Since the last newsletter, the Debt Management-DMFAS Programme has seen a slight name change (it was previously called simply the DMFAS Programme), an increase in the scope of its activities, a growing list of client institutions, an exceptional week of debt management meetings, and the finalization and release of a significantly improved version of the DMFAS software - version 5.3, including an Arabic version.

This latest version of UNCTAD’s software for debt management includes many new functional and technical features, among them a new bonds module, new security features, new functionalities for reporting and producing statistics, and a revised classification and coding system for debt instruments - a revision that significantly simplifies compliance with international standards for the production of debt statistics. A major goal of the Programme for the coming years will naturally be implementation of 5.3 in the DMFAS countries. Successfully completed and tested at the end of 2003, it had already been installed in Argentina, Chile, Panama and the Syrian Arab Republic by the first quarter of 2004.

With each new version of its software, as with each new debt management activity it organizes, the Programme hopes to further improve governments’ capacity to meet the challenges they face in debt management. To address these challenges directly and to work together on finding the best solutions and practices in debt management, the Programme also organizes on an annual basis the DMFAS Advisory Group and on a biennial basis UNCTAD’s Inter-regional Conference on Debt Management. Furthermore, it acts as secretariat to the World Association of Debt Management Offices (WADMO). For the first time, in November 2003, the Programme decided to hold the conference, the Advisory Group meeting and the general assembly of WADMO back to back. This resulted in discussions on some of the most pertinent issues in debt management between debt officers from over 90 countries as well as with representatives of many major international and regional institutions. Overall, some 300 delegates attended.

Seen against the background of United Nations resolutions on debt, the Millennium Development Goals and the Monterrey Consensus, these meetings highlight the importance of international cooperation, including our role, in helping countries strengthen their debt management. Furthermore, in December 2003, the United Nations General Assembly adopted a resolution on external debt crisis and development (A/RES/58/203) that also “invites the United Nations Conference on Trade and Development, the International Monetary Fund and the World Bank, in cooperation with the regional banks, regional commissions and multilateral institutions, to study the possibility of creating a consultative group on external debt management aimed at developing best practices and strengthening the institutional capacity of developing countries in debt management, taking into account work that has already been done” (para. 17).

Such a group will certainly strengthen our own capacity to assist others: our counterparts whom we serve as international civil servants, our partners in the debt management community, and our colleagues with whom we work on a daily basis. After all, capacity building is about cooperation and about people. This motivation is at the heart of the Debt Management-DMFAS Programme, and it is in this spirit that we make every effort to continually improve our services to countries.
Release of DMFAS version 5.3

Officially released on 31 December 2003, the latest version of DMFAS, 5.3, gives increased emphasis to capital market instruments through its enhanced bonds module. In addition, it contains new functional features for reporting and producing statistics, processing local government debt, managing revolving credit, capitalizing interest, and handling Asian Development Fund loans. It also features a revised classification and coding system for debt instruments - a revision that significantly simplifies compliance with international standards for the production of debt statistics.

New technical features include a new security password management function, which enables sets (e.g. loans, grants, bonds) to be assigned for exclusive groups of users. Also included is a new feature for exporting loan-by-loan data to the Debt Sustainability Model (DSM+).

DMFAS 5.3 was successfully tested in Geneva on a simulated database in November 2003, allowing it to be tested on a real database in Argentina in December (see article "DMFAS 5.3 Beta Testing in Argentina" in this issue). It will be made available to a number of institutions during 2004 within the scope of the Programme’s country project activities. It has already been installed in Argentina, Chile, Panama and the Syrian Arab Republic.

DMFAS 5.3 exists or will soon exist in English, French, Russian, Spanish and, for the first time, Arabic. For more detailed information, please contact the Programme or refer to DMFAS Information Note 1 (available on the Programme’s website www.unctad.org/dmfas).

Domestic debt sustainability

The panel concluded that sound macroeconomic and fiscal policies are a prerequisite for reaching debt sustainability. It also highlighted the need to go beyond traditional indicators and to view debt sustainability as a process that needs clearly separated but closely coordinated fiscal, monetary and debt management policies. Domestic debt markets should be developed gradually. Longer-term issues could be placed as investor confidence develops as a result of prudent macroeconomic management. The panel also agreed that there has to be a balance between investors’ portfolio needs and governments’ objective of long-term, sustainable market development.

Regional capital markets

Discussion focused on the benefits of developing regional capital markets as an alternative financing mechanism to bank borrowing and one that overcomes some of the constraints faced by developing countries when issuing debt instruments in international bond markets. The Latin American and South-East Asian initiatives were used as examples of the benefits of developing regional capital markets, as well as the difficulties faced by countries involved in such initiatives. The main benefits of regional markets identified were their higher liquidity compared to domestic markets and their greater absorptive capacity for large issues. However, the panel concurred that a number of issues still needed to be addressed, such as the need for greater transparency, the need for harmonized tax laws, improved reporting procedures, the development of new instruments, and the creation of mechanisms for enforcing creditor rights.

Paris Club restructuring

The panel concluded that the Evian approach, put forward by the G-8 and the Paris Club creditors, represents a promising innovation in debt restructuring. The main innovations are its explicit focus on debt sustainability (i.e. long-term solvency rather than short-term liquidity...
problems) and the possibility of debt reduction for low- and middle-income countries, which previously occurred only on an ad hoc basis. The Evian approach is driven by the demise of the Sovereign Debt Restructuring Mechanism (SDRM) proposed by the International Monetary Fund (IMF), the growing importance of private creditors in emerging-market lending, and progress by the IMF and the World Bank in developing tools for analysing sustainability. The panel stressed that the Evian approach, applicable to all non-HIPC countries, does not introduce any new terms but rather introduces a new case-by-case flexibility that enables debt sustainability through a number of channels including write-offs, extended use of debt swaps, and changes to the cut-off date. Several concerns were raised, including regarding the IMF’s role as the ultimate judge of sustainability, the continuing link between the Paris Club and IMF conditionality, the difficulties in establishing a clear methodology for changing the cut-off date, burden sharing among creditors of the Paris Club, and the participation of non-Paris Club creditors.

Collective action clauses (CACs) and sovereign debt restructuring

It was concluded that collective action clauses (CACs) are becoming increasingly common in sovereign bond issues, and that fears of higher spreads and debt costs for emerging-market bonds have not materialized. The panel outlined the work of several bodies, including the private sector, the G-8, the G-20 and the European Union, in encouraging the use of CACs in member States’ foreign bond issues. A presentation by the International Primary Market Association (London) favored this market-based contractual approach over a more statutory approach and stressed the importance of standardization of CACs. It addressed concerns about CACs’ creating multiple fragmented bondholders’ committees (which lead to higher restructuring costs for emerging-market issuers). It also highlighted that, in cases of restructuring of bonds with CACs, creditors will naturally come together when debtors negotiate in good faith.

It was concluded that the demise of the SDRM proposal still left a number of options for sovereign debt restructuring that future research needs to address. These include the use of CACs, various Code of Conduct proposals, and changes to the IMF’s access policy. The recent voluntary debt reprofiling of Uruguay was presented as a case of innovative restructuring based closely on consultations and best practices deriving from the market. Overall, panelists felt that conclusions still needed to be drawn from the debt crises of the 1980s and 1990s and that more work was needed to establish clear incentives for sovereigns to deal with debt problems before a crisis, and to generate a system that ensures transparency and availability of debt data.

Statistics reporting

The panelists presented the current state of affairs in the domain of debt reporting. The catalyst for revising debt statistics reporting was the Asian financial crisis of 1997, which revealed limitations in the existing debtor data, particularly with regard to short-term external debt. The presentations covered the following issues:

- The origin and coverage of BIS international financial statistics and improvements in data
- The "accrual principle": the case of Slovenia
- Selected issues in World Bank debt statistics reporting
- The Public Debt Committee of the International Organization of Supreme Audit Institutions (INTOSAI) and its role
- Debt recording and statistics in highly indebted poor countries (HIPCs)

Basel II

While the Basel II proposal represents an improvement over the existing Accord, the panel agreed that it raises several problems from a developing-country perspective. These problems include (a) punitive capital requirements for low-grade lenders, leading to higher financing costs for developing countries and effectively shutting them out of lending markets; (b) the reliance of Basel II on credit rating agencies, which were viewed as unsuitable for judging economic conditions in developing countries, especially during crises; (c) the continued bias towards short-term lending; (d) the need to increase representation of developing countries on the Basel Committee; (e) the lack of recognition in Basel II of a diversified developed-developing-country portfolio rather than one exclusively focused on OECD economies; and (f) the difficulty of implementing Basel II by the 2007 deadline given limited supervisory resources. The points on punitively high capital requirements, credit rating agencies and short-term lending were seen as especially significant given their role in recent emerging-market financial crises, the resulting sharp falls in bank lending to developing countries, and the need to modulate boom-and-bust cycles in the global economy.
New module on producing a debt statistical bulletin

In line with the Programme’s new modular approach to producing a comprehensive training package of debt management capacity-building materials, the Programme has recently started work on its second module. This concerns the production of a debt statistical bulletin and follows the first module on data validation, which is due for completion later this year.

The initiative to produce the module on debt statistics, and to support countries in producing reliable, timely and consistent debt statistics, comes at a most appropriate time. There is growing appreciation of the increasing importance of debt-related issues in the economy and the recognition that policy makers, financial markets, international organizations, researchers and the general public require timely, consistent, reliable and transparent debt information. Recent financial crises have also exposed the lack of timely and reliable data. Observation of some inconsistent national practices in the publication of debt statistics has provided further impetus.

Furthermore, many countries using the DMFAS software now have operational databases and are in a position to produce debt statistics, or can do so with some additional support. In the Debt Management-DMFAS Programme’s Annual Report for 2003, a basic examination of the status of DMFAS implementation shows that, of the 88 country institutions that use DMFAS, 69 use the system for internal reporting, and 54 of these use it for statistical bulletins and/or other periodical publications.

This module in debt statistics is intended to complement the publication External Debt Statistics: Guide for Compilers and Users, otherwise known as the Debt Guide, which presents a comprehensive conceptual framework and provides guidance on the concepts, definitions, and classifications of external debt data; the sources and techniques for compiling these data, and the analytical use of the data. The module will implement the recommendations of the Debt Guide, as well as bridge the gap between its recommendations and actual production of the statistics. However, it goes beyond the Debt Guide in the following areas:

- It incorporates public domestic debt.
- It deals with some relevant classifications not addressed in the Debt Guide.
- It addresses issues such as frequency, timeliness, coverage, resources and the establishment of a publications calendar.
- It provides support at the country level for the production of a debt statistical bulletin.

The expected output of this set of activities at the country level will be a debt statistical publication with a well-defined scope, timeliness and periodicity, and with clear and relevant tables and definitions that are consistent with the latest international standards.

The module will be delivered to countries by the Debt Management-DMFAS Programme through national and regional workshops. Follow-up support by the Programme will be given as required. The module includes:

- A participant’s handbook on producing a debt statistical bulletin
- Reference documents, including excerpts from the Debt Guide and documents related to the General Data Dissemination System (GDDS), the Special Data Dissemination Standard (SDDS), the Data Quality Assessment Framework (DQAF), the Joint BIS-IMF-OECD-WB Statistics on External Debt, the balance of payments and the international investment position (IPP) requirements
- PowerPoint and other presentations
- A package of tools supporting the production of a debt statistical bulletin

To date, a first draft of the participant’s handbook on the production of a debt statistical bulletin has been prepared. This was followed by a workshop in Geneva (29 March-2 April 2004), at which it was extensively discussed between DMFAS consultants, the DMFAS central team and representatives of the IMF and the World Bank. Subsequently, it was introduced to four countries belonging to the Macroeconomic Financial Management Institute (MEFMI) that use DMFAS (Angola, Uganda, Zambia and Zimbabwe) during an UNCTAD/MEFMI regional workshop on issues relating to the production of a statistical bulletin, which took place in Harare on 26-30 April 2004. Other related activities are expected to be undertaken during the year. The full module is expected to be completed by the end of 2004.
COUNTRY FOCUS

DMFAS in the Syrian Arab Republic / Release of the Arabic version of DMFAS 5.3

The DMFAS system now also exists in Arabic! This is largely thanks to a project document signed in 2001 with the Syrian Arab Republic, which agreed to cover part of the cost of the Arabic translation. The Programme has produced an Arabic version of DMFAS 5.3, which it installed in the Syrian Arab Republic in February 2004. Here is the screen for entering general information for loans in Arabic.

The Programme was happy to discover an article in the Syrian newspaper *Tishreen* that included an interview with the Governor of the Syrian Central Bank, Dr. Bashar Kabbarah, describing the project's implementation.

Dr. Kabbarah explained how the project to implement DMFAS in the Central Bank aims to reinforce the Bank's technical capability to meet Syria's external obligations and to more precisely control its loan payments, as well as to help Syria formulate its debt sustainability strategy. He drew attention to the fact that DMFAS contains many significant functions that could support decision makers: it helps in building up a debt database and enabling the user to produce a huge number of reports and statistics on all types of debt - with a high level of accuracy and speed - and allows the user to produce data according to the required classification (by currency, creditor country, debtor and so forth).

Dr. Kabbarah also described how DMFAS could be used to help formulate different scenarios for financing balance-of-payments gaps, rescheduling debt or even negotiating new loans. For these purposes, the system uses the macroeconomic indicators, the balance-of-payments information and the debt data stored in the database. He explained that although his country had a positive balance of payments, the Bank always tried to obtain tools that would help it support its monetary and financial situation: DMFAS was an example. Finally, Dr. Kabbarah said that the components of the new project are new hardware, the software (DMFAS) and training workshops. He thanked UNCTAD, the United Nations Development Programme and all local authorities for their positive role in implementing this new project.

Yemen workshop on debt sustainability analysis

"Detailed reports on external loans and assistance can now be available at the touch of a button." This is how Mr. Ahmed Al-Samawi, Governor of the Central Bank of Yemen, described the situation in Yemen with regard to the use of DMFAS and DSM+, during a workshop on debt sustainability. The workshop was held from 6 to 11 March 2004 at the Central Bank of Yemen and was co-organized by the Ministry of Finance and the Ministry of Planning and International Cooperation. The workshop's objective was to help Yemen in analysing its net external financing requirements and to assist the country in formulating a cost-effective and sustainable debt strategy.

Back in 1998, Yemen's external debt stock stood at US$11 billion. Since then, with the assistance of the international institutions and bilateral donors, the debt has been reduced to a sustainable level of US$5.4 billion. All new loans contracted must now be highly concessional. Through debt buy-back operations of 15 million dollars financed by a grant from the World Bank and other donor countries, $650 million of official commercial debt could be written off.

Project updates

> Congo. In September 2003, Congo became the sixty-second country to choose DMFAS for the computerization of its debt data and to receive DMFAS technical cooperation assistance in its debt management. Funding for this new project was secured through the World Bank’s International Development Association (IDA). Project activities started in early 2004 with an IT training workshop (in Gabon) and DMFAS 5.3 installation and training in April. In October 2003, debt officers from the Caisse Congolaise d’Amortissement were already able to participate in a DMFAS/Pôle-Dette workshop in Brazzaville on IT training and advanced Oracle Browser functionalities.

> Dominican Republic. A new project document was signed between the Secretariat of State of Finance and UNCTAD in October 2003. Within the framework of that project, a mission was fielded in November 2003 in order to install DMFAS version 5.2 in the Secretariat and train its staff in the use of the system. The mission also updated the existing installation in the Central Bank.
> COUNTRY FOCUS

> Honduras. A new project is planned to develop a link between DMFAS and the Government's Integrated Financial Administration System (SIAFI). A letter of agreement has already been signed. The project will include a needs assessment mission as well as assistance in the functional and physical design of the link and its validation. The link is to be developed to fit with DMFAS 5.3, which will be implemented under a separate agreement.

> Indonesia. In November 2003, the central bank of Indonesia, Bank Indonesia, decided to reinforce its external debt management capacity by adopting DMFAS. Installation of DMFAS in the Bank will require a debt database conversion from the Bank’s existing debt management system. DMFAS has been installed in the Ministry of Finance since 1988.

> TECHNICAL CORNER

> DMFAS 5.3 beta testing in Argentina

After a successful first testing of DMFAS 5.3 on a simulated database in Geneva in November 2003, the Programme was able to organize its “beta testing” (pre-release testing) of the system on a real database in early December. This took place in the Debt Unit of Argentina’s Ministry of Finance.

The objective of the beta testing was to user-test the new version to ensure that all functions were working correctly, to discover possible errors and to receive suggestions for improvements from users. The testing team consisted of three sub-groups:

- **End-users Group**, composed of Argentinean users of the system - responsible for conducting all tests and for communicating all findings to the Testing Support Group;
- **Testing Support Group**, made up of DMFAS central team staff - responsible for coordinating the testing and for analysing and recording the findings; and
- **Technical Support Group**, consisting of DMFAS central team technical staff - responsible for providing technical backup to the other groups. This group also investigated reported anomalies and made the necessary amendments to ensure that the testing continued smoothly.

The system was installed on a network (one server and two workstations).

**Conversion**
A loan subset was allocated to each testing group member in order to check that the data from DMFAS 5.2 had been correctly converted to 5.3 format. This was done by printing the reports foreseen in the conversion kit.

**Conclusion**
- All anomalies and suggestions for enhancements were reported to the Technical Support Group during the mission.

- More than 50% of all errors found were corrected during the mission and retested by the End User Group.
- The testing enabled all remaining errors to be corrected before DMFAS 5.3 was installed in Panama at the end of January 2004.
- The mission was a good opportunity to evaluate, together with the Argentineans, the impact that the implementation of 5.3 will have on connected systems (SIDIF link and Access database).

> Some advantages of the new Oracle tools used to develop DMFAS 5.3

As Oracle advances in its own technology, the Debt Management-DMFAS Programme takes advantage of Oracle’s new features for the continuing development of its own system. Oracle’s new development tools, Oracle Forms and Reports 6i, have been used for DMFAS 5.3. Most of the advantages of the new Oracle tools are internal (i.e. not directly visible to users) but allow for a more reliable and less resource-consuming platform. Following is a brief description of the internal and external features most relevant to DMFAS users. Other internal and external features are related to Web environments and may not apply to the use of DMFAS.

**Internal features**
- Support for Windows 95, 98, NT 4.0, and 2000 (To date, Oracle has not confirmed the compatibility of Oracle tools with Windows XP.)
- Support for Oracle 8i and 9i. (9.0.1.x) database versions
- Coexistence with other versions of Oracle tools such as:
  - Developer 1.6.1
  - Developer 2.1

This allows other systems developed on the above-mentioned versions of the tools to coexist with the DMFAS installation.
- Forms 6i capabilities leveraging Oracle8i features:
  - Automatic pre-fetch, which allows faster data retrieval.
- **INSTEAD-OF** trigger for updating views. This facilitates the usage of views on forms, making it easier to work with different screens. (This is transparent to users.)

- Forms runtime diagnostics facilitates debugging of the system.

**External features**

- Enhanced general graphical environment on forms. This facilitates higher-resolution data display.

- Improvements on the generation of files from Oracle Reports 6i. This allows users to generate a report in seven different file formats. This is an important improvement for sharing information from the DMFAS database.

**Generating report files**

As was mentioned above, Oracle Forms 6i has improved its way of generating operating system files. The most important change in the tools is the generation of files in the following formats:

- PDF (Portable Document Format). Compatible with the Adobe Acrobat software.

- HTML & HTML Style Sheet. Compatible with both versions of the hypertext mark-up language.

- RTF (Rich Text Format), compatible with Microsoft Word documents.

- PostScript, compatible with the Adobe PostScript language. This is a computer language able to generate graphical images (including text) that is not dependent on the use of other specific devices (e.g. printer).

- Comma-delimited files (ASCII text files delimited by commas).

- Text/XML (Extensible Markup Language). Compatible with the language specification developed by the W3C. XML is a language designed especially for Web documents. It allows designers to create their own customized tags, enabling the definition, transmission, validation and interpretation of data between applications and between organizations.

The process for generating any of the file types described above is very simple. The user simply generates the desired report to the "Report Previewer" and selects the file format from the menu option File/Generate to File. The file, with the same layout as the report shown in the screen, will be generated on the user's PC, in the directory set as "Working directory" of the DMFAS shortcut.

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**Frequently Asked Questions in DMFAS**

**Are the Oracle Tools used to run DMFAS the same for versions 5.2 and 5.3?**

**Answer:** No, different versions of Oracle Forms and Reports are used in DMFAS 5.2 and 5.3. DMFAS 5.2 uses Oracle Forms 4.5 (Oracle Tools Release 1.6.1), while DMFAS 5.3 uses Oracle Forms 6, patch 14. In formulating queries for user-defined reports, both DMFAS versions can use Oracle Browser. In addition, in DMFAS 5.3 it is possible to use Query Builder, which is part of Forms 6, instead of Oracle Browser. The Forms and Reports runtime versions of Oracle Forms 6 can be distributed without additional charge to clients. In the case of Query Builder, we are awaiting confirmation from Oracle to distribute it free of charge.

**When Oracle 8.1.7i is installed from the CD onto a Pentium 4, the Oracle Installer window simply flashes and exits. What is causing the problem?**

**Answer:** This is a bug in the Oracle Universal Installer from the CD of Oracle 8.1.7i (Standard Ed). As an alternative, copy the whole CD of Oracle 8.1.7i to your hard disk. Search for the file SYMJCIT.DLL on the hard disk and rename the file to SYMJCIT.OLD directly from the copied Oracle 8.1.7i. Be sure to rename all occurrences of SYMJCIT.DLL. Then install Oracle 8.1.7i from the hard disk, clicking on SETUP.EXE.

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For answers to other frequently asked questions, check the DMFAS website [www.unctad.org/dmfas](http://www.unctad.org/dmfas) or e-mail dmfas@unctad.org or telephone + 41 22 907 6291.
The following article is taken from a presentation by Luis Foncerrada at UNCTAD’s Fourth Inter-regional Debt Management Conference, held in Geneva in November 2003. Here Mr. Foncerrada defines debt sustainability as a process involving a set of factors, thus enlarging the commonly used concept of measuring debt sustainability with a set of indicators.

Let me elaborate on the concept: There is a family of indicators that have been used to assess sustainability. They are based on fiscal budget constraints and debt service present values, that is, the present value of debt service compared with the present value of future primary surpluses. It has also been argued that an alternative measure, and on occasion a better indicator, could be the fiscal revenues compared with the debt service.

The use of these indicators allows us to elaborate templates where we can measure and compare the variables and their critical relations through time. And, I am convinced, we should make systematic use of them.

But let me underline that, as good as they can be, they are only that: indicators. And like all indicators for the future, they greatly depend on projections, and projections depend on assumptions. So that is what they are - indicators of probable solvency, of possible liquidity and also of probable vulnerability; indicators, if you want, of one of the aspects, but only one of the aspects, of sustainability.

What is “sustainability”, then? Sustainability is not just a group of indicators - and certainly it is not just a synonym for solvency. It is much more than that.

I would like to propose, and invite you to consider, a different approach. Add other elements to the indicators’ analysis, and by doing that improve both the concept of sustainability and its assessment.

So let me state the following: sustainability is a process, a series of actions and functions geared to sustain, to maintain the debt flows, the borrowing and the debt service. It is not just indicators; it is a process.

And I would like to list the five aspects that I believe are critical to this process.

Legal framework and institutional structure
The design, achievement and continuous improvement of a good legal framework, and of an efficient institutional structure for all functions regarding debt management. This is a fundamental condition.

Coordination and communication
The establishment of an institutional practice of continuous coordination and communication among the debt management unit, the fiscal area, and the monetary authorities is as essential as having the legal framework and the institutional structure. One cannot work without the other.

Market development
Sustaining debt is also, and probably mostly, developing and sustaining a market. The will and ability to develop domestic markets are essential to the process. The identification and application of all available methods to develop the market (i.e. use of market makers) is essential. A continuous presence and analysis to monitor the market behavior are key elements of achieving sustained development.

Staff
The importance of the qualifications of the staff cannot be overstated. The careful selection and continuous training of the people in charge is the only way to assure successful maintenance of markets and solid debt management. This aspect is probably the most critical. The staff should be able to match the borrowing requirements with the best risk-weighted financing, and they should certainly be able to thoroughly understand the effects of different financing options on the macro variables. It is fundamental to have attentive, thoughtful and proficient personnel. The recent experience of Mexico is a result, undoubtedly, of skillful staff.

Tools
It is indispensable for the staff to be using the best available tools (technical tools and software) to achieve the best possible planning and control. The old and simple financial programming can, if systematically and thoroughly used, do a great job. That has been our experience. It will always be a powerful tool. Asset-liability management and the recently introduced balance sheet approach can and should be used as important complements. Sensitivity analysis, done systematically, will certainly be a definite and important source of help. A good template with a good family of indicators, including those mentioned above, is essential to assess risks and to put together early warning models or systems.

Let me recapitulate: Sustainability is a live process. It is a series of actions and functions that take place every day in a well-established legal framework and a well-established and functional, institutional structure.

Given that sustainability is a process integrated by these five aspects, the next question is: How do we then assess it? The answer is simple: We cannot just compare present values of debt service and future fiscal surpluses that will only assess one of the several aspects of the process. Instead, in order to have a fine and reliable assessment of the real sustainability of debt, we need to assess each one of the above-mentioned aspects.
For each of these, we need to establish a few well-defined concepts and/or variables, which help us determine and assess, with the greatest possible accuracy, the process of policy decision making, as well as its steps and its performance. Thus, the monitoring of the market, of its development, and the effectiveness of any action, can really be evaluated. The training of the team and the use of technical tools and ad hoc software complement the assessment. Sustainability is then assessed and eventually achieved. Solvency, consequently, is the success of carefully maintaining the debt. It is the result of sustainability, the result of this process.

> Measuring the real debt burden: proposing a new debt indicator

By Kunibert Raffer

Mr. Raffer is currently Associate Professor in the Department of Economics at the University of Vienna as well as Senior Associate of the New Economics Foundation, London (Think Tank of the Year 2002). He has written numerous papers on debt and was one of the experts invited to speak at UNCTAD’s Fourth Inter-regional Debt Management Conference, where he took part in the panel discussion on collective action clauses and debt restructuring mechanisms. Here are his thoughts on the use of debt indicators, an input to the conference’s discussion on debt sustainability.

Conventional, widely used debt indicators such as the Debt Service Ratio (DSR) or the Interest Service Ratio (ISR) may often hide the real debt problem in a misleading way. When actual payments (cash base) are divided by export earnings, both ratios are equally low for debt-free countries and heavily indebted countries unable or unwilling to pay. The less debtors pay - the more accumulating arrears boost the debt overhang - the lower these indicators are.

To solve this problem of a hidden debt overhang, I have proposed a new indicator. As non-payment and arrears are both the reason and clearest sign of a debt overhang, relating cash payments and all payments due provides a simple, useful index:

\[ 0 \leq \frac{DSR}{DSRd^*} \leq 1 \]

DSR is the International Bank for Reconstruction and Development’s cash-base ratio. The denominator, DSRd*, is calculated using debt service paid plus payments due but not effected. My index is 1 if all payments are made on time, zero if nothing is paid. Multiplied by 100, my indicator shows actual payments as percentages of debt service due. It does not suffer from the ambiguity of conventional indicators. A similar indicator for interest payments (ISR/ISRd*) can be calculated, but it is of less interest.

Theoretically DSRd*, which may be called the real debt service ratio, should include all payments due but not effected: all arrears (including of short term debts), capitalized interest, rescheduled arrears for every year, and new loans obtained only to pay (over)due debt service. Unfortunately, such detailed data are not easily available. For this practical reason, I have had to restrict DSRd* to data published by the World Debt Tables (now Global Development Finance), basically DSR plus interest capitalized, reschedulings of amounts due or in arrears, and arrears on long-term debts. While an improvement over traditional debt indicators, this may still understate the debt burden.

Nevertheless, my indicator based on IBRD data warned that the perceived end of the debt crisis in Latin America basically reflected tolerance of extremely large non-payments, or breaches of contract. If creditors had accepted much lower, or a similar level of arrears in 1982, there would have been no debt crisis. The debt overhang was not gone, but had grown perceptibly since the 1980s. Mexico paid punctually, but its current account deficit more than trebled during 1990-92, hardly a path to sustainable growth. Presented at the Development Studies Association Conference, Lancaster, on 7-9 September 1994, my paper warned against the general euphoria before the Tequila Crisis, which was also fuelled by low debt indicators. The data on which my calculations were based continue to be published in Global Development Finance. Reflecting the real debt burden, my index could be equally useful for assessing other cases properly.

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> EVENTS

> Meetings

19-23 May 2003
Course on external debt statistics organized by the IMF Statistical Department, Brasilia, Brazil.

24-27 September 2003
World Bank IT Conference: "Information Technology for Reserves Management: Challenges and Opportunities", Rome, Italy.

29 September-9 October 2003
UNCTAD/Pôle-Dette workshop on DMFAS reporting facilities, Brazzaville, Congo.

6-8 October 2003
Pôle-Dette Advisory Group meeting, Yaounde, Cameroon.

10-11 November 2003
Fourth UNCTAD Inter-regional Conference on Debt Management, Geneva, Switzerland.

12 November 2003

13-14 November 2003
Fourth meeting of the DMFAS Advisory Group, Geneva, Switzerland.

26-29 November 2003

> Workshops

7-16 July 2003
DSM+ training (regional) workshop, co-organized by COMSEC, MEFMI, the World Bank and UNCTAD, Maseru, Lesotho.

29 September -9 October 2003
UNCTAD/Pôle-Dette regional workshop, Brazzaville, Congo.

22-27 November 2003
IMF/BEAC regional workshop on external debt statistics, Yaounde, Cameroon.

12-14 March 2004
Paris Club/UNCTAD debt management workshop for Iraq, Beirut, Lebanon.

22-26 March 2004
Training for trainers workshop on DMFAS 5.3, Geneva, Switzerland.

29 March-2 April 2004
Training for trainers workshop on producing a statistical bulletin, Geneva, Switzerland.

19-30 April 2004
MEFMI/UNCTAD regional workshop on debt statistics, Harare, Zimbabwe.

3-14 May 2004
MEFMI/UNCTAD regional workshop on debt sustainability, Harare, Zimbabwe.

6-7 July 2004
UNESCAP Regional Workshop on capacity building for external debt management in the era of rapid globalization, Bangkok

12-23 July 2004
IMF regional workshop on external debt statistics, Vienna, Austria.

9-13 August 2004
MEFMI/UNCTAD/World Bank workshop on debt sustainability, Windhoek, Namibia.

20-24 September 2004
ESCWA/UNCTAD regional workshop on debt management, Beirut, Lebanon.
Departures/New appointments

Mr. Gerry Teeling. After more than 17 years with the Debt Management-DMFAS Programme, one of its most outstanding and longest-serving staff members has moved to the United Nations’ Information and Communications Technology Service in Geneva, to become Chief of the IT component of its Integrated Management Information Systems. First as a computer programmer, then as senior systems analyst and finally as head of the DMFAS IT team, Gerry has been a driving force behind successive versions of the DMFAS software. With his colleagues from the IT team, he has made the DMFAS evolve into a state-of-the-art debt management system. While being a lot of fun, he has always fought hard to make things happen and get things done – in Bogota, Hanoi, Washington…to name just a few places. He is a fantastic team player, and we will certainly miss him, but we wish him all the best in his new responsibilities.

Mr. Marcelo Tricarico. With Gerry’s departure, Marcelo has been appointed Systems Coordinator and head of the IT team within the Programme. He was formerly User Representative for the Programme (see his details in DMFAS Info No. 14). We are confident that, in his very experienced and capable hands, the DMFAS system will continue to reach new horizons.

Mr. Balliram Baball, one of the Programme’s most experienced debt management experts, joined the DMFAS central team in November 2003. Originally from Trinidad and Tobago, where he was responsible for implementing the DMFAS system, Balliram has worked extensively in Asia, Africa and the Caribbean and has also been involved in supporting regional organizations such as MEFMI. He has served the Programme in DMFAS country/regional assignments since 1991. As well as being DMFAS resident adviser in Bangladesh, he has been instrumental in supporting several other DMFAS countries, such as Indonesia, the Philippines and Viet Nam. He is presently involved in DMFAS 5.3 testing and implementation and is playing a major role in the development of a training module on producing a debt statistical bulletin (see article earlier in this issue).

Ms. Cecilia Caligiuri. Formerly a consultant, Cecilia joined the Programme as User Representative in October 2003. She previously played an important role in the implementation of DMFAS in three of Argentina’s provinces, where she was responsible for training and user support. Before that, she was a debt officer in Argentina’s Ministry of Finance.

Mr. Jaime Delgadillo is once again a consultant rather than part of the central team in Geneva and will continue working with the Programme in his capacity as a senior expert in debt management and debt sustainability analysis.

Mr. François Oyharçabal joined the DMFAS team in July 2003 as Technical Writer. He formerly worked as head of a team of technical writers for a software firm based in Paris, and his skills in this specialized field are highly appreciated by the Programme. He and Hélène Fabiani have actually managed to make software user documentation for the new version of the system - DMFAS 5.3 - a pleasure to read. Quite an achievement!

Ms. Patricia Tambuza. Allowing Natalie Bois to enjoy a sabbatical leave, Patricia assisted Ximena Renault, from February to July, in ensuring that the DMFAS secretariat maintained its high-quality and efficient service. It was a pleasure to have Patricia with us.

DMFAS consultants

The following consultants have worked for the Debt Management-DMFAS programme since the last newsletter (1st semester 2003):

<table>
<thead>
<tr>
<th>Name</th>
<th>Country of origin</th>
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<tbody>
<tr>
<td>Mr. Dovi Coco Anthony</td>
<td>Togo</td>
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<td>Mr. Jacques Baert</td>
<td>Chile</td>
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<td>Mr. Enrique Cosio-Pascal</td>
<td>Mexico</td>
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<td>Mr. Khaled Jacob Daher</td>
<td>Lebanon</td>
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<td>Mr. Jaime Delgadillo</td>
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<td>Mr. Khaled El-Sayed</td>
<td>Egypt</td>
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<td>Mr. Jose Flores</td>
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<td>Ms. Jacqueline Gomez</td>
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<td>Ms. Roula Katergi</td>
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<td>Mr. Alexander Kovalenko</td>
<td>Russian Federation</td>
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<td>Mr. Emilio Nastrti</td>
<td>Argentina</td>
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<td>Mr. Erwin Schurjin</td>
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DMFAS programme staff

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** Nathalie was replaced by Ximena Renault from February to July 2004.

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