publications.

Workshop on debt statistics using DMFAS in Libreville (Gabon)

Pôle Dette, the regional agency on debt management in West Africa, held a workshop on debt statistics jointly with UNCTAD in Libreville (Gabon) from 18 to 23 March 2002.

The workshop, which was organized in the context of Pôle Dette's regional capacity-building initiative, had four objectives:

- To train participants in the use of the DMFAS user-defined reports module;
- To present the possibilities to interface DMFAS with the DSM+ debt analysis software of the World Bank;
- To train the participants in using DMFAS for the compilation of a statistical bulletin on debt;
- To express the views of the users regarding the improvement of the software.

Around 30 debt officers from Burkina Faso, the Central African Republic, Chad, Côte d'Ivoire, Guinea Bissau, Senegal and Togo participated. UNCTAD sent four resource persons to conduct the workshop, which was funded by the Government of Switzerland. The participants judged the workshop very satisfactory. More such events will follow within the framework of an UNCTAD cooperation agreement being signed with Pôle Dette.

Other

Study tours

11–15 March 2002	Jordanian delegation to Beirut (Lebanon) Study tour on DMFAS at the Banque du Liban
13–17 May 2002	Mongolian delegation to Manila (Philippines) Study tour on DMFAS at the Bureau of Treasury
24–28 June 2002	Mongolian delegation to Hanoi (Viet Nam) Study tour on DMFAS at the Ministry of Finance

Seminars/workshops

18–23 March 2002	UNCTAD/Pôle Dette seminar in Libreville (Gabon)
15–19 July 2002	UNITAR/UNCTAD Workshop on Legal Issues of Debt Management

Meetings

10 September 2002 WADMO Steering Committee meeting

12–13 September 2002 3rd DMFAS Advisory Group meeting



Mongolian delegation to Manila – study tour on DMFAS at the Bureau of Treasury

DMFAS TEAM

Departures

Goodbye Pekka!

After more than 20 years of service with the United Nations, DMFAS senior systems analyst **Mr. Pekka Sankala** took his well-deserved retirement. He started with the DMFAS programme in 1982, designing and programming the first “pioneer” DMFAS version, which at that time still ran on a mainframe computer. Mr. Sankala contributed greatly to the development of subsequent DMFAS versions. As the DMFAS design specialist, he left his imprint on the system. We wish him all the best and lots of fun in his retirement, which he will be spending in the sun in the South of France.

New appointments

Ms. Eva-Kristiina Kuusamo-Tuusvuori has been with the DMFAS programme since June 2001. She assists the DMFAS secretariat, in particular with the organization of meetings and conferences. She also provides documentation support.

Mr. Ricardo Murillo, who started with the programme as Project Officer in August 2001, originally replacing Ms. Manuela Jander during her maternity leave (she has now returned), will continue as part of the central team. He has been assigned projects in Latin America and Lusophone Africa.

Ms. Vanessa de Thorpe Millard joined the central team in November 2001 as a training and communications expert. Working with Mr. Pal Borresen, DMFAS Coordinator for Training and Development, she is actively involved in the elaboration of a DMFAS training programme in debt management and is responsible for regular DMFAS communications such as the website and progress report. She also contributed to the organization of last year's debt management conference.

Mr. Marcelo Tricarico has been working with the DMFAS programme's central team since March 2002 as User Representative and Systems Analyst. He was formerly Director of Domestic Finance in the Secretary of Finance of the Ministry of Economy of Argentina and also coordinated the DMFAS project in that country. He has in fact been supporting the work of the DMFAS programme for many years and has worked as a consultant for DMFAS in various

other Latin American countries. His work for the programme has included interface development for governmental integrated financial management systems.

DMFAS consultants

The following consultants have recently undertaken assignments for the DMFAS programme:

Name	Country
Mr. Abdul Aziz Ould Feil Dahi	Mauritania
Mr. Balliram Baball	Trinidad and Tobago
Mr. Jacques Baert	Chile
Mr. Sebastián Cataldi	Argentina
Mr. Anthony Coco	Togo
Mr. Khaled El Sayed	Egypt
Mr. Jose Flores	Honduras
Mr. Nihal Kappagoda	Canada
Ms. Roula Katergi	Lebanon
Mr. Alexander Kovalenko	Russian Federation
Mr. Emilio Natri	Argentina
Mr. Rolando Ochoa	Bolivia
Mr. Elahi Rizwan	Canada
Mr. Antonio Sanchez	Nicaragua

DMFAS programme staff

Name	Title	Telephone
Philippe Straatman	Chief	907 5845
Alain Bodin	Senior Debt Management Expert	907 5856
Raúl Javaloyes	Associate Programme Officer	907 5573
Fernando Archondo	Senior Financial Economist	907 1139
Andrei Krylov	Economic Affairs Officer	907 5931
Mark Willis	Financial Economist	907 6218
Manuela Jander	Financial Economist	907 2741
Gabor Piski	Financial Economist	907 4687
Ricardo Murillo	Financial Economist	907 2741
Pål Ivar Børresen	Financial Economist	907 5917
Hélène Fabiani	Documentation Specialist	907 5835
Vanessa de Thorpe Millard	Training/Communications Expert	907 5557
Gerard Teeling	Information Systems Coordinator	907 5859
Marcelo Tricarico	User Representative/Systems Analyst	907 5860
Marilyn de Guzman	Computer Programmer /Analyst	907 6291
Gilberto Zabala	Information Systems Specialist	907 6049
Marcelo Abalos	Systems Designer/Lead Programmer	907 5858
Rubén Darío Guillén Velázquez	Computer Programmer	907 5653
John Barrozo	Computer Programmer	907 5539
Nathalie Bois	Senior Secretary	907 6048
Ximena Renault	Secretary	907 5852
Eva-Kristiina Kuusamo-Tuusvuori	Secretary	907 3137

Donors of the DMFAS programme

Belgium
Denmark
Finland
Germany (through Associate Experts Programme)
Ireland
Netherlands
Norway
Sweden
Switzerland

Correspondence for the Newsletter to:

DMFAS Newsletter Editor
Villa le Bocage 116
UNCTAD
Palais des Nations
CH-1211 Geneva 10
Switzerland
Tel. + 41 22 907 5924
Fax: 41 22 907 0045
E-mail: dmfas@unctad.org

DMFAS hotline

Tel.: + 41 22 907 6049
Fax: 41 22 907 0045

Web page: www.unctad.org/dmfas

The DMFAS Newsletter is not an official document. Opinions expressed in the articles are those of the authors and do not necessarily reflect those of UNCTAD or of the United Nations Secretariat.