ISSUES IN EXTERNAL DEBTS: Concepts, Monitoring Procedures, Reporting and Crisis Prevention in the SEACEN Countries

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by

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FOREWORD

The paper on *Issues in External Debts in the SEACEN Countries: Concepts and Monitoring Procedures for Crisis Prevention* is an outcome of yet another collaborative effort between the SEACEN Centre and the 9 member central banks of Indonesia, Korea, Malaysia, Mongolia, Nepal, Philippines, Sri Lanka, Taiwan and Thailand. It aims to review existing monitoring procedures and reporting systems on external debts in the SEACEN countries, with a view to facilitating improvement in data collection systems. The project also aims at identifying relevant tools for analysis of external debt positions and trends, and assessing the sustainability of external debts in the participating SEACEN countries. It also represents part of the Centre's on-going efforts to assist the work of the *SEACEN Expert Group (SEG) on Capital Flows* in enhancing collection of data relating to capital flows.

Rather than re-inventing the wheels, the study makes extensive use of the international guidance as provided in the *External Debt Statistics: Guide for Compiles and Users* issued by the Inter-Agency Task Force on Finance Statistics (TFFS) in November 2001, as well as the efforts to reconcile the creditor and debtor data on the components of short-term external debts developed by the BIS in its paper on *Comparison of Creditor and Debtor Data on Short-term External Debt, March 2002.* The paper is divided into 2 parts: the first part consists of integrative report and regional analysis prepared by Mr. Sushil Ram Mathema, Senior Economist at the SEACEN Centre who has been seconded from Nepal Rastra Bank, while the second part contains country chapters authored by country researchers of the 9 participating member central banks.

The author wishes to gratefully acknowledge the contributions of Ms. Nataliya Ivanyk, Senior Economist, IMF and Mr. Karsten von Kleist, Deputy Head, Bank for International Settlements for their assistances in sharpening the issues and useful suggestions at various stages of the project. He would also like to especially thank Mr. Von Kleist for valuable comments on the draft paper, and Professor Frederico G. Jayme, Jr, of the Economics Department, Universidade Federal de Minas Gerais, Brazil for his useful suggestions and valuable information concerning the empirical analysis of the project. To the SEACEN member central banks, the author expressed his deep gratitude to all the country researchers for the excellent drafts on the respective country chapters, and to the research directors for useful comments and suggestions on the draft report. At the SEACEN Centre, he wishes to record his appreciation to Miss

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The views, conclusions and recommendations stated in the paper are those of the authors, which do not necessarily reflect those of the SEACEN Centre or its member central banks.

Dr. Subarjo Joyosumarto
Executive Director
The SEACEN Centre

30 May 2003

EXECUTIVE SUMMARY

This collaborative research project aims to review the existing monitoring and reporting practice on external debt in the SEACEN countries, with a view to improving data collection systems in these countries. It also identifies useful indicators for analysis of external debt positions and trends.

The study finds that while there seems to be less discrepancies in the external debt monitoring and reporting systems in the SEACEN countries that have subscribed to the IMF's Standard Data Dissemination System (SDDS), several member countries are faced with a number of challenging issues, notably the lack of appropriate system to collect data on private sector debt and short-term debt, corporate long-term debt, breakdown of external debt by sector and by currency, as well as short-term debt of private banks. It is noted that the less than comprehensive definitions and coverage may have resulted in the understatement of external debt in many SEACEN countries. Moreover, the long lag period of reporting underscores the need for measures to enhance the timeliness of data reporting.

The study also employs statistical indicators as suggested by the IMF to assess the solvency and liquidity of the economy with respect to the external debt level. For the solvency indicators, the study finds that the external debt to exports ratio, external debt to GDP ratio, and external debt service ratio, went beyond the threshold levels in 1997, when the crisis erupted. However, when averaged over the period 1996-2001, the ratios dipped below the critical values for most of the SEACEN countries, reflecting successful measures in bringing down external debt in these countries. Similarly, the liquidity indicator, as measured by a ratio of international reserves in short-term debt, was on the average higher than the threshold value during 1996-2001 for most of the SEACEN countries. The study also finds that sustainability of external debt, in terms of trade and current account, does not seem to pose a serious problem during a similar period. Due to insufficient sample size to derive meaningful results, however, the study is not able to make separate assessments for 1997 and the post-1997 period.

The study recommends that each SEACEN member country should enhance its data compilation and reporting system both in terms of coverage and frequency of reporting. In addition, transparency is needed to improve data compilation and reporting system on the stock and composition of debt, in particular the financial

asset data such as currency, maturity and interest rate structure. To overcome shortage of reliable private debt data, a suitable mechanism should be developed to capture information pertaining to non-cash transactions and to avoid double counting of transactions, particularly through offshore banking units. This will improve the assessment of debt-related indicators as well as enhance the quality of debt analysis and its sustainability, which further help develop better debt management.

PART I: OVERVIEW

CHAPTER 1

ISSUES IN EXTERNAL DEBTS: CONCEPTS, MONITORING PROCEDURES, REPORTING AND CRISIS PREVENTION IN THE SEACEN COUNTRIES

by

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1. Current Issues

The excessive and persistent accumulation of short-term debts was seen by many economies as a triggering cause of recent financial crises. The SEACEN Countries like Indonesia, Korea, Malaysia and Thailand have reported that among the many structural weaknesses, the increasing short-term debts was mainly responsible for evolving Asian financial crisis in 1997. Conceptually speaking short-term debts help to meet the widening domestic savings-investment gap. But the persisting demand for public expenditure accompanied by stagnant revenue ratio (Chelliah 1991) always led to excessive debts that were translated into high inflation and increased debt servicing burden (Guidioti et.al 1991; El-Erian 1991; Chelliah 1991; Joakin 1989). As external debts carry obligations to make future payments, large external debt liabilities have the potential to create circumstances that render an economy vulnerable to solvency and liquidity problems. SEACEN Countries do suffer from high percentage of external debts to their exports (Figure1.1). Such rapid expansion of external debts in developing countries in recent years has highlighted the importance of having reliable and timely debts statistics. Detailed debt statistics could reveal not just how fast debt is growing but also how, and to what extent, it could have impact on other economic aggregates. Multi-lateral agencies such as the IMF and the World Bank have therefore emphasised that close surveillance and monitoring of these external debts, in particular the short-term debt exposures could be useful to avert and help reduce the probability of future crises.

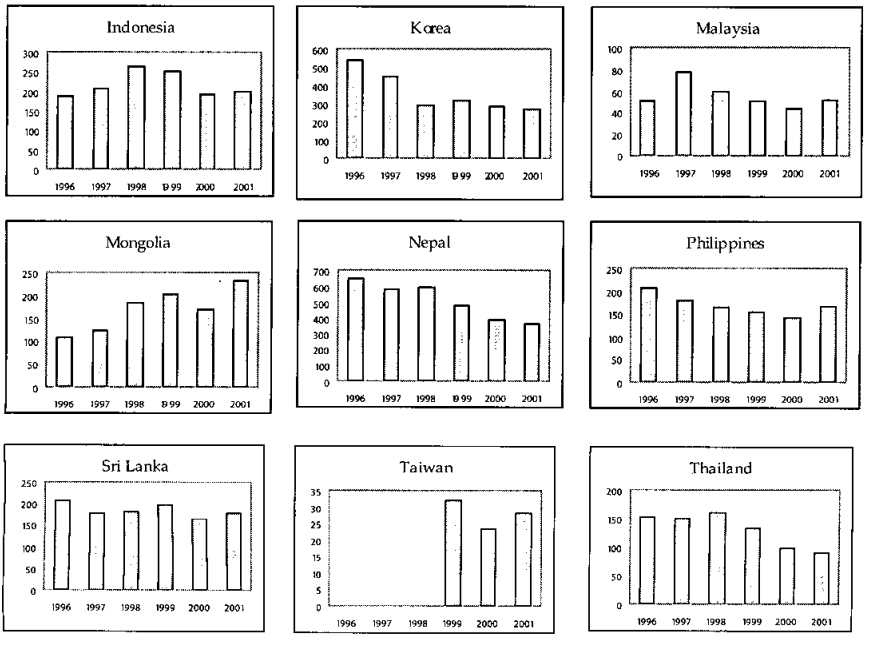
While external debt data have been compiled by various international agencies and the national sources it has been realised that there have been cases of significant discrepancies in statistics from different sources. On the international agencies front, one of the main causes of these discrepancies is the methodology

the different organisation follows. For instance the Organisation for Economic Co-operation and Development (OECD) defines debt as total gross long and short-term liabilities owed by all borrowers in a country to all non-resident creditors. The Bank for International Settlements (BIS), on the other hand, limits the coverage to particular categories of debt such as bank and trade creditor's claims, while public sector debt for most of the countries are available in the World Bank Debtor Reporting System.

Even among the national sources, the discrepancies of external debt data are evident due to different definitions, methodology of compilation and the degree of comprehensiveness. Most of the SEACEN countries provide data on official debts, while private sector debts continue to be scarce even until now. Reliability and accuracy of data are other issues of concern, as some data such as private non-guaranteed debt and even public and publicly guaranteed debt are not always accurately reported. Variations in reporting of rescheduled debt, which in most of the cases are relating to Structural Adjustment Programs and recently PRGF program of the IMF with the developing countries, also affect

Figure 1.1

External Debt to Export Ratio (%)



the cross-country comparability. Similarly, other areas of inconsistency include country differences in the treatment of arrears and of foreign currency deposits by non-residents.

These issues indicate the need to identify gaps in the external debt data collection system and thereby advocate for further work to ensure a comprehensive coverage and better quality of data.

2. International Efforts to Consolidate Data Monitoring on External Debt

Currently, there are mainly four international agencies namely, BIS, the IMF, OECD and the World Bank which are disseminating the data on external debt and related statistics though their collection and reporting system varies in terms of methodology and comprehensiveness. A brief note on the coverage of data on external debt produced by these agencies is given as follows:

2.1 Bank for International Settlements (BIS)

The BIS disseminates two important components of external debt data: the external debt data and the related statistics from its location and consolidated international banking statistics (Creditor reporting) and international securities data (based on market information), in the BIS Quarterly Review. It produces two main sets of data: the International Banking Statistics (IBS) and the International Security Statistics (ISS). These data are published quarterly in the BIS publication – Quarterly Review as well as in the Joint BIS – IMF- OECD -World Bank Statistics on External Debt. The concepts used in the BIS International Banking Statistics are based on IIP definitions. International Banking Statistics is based on the country of origin or nationality of creditor banks. Basis for defining creditor is residence / location as well as nationality / consolidated while for defining debts, is residence and nationality. Available breakdown is Sector, Currency and Instruments for residence / location while for nationality / consolidated is Sector and Maturity. In the case of International Securities Statistics (which is defined as those raised outside the debtor country itself whether in the international bond-formerly euro-bond market or in foreign market such as the Yankee bond market) basis for defining debtor is Residence and Nationality and available breakdown is Maturity, Currency, Instrument and Sector.

2.2 International Monetary Fund (The IMF)

The IMF disseminates the information on external debt statistics by collecting and publishing annual and quarterly data on the IIP (International Investment Position)[1]. These data are published in the International Financial Statistics (IFS) monthly publication and in the annual, Balance of Payments Statistics year Book (BOPSY). Data on the IIP was first published in BOPSY in 1984. The recommended concepts for the measurement of the IIP are outlined in BPM5. The concepts are consistent with the 1993 SNA.

2.3 Organisation for Economic Cooperation and Development (OECD)

The OECD provides information on external debt statistics in its annual publication External Debt Statistics that highlights data on debt for developing and transition economies. It collects two sets of data-; i) aggregate information on official and officially supported (i.e., guaranteed or insured by the official sector) export credits, and individual transactions data on all other official loans from the Creditor Reporting System (CRS). These data are also published in the Joint BIS -IMF -OECD – World Bank Statistics on External Debts-; ii) aggregate data on flows of aid loans and grants, other official flows, private market transactions, and assistance from non-governmental organisations to each recipient country and recipient countries combined (the information is solicited from the Development Assistance Committee (DAC) annual questionnaire) and these data are published in Geographical Distribution of Financial Flows to Developing Countries and in the Development Co-operation Report . The data are based largely on creditor sources, with the CRS data on loans (including export credits), the BIS international banking and security statistics, and the World Bank's data on multi-lateral lending providing the case data series. Some additional debtor data are obtained from the World Bank for debt owed to non-OECD official creditors and from various sources for non-resident non-bank deposits in banks. The data are available in breakdown by maturity, creditor sector, and / or instrument. However, the classifications are not the same as in the IIP and, the external debt totals will differ from IIP because of differences in concepts and methodology used, and in completeness of reporting. Thus, unlike in the presentation in IIP, the OECD categories show different types of debt based partly on the creditor and partly on the instrument. They include official bilateral

1. It provides a framework that allows transactions in external debt, such as disbursements and repayments of loans, the accrual of interest costs, etc. that are recorded in the balance of payments to be related to changes in outstanding positions in external debt liabilities as recorded in the change in the IIP between reporting periods.

lending (excluding export credits), official development assistance (ODA), official aid, officially supported export credits, official multilateral lending bank lending, debt securities, offer claims and short-term debt.

2.4 The World Bank (WB)

The World Bank collects data on external indebtedness from debtor countries through the Debtor Reporting System. It covers typically those countries with low and middle income that borrow - from the World Bank report data on long-term external indebtedness. The data on country level of debt stock and flow data are published annually in the Global Development Finance (GDF) (formerly World Debt Tables); selected debt data are also available in the World Development Indicators, and in the Joint BIS-IMF-OECD-World Bank Statistics on External Debt.

3. Joint BIS-IMF-OECD World Bank Statistic on External Debt

With the liberalisation and globalisation of the world economy, the monitoring on external debt-statistics has become a more of complicated nature. This was evident by the fact that during the Asian crisis in 1997, efforts to monitor short-term external debt had revealed limitations in existing debtor data in terms of its coverage, consistency and timeliness. Private sector bank risk managers indicated that the usefulness of the BIS banking statistics for assessing risk could be enhanced through an analysis of how they are related to other international financial statistics and a more user friendly presentation.[2] Under the auspices of the Interagency Task Force on Finance Statistics (TFFS), it was therefore decided to publish as of March 1999 existing components of total and short-term external Debt from creditor and market sources for more than 175 developing economics. These statistics (which are provided on the websites of the BIS, IMF, OECD and World Bank) bring together data in one place and on a consistent basis that are currently compiled and published separately by the contributing international agencies on the components of countries' external debt and international reserve assets. The joint statistics are mostly from creditor and market sources but also include some data provided by debtor countries. It comprise bank loans, debt securities issued abroad, Brady bonds, officially guaranteed non-bank export credits, multi-lateral claims and officially bilateral

2. BIS (1998), " On the use of information and risk management by international banks"- Report of a Working Group established by the Euro-currency Standing Committee of the central banks of the Group of Ten countries, p. 9.

loans. This should facilitate timely and frequent access by a broad range of users to a single data set. But, however, the users should bear in mind that it does not provide an absolutely comprehensive and consistent measure of total external debt in each country.

4. Some Caveats in Joint Statistics

Two deficiencies are identified in the joint statistics; one is relating to important gaps and the other is relating to some overlapping coverage.[3]

4.1 Gaps[4]

These statistics do not cover:

- non-officially guaranteed supplier's credit not channeled through banks;
- debt owed to foreign direct investors (direct investment: inter-company lending);
- domestically issued debt securities held by non-resident non-banks;
- deposits of non- residents with domestic financial institutions;
- private placements of debt securities, and,
- lending by governments that are not members of the OECD's Development Assistance Committee (DAC).

4.2 Overlapping Coverage[5]

These is some overlapping coverage in the areas of

- official bank lending (bank loans and official bilateral loan.)
- holdings of international debt securities
- debts maturing within one year

As a result, aggregates of individual country data may either understate or overstate total external debts.

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3. BIS- IMF-OECD-World Bank (The World Bank Group)," Joint BIS-IMF-OECD-World Bank Statisticson External Debt – Background Summary.

4. BIS, " Draft on Comparison of Creditor and Debtor data on short-term external debt", by Karsten Von Kleist, Monetary & Economic Department, March 2002.

5. _____

5. Evolution of Guide and its Accounting Principle

The financial crises underscored again the importance of timely and reliable economic and financial data to assess risk of sharp swings in capital flows. This led to realisation that focus needs to be placed in the following issues;

i Statistics are important
ii More timely, reliable data are needed in several key areas such as
- for addressing " debt sustainability, the focus has been on external - positions, external debt and reserves;
- for addressing " financial sector soundness," the focus has been on developing macro-prudential indicators;

iii There needs to be a better data provision such as
- borrowing countries should meet standards for dissemination of data;
- international institutions should enhance provision of comprehensive financial data;
- aggregated risk exposure information of financial institutions should be made public.

Recently international initiatives in the area of statistics have been launched to enhance disclosure practices and transparency in order to improve the functioning of markets as well as the basis for policy making.[6] As an initiative taken up by the IMF, the Inter-Agency Task Force on Finance Statistics (TFFS) has produced the draft on "External Debt-Statistics: Guide for Compiled and Users" in November 2001.[7] The TFFS was set up in 1992 and is one of the interagency task forces formed under the aegis of the United Nations Statistical Commission. In 1998, it was reconvened to coordinate work among participating agencies to improve the methodological soundness, transparency, timeliness and availability of data on external debt and international reserve asset. The 'Guide' provides guidance on;

6. The working Group on Capital Flows of the Financial Stability Forum, in March 2000, urged national policy makers to give high priority to upgrading debt statistics.

7. The previous international guidance on external debt statistics, "External Debt: Definition, Statistical Coverage, and Methodology" widely known as the Grey Book was published in 1988 by BIS-IMF-OECD-World Bank. The work on 'Guide' involves representatives from nine international organisations: BIS, The Commonwealth Secretariat, ECB, Euro-stat, IMF, OECD, The Paris Club Secretariat, UNCTAD and World Bank.

i) Concepts, definitions and classification of gross external debt of the public and private sectors
ii) The sources and techniques for compiling these data
iii) The analytical use of external debt data

Further, the Guide provides additional accounting principles to assist in compiling data series of analytical use in understanding the gross external debt position.

6. Definition and Main Accounting Principles of 'Guide' for Measuring External Debt

The accounting principles recommended by the 'Guide' for the measurement of external debts are drawn from 1993 SNA and BIM5 and are focused on this following accounting concepts for the measurement of external debt.

6.1 Definition of External Debt

Gross external debt, at any time, is the outstanding amount of those actual current and not contingent liabilities[8] that require payment (s) of principal and / or interest by the debtor at some point (s) in the future and that are owed to non-residents of an economy.[9] This definition of external debt is consistent with the concepts of 1993 SNA and BPM5. Also the definition remains based on the notion that if a resident has a current liability to a non-resident that requires payments of principal and / or interest in the future, this liability represents a future claim on the resources of the economy of the resident, and so is external debt of that economy. This approach provides a comprehensive measure of

8. Contingent liabilities are defined as arrangements under which one or more conditions must be fulfilled before a financial transaction takes place. The exclusion of contingent liabilities does not mean that guaranteed debt is excluded, but rather the guaranteed debt is attributed to the debtor not the guarantor (unless and until the guarantee is called).

9. From the view point of the national accounts, the definition of external debt is such that it includes all financial liabilities recognised by the 1993 SNA as financial instruments, except for share and other equity and financial derivatives that are owed to non-residents. Shares and equity are excluded because they do not require the payment of principal or interest. For the same reason, financial derivatives, both forwards and options, are excluded as no principal amount is advanced that is required to be paid, and no interest accrues on any financial derivative instrument. Nonetheless, an overdue obligation to settle a financial derivative contract would, like any arrears, be a debt liability because a payment is required. Monetary gold and Special Drawing Rights (SDRs) are financial assets included in the 1993 SNA but are not debt instruments because they are, by convention, assets without a corresponding liability.

external debt, which is consistent across the range of debt instruments regardless of how they may be structured.

Apart from definition, the 'Guide' has introduced accounting concepts for the measurement of external debt that are known from 1993 SNA and BPM5 so as to have information to the extent possible, that is compatible with related data series both within and among countries. The advantages envisaged from compatibility are that on one hand it enhances this analytical usefulness and reliability of data by allowing inter-relationships with other related macroeconomic data series to be examined and comparisons across countries to be undertaken on a clear and consistent basis while it also encourages the nationalization of collection procedures, through the integration of domestic and external debt data.

6.2 Outstanding and Actual Current Liabilities

A liability must exist and be outstanding to be included in external debt. Debt liabilities are typically established through the provision of economic value (assets, services, and / or income) by one institutional unit, the creditor to another, the debtor, normally under contractual arrangement. Similarly, debt liabilities can also be created by the force of law such as claims arising from taxes, penalties and judicial awards (including penalties arising from commercial contracts). And debt liabilities include arrears of principal and interest. Commitments to provide economic value in the future cannot establish debt liabilities. For example, amounts yet to be disbursed under a loan or export credit commitments are not to be included in the gross external debt position.

6.3 Principal and Interest

The definition of external debt does not distinguish between whether the payments that are required by the debtor to the creditor are principal or interest or both. There are instances of interest free loans, which are debt instruments although no interest is paid. Likewise, perpetual bonds are debt instruments although no principal requires to be repaid. And the payments are normally expected in the form of financial assets such as currency and deposits or in the form of goods and services. Irrespective of this form of those payments it is the future requirement to make payments that determine whether a liability is a debt instrument or not. Also, the definition does not specify that the timing of future payments of principal and / or interest need to be known for a liability to be classified as debt.

6.4 Core Accounting Principles

Residence: To quality as external debt, a resident must owe the debt liabilities to a non-resident. Generally, the debt liabilities of residents that are owed to non-residents are to be included in the presentation assets without a corresponding liability (Guide p.20) of an economy's gross external debt position. Debt liabilities owed to residents are excluded.

A **Resident** is a transactor whose center of economic interest is in the economic territory[10] of a country. It is assumed that any individual, enterprise or other organisation has an economic interest in the country if it has already engaged in economic activities and transactions on a significant scale in a country for at least one year. It could also include the branches and subsidiaries of foreign enterprises registered in that economy (as prescribed in IMF-BPM5)

6.5 Time of Recording

The guiding principle as to whether claims and liabilities exist and are outstanding is determined at any moment in time by the principle of ownership. The creditor owns a claim on the debtor and the debtor has an obligation to the creditor. Transactions are recorded when economic value is created, transformed, exchanged, transferred or extinguished. When transaction occurs in assets, both financial and non-financial, the date of the change of ownership (the value data), and so the day the position is recorded, is when both creditor and debtor have entered the claim and liability respectively in their books. If no precise data can be fixed, the data on which the creditor receives payment or some other financial claim is decisive. For instance, loan drawings are entered in the accounts when actual disbursements are made.

The Guide also recommends for inclusion of interest costs accrued continuously on debt-instrument for which these are three measurement possibilities:

- they are paid within the reporting period, in which instance there is no impact on the gross external debt position;

10. A country's economic territory is the geographic territory administered by a government within which persons, goods and capital circulate freely.

- they are not paid because they are not yet payable (e.g. interest is paid each six months on a loan or security, and the gross debt position is measured after the first three months of this period – in which instance, the gross external debt position increases by the amount of interest that has accrued during the three month period ;[11] and,

- they are not paid when due, in which instance, the gross external debt position increases by the amount of interest cost that have accrued during the period, and are in arrears at the end of the period.

6.6 Valuation

The 'Guide' has recommended that debt instruments are to be valued at the reference date, at nominal value while for traded debt instruments at market value as well.

Nominal Value: It is the amount that the debtor owes to the creditor at any moment in time. The nominal value of a debt instrument reflects the value of the debt at creation; For instance, the par value of a share. Nominal value of the outstanding gross external debt position is the amount the debtor owes to the creditor at any time i.e. the value of debt at creation (face value) and subsequent economic flows including transactions (e.g. repayment of principal) and valuation changes (including exchange rate and other valuation changes other than market price changes).

Market Value: The market value of a traded debt instrument is determined by its prevailing market price, which, as the best indication of the value that economic agents currently attribute to specific financial claims, provides a measure of the opportunity cost to both the debtor and the creditor. It is the valuation principle adopted in the 1993 SNA and BPM5.

Face Value: Face value has been used to define nominal value in some instances, as face value is the undiscounted amount of principal to be repaid. Face value, therefore differs from nominal value, for example, in the case of

11. Traditionally, external debt recording system does not include external debt interest costs that have accrued and are not yet payable. The reason is that for countries with a few large external loans borrowed at irregular periods that have annual or semi-annual interest payments, significant variation over time in the debt stock could arise from this inclusion. Also, inclusion of such interest costs could take some time to implement as it could involve a significant change to their compiling system.

deep discount bonds and zero coupon bonds, where the face value includes interest that has not been yet accrued.

6.7 Unit of Account and Exchange Rate Conversion

The compilation of the gross external debt position is complicated by the fact that the liabilities may be expressed initially in a variety of currencies or in other standards of value such as SDR. The conversion of these liabilities into a reference unit of account is a requisite for the construction of consistent and analytically meaningful gross external debt statistics.

Obviously, from the perspective of the national compiler, domestic currency unit is the prime choice for measuring the gross external debt-position. However, if the currency is subject to significant fluctuation relative to other currencies, it will have diminished analytical value as valuation changes could dominate inter-period comparisons. For this reason, this conversion of the debt liabilities of different units into a single reference unit is necessary. The most appropriate exchange rate to be used for conversion of external debt (and assets) denominated foreign currencies into the unit of account is the market (spot) rate prevailing on the reference date to which the position relates. It is also advised that the mid– point between buying and selling rates should be used for conversion.

6.8 Maturity

The maturity composition of external debt is important as it can have profound impact on liquidity. For debt liabilities, it is recommended that the traditional distraction between long-term and short-term maturity be based on the formal criteria of original maturity. The debt with original maturity of more than one year or with no stated maturity is defined as the long-term debt. Short-term debt-includes the debt repayable on demand or with an original maturity of one year or less. Concentration of high levels of short-term external debt is seen to make an economy vulnerable particularly to unexpected downturns in financial fortune. Debt analysis therefore needs to make a distinction between short-term debt on an original maturity basis as well as remaining maturity basis. Original maturity basis means debt issued with a maturity of one year or less while on a remaining maturity basis means debt obligations that fall due in one year or less. Thus debt on original maturity basis provides information on the typical terms of debt and the debt structure while on a remaining maturity provides with information on the repayment obligations i.e. the liquidity structures.

7. General Skeleton Structure of Composition of External Debts Data

As better monitoring procedures and reporting system help in the early assessment of the vulnerability of the economy to solvency and liquidity risk arising from the large external debt liabilities of a country, it is required to have more detailed examination of the external debt position and related activity for the sustainability analysis of the external debt. For this, the data on composition of external debt should be adequate, at least, to provide the following related information;

a) Who is borrowing?
b) What is the composition of debt by functional category?
c) What type of instrument is being used to borrow?
d) What is the maturity of debt?
e) What is the currency composition of the debt?
f) What is the profile of debt servicing?
g) What are the sources of debt data?
h) On what frequency data are available?
i) What is the coverage and dissemination period?, and
j) Use of Debt data for sustainability analysis

Based on the above, the general skeleton structure on composition of external debt data is depicted as follows[12]:

1. Definition of external debt
2 Classification of external debt
    2.1 By Borrower/ Sector
        2.1.1 Public Sector
            a) General Government
            b) Monetary Authorities
            c) Banks
            d) Others[13]
        2.1.2 Private Sector
            a) Banking Sector and Non-Banking Sector
            b) Publicly Guaranteed and Non-Guaranteed

12. A more comprehensive version as suggested by "Guide" has been given in Appendix 1.

13. "Others" generally include non-bank financial corporation, non-financial corporation and other sectors such as households and non-profit institutions serving households.

- 2.2 By Instruments[14]
  - 2.2.1 Loans
  - 2.2.2 Trade Credits
  - 2.2.3 Debt Securities
  - 2.2.4 Currency Deposits
  - 2.2.5 Other debt liabilities
- 2.3 By Maturity
  - 2.3.1 Long-term > 1 year
  - 2.3.2 Short-term 1 year or <1 year
  - 2.3.3 Original Maturity
  - 2.3.4 Residual Maturity
- 2.4 By Currency
  - 2.4.1 Foreign Currency
    - a) Long -term
    - b) Short-term
  - 2.4.2 Domestic Currency
    - a) Long-term
    - b) Short-term
- 2.5 Type of Liabilities
  - 2.5.1 Principal
  - 2.5.2 Principle and / or interest

3. Sources of Data
   - 3.1 Public Sector Debt
   - 3.2 Private Sector Debt
   - 3.3 Banking Sector
   - 3.4 Non-Banking Sector

14. Loans: It includes those financial assets created through the direct lending of funds by a creditor (lender) to a debtor (borrower) through an arrangement in which the lender either receives no security evidencing the transactions or receives a non-negotiable document or instrument.
Trade credits: It consists of claims & liabilities arising from the direct extension of credit by suppliers for transactions in goods & services and advance payments by buyers for goods & services and for work in progress.
Debt securities: If a loan becomes tradable and is or has been traded in the secondary market, the loan should be reclassified as a debt security.
Currency & Deposits: It consists of notes & coins and both transferable and other deposits. Notes and coins represent claims of affixed nominal value usually on a central bank or government; commemorative coins are excluded.
Other Debt Liabilities: It covers items, which include liabilities of pension funds and life insurance companies to their non-resident participants & policy holders.

4. Frequency of Data availability, coverage and dissemination
   - 4.1 Types of releases
     - a) Monthly
     - b) Quarterly
     - c) Semi-annually
     - d) Annually
   - 4.2 Sources of Data Dissemination
     - a) Annual Report
     - b) Economic Report
     - c) Quarterly Economic Bulletin
   - 4.3 Lag Period in Data Dissemination
     - a) Monthly data
     - b) Quarterly data
     - c) Annual data

5. Debt-Service Payment Schedule (following 5-10 years)
   - 5.1 By Sector
     - a) Public
     - b) Private
   - 5.2 By Maturity
   - 5.3 By Currency
   - 5.4 By Instruments

6. Use of External Debt data
   - 6.1 External Debt / GDP
   - 6.2 External Debt / exports
   - 6.3 External Debt service / export
   - 6.4 Reserves / short-term External Debt.
   - 6.5 Others

8. A Brief Review on Existing Concepts, Monitoring Procedures and Reporting System of External Debts in the SEACEN Countries

In most of the SEACEN member countries, the central bank has been primarily entrusted to compile the external debt data. However, the debt data are supplemented through other government offices such as Ministry of Finance, Finance Comptroller General Office, Federal Treasury, Account Department and so on. The following chapter reviews in short the existing monitoring procedures and reporting system of external debts of the individual SEACEN member countries.

8.1 Indonesia

The external debt in Indonesian case is defined as debt of resident to non-resident, denominated in foreign currency or Rupiah. That is Indonesia's external debt is the outstanding amount of Indonesia's external financial liabilities at a point of time.

The data on external debt is collected from various reporting parties which include all head offices of commercial banks of Indonesian legal entities and of foreign banks' branch offices domiciled in Indonesia, head offices of state-owned enterprises, regional state enterprises, private corporations and individuals. All this data on external debt is based on administrative records. General Government and Monetary Authority debt data is obtained from the Debt Analysis and Management System (DAMS) of Bank Indonesia while Banks and other sector data is processed from the External Debt Information System (EDIS) of Bank Indonesia. The banks' liabilities in the form of currency and deposits is however, administered from the Monthly Report of Deposit Money Banks and the Central bank's balance sheet.

The statistics of Indonesia's external debt is compiled in line with the guidelines as set out in the Final Draft of the IMF" External Debt Statistics: Guide for Compilers and Users (Nov.2001)." Bank Indonesia however maintains data on contingent external liabilities of private banks for the purpose to enhance public confidence on banking sector by applying a guarantee scheme on all bank liabilities, including contingent ones. The external debt position is classified by sector, instruments, maturity as well as currency and residency. The external debt data is also classified into type of liabilities (principal cum interest payments). No data on debt service payment schedule is released for public. The external debt data in general, is released quarterly, with a maximum of these months lag period in dissemination after the end of the reference quarter in BI internet website.

8.2 Korea

Gross external debt in Korea is defined as the amount, at any given time, of outstanding contractual liabilities of residents to non-residents in foreign currencies according to the World Bank rule and, also includes domestic banks' off-shore and overseas branches' borrowings (after the agreement between Korean government and IMF in 1997)

Three sources are mainly considered for collecting the data on external debt. The data on external debt liabilities in the financial sector is solicited from the bank's monthly balance sheets and detailed reports of foreign exchange positions. The flow data from other sources are obtained for the governmental, corporate and other sectors as it is difficult to obtain accurate monthly stock data on debt positions. As such BOP figures and foreign exchange receipts and payments reports from banks are the main flow data to be supplemented with benchmark stock data inherent in those sectors. And benchmark stocks are obtained by the annual government statement of accounts for the public sector and the comprehensive survey for the corporate sector done every two or three years.

Mainly the Bank of Korea (BOK) is entrusted in charge of collecting and compilation of the external debt data, while the Ministry of Finance and Economy (MOFE) is in charge of dissemination of External Debt Statistics. External debt-data are presented by sector, maturity, instruments and recently by currency also. Dissemination of the data is conducted in the form of monthly press release and through BOK website with a one month lag. Data on debt service payment is also available.

8.3 Malaysia

Malaysia's outstanding external debt reflects the nominal value of the outstanding principal amount. There are mainly three agencies responsible for the management and monitoring of the public debt, namely the Federal Treasury, the Accountant General Department and Bank Negara Malaysia (BNM). Bank Negara Malaysia is also responsible for monitoring and maintaining the similar information on the private sector and Non-Financial Public Enterprises loan. BNM plays a central role in coordinating all the information on external debt collected by various agencies and in publishing the external debt statistics on periodic basis. The external debt data are presented by sector, instruments (but currency and deposits are not included), currency and maturity (only original maturity). Data by residual maturity is not released for public. The information on external debt data are disseminated / released on quarterly basis with a quarter lag after the end of the reference period in BNM Monthly Statistical Bulletin, press release on the quarterly GDP government and BNM annual report. The information is also posted in BNM website.

8.4 Mongolia

Mongolia defines the external debt as the outstanding amount of those actual current, and not contingent, liabilities that require payments of interest and / or principal by the debtor in the future and that are owed to non-residents by residents of an economy.

Debt Management Division of the Treasury Department of the Ministry of Finance and Economy (MOFE) is in charge of recording of external debt data and its monitoring. However the Bank of Mongolia (BOM) as the sole financial agent of the Ministry of Finance and Economy of Mongolia (MOFE) registers the external debt transactions (disbursements, principal payments, interest and commission payments and arrears in the BOP) and BOM and MOFE reconcile the total outstanding debt stock and payments made on quarterly basis as in line with the MOU signed between MOFE AND BOM. The external debt data however is available by public sector only, by maturity -only the long-term, by instruments -loans only and by currency. The data are also available classified by creditors which, includes different international donor agencies. The information on external debt position is disseminated quarterly in the BOP by the Bank of Mongolia showing only disbursements and debt service data for the current quarter and annually by the Ministry of Finance and Economy of Mongolia (since 2001) covering total amount of debt outstanding. Lag period in dissemination of data is one quarter.

8.5 Nepal

The amount of outstanding debt owed to the bilateral creditors which are foreign governments and the multi-lateral agencies such as the ADB, World Bank, IMF, EEC, IFAD, OPEC and others. Most of the external debt of Nepal is public debt. The external debt burden of the private sector is insignificant. The external debt data are regularly maintained by the Financial Comptroller General's Office (FCGO) which is under the Ministry of Finance (MOF). Annual data for central government debt are disseminated by MOF and Nepal Rastra Bank. In both cases data are presented in local currency. Desegregation by maturity is not provided and there is no government guaranteed debt. External debt-by lender and currency are available in creditor reporting format. All the information on external debt data are on "Economic Survey" (Annual) of Ministry of Finance and Quarterly Economic Bulletin of Nepal Rastra Bank with at least a six month lag period.

8.6 Philippines

External debt in Philippines pertains to gross debts, disbursed and outstanding owed by Philippine residents to non-residents.

In the Philippines, the responsibility of external debt management rests in a number of government agencies led by the Bangko Sentral ng Pilipinas (BSP). The Philippine Central Bank (BSP) is thus entrusted to the following major tasks such as knowing the level of debt, ensuring the outstanding debt level within the country's capacity to repay and keeping borrowing costs at minimum. Authority to collect information on external debt data is therefore vested upon the central bank based on its mandates under various laws and executive issuances. For the purpose, the bank solicits the information on external debt from the following sources:

- Regular reports from borrowers of both public and private sectors which contain information on both stock and flows

- Local bank reports including those of branches / subsidiaries of foreign banks operating in the Philippines

- Major creditor / institutional investors' reports on the stock (and even on flows in some instances) of their exposures to Philippine residents

The information on external debt data is presented in different levels of desegregation by sector (public / private), institution (bank / non-bank), maturity (short-term/medium-term /long-term as well as original and residual maturity), type of debt instruments (loans/ trade credits/ debt securities/ currency and deposits/ other debt liabilities), currency (individual loan accounts are maintained in original currency and presented in debt table to its US dollar equivalent for a reference date). Also, the external debt is classified by creditor such as multilateral, bilateral, banks and financial institution, bond-holders/ note-holders and other creditors (suppliers, exporters and others).

External debt data are released quarterly in a one quarter lag from the end of the period of reference. They are disseminated via a news release in the BSP website and in major newspapers in the country. Detailed debt statistics classified by maturity, borrower, creditor type, currency, creditor country and instrument type are available in BSP website. The same level of desegregation with an exception to instrument type is released in the monthly publication of the selected

Philippine Economic Indicator series of BSP. A report on the country's external debt profile is also presented in the BSP Annual Report and the BSP series of special publications. Debt service Payment Schedule (projected) for debt outstanding is available by sector (public and private) and is denominated in US dollars.

8.7 Sri Lanka

Sri Lanka defines the external debt as the gross liability of residents in the economic territory to the residents of the rest of the world at any given time that requires payment in the future.

Regarding the sources of data, the primary source of information on the public sector external debt is the External Resources Department of the General Treasury which shares the information with the Public Debt Department of the Central Bank. The Central bank also maintains the list of non-financial public corporations which have raised funds from external sources and is used to collect information about the medium and long-term borrowings of these public entities through the semi-annual survey. With regards to the private sector debt with medium and long-term maturity, the central bank collects the information from debtors through a semi-annual survey. For the short-term private sector external debt, the sources for the estimation of short-term private debt are private sector survey results (in 1995) and raw material imports for export purposes.

The external debt position of Sri-Lanka is classified by sector (public/ private), maturity (only original maturity), instruments (limited only to medium and long-term external debt- debt securities not included) and currency (both local currency and US dollars). However, under sectoral category, external liabilities of the monetary authority and commercial banks are not classified under the public sector external debt. Likewise, both private non-bank sector and the publicly guaranteed and non-guaranteed debt are reported under the same category of private debt due to no clear definition available to classify the enterprises involved in above debtor type.

External debt data relating to the central government is released on monthly, semi-annual and annual basis with a lag of two months. Government guaranteed and non-guaranteed public and private debt and short-term private debt data are released on semi-annual and annual basis. Debt service payments schedule by sector, maturity, currency and instrument profile is available under the current

data compilation and management system at the General Treasury and the Central Bank.

8.8 Taiwan

The external debt of Republic of China (ROC) is divided into public external debt and private external debt. Public external debt includes the debts of government and public banks while private external debt includes primarily the debts of local private banks, foreign banks in Taiwan ROC, offshore banking units (OBUs) and private enterprises or manufacturers. The Central Bank of China (CBC) compiles the external debt statistics for which public external debt data is provided by Ministry of Finance while private sector debt data is solicited from authorised foreign exchange banks (including domestic and foreign banks), OBUs and private enterprises.

The information on the external debt position is released on quarterly basis with a lag period of quarter and is disseminated both in print form and on CBC's website. External debt data are presented by sector, maturity (only short-term/long-term), instruments and currency (both local and foreign). Under sectoral category, the private external credit is not guaranteed by CBC or government but is guaranteed by commercial bank itself.

8.9 Thailand

Thailand's external debt pertains to the remaining stock of liabilities excluding equity which residents have over non-residents and are obliged to repay the principal amount and interest in the future (contingent liabilities are not included in the definition of external debt).

The source of data on external debt in the banking sector is generally foreign exchange forms and bank reports while in the non-banking sector is, apart from foreign exchange forms, reports from related companies and occasional surveys. For public sector external debt data, Ministry of Finance (MOF) provides all records of central government's borrowing which include external debt of all ministries and state enterprise external debt guaranteed by MOF. Other agencies involved in providing information on public external debt data are state enterprises and the Bank of Thailand. State enterprises debts cover the non-guaranteed external debts of state enterprises. On the private sector, the banking sector data are solicited from the foreign transaction reports (FT) of commercial banks, Bangkok International Banking Facilities as well as non-guaranteed external

debt data of state financial institutions followed under the International Transaction Rèport system (ITRS). Non-Bank sector external debt data are solicited from two sources: the financial transaction report and external debt survey conducted every quarter. As non-resident transaction in host countries, non-foreign exchange transaction and non-cash activities are collected through the survey as mentioned above on a quarterly basis from borrowers, the compilation system in Thailand do not have adequate coverage data problem. The external debt is classified by borrower (public external debt, monetary authority debt, private external debt), maturity (short-term/long-term; original maturity / residual maturity/, currency (in total public debt and total private debt in major currencies).

The information on position of external debt is released on monthly, quarterly as well as on annual basis. The external debt outstanding data is released monthly with a two month lag. With a two month lag, quarterly debt outstanding debt and debt service ratio is released. Again, with a two-quarter lag, debt outstanding at year end, debt service ratio and external debt classified by major currency is released annually. The external debt data are disseminated through website of BOT, facsimile: (Interactive Voice response in Thai language) and the publications such as i) Economic and Financial Statistics ii) Quarterly Bulletin and iii) Annual Economic Report.

9. Compliance to SDDS and GDDS Mandate of the IMF

At the third review of the IMF's Data Standards Initiative (March 2000), the SDDS external Debt category prescribed:

- dissemination of quarterly external debt statistics with one quarter's lag
- data for four main sectors, broken down into long-term / short-term on original maturity basis and by instrument
- to the extent possible, the new SDDS external debt category is to be consistent with the framework for IIP statistics presented in the BPM5.

For the compliance to SDDS, a transition period of three years ending on March 31, 2003 has been fixed. The followings are the prescriptions and recommendation given in brief under SDDS and GDDS mandate.

SDDS	GDDS
Prescribes: The gross external debt position Coverage: Four sectors Data disaggregated by: - Maturity (short and long-term) on an original maturity basis - Instrument Periodicity: Quarterly data Timeliness: One Quarter lag **Encourages**: domestic / foreign currency breakdown of the gross external debt position Coverage: total economy or disaggregated by four sectors **Data disaggregated by:** - Maturity (short and long-term) on an original maturity basis Periodicity : Quarterly data Timeliness: One quarter lag	**Recommends**: The gross external debt position Coverage: Public and Publicly guaranteed debt Data disaggregated by: - Maturity (short and long-term) on an original maturity basis Periodicity: Quarterly data Timeliness: One or two quarter lag
Encourages: Future debt service payments Coverage: Four sectors Data disaggregated by: - Maturity (short and long-term) on an original maturity basis - Interest and principal Periodicity: Twice yearly for four quarters and two semesters Timeliness: One quarter lag	**Recommends**: Future debt service payments Coverage: Public and publicly guaranteed debt Data disaggregated by: - Maturity (short-and long-term) on an original maturity basis Periodicity: Twice yearly for four quarters and two semesters Timeliness: Three to six months lag Encourages: Debt position and future debt service payments Coverage: Non-guaranteed private external debt Periodicity: Annual Timeliness: Six to nine months lag **Encourages**: Debt position and future debt service payments Coverage: Non-guaranteed private external debt Periodicity: Annual Timeliness: Six to nine months lag

The current status shows that not all SEACEN members meet the requirement for SDDS. Among the SEACEN member countries, Indonesia, Korea, Philippines, Taiwan and Thailand have entered into the SDDS system while Malaysia and Sri Lanka are on its way towards meeting the SDDS mandate requirement by end-September 2003 and end-March, 2003 respectively. Mongolia and Nepal have participated only in GDDS. With all the SEACEN member countries fulfilling the SDDS requirement in due course of time, it is expected to have better data reporting and monitoring system of external debts in future for each and every SEACEN countries.

10. Challenges Faced in External Debt Data Collection and Reporting System by SEACEN Member Countries

Currently, SEACEN member countries have come across a number of challenges in data collection and reporting system on external debts. To mention a few important areas as follows:

(a) Efforts to improve reporting coverage by amending or abolishing the threshold on external debt remain a technical problem as it is hard to examine whether the reporting parties provide reliable and correct data or not.

(b) Difficulty has been encountered to solicit data on external borrowing due to lack of effective punishments. As such, survey of data on loan and debt securities relating to corporate long-term debt is not so easy.

(c) With respect to the banking sector external debt data, though breakdown in term of domestic and foreign currency on aggregate basis is available, further segregation by the type of the currency is difficult to capture for most of the SEACEN Countries.

(d) Lack of direct mechanism to collect short-term external borrowings from private banks, OBU's on a regular basis has underscored the underestimated problem.

(e) Liberalisation of external sector has limited the usefulness of banks as a data source for external debt accounts, as not all transactions involve purchase and sale of foreign exchange by banks

(f) Most of the countries have inadequate coverage for non-resident transactions in host country, non-foreign exchange transaction and non-cash activities

(g) Realising that gaps are possible under the existing liberalised trade and foreign exchange transactions, a regular comparison of debt statistics produced with those presented in other international statistical publication is needed.

(h) Classification of external debt by sector has posed problems related to whether semi-privatised and privately managed public enterprises data should be put in the public sector categories or the private sector categories[15].

11. Efforts Taken Towards Improvement of Data Collection and Reporting System

The central bank and the Ministry of Finance (Economy) have been making continuous efforts to improve the collection, reporting and monitoring of the external debt in the respective SEACEN member countries. Some of the key improvement efforts planned/ undertaken by SEACEN member countries are listed below on country wise basis:

11.1 Indonesia

- To amend the threshold
- To improve public awareness for soliciting adequate and timely data to serve the interest of all parties in the country.
- To improve the accuracy of external debt data with the cross checking of data obtained from EDIS with those of Foreign Exchange Flows Monitoring (so called LLD) system
- To use the web technology to improve the External Debt Information System (EDIS).

11.2 Korea

- Plan to collect official loan data through electronic network

15. In the Balance of Payments manual of IMF, Fifth Edition, semi-privatised public enterprise data has been classified into other sectors category and the public sector has been defined as the combination of General government sector. It is advisable that data compilers may look into international accepted definitions for private and public sectors to distinguish operations of semi-privatised public enterprise which would help improving the correct classification and, hence, the sectoral analysis of external debt. Such concept is generally incorporated in the data published under SDDS system.

- Undergoing the renewal of compiling standard of External debt statistics according to 'Guide' for standardising the data definition.

11.3 Malaysia

- Envisaged to compile the new SDDS external debt data requirements by 2003 that conform to the IMF BPM5 guidelines.
- Bank Negara Malaysia (BNM) has embarked on a new computer statistical system to facilitate the collection and compilation of information on external debt and also additional data required on regular basis.

11.4 Mongolia

- Debt Management and Financial Analysis System (DMFAS) have been introduced in Ministry of Finance and Economy to improve database system in external debt.

11.5 Nepal

Debt Management Project was launched in 1997 with the introduction of Debt Recording and Management Systems (DRMS) software to record debt data and assist in the management of the debt. A networking aimed to develop between the MOF, Financial Comptroller General's office and Nepal Rastra Bank is, however, yet to be implemented.

11.6 Philippines

- Notwithstanding the liberalisation of foreign exchange rules, data collection for private sector external debt has remained efficient largely due to (a) the BSP's requirement of mandatory approval and registration process for borrowers seeking to service their loans through foreign exchange purchased from the banking system, and (b) the BSP's moral influence over those that did not pass through the approval/registration scheme for a voluntary submission of reports on their foreign loans.

- Monitoring of bank's liabilities to non-residents will have a wider scope, since OBUs are now regarded as residents for statistical purposes; accordingly, OBU lending to Philippine residents which have formed part of total debt stock in past years will have to be excluded while OBU borrowings from non-residents will be considered part of external debt.

- Coordination with both government and non-government organisations is being undertaken as additional sources of information on private sector foreign loans.

11.7 Sri Lanka

- CS-DRMS package has been introduced for external debt recording and monitoring.

- Conduct of occasional surveys has been initiated to estimate short-term external borrowings by the private sector and improve its coverage.

- Efforts have been made in general improvement of data compilation and reporting system in line with BPM5 manual of IMF.

- The country is working towards meeting the requirement for Special Data Dissemination System (SDDS).

11.8 Taiwan

- In the wake of financial crisis in 1997, Central Bank of China has initiated collection of short-term debt data from the financial institutions since 2nd quarter of 1999.

11.9 Thailand

- Initiated the Data Management System (DMS) project to eliminate redundancy and reduce the data reporting burden of related parties. The project is to be completed at the end of February 2004.

- Efforts have been taken up in improving data coverage of loan survey from 70- 80% to 90-95% of the outstanding debt of non-banks by increasing response rate.

12. Use of Debt Indicators for Sustainability Analysis

During the 1990's, Southeast Asian and Latin American countries experienced an increased flow of international capital on account of the liberal policy adopted by these economies. This wave of capital inflows was much remarkable in the sense that they brought about external savings and accumulation of reserves that

not only helped the short-run growth in GDP but also opened forum for possibility of triggering exchange rate based stabilisation programs. With the positive effect of these capital inflows, it brought along with some negative aspects such as relating to an increase in stock of external debts, the rapid denationalisation of public enterprises and low impact of foreign direct investment over export led industries. The crises evolved in the financial markets in recent years have thus brought to the fore the importance of sound debt and liquidity management in helping to prevent external crises or to cushion the pace of necessary adjustment. This has raised the question as to what sort of indicators should be used to assess the degree to which a country's debt and position makes it vulnerable to shocks. Also, one can argue with whether there is any possibility that these indicators can be compared against simple benchmarks to provide a useful test of the soundness of debt and reserve management policies. With this issue in mind, the following section focuses on some key concepts on debt and reserve related indicators of external vulnerability, the assessment of these indicators on time series data of the SEACEN countries and finally on debt sustainability using the model derived from the work of Sawada (1994), Wilcox (1989) and, Hamilton and Flavin (1986).

12.1 Some Key Concepts on Debt and Reserve-related Indicators

External debts and reserves affect a country's external vulnerability through their impact on the country's ability to discharge external obligations. Inability to discharge obligations may result either from a solvency or a liquidity problem.

Solvency is the country's ability to discharge its external obligations on a continuing basis. In short, it is the country's ability to pay the debt. Assuming debt can be renewed at maturity, countries are solvent as long as the present value of net interest payments does not exceed the present value of other current account inflows (primarily export receipts) net of imports. In fact, countries stop servicing their debts long before this constraint is reached.

Likewise, liquidity problems arise when creditors lose confidence and undertake transactions that lead to pressures on the international reserves of the economy. Liquidity problems can be emerged due to a sharp drop in export earnings or an increase in interest rates-foreign and /or domestic or prices of imports.

Various external debt-related indicators have been devised to assess the debt-servicing capacity of a country and past analysis has attached different

degree of importance to each of these indicators. The followings depict the review on meaning of some important debt-related indicators:

12.1.1 Solvency Indicators

External Debt to Export ratio

The ratio of outstanding external debt to export is a basic measure of the level of indebtedness and is found to be very significant in distinguishing the default cases. In other words, it is a useful indicator of trend in external debt outstanding that is closely related to the repayment capacity of the country.

External Debt to GDP ratio[16]

The ratio of outstanding external debt to GDP/GNP is another basic measure of the level of indebtedness which shows a long-run debt servicing capacity of a country. An increasing ratio of external debt to GDP suggests a deteriorating creditworthiness. It is a useful indicator relating debt to resource base which is a potential basis for shifting production to exports in an effort to enhance repayment capacity.

Debt-Service ratio

It is defined as debt service payments (including both interest and principal) over export earnings of goods and services. It is a hybrid indicator of solvency and liquidity aspect and indicates the proportion of foreign exchange earnings on current account that would be used on debt-service payments and therefore can be interpreted as a country's debt burden.[17]

Interest Service ratio

It is the ratio of average interest payments to export earnings and indicates the current cost of the services of borrowed capital in relation to current earnings from abroad. Creditworthy countries generally face little difficulty in rolling over

16 Williaman and Mahar (1998) have argued that debt to GDP ratio may be considered more appropriate long-term criterion because the adjustment policies can transform domestic outputs into exports. But IMF has cautioned that over and under-evaluation of the exchange rate may distort the ratio of debt to GDP.

17. Debt-service ratio below 10% is acceptable while above 20% is considered potentially dangerous.

amortisation as long as investors have confidence in the management of an economy. Amortisation thus does not represent immediate burden in such cases to the economy of the debtor country. In such circumstances, interest-service ratio may be a better indicator to assess country's debt-servicing capacity than the debt service ratio. By excluding amortisation, the interest-service ratio eliminates effects due to a bunching of repayments, prepayments or refinancing.

Short-term Debts to Outstanding Debts ratio

This indicator indicates relative reliance on short-term financing. As a matter of fact, it is an important indicator, which, together with indicators of maturity structure allows monitoring of future repayment risk.

12.1.2 Liquidity Indicators

International Reserves to Short-term External Debts ratio[18]

It is the single most important indicator of reserve adequacy in countries withsignificant but uncertain access to capital markets. A smaller reserve to short-term debt is associated with a greater incidence and depth of crises.

International Reserves to Imports ratio

This ratio shows the potential capacity of a country to pay the import proceeds against the possible fluctuations in export earnings. Other influences being equal, the country with high reserves to imports is unlikely to be in need of debt rescheduling.

12.2 Assessment of Debt-related Indicators

As part of the work on vulnerability indicators, economists are more of concern that what level of debt is sustainable for an economy and what is the desired critical amount of debt that a country can hold. It is evident that borrowing from abroad can help countries grow faster by financing productive investment, and it can also cushion the impact of economic disruptions. But if a country

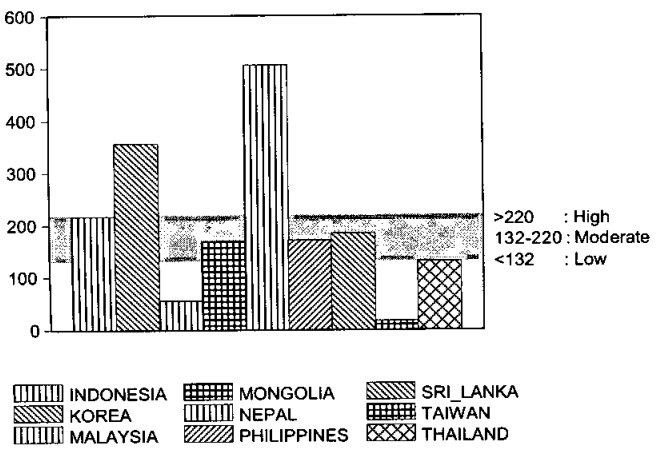
18. As most of the SEACEN countries do not have short-term debts classified under remaining maturity, the information here is regarded as short-term debt on original maturity basis.

starts accumulating debt beyond what is able to service, a debt crisis can erupt with potentially large economic and social costs. For this reason, it is important to gauze how an economy or a country can safely handle debt. As this is related to how much foreign capital, the country has and is expected to have inflows, the solvency and liquidity indicators as explained before help in indicating the level of indebtedness, repayment capacity and ultimately its sustainability. The appropriately defined indicators are also a useful tool to support debt management. An assessment of some important debt-related indicators has therefore been done here for the period between 1996 and 2001.[19]

12.2.1 Solvency Indicators

The external debt to exports ratio showed an increasing trend over 1996-1998 for most of the SEACEN countries after which it tended to slide down (Figure 1.2 and Table 1.1). As of 2001, Korea, Mongolia and Nepal have been identified as the countries which have external debt as percentage of exports higher than the critical point[20] registering at 263.2%, 230.4% and 362.1% respectively. Other remaining countries are at comfortable level ranging from a low of 27.9% for Taiwan to a high of 200.4% for Indonesia.

Figure 1.2
Debt to Exports (average 1996-2001)



19. This period has been chosen as to see whether debt-related indicators showed any significant movements during the Asian crisis time.

20. Debt to exports ratio critical point is considered at 220%.

Table 1.1
External Debt to Exports Ratio (%)

	1996	1997	1998	1999	2000	2001
Indonesia	188.7	207.3	261.8	252.1	190.8	200.4
Korea	539.6	446.0	288.7	313.7	283.8	263.2
Malaysia	49.7	77.3	59.3	50.5	42.8	51.8
Mongolia	107.4	123.7	184.8	202.1	168.8	230.4
Nepal	644.1	583.8	585.9	475.0	382.7	362.1
Philippines	203.8	180.1	162.1	152.6	139.6	167.6
Sri Lanka	207.2	176.7	182.4	197.1	163.5	177.8
Taiwan	0.1	0.1	0.1	31.8	23.4	27.9
Thailand	152.27	150.88	159.57	133.05	97.32	88.85

Source: Member Banks reply

On average basis, it is revealed that during 1996-2001, external debt to exports ratio for Korea and Nepal tended to be very high while the same showed low position for the countries like Malaysia, Taiwan and Thailand.

Likewise, external debt to GDP ratio for the SEACEN members followed the same pattern with the increasing trend till 1998 which then after, showed declining trend in the later years. The figures on external debt to GDP ratio for 2001 shows that most of the countries have exceeded the critical point[21] with Indonesia registering at 92.7%, Mongolia at 84.1% and Philippines at 73.3%[22]. The countries such as Malaysia, Sri Lanka and Thailand are within the less vulnerable range between 51.8% and 58.9%

As explained elsewhere, external debt to GDP ratio is considered more appropriate indicator for long-term criterion and therefore, the countries like Indonesia, Mongolia and Philippines are likely to be in less solvent position as to the position of external debts. While, Korea, although registered high external

21. Debt to GDP ratio critical point is considered at 50% (Cohen, 1997).

22. In case of Philippines, it may be noted that all the data prior to 1999 are based on the foreign trade statistics released by the national Statistics Office while then after is adjusted using the BPM5 concept of IMF.

debt to export ratio but is expected to manage its debts on sustainable basis on account of its external debts to GDP ratio remarkably below the critical point.

Table 1.2
External Debt to GDP (%)

	1996	1997	1998	1999	2000	2001
Indonesia	49.3	64.0	155.9	105.2	105.9	92.7
Korea	31.4	33.4	46.8	33.8	28.5	27.9
Malaysia	38.6	60.6	60.0	53.9	47.0	52.0
Mongolia	38.6	53.0	65.3	84.7	81.2	84.1
Nepal	51.4	47.1	53.6	49.5	50.2	49.1
Philippines	50.5	55.2	73.4	68.6	69.6	73.4
Sri Lanka	61.1	54.3	55.5	57.8	54.4	54.7
Taiwan	0.1	0.0	0.0	13.4	11.2	12.2
Thailand	59.8	72.4	93.9	77.6	65.3	58.9

Source: Member Banks reply

It is also revealed that except for Korea and Nepal, all the SEACEN member countries have large ratio which seems to have contributed to the emergence of external crisis in 1997. It is very much understood that the financial liberalisation in 1992 has contributed to the rise in unsustainable debt during the period 1996-2001. However, adoption of some prudent policies in the SEACEN region after 1998 helped reduce the position of external debts relative to its resource base and /or foreign assets. Bank restructuring, improvement in the data collection system on external debts particularly for short-term private debts and government policy oriented towards repayment of their debts in time has overall assisted in improving the debt-related indicators subsequently helping in making external debts more solvent after 1998.

This is also evidenced by the observation that debt-service ratio has been gradually declining over time for most of the SEACEN countries for the period under review[23] (Table 1.3 and Figure 1.3). A relatively upward movement has been noticed in 2001 for some selected SEACEN countries which is resulted out of the government's policies to enhance debt servicing.

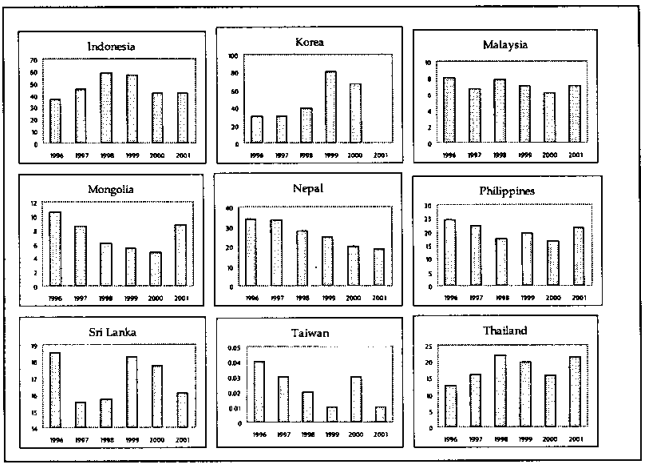
Table 1.3
Debt Service Ratio (%)

	1996	1997	1998	1999	2000	2001
Indonesia	35.9	44.5	57.9	56.8	41.1	41.4
Korea	30.4	30.3	39.2	80.3	67.2	n.a
Malaysia	8.0	6.7	7.8	7.1	6.2	7.0
Mongolia	10.6	8.6	6.0	5.4	4.8	8.6
Nepal	33.8	33.3	27.9	24.5	20.1	18.7
Philippines	24.5	22.2	17.3	19.4	16.4	21.2
Sri Lanka	18.5	15.6	15.7	18.2	17.7	16.1
Taiwan*	0.04	0.03	0.02	0.01	0.03	0.01
Thailand	12.6	16.1	21.9	19.8	15.7	21.2

Note: * Public external debt only.
Source: Member Banks reply.

23. For the country like the Philippines which have substantial receipts from services and income including bigger volume of remittances, using exports of goods and receipts from services and income would yield more solvency condition for the country. For example, debt service ratio under above concept yield 16.0% which is well below the 20.0% threshold.

Figure 1.3
Debt Service Ratio (%)



More reliable information can be obtained to see the debt servicing capacity of the countries from their positions of interest service ratio (Table 1.4). The following table depicts that the countries like Korea and Thailand have improved its interest-service ratio by 1.2 percentage points and 2.3 percentage points respectively between 1996 and 2000 revealing the strengthening of debt-servicing capacity in the later part of the review period. Indonesia, is, however, found struggling with its ratio raised by 1.9 percentage points in 2000 compared to 1996.

Table 1.4
Interest-service Ratio (%)

	1996	1997	1998	1999	2000	2001
Indonesia	10.6	10.3	15.0	15.8	12.5	10.7
Korea	13.5	14.3	13.0	14.9	12.3	n.a
Thailand	7.3	7.7	8.3	6.3	5.0	4.4

Member Banks reply

Another potential indicator i.e. short-term debt to total external debt ratio, which shows relative reliance on short-term financing, revealed mixed trend

(Table 1.5). During the review period, Korea, Malaysia, Philippines and Thailand have been successful to lower down their ratio from 57.1% to 33.3%, 25.7% to 14.0%, 17.2% to 11.6% and 43.9% to 19.8% respectively. But note that the ratio has gone up after 1998 in Korea, after 1999 in Philippines. It is understood that the rise in this ratio for the above two countries is linked with the improvement in compilation system of short-term debts after the crisis which might have captured the missing figures in the past.

Table 1.5
Short-Term Debt to Total External Debt (%)

	1996	1997	1998	1999	2000	2001
Indonesia	n.a	n.a	n.a	6.3	4.9	5.0
Korea	57.1	39.9	20.6	28.6	36.4	33.3
Malaysia*	25.7	25.3	21.1	13.8	11.0	14.0
Mongolia	n.a	n.a	n.a	n.a	n.a	n.a
Nepal	n.a	n.a	n.a	n.a	n.a	n.a
Philippines	17.2	18.6	15.0	11.0	11.4	11.6
Sri Lanka	5.9	5.8	5.5	5.2	6.4	6.5
Taiwan	n.a	n.a	n.a	81.4	75.7	76.5
Thailand	43.9	35.0	27.1	20.6	18.4	19.8

Note: * Short-term debt is taken from BNM Monthly Bulletin.
Source: Member Banks reply

It may, however, be reminded that the extent of repayment risk derived from this indicator has to be in concurrent with the indictor of maturity structure which has not been considered in this analysis.

12.2.2 Liquidity Indicators

Conventionally, reserve adequacy measured in terms of months of imports covered was previously used as one for the main liquidity indicators[24] (Table 1.6

24. It is supposed to cover at least 3 months of imports for sound liquid position.

and Figure 1.4). As this indicator may not prove appropriate if a country's economy is subject to high capital movements, recently, international reserves to short-term external debts has been widely used as the more suitable liquidity indicator. As this indicator reflects a country's ability to withstand the withdrawals of short-term capital, it is also regarded as a good predictor of debt crisis (Detragiache and Spilimbergo, 2001).

Table 1.6
Reserves to Short-Term Debt (%)

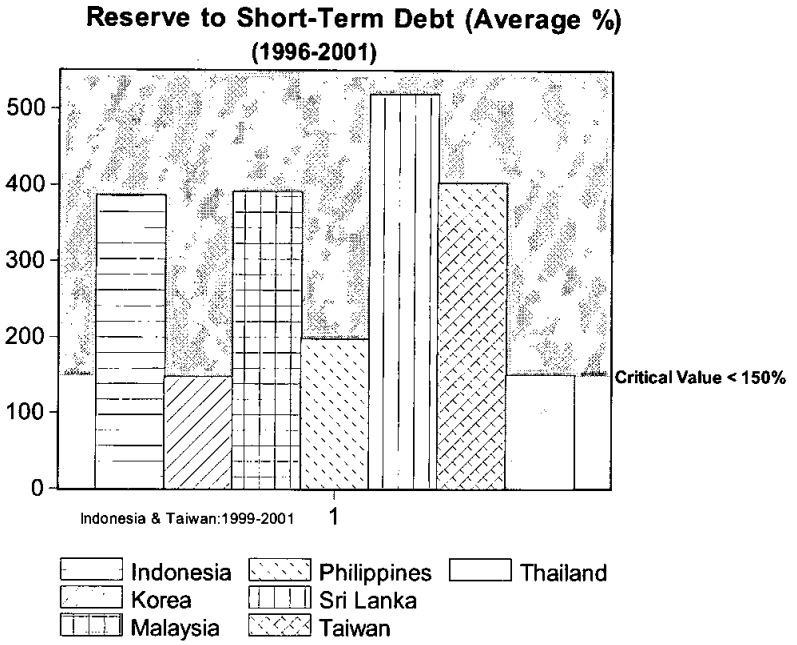
	1996	1997	1998	1999	2000	2001
Indonesia	n.a	n.a	n.a	291.1	436.5	432.3
Korea	35.6	32.1	169.5	188.8	200.7	262.7
Malaysia	278.2	136.7	277.6	522.9	648.4	484.8
Mongolia	n.a	n.a	n.a	n.a	n.a	n.a
Nepal	n.a	n.a	n.a	n.a	n.a	n.a
Philippines	163.0	103.9	150.4	261.5	252.6	258.9
Sri Lanka	544.9	654.4	599.5	543.1	369.9	401.9
Taiwan	n.a	n.a	n.a	337.6	406.0	465.0
Thailand	81.1	70.4	103.9	178.0	222.3	246.8

Source: Member Banks reply

Figures on the above table shows that during the year 1997, crisis hit countries like Korea, Malaysia, Philippines and Thailand experienced a downturn movement for this ratio which declined by 3.5 percentage points, 141.5 percentage points, 59.1 percentage points and 10.6 percentage points respectively[25]. However after 1997, it showed gradual increase implying the rise in external liquidity to service its short-term debts. Between 1997 and 2001, the ratio picked up by 141.2 percentage points, 230.6 percentage points, 348.1 percentage points, 155.0

25. It may be noted that this ratio is assumed to be more meaningful to measure a country's liquidity to service its debt where the country adopts fixed exchange rate regime or to some extent managed floating regime.

Figure 1.4



percentage points, and 176.4 percentage points for Indonesia[26], Korea, Malaysia, Philippines and Thailand respectively. On average basis, the following graph shows that Indonesia, Malaysia, Sri Lanka and Taiwan are well within the critical level[27] while Korea, Philippines and Thailand are just in comfortable position of international liquidity to cover outflow of short-term debts.

Another liquidity indicator which is reserves to imports also went down in 1997 for almost all SEACEN countries but then geared up in later part of review period with an exception to Indonesia, Taiwan and Thailand which declined in 2002 to pick up again in 2001 (Table 1.7 and Figure 1.6). In terms of months of imports covered by the international reserves, in 2001 Mongolia recorded a lowest of three and half months while Korea recorded as high as 19 months of imports (Figure 1.5).

26. It refers to period between 1999 and 2001.

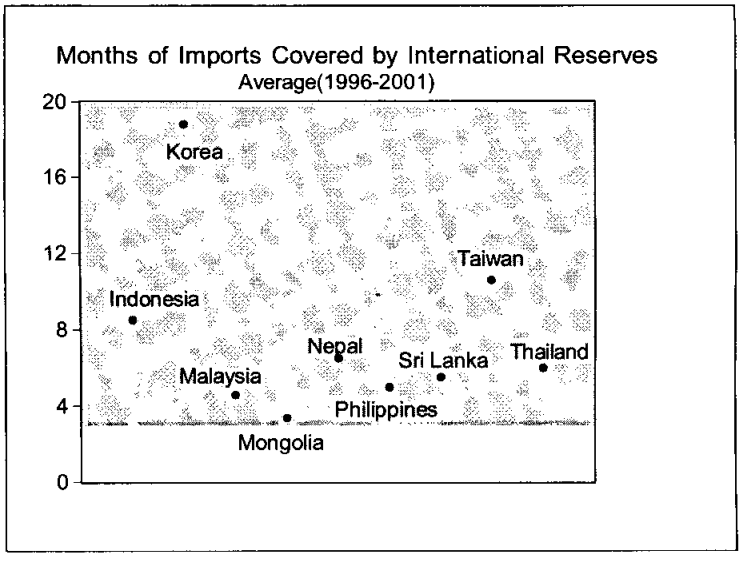
27. It should be more than 150%.

Table 1.7
Reserves to Imports Ratio (%)

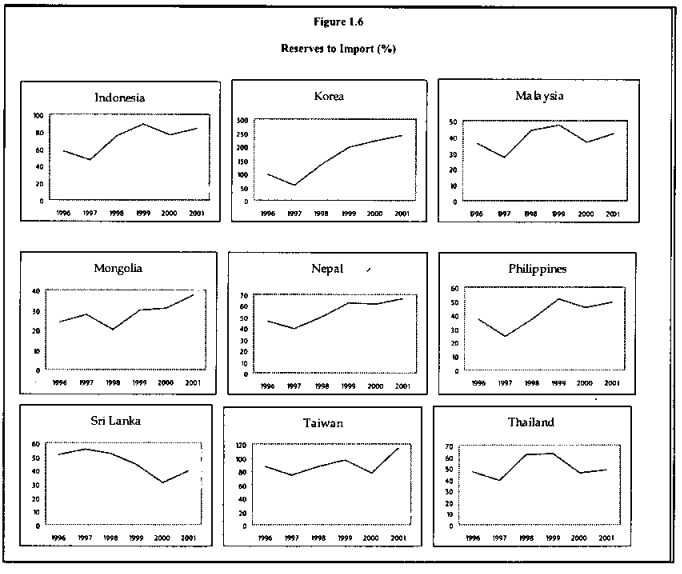
	1996	1997	1998	1999	2000	2001
Indonesia	56.8	46.5	74.4	88.4	75.4	83.5
Korea	95.5	54.7	131.7	194.9	219.1	241.9
Malaysia	35.5	26.8	43.6	47.2	36.5	41.8
Mongolia	23.7	27.5	20.1	29.6	30.5	37.1
Nepal	46.2	39.6	49.6	62.1	61.6	66.1
Philippines	36.8	24.1	36.6	51.4	44.9	49.0
Sri Lanka	51.2	55.5	51.8	44.1	30.7	39.1
Taiwan	86.0	73.0	86.3	95.9	76.2	114.0
Thailand	46.8	38.4	61.4	62.1	45.8	47.9

Source: Member Banks reply

Figure 1.5



In terms of average figures between 1996 and 2001, except for Mongolia, all the SEACEN countries have liquidity enough to cover more than 3.5 months of imports. In 1997, SEACEN countries had an average level of international reserves equivalent to 5.2 months with lowest of 2.9 months recorded for Philippines and highest of 8.8 months for Taiwan.

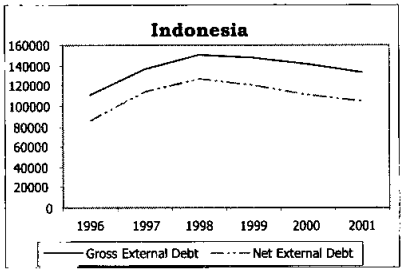


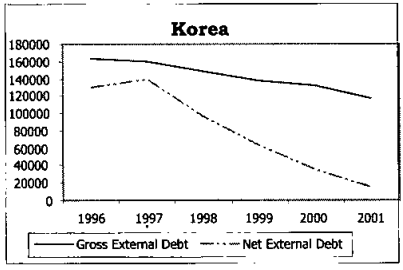
13. Analysis on Debt Sustainability

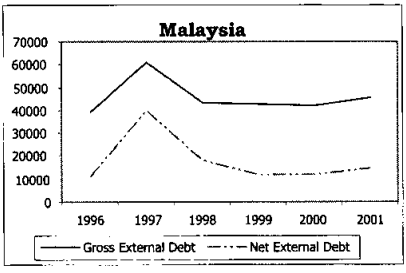
In this section, in an effort to supplement the development shown by the debt-related indicators on time series data, an empirical analysis is conducted to see whether the external debt in the SEACEN countries is sustainable (Figure 1.7). In the 1990's many of the SEACEN countries under went financial liberalization and structural reforms to increase trade by means of reducing average import tariffs, as well as breaking the barriers to short-run and speculative capital flows. As a result, capital flows allowed a fast accumulation of foreign reserves, but at a cost of increasing external debt. Therefore the net external indebtedness[28] for most of the SEACEN member countries remain either increasing or almost constant until the Asian crisis in 1997 after which it started to decline in the following years (except for Mongolia and Sri Lanka).

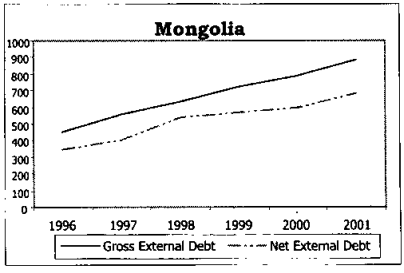
28. Net external debt= Total external debt- International reserves.

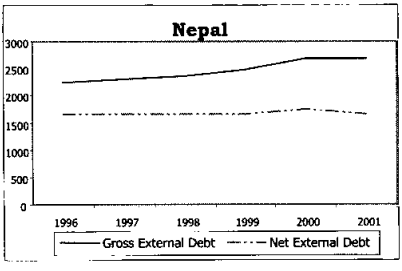
Figure 1.7
Gross and Net External Debt in SEACEN Countries
(in million of US$)

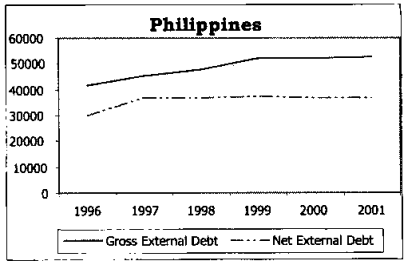


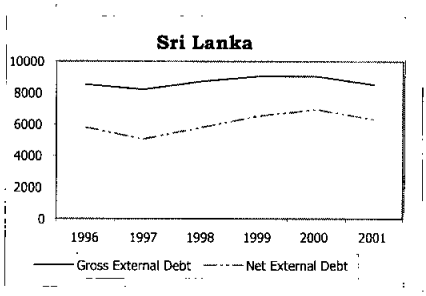


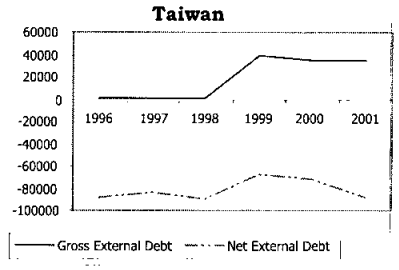


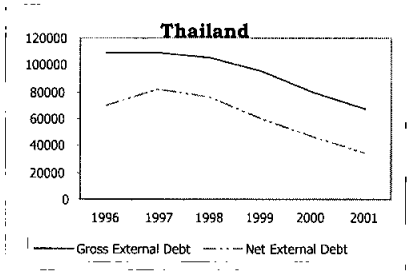












During early 1990's, many Asian and Latin American countries experienced growing deficits in the current account of the balance of payments which poses the question whether the current account deficits are sustainable in the long run. With the onset of financial liberalisation plan in many countries, the financial structure as well as its stability of most developing countries grew to depend on capital flows. However, capital flows are endogenous in nature and are highly dependent on the international environment. It is indeed understood that the relationship among current account deficits, external debt stock and external interest rates can lead to an unstable path of external debt in the long run which can lead to a possible currency crises. For example, the overvaluation of exchange rate until 1997, which brought a strong vulnerability of the balance of payments and, there after financial crisis.

Apart from credit availability in the international capital markets, which warrant capital inflows, another important consideration is to manage not only their macroeconomic consequences, such as current account deficits but also the inter-temporal equilibrium of the current account. High debt stock can lead to the impossibility to finance flows (Minsky 1986). In fact, as long as current account deficits are financed by capital inflows, there is an increase in external

debt. In order to avoid speculation and Ponzi situation,[29] capital flows need to be related economic growth, foreign interest rate and current account balance. As emphasised by Carneiro (1997), the problem of debt appears only when there is a sudden scarcity of resources and this is common in developing countries. Debt crisis develops in long run, as increasing external debt lead eventually to capital outflows and poses constraints to balance of payments. This signified not only the avoidance of speculative capital flows but also systematic current account deficits[30].

Based on the above concepts on trade deficits and current account sustainability, several techniques have been employed to calculate the debt sustainability in the past studies. One of related sustainability test is explored by Sawada (1994) who uses the current account balance to test the sustainability of heavily indebted countries. In his methodology, the solvency condition is met whether the series in question are stationary or co-integrated. Ponta (1996), Rocha and Bender (2000) and Carneiro (1997) employ similar unit roots and co-integration tests for external debts and current account[31]. In their paper, they test for co-integration between external debt and trade balance and /or exports and imports of goods and services including net interest. Frederico G. Jayme Jr (2001) employs slightly diversified models to see the sustainability of external debts in Brazil (Appendix 2 & 3). He uses variables such as exports, imports plus net interest rates, trade balance and net external debts for which unit roots and co-integration tests were performed to see the solvency and sustainability of current account and external debts in the long run. Our study departs slightly from the seminal work of Jayme in the sense that apart from employing unit root test and co-integration tests between net external debt and trade balance, we

29. A Ponzi situation is the one in which external debt repayments are not sustainable or the amount a country borrows in international markets does not equal the present value of future trade surpluses.

30. Looking at the time series behavior of the current account could provide useful information on whether the deficit is sustainable.

31. There are some drawbacks of this technique as the concept of unit roots and co-integration tests is purely statistical determined by time series and may not be appropriate to conclude the future trend sustainability only by its own past trend. However, the technique helps in indicating whether the current account deficits of a country do meet the requirement to warrant a sustainable path for country's external debt in the long run. This information is useful for suggesting appropriate macroeconomic policy management and structural improvement policies in the coming period.

also use the current account balance. This is because in SEACEN members which, includes Indonesia, Nepal, Philippines, Sri Lanka and Thailand remittances form a large portion of capital flows and therefore sustainability of current account is a significant variable to ascertain whether it can sustain the existing debt stock. In summary, if the trade balance, current account balance and net external debt are non stationary, the solvency condition is met when net external debt is co-integrated with either the trade balance or the current account balance.

13.1 Data Source and Empirical Results

As stated earlier, the sustainability of the external debt and current account in the SEACEN countries is tested looking at the co-integration between net external debt and trade balance as well as current account balance (Jayme, 2001). Due to data limitation, we employ yearly sample from 1980-2001.[32] The first step is to test for stationarity of the variables.

Dickey and Fuller (1979) suggested that the following equation is estimated by OLS to test for the presence of a unit root in any x_t series:

$$\Delta x_t = \gamma + \alpha_1 x_{t-1} + \sum_{i=1}^{\rho} \beta i \Delta x_{t-i} + \varepsilon t$$

ADF test for unit root consists of testing whether the coefficient on x_{t-1} is zero. In other words, the mean, variance and co-variances of the selected series need to be constant over time. Under the null Ho: $\alpha_1=0$, the series x_t contains a unit root and therefore is non-stationary. Under the alternative $H_1: \alpha_1 < 0$, the series is stationary. Here, we first test the simple model with a constant in the test regression. If the null hypothesis is rejected, the series is said to contain no unit root. However, if the null is accepted, the next step is to test the model with a constant and a linear trend. If at any stage the null is rejected, the series is

32. Debts Data are from 1980-2001 sourced from member banks (except for Korea, from ADB). Data for other variables such as trade balance, international reserves and current account balance are sourced from IFS CDROM Dec. 2002. Breaking the sample into two sub-periods, namely, 1980-1997 and 1998-2002 could provide more information on whether external debts were indeed sustainable during the two sub-sample periods. However, testing sustainability by co-integration requires a long span of data. As only annual data are available, it is econometrically problematic to analyse the data, especially for the latter sub-sample period as there is not enough degree of freedom.

said to be stationary. Also since the unit root test is also sensitive to the duration of the lag periods, the sequential tests by Hall (1990) and Perron (1991) whereby tests are conducted starting off with a priori lag length are used. However because of limited sample size, the priori lag length (k) is set to three. If the null hypothesis is not accepted, we proceed, using similar procedure with the Philip-Perron (PP) test.

Perron (1989, 1994) argued that if there is a break in the determinist trend in any series, unit root tests will lead to a misleading conclusion that there is a unit root. So PP test is supposed to correct serial correlation of the error term in case there occurs break in the time series trend (For details on concept, see Appendix 3).

For co-integration, the Johansen Maximum Likelihood co-integration tests will be used. The concept of co-integration suggests that it is possible to determine whether a linear combination of a group of variables is stationary or not, although individually the variables may have unit roots. The co-integration test, is, however not necessary, if the series are integrated of zero-order. We also employ the sequential test using the most basic model and the least lag of one. Co-integration is detected should any co-integration vector is present. We repeat the procedure to the maximum lag of three.

For the net external debt, defined as total external debt minus reserves (D), in the case of Korea, it is stationary at 5%level, although in Malaysia, the Philippines, Sri Lanka and Thailand, unit root is also rejected at 10 percent level. In most cases, there is sufficient evidence to indicate that the trade balance statistics are mostly non-stationary while for the current account, the result is mixed. For net external debt, it is also evident that, except for Korea it is non-solvent for other countries during 1980 to 2001 (Table 1.8).

As discussed before, co-integration tests between net external balance and trade balance and net external debt and the current account are then conducted to see whether the net external debt is sustainable. If they are co-integrated, then the net external debt is said to be sustainable.

Preliminary analysis indicates that both Nepal and Sri Lanka, experienced trade balance and current account deficits. Therefore in theory, these deficits are not compatible with the stock of external debts. However, their debts are mostly long-term concessional debts from the IMF and World Bank and these

Table 1.8: Test of Unit Roots and Cointegration [1]

	Unit root tests												Cointegration Tests		
	D		ΔD		TB		ΔTB		C/A		ΔC/A		Status at least 5%	Cointegration Dt and TB	Cointegration D and C/A
Indonesia			-3.33**	(c,1)pp			-3.51**	(c,1)			-3.49**	(c,1)	D~I(1) TB~I(1) CA~I(1)	Yes NNN(1)	Yes NNN(1)
Korea	-3.16**	(c,3)	-2.75*	(c,1)	-2.72*	(c,1)	-4.12***	(c,1)pp	-3.09**	(c,1)	-4.51***	(c,1)	D~I(0) TB~I(1) Ca~I(0)	No	YES, both series~I(0)
Malaysia	-2.45*	(c,1) pp	-5.59***	(c,1)pp			-3.60**	(c,1)pp			-3.93***	(c,1)pp	D~I(1) TB~I(1) Ca~I(1)	Yes QIT(1)	Yes LIN(1)
Nepal			-4.07***	(c,1)pp	-3.60*	(t,3)	-4.25***	(c,3)	-5.78**	(t,3)	-4.83***	(c,1)pp	D~I(1) TB~I(1) Ca~I(0)	-	-
Philippines	-3.50*	(t,1)pp	-4.68***	(c,1)	-3.05**	(c,1)	-3.09**	(c,2)	-2.81*	(c,1)	-3.23*	(c,2)	D~I(1) TB~I(0) Ca~I(1)	Yes NNN(1)	Yes NNN(1)
Sri Lanka	-2.73*	(c,3)	-4.038***	(c,1)	-2.94*	(c,1) PP	-4.94***	(c,1)	-3.95**	(t,1)pp	-5.15***	(c,1)	D~I(1) TB~I(1) Ca~I(1)	-	-
Taiwan			-3.28**	(c,1)pp			-4.55***	(c,1)pp	-3.56**	(c,1)	-4.95***	(c,1)pp	D~I(1) TB~I(1) Ca~I(1)	Yes LIN(1)	No
Thailand	-3.50*	(t,2)	-2.78*	(c,3)			-3.79**	(c,1)	-2.78*	(c,1)	-3.96***	(c,1)	D~I(1) TB~I(1) Ca~I(1)	Yes NNN(1)	Yes NNN(1)

D=net external debt=total debt-reserves, Δ indicates first differencing, TB= trade balance and C/A = Current Account, The reported results for unit root tests are based on the Augmented Dickey-Fuller unless otherwise stated. PP = Philip-Peron test

1/ At least one cointegrating vector is presented, in either the trace or eigenvalue test statistics

NNN = No deterministic trend in data, No intercept , No Trend in cointegrating Equation

QIT= Quadratic Trend in data, Incept and Trend in Cointegrating Equation

LIN= Linear deterministic Trend in data, Intercept, no Trend in Cointegrating Data

Figure in bracket in the unit root and cointegration test roots is number of lags. Bracket in unit root test indicates c=constant and t=constant and trend in the test regression.

*** Significant at 1% level

** Significant at 5% level

* Significant at 10% level

debts are not significant as far as sustainability is concerned. However, in other countries, co-integration is detected for Indonesia, Korea[33], Malaysia, the Philippines, Taiwan[34] and Thailand indicating that the external debt is indeed sustainable from 1980-2001. Nonetheless, some of these countries faced difficulty during the Asian Financial crisis in 1997/98 especially on external debt servicing.

In the case of Korea, as the series on both net external debts and current account balance showed no presence of unit root, it is deemed not necessary to do co-integration test between external debt & trade balance and external debt & current account balance. However, in the case of Taiwan, co-integration is not detected between net external debts and current account series although both the variables were non-stationary. It is on account of the reason that for Taiwan, the reserves were more significant than total external debts implying negative net external debts for the review period.[35] That is, external debts were sustainable with the available position of international reserves for the whole review period.

14. Summary and Conclusions

Inconsistency prevailed in defining the concepts of external debt and its monitoring and reporting procedures has been claimed to understate the position of external debt in many of the developing countries including the SEACEN members. As the persistent accumulation of short-term debts is seen as a triggering cause of financial crisis, the compilation of external debt statistics has signified the importance of need to having reliable and timely debt statistics,. Although many international organizations have come up front with joint efforts to upgrade and improve the compilation system and monitoring procedure of external debt statistics in general, there are evidence that discrepancies occur in external debt data to different definitions, methodology of compilation and the

33. Both net external debt and current account are integrated of zero.

34. In case of Taiwan, it should however, be noted that prior to 1998, external debt data included only public debts and therefore may not have reflected the actual condition of sustainability.

35. In addition, there was a deterministic break in net external debt series at 1998 as private sector debts were included in total external debts after the mid of 1998. Also, there was a problem of less degree of freedom in current account balance series due to limited available data series. Besides, trade balance accounts for the biggest part of the current account balance for Taiwan.

degree of comprehensiveness among the SEACEN countries. Most of the SEACEN countries provide data on official debts, while private sector debts and short-term debts continue to be scarce for the countries like Mongolia and Nepal. It has also been revealed that reliability and accuracy of data in some of the SEACEN countries are found to be confronted with the data issues as such as private non-guaranteed debt and even public and publicly guaranteed debts are not always accurately reported. As an initiative taken up by the IMF, the Inter-Agency Task Force on Finance Statistics (TFFS) has recently produced a document on " External Debt Statistics: Guide for Compilers and Users" in November 2001 with an objective to assist in improving methodological soundness, transparency, timeliness and availability of data on external debt and international reserve assets. The accounting principles recommended by the "Guide" for the measurement of external debt drawn from 1993 SNA and BPM5 are regarded as the congenial accounting concepts for the measurement of external debt. The SEACEN members such as Indonesia, Korea, Philippines, Taiwan and Thailand which have entered into SDDS system tended to have less discrepancy in the external debt data reporting system. In the process, Malaysia and Sri Lanka are on their way towards meeting the SDDS mandate requirement. It is realised that the assumption of concepts & reporting and monitoring system of external debt as suggested in "Guide" and the entering into SDDS system of the IMF's Data Standard Initiative will help SEACEN countries towards minimizing the discrepancy in the external debt data monitoring & reporting system subsequently assisting in crisis prevention. At present, however, SEACEN member countries suffer from a number of challenging issues in external debt reporting system as follows:

1. There is no concrete measuring rod which can examine whether the reporting concerned parties provide reliable and correct data. Similarly, encountering difficulty on soliciting data on regular basis has stood as a perpetual problem due to lack of effective punishments. As such, periodic survey of data on loan and debt securities for the purpose of supplementing the gaps relating to corporate long-term debts is not that easy.

2. In most of the SEACEN countries, although breakdown in terms of domestic and foreign currency on aggregate basis is available, further segregation by the type of currency is difficult to capture.

3. There is a lack of direct mechanism to collect short-term external debts from private banks & OBU's on a regular basis which has underscored the underestimated problem. Moreover, most of the countries have inadequate

coverage for non-resident transaction in host countries, non-foreign exchange transaction & non-cash activities.

4. Classification of external debt by sector has posed problems relating to semi-privatised and privately managed public enterprise to decide to put them either in public or private sector category.

5. Liberalisation of the external sector has limited the usefulness of banks as a data source for external debt accounts as not all transactions involve purchase and sale of foreign exchange by banks.

Realising that gaps are possible under the existing liberalised trade and foreign exchange transactions a regular comparison of external debt statistics produced with those presented in other international statistical publications is vigorously pursued.

A prominent issue related with the reliability and accuracy of external debt data reporting system is the assessment of sustainability of the external debt itself. With the highly consistent, reliable and accurate reporting of external debt position, the use of debt related indicators will show genuine position or path in terms of solvency and liquidity position of existing external debt. Monitoring of the movement of certain debt indicators will help in designing sound debt and liquidity management system for the prevention of external crisis in time or to cushion the pace of necessary adjustment. An assessment of debt-related indicators among the SEACEN countries for the period between1996-2001 revealed that the solvency indicators such as external debts to exports ratio and external debts to GDP ratio have exceeded its critical points during the financial crisis in 1997. The analysis also suggests that the countries like Indonesia, Mongolia and the Philippines are likely to be in less solvent state as to the position of external debts in 2001. But most of the SEACEN countries have been seen to make efforts to improve their respective external debt position after 1997 as evidenced by the gradual decline of debt-service ratio over time. Moreover, Korea and Thailand have remarkably improved its interest-service ratio between 1996 and 2000 revealing the strengthening of debt-service capacity in the later part of the review period. It has also been recorded that the SEACEN member countries like Korea, Malaysia, Philippines and Thailand have been successful in lowering the short-term debt to total external debt ratio during the review period.

Eyeing at the liquidity indicators, crisis hit countries like Korea, Malaysia, Philippines and Thailand have gradually improved their reserves to short-term debt position after 1997 implying the rise in external liquidity to service its short-term debts. On an average basis for the period between 1996 and 2001, most of the countries were found to secure comfortable position of international liquidity to cover outflow of short-term debts with their ratio falling well within the critical point. In terms of reserves to import ratio, except for Mongolia, all the reporting SEACEN countries are found to have liquidity sufficient to cover more than 3.5 months of imports within the same period.

The solvent and sustainable position of external debts in the SEACEN countries was checked with the empirical analysis done on debt sustainability using the model concept of Frederico G, Jayme. Jr.(2001). Unit roots and co-integration tests were performed on the important conceptual variables like trade balance and current account balance with net external debt to see solvency as well as sustainability of external debts in the long run. The empirical evidence indicates that the trade balance statistics are mostly non-stationary while for the current account balance the result is mixed. Preliminary analysis on co-integration tests suggests that co-integration is detected, in general, for Indonesia, Korea, Malaysia, the Philippines, Taiwan and Thailand indicating that the external debts position in these countries is indeed sustainable during the period between1980-2001. It is suffice to show that the results from tabular analysis of debt related indicators that external debts in the SEACEN countries are solvent and liquid as well during 1996-2001 on an average basis.

In summary, to improve the quality of external debt compilation and monitoring system in the SEACEN countries, the government needs to improve its data compilation and reporting system on the stock and composition of its debt and financial assets including their currency, maturity and interest structure so that there is the conduct of transparency in the external debt data compiling and reporting system. A regular check system needs to be employed to see the consistency of the stock data from the survey and the stock data from the flow data if the country has both sources of data. Efforts to enhance and improve the monitoring and regulating on short-term external debt of both the private and public sectors should be pursued. A suitable mechanism needs to be developed to capture the information on private debts particularly of non-cash transactions and also to avoid overlapping of data especially transacted through offshore

banking units. This will help in correcting the assessment of the debt –related indicators as well as improve the quality of analysis on debt sustainability. Accordingly, the country can develop better debt management system to prevent possible crisis originating from it in the future.

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Appendix 1(a)

Gross External Debt Position	**End-Period**
General Government	
Short-term	
Money market instruments	
Loans	
Trade credits	
Other debt liabilities*	
Arrears	
Other	
Long-term	
Bonds and notes	
Loans	
Trade credits	
Other debt liabilities	
Monetary Authorities	
Short-term	
Money market instruments	
Loans	
Currency and deposits**	
Other debt liabilities	
Arrears	
Other	
Long-term	
Bonds and notes	
Loans	
Currency and deposits**	
Banks	

Short-term

Money market instruments

Loans

Currency and deposits**

Other debt liabilities

Arrears

Other

Long-term

Bonds and notes

Loans

Currency and deposits**

Other debt liabilities

Other Sectors

Short-term

Money market instruments

Loans

Currency and deposits**

Trade credits

Other debt liabilities

Arrears

Other

Long-term

Bonds and notes

Loans

Currency and deposits**

Trade credits

Other debt liabilities

Non-bank financial corporations

Short-term

Money market instruments

Loans

Currency and deposits**

Other debt liabilities

Arrears

Other

Long-term

Bonds and notes

Loans

Trade credits

Other debt liabilities

Non- financial corporations

Short-term

Money market instruments

Loans

Trade credits

Other debt liabilities

Arrears

Other

Long-term

Bonds and notes

Loans

Trade credits

Other debt liabilities

Households and Non-Profit Institutions serving households (NPISH)

Short-term

Money market instruments

Loans

Trade credits

Other debt liabilities

Arrears

Other

Long-term

Bonds and notes

Loans

Trade credits

Other debt liabilities

Direct investment: Inter-company lending

Debt liabilities to affiliated enterprises

Arrears

Other

Debt liabilities to direct investors

Arrears

Other

GROSS EXTERNAL DEBT

*Other debt liabilities are other liabilities in the IIP statement.

** It is recommended that all currency and deposits are included in the short-term category unless detailed information is available to make the short-term/long-term attribution.

Appendix 1 (b)

Gross External Debt Position: Public and Publicly Guaranteed Debt

End-period

Public and publicly guaranteed debt

Short-term

Money market instruments

Loans

Currency and deposits*

Trade credits

Other debt liabilities

Arrears

Other

Long-term

Bonds and notes

Loans

Currency and deposits*

Trade credits

Other debt liabilities

Direct investment: Inter-company lending

Debt liabilities to affiliated enterprises

Arrears

Other

Debt liabilities to direct investors

Arrears

Other

Non-guaranteed private sector external debt

Short-term

Money market instruments

Loans

Currency and deposits*

Trade credits

Other debt liabilities

Arrears

Other

Long-term

Bonds and notes

Loans

Currency and deposits*

Trade credits

Other debt liabilities

Direct investment: Inter-company lending

Debt liabilities to affiliated enterprises

Arrears

Other

Debt liabilities to direct investors

Arrears

Other

Gross External Debt

*It is recommended that all currency and deposits are included in the short-term category unless detailed information is available to make the short-term/long-term attribution.

Public sector external debt **End-period**

Short-term

Money market instruments

Loans

Currency and deposits*

Trade credits

Other debt liabilities

Arrears

Other

Long-term

Bonds and notes

Loans

Currency and deposits*

Trade credits

Other debt liabilities

Direct investment: Inter-company lending

Debt liabilities to affiliated enterprises

Arrears

Other

Debt liabilities to direct investors

Arrears

Other

Total

Public guaranteed private sector external debt

End-period

Short-term

Money market instruments

Loans

Currency and deposits*

Trade credits

Other debt liabilities

Arrears

Other

Long-term

Bonds and notes

Loans

Currency and deposits*

Trade credits

Other debt liabilities

Direct investment: Inter-company lending

Debt liabilities to affiliated enterprises

Arrears

Other

Debt liabilities to direct investors

Arrears

Other

Total

* It is recommended that all currency and deposits are included in the short-term category unless detailed information is available to make the short-term/long-term attribution.

Note: Further, public sector data can be attributed into general government, monetary authorities, banks, and other sector, while private sector information can be attributed into banks and other sectors. In this regard, it is recommended that if detailed records are kept, the institutional sector of the debtor be identified, so allowing an economy that is presenting data on a public sector basis to also compile data on an institutional sector basis.

Appendix 2

Classification of Debt by Sector

Indonesia Public Sector Private Sector	**Korea** Public Sector Private Sector	**Malaysia** Public Sector Private Sector
Mongolia Public Sector only	**Nepal** Public Sector only	**Philippines** Public Sector Private Sector
Sri Lanka Public Sector Private Sector	**Taiwan** Public Sector Private Sector	**Thailand** Public Sector Private Sector

Appendix 3

Classification of Debt by Borrower

Indonesia

General Government
Monetary Authority
Banks
Others
Bank
Non-bank
Non-financial
Institution

Korea

General Government
Monetary Authority
Banks
Others
Private Sector

Malaysia

General Government
Monetary Authority
Banks
Others
i. Non-Financial Public Enterprises
ii. Non-bank Private Sector
Bank
Non-bank
Public Enterprise

Mongolia

Only available
by creditors
International
donor agency

Nepal

Only available
By creditors
-International donor agency

Philippines

National
Government
Local Government
Unit
Central Monetary
Authority
Other Govt. Banks
& Financial
Institutions
& Government
Owned Corporations
Private
Banks/Financial
Institutions
Private Non-
Banks/Non-Financial
Institutions

Sri Lanka

General Government
Non-Financial Public
Enterprises
Financial Public
Institutions
Private non-banks

Taiwan

Central Government
Banks
Local Private Bank
Offshore Bank Units
Private Enterprise

Thailand

Central Government
State Enterprise
BOT
CB, International
Banking
Facilities (IBF), finance
& Insurance companies
& Other private
corporates

Appendix 4

Classification of Debt by Instruments

Indonesia

Loans
Trade Credit
Currency & Deposits
Debt Securities
Other Debt
Liabilities

Korea

Loans
Trade Credit
Currency & Deposits
Debt Securities
Other Debt
Liabilities

Malaysia

Loans
Trade Credit
Debt Securities
Other Debt
Liabilities

Mongolia

Loans

Nepal

Loans

Philippines

Loans
Trade Credit
Currency & Deposits
Debt Securities
Other Debt
Liabilities

Sri Lanka

Medium and Long term Debt
.-Project loans
-Non-project loans
-Suppliers credit
-IMF drawing
-Other loans
Short-term Debt
-Gov. Trade Credit
(Debt securities not included)

Taiwan

Loans
Trade Credit
Currency & Deposits
Debt Securities
Other Debt
Liabilities

Thailand

Loans
Trade Credit
Currency & Deposits
Debt Securities
Other Debt
Liabilities

Appendix 5

Classification of Debt by Maturity

Indonesia

1. Short-term
Long-term

2. Original
Maturity

Korea

1. Short-term
Long-term

2. Original
Maturity
Residual Maturity

Malaysia

1. Short-term
Long-term

2. Original
Maturity

Mongolia

Long-term only

Nepal

Philippines

1. Short-term
Medium/
Long-term

2. Original
Maturity
Residual Maturity

Sri Lanka

1. Short-term
Medium/Long-
term

2. Original
Maturity

Taiwan

1. Short-term
Long-term

Thailand

1. Short-term
Long-term

2. Original
Maturity
Residual Maturity

Appendix 6

Classification of Debts by Currency

	US$	JPY	Euro	SDR	Major Currencies	Others
Indonesia	√	√	√			√
Korea	√	√	√			√
Malaysia*					√	
Mongolia		√		√		√
Nepal	√	√		√		**European Currency, Won, Saudi Riyal and Others**
Philippines	√	√	√	√	√	√
Sri Lanka	√					**Local Currency and others**
Taiwan	√	√	√			**HKD, SRL and TWD and others**
Thailand					√	

* With the exception of the banking sector, the currency breakdown of Malaysia's external debt is extensive and not necessarily confined to the major currencies, although the share of Malaysia's external debt in terms of the major countries have been published.

Appendix 7

Frequency of Data Availability, Coverage, Dissemination and Lag period

Indonesia	**Korea**	**Malaysia**
Quarterly Released Lag period: maximum three months in dissemination Media: BI Internet website	BOK in charge of compilation while Ministry of Finance and Economy into dissemination which is in the form of press release every month. Data classified by maturity and sector. More concrete data on BOK website	Quarterly released with a lag of quarter after the end of the reference period in BNM's Monthly Statistical Bulletin, press release and BNM's annual report Coverage: Loan, debt securities by sectors and maturity
Mongolia	**Nepal**	**Philippines**
Debt Management Division of the Treasury Department of Ministry of Finance and Economy is in charge of recording of external debt data	Annual data for central government debt are disseminated by MOF and NRB. Desegregation by maturity is not provided. No government guaranteed debt	External debt data are released quarterly within one quarter after the period of reference. The data are disseminated via news release in the BSP website and major newspaper.
Sri Lanka	**Taiwan**	**Thailand**
External debt data relating to the central government is released on monthly, semi-annual and annual basis with a lag of two months. Government guaranteed and non non-guaranteed public and private debt and short-term private debt are released on semi annual and annual basis.	Quarterly Release Lag period: Quarterly	External debt outstanding data is released monthly with a two month lag. With a two month lag, quarterly debt outstanding debt service ratio is released. With a two-quarter lag, debt outstanding at year end, debt service ratio and external debt classification by major currencies is released.

Appendix 8

Adhering to SDDS and GDDS Mandate

- Not all SEACEN members meet the requirement for SDDS
- Indonesia, Korea, Philippines, Taiwan and Thailand – SDDS
- Malaysia, Sri Lanka on the way towards meeting the requirement for SDDS
- Mongolia, Nepal - GDDS

Appendix 9

The Analytical Framework of Critical Debt Sustainability Test Approached by Frederico G. Jayme Jr (2001)

Model 1

The first useful model to get a feasible empirical estimation equation comes from the work of Sawada (1994), Wilcox (1989) and Hamilton and Flavin (1986). It departs from the basic account identity for an economy during a period t:

$$Y_t + (D_t - D_{t-1}) + TR_t = A_t + rD_{t-1} - 1 + \Delta RE_t \ldots\ldots\ldots\ldots (1)$$

Where Y is the GDP, D is the net external debt (gross external debt minus international reserves), TR is the net transfer receipts, A is the domestic absorption, r is the nominal interest rate and ΔRE_t is the change in foreign reserves.[36] As usual in accounting identities, the left hand side of equation 1 represents the economy's aggregate income whereas the right hand side is the total expenditure.

From the income identity in an open economy we get:

$$X_t - M_t = Y_t - A_t \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (2)$$

Where X_t are the nominal exports of goods and services and M_t are the nominal imports of goods and services at time t. From (1) we can get the trade balance of this economy:

$$TB_t = X_t - M_t = rD_{t-1} - (D_t - D_{t-1}) - TR_t + \Delta RE_t \ldots\ldots\ldots\ldots\ldots (3)$$

The evolution of the external debt is:

$$(D_t - D_{t-1}) = rD_{t-1} - \{TB_t + TR_t - \Delta RE_t\} \ldots\ldots\ldots\ldots\ldots (4)$$

36. Sawada (1994) admits that there is an interest rate over reserves, so ΔRE_t *is* $\{REt - (1+i)\ RE_{t-1}\}$ where I is the interest rate on this reserves. The results do not present differences if we skip the interest rates over external reserves.

Letting $S_t = \{ TB_t + TR_t - \Delta RE_t \}$, we can translate this identity as the net external surplus that can be used to meet the external debt repayments. Since equation (4) is a differential equation, we can solve it recursively to get the forward-looking solution in terms of net external debt (D_t):

$$D_t = \lim_{N \to \infty} \frac{D_N}{\prod_{j=1}^{N-t} (1+r_{t+j})} + \sum_{j=t+1}^{\infty} \frac{S_j}{\prod_{i=1}^{j-1} (1+r_{t+i})} \quad \ldots\ldots\ldots\ldots \quad (5)$$

Taking expectation operator in both right hand equations we can determine that the solvency condition is satisfied when:

$$D_t = E \sum_{j=t+1}^{\infty} \frac{S_j}{\prod_{i=1}^{j-t} (1+r_{t+i})} \quad \text{or, if} \quad D_t = E \lim_{N \to \infty} \frac{D_N}{\prod_{j=1}^{N-t} (1+ r_{t+j})} = 0 \quad \ldots\ldots\ldots \quad (6)$$

This is the no Ponzi condition, in which external debt repayments are sustainable, or that the amount a country borrows (lends) in international market equals the present value of future trade surpluses. If equation (6) is greater than zero, the country is paying the old maturity debt by issuing new debt, which reveals that external debt is not sustainable in the long run.

Assuming that the interest rate is stationary, with a unconditional mean equal to r, we can subtract rDt-1 from equation (4) to get:

$$E_t + (1+r) D_{t-1} = EX_t + D_t \quad \ldots\ldots\ldots\ldots \quad (7)$$

Where $EX_t = X_t + TR_t + RE_{t-1}$, $IM_t = M_t + RE_t$, and $E_t = IM_t + (r_t - r) D_{t-1}$. Taking first difference, we have:

$$\Delta D_t = \Delta E_t + (1+r) \Delta D_{t-1} - \Delta Ex_t \quad \ldots\ldots\ldots\ldots \quad (8)$$

Solving this equation forward to get:

$$MM_t = EX_t + \lim_{i \to \infty} \frac{\Delta D_{t+1}}{(1+r)^i} + \sum_{j=t+1}^{\infty} \frac{\Delta EX_j - \Delta E_j}{(1+r)^{j-t}} \quad \ldots\ldots\ldots \quad (9)$$

Where MM_t is defined as $(M_t + D_{t-1})$

From the assumption that EX_t and MM_t follow a random walk with drift, or in other words, both series are non-stationary and have an intercept, we can obtain an empirical testable equation. This equation follows:

$$EX_t = a + b\ MM_t + u_t \quad \ldots\ldots\ldots\ldots \quad (10)$$

If *MM* and *EX* are non-stationary process, then the null hypothesis to be tested is that *MM* and *EX* are co-integrated and that $b=1$.[37] Therefore, *MM* and *EX* have to be co-integrated in order to reach the necessary condition for the country to be solvent.

Basically, two values are said to be co-integrated when each variable taken separately is non-stationary, I(1) process, while a linear combination of them is stationary. There may be a number, b, such that $Ex_t - a - bMM_t = ut$ is stationary. After checking whether Ex_t and MM_t each have a unit root, it will be employed the Johansen testing procedure to estimate the co-integration regression (10).

Model 2

An alternative methodology to treat debt sustainability departs from this basic equation

$$d = \frac{D}{Y} \quad \ldots\ldots\ldots\ldots \quad (11)$$

Where *D* is the stock of external indebtedness of the country and *Y* is the GNP. Taking derivatives we can get:

$$dd/d = dD/D - dY/Y \quad \ldots\ldots\ldots \quad (12)$$

We know that

$$CA = -B + rD$$

37. See for this condition Hakkio and Rush (1991). See also, Rocha and Bender (2000) regarding the need in supposing that b should be equal to 1 in order to meet the requirements for sustainability when both variables are co-integrated. Although Hakkio and Rush (1991) point out that b could be less than one, this requirement is not sufficient to meet the sustainability condition in case of the external debt is positive.

Where *CA* is the Current Account Deficit, *B* is Current Account surplus excluding net interest payments and *r* is the interest rates paid on external debt. From that we have:

$$dD = -B + rD$$

$$dD/D = \frac{-B+rD}{D}$$

$$\cdot d/d = -B/D + r-g$$

Where *g* is the growth rate of GNP.

$$dd/d = (r-g) - B/D \quad \ldots\ldots\ldots \quad (13)$$

Of course if r=g, it follows that

$$dd/d = -B/D \quad \ldots\ldots\ldots\ldots \quad (14)$$

If *r=g* external indebtedness will be growing relative to GNP when the non-interest current account is in deficit. On the other hand, if r exceeds g and, for an external debtor, external debt will be rising relative to GNP when the non-interest current account is not in sufficiently large surplus relative to the stock of external debt. Therefore, the sustainable path is what the ratio of external debt to GNP is

$$dd/d = 0$$

If $dd = 0$, $dd/d = 0$, then,

$$-B/D = -(r-g)$$

Once $d = D/Y$, we can reach that

$$D/Y * B/D = (r-g)d$$

$$d^* = \frac{B/Y}{r-g} \quad \ldots\ldots\ldots\ldots \quad (15)$$

If $r > g$, it is not possible to find the sustainable deficit in current account compatible with the stock of the external debt, foreign interest rates, and growth of GNP. Therefore, it is necessary a trade surplus for $d^* > 0$.

As unit root and co-integration tests have provided useful tools in gaining insight into the long-run implications of a government's fiscal and the financial policy in a given time-horizon. This method, therefore, can be employed to test the sustainability of the external debt.

Appendix 10

The Phillips-Perron (PP) Test

Phillips and Perron (1988) proposed a nonparametric method of controlling for higher-order serial correlation in a series. The test regression for the Phillips-Perron (PP) test is the AR(1) process:

$$\Delta y_t = \alpha + \beta y_{t-1} + \varepsilon_t$$

While the ADF test corrects for higher order serial correlation by adding lagged differenced terms on the right-hand side, the PP test makes a correction to the t-statistic of the coefficient from the AR(1) regression to account for the serial correlation in . The correction is nonparametric since we use an estimate of the spectrum of at frequency zero that is robust to heteroskedasticity and autocorrelation of unknown form. The Newey-West heteroskedasticity autocorrelation consistent estimate is used here.

$$w^2 = \gamma_o + 2\sum_{j=1}^{q} \{1-\frac{j}{q+1}\} \gamma_j ; \quad \gamma_j = \frac{1}{T}\sum_{t=j+1}^{T} \acute{\varepsilon}_t \acute{\varepsilon}_{t-j}$$

where q is the truncation lag. The PP t-statistic is computed as

$$t_{pp} = \frac{\gamma_o \, ½ \, t_ó}{w} - \frac{(w^2 - \gamma_o) \, Ts_ó}{2w\tilde{o}}$$

where, $t_ó$, $s_ó$ are the t-statistic and standard error of β and $\tilde{o}$ is the standard error of the test regression.

The asymptotic distribution of the PP t-statistic is the same as the ADF t-statistic and reports MacKinnon critical values. As with the ADF test, the test is done as to specify whether to include a constant, a constant and linear trend, or neither in the test regression. For the PP test, the truncation lag q has also to be specified for the Newey-West correction, that is, the number of periods of serial correlation to include. The dialog initially contains the Newey-West automatic truncation lag selection (the floor function returns the largest integer not exceeding the argument)

$q = \text{floor } \{4 \, (T/100)^{2/9}\}$
which, is based solely on the number of observations used in the test regression.

Appendix 11

Unit Root Test

	Levels		Differences	
Variables	DF	PP	DF	PP
(c,1) ntdebt_sea_indo	-1.019	-0.923	-2.571	-3.337 **
(c,2) ntdebt_sea_indo	-0.811	-0.923	-1.578	-3.285 **
(c,3) ntdebt_sea_indo	-0.968	-0.923	-1.695	-3.266 **
(t,1) ntdebt_sea_indo	-2.206	-1.847	-2.433	-3.280 *
(t,2) ntdebt_sea_indo	-2.204	-1.859	-1.109	-3.231
(t,3) ntdebt_sea_indo	-2.417	-1.799	-0.854	-3.221
(c,1) ntdebt_kor	-2.479	-1.761	-2.752 *	-2.606
(c,2) ntdebt_kor	-1.837	-1.808	-1.887	-2.514
(c,3) ntdebt_kor	-3.160 **	-1.782	-2.998 *	-2.461
(t,1) ntdebt_kor	-2.768	-1.797	-2.617	-2.556
(t,2) ntdebt_kor	-2.225	-1.858	-1.579	-2.463
(t,3) ntdebt_kor	-3.331 *	-1.798	-2.525	-2.424
(c,1) ntdebt_sea_mal	-2.451	-2.848 *	-3.550 **	-5.591 ***
(c,2) ntdebt_sea_mal	-2.329	-2.853 *	-2.934 *	-5.672 ***
(c,3) ntdebt_sea_mal	-2.088	-2.829 *	-2.840 *	-5.825 ***
(t,1) ntdebt_sea_mal	-2.504	-2.962	-3.434 *	-5.451 ***
(t,2) ntdebt_sea_mal	-2.479	-2.971	-2.816	-5.526 ***
(t,3) ntdebt_sea_mal	-2.330	-2.930	-2.820	-5.662 ***
(c,1) ntdebt_sea_nep	-1.387	-1.206	-3.011 *	-4.069 ***
(c,2) ntdebt_sea_nep	-1.635	-1.233	-2.230	-4.050 ***
(c,3) ntdebt_sea_nep	-1.457	-1.262	-1.838	-4.034 ***
(t,1) ntdebt_sea_nep	-1.017	-1.230	-3.393 *	-4.219 **
(t,2) ntdebt_sea_nep	-0.663	-1.240	-2.631	-4.208 **
(t,3) ntdebt_sea_nep	-0.465	-1.225	-2.221	-4.219 **
(c,1) ntdebt_sea_phi	-1.429	-2.153	-4.686 ***	-4.599 ***
(c,2) ntdebt_sea_phi	-0.573	-2.186	-3.383 **	-4.772 ***
(c,3) ntdebt_sea_phi	-0.113	-2.165	-2.485	-4.883 ***
(t,1) ntdebt_sea_phi	-3.249	-3.502 *	-4.480 **	-4.521 ***
(t,2) ntdebt_sea_phi	-1.984	-3.503 *	-3.264	-4.638 ***
(t,3) ntdebt_sea_phi	-1.724	-3.503 *	-2.537	-4.696 ***
(c,1) ntdebt_sea_sri	-1.664	-1.602	-4.038 ***	-2.826 *
(c,2) ntdebt_sea_sri	-2.044	-1.720	-2.771 *	-2.490
(c,3) ntdebt_sea_sri	-2.725 *	-1.987	-1.015	-2.032
(t,1) ntdebt_sea_sri	-1.589	-1.415	-4.665 ***	-2.974
(t,2) ntdebt_sea_sri	-0.439	-1.209	-4.128 **	-2.600
(t,3) ntdebt_sea_sri	-0.287	-0.920	-2.236	-2.047
(c,1) ntdebt_sea_tai	-1.652	-1.624	-2.703 *	-3.275 **
(c,2) ntdebt_sea_tai	-1.964	-1.628	-2.081	-3.241 **

(c,3) ntdebt_sea_tai	-2.213	-1.637	-1.594	-3.210 **
(t,1) ntdebt_sea_tai	-1.491	-1.178	-3.154	-3.373 *
(t,2) ntdebt_sea_tai	-1.233	-1.169	-2.785	-3.278 *
(t,3) ntdebt_sea_tai	-1.271	-1.137	-2.762	-3.197
(c,1) ntdebt_sea_thai	-1.787	-1.278	-1.209	-1.914
(c,2) ntdebt_sea_thai	-2.307	-1.375	-2.040	-2.097
(c,3) ntdebt_sea_thai	-1.416	-1.411	-2.784 *	-2.129
(t,1) ntdebt_sea_thai	-2.206	-1.244	-1.191	-1.934
(t,2) ntdebt_sea_thai	-3.498 *	-1.550	-1.835	-2.099
(t,3) ntdebt_sea_thai	-2.867	-1.648	-2.627	-2.124
(c,1) tb_indo	-0.606	-0.038	-3.509 **	-3.779 **
(c,2) tb_indo	0.190	0.059	-2.390	-3.774 **
(c,3) tb_indo	0.840	0.199	-1.568	-3.780 **
(t,1) tb_indo	-1.715	-1.955	-3.641 *	-3.577 *
(t,2) tb_indo	-0.954	-1.945	-3.348 *	-3.523 *
(t,3) tb_indo	-0.865	-1.883	-2.356	-3.457 *
(c,1) tb_kor	-2.720 *	-2.399	-4.380 ***	-4.122 ***
(c,2) tb_kor	-1.689	-2.312	-3.361 **	-4.112 ***
(c,3) tb_kor	-1.740	-2.223	-3.587 **	-4.217 ***
(t,1) tb_kor	-3.141	-2.685	-4.263 **	-4.005 **
(t,2) tb_kor	-2.076	-2.585	-3.367 *	-3.974 **
(t,3) tb_kor	-1.814	-2.465	-3.493 *	-4.055 **
(c,1) tb_mal	-1.178	-0.719	-2.832 *	-3.607 **
(c,2) tb_mal	-1.314	-0.772	-2.689 *	-3.593 **
(c,3) tb_mal	-1.007	-0.728	-2.087	-3.552 **
(t,1) tb_mal	-1.900	-1.712	-2.753	-3.508 *
(t,2) tb_mal	-1.931	-1.752	-2.835	-3.472 *
(t,3) tb_mal	-1.706	-1.708	-2.364	-3.393 *
(c,1) tb_nep	-1.318	-1.348	-2.929 *	-4.713 ***
(c,2) tb_nep	-1.219	-1.362	-2.173	-4.713 ***
(c,3) tb_nep	-1.188	-1.380	-4.254 ***	-4.715 ***
(t,1) tb_nep	-1.987	-2.173	-2.849	-4.614 ***
(t,2) tb_nep	-2.337	-2.229	-2.102	-4.614 ***
(t,3) tb_nep	-3.609 *	-2.247	-4.513 **	-4.616 ***
(c,1) tb_phi	-3.058 **	-1.638	-2.911 *	-2.740 *
(c,2) tb_phi	-2.552	-1.727	-3.091 **	-2.697 *
(c,3) tb_phi	-1.934	-1.677	-2.237	-2.520
(t,1) tb_phi	-3.059	-1.542	-2.796	-2.619
(t,2) tb_phi	-2.780	-1.613	-3.063	-2.557
(t,3) tb_phi	-2.544	-1.544	-1.845	-2.319
(c,1) tb_sri	-2.467	-2.937 *	-4.938 ***	-4.946 ***
(c,2) tb_sri	-1.575	-2.873 *	-2.625	-5.080 ***
(c,3) tb_sri	-1.736	-2.911 *	-3.497 **	-5.211 ***
(t,1) tb_sri	-2.820	-3.265 *	-4.793 ***	-4.671 ***

(t,2) tb_sri	-2.287	-3.177	-2.499	-4.729 ***
(t,3) tb_sri	-2.743	-3.163	-3.269	-4.818 ***
(c,1) tb_tai	-2.272	-2.160	-2.862 *	-4.548 ***
(c,2) tb_tai	-2.501	-2.150	-2.180	-4.548 ***
(c,3) tb_tai	-2.617	-2.143	-2.037	-4.546 ***
(t,1) tb_tai	-2.228	-2.240	-2.772	-4.449 **
(t,2) tb_tai	-2.460	-2.229	-1.949	-4.443 **
(t,3) tb_tai	-2.527	-2.203	-1.688	-4.434 **
(c,1) tb_thai	-2.297	-1.507	-3.787 **	-3.118 **
(c,2) tb_thai	-1.061	-1.501	-2.902 *	-2.990
(c,3) tb_thai	-1.306	-1.405	-2.184	-2.845
(t,1) tb_thai	-2.642	-1.867	-3.937 **	-3.045
(t,2) tb_thai	-1.444	-1.832	-3.107	-2.891
(t,3) tb_thai	-0.782	-1.705	-2.776	-2.702
(c,1) ca_indo	-2.112	-1.095	-3.496 **	-3.390 **
(c,2) ca_indo	-1.120	-1.092	-2.798 *	-3.358 **
(c,3) ca_indo	-0.948	-0.993	-1.872	-3.294 **
(t,1) ca_indo	-2.659	-2.077	-3.427 *	-3.121
(t,2) ca_indo	-1.766	-2.081	-3.263	-3.062
(t,3) ca_indo	-2.013	-1.985	-2.072	-2.916
(c,1) ca_kor	-3.091 **	-2.580	-4.508 ***	-4.009 ***
(c,2) ca_kor	-1.903	-2.482	-3.350 **	-3.977 ***
(c,3) ca_kor	-1.992	-2.373	-3.270 **	-4.063 ***
(t,1) ca_kor	-3.246	-2.678	-4.381 **	-3.896 **
(t,2) ca_kor	-2.044	-2.569	-3.312 *	-3.843 **
(t,3) ca_kor	-1.812	-2.440	-3.151	-3.902 **
(c,1) ca_mal	-0.741	-0.453	-2.572	-3.931 ***
(c,2) ca_mal	-2.183	-0.575	-2.050	-3.939 ***
(c,3) ca_mal	-1.870	-0.576	-1.999	-3.933 ***
(t,1) ca_mal	-1.207	-1.252	-2.652	-4.042 **
(t,2) ca_mal	-2.336	-1.344	-2.147	-4.039 **
(t,3) ca_mal	-2.132	-1.346	-2.037	-4.028 **
(c,1) ca_nep	-1.524	-1.456	-3.646 **	-4.833 ***
(c,2) ca_nep	-1.132	-1.398	-3.205 **	-4.882 ***
(c,3) ca_nep	-0.933	-1.334	-4.973 ***	-5.028 ***
(t,1) ca_nep	-3.082	-2.986	-3.494 *	-4.716 ***
(t,2) ca_nep	-3.152	-2.943	-3.032	-4.756 ***
(t,3) ca_nep	-5.789 ***	-2.836	-4.829 ***	-4.901 ***
(c,1) ca_phi	-2.815 *	-1.853	-3.027 *	-2.999 *
(c,2) ca_phi	-2.342	-1.904	-3.234 **	-2.937 *
(c,3) ca_phi	-1.670	-1.837	-1.826	-2.759 *
(t,1) ca_phi	-3.012	-1.772	-2.852	-2.851
(t,2) ca_phi	-2.939	-1.825	-3.089	-2.773
(t,3) ca_phi	-2.396	-1.754	-1.448	-2.551

(c,1) ca_sri	-1.605	-2.335	-5.154 ***	-5.310 ***
(c,2) ca_sri	-0.738	-2.276	-3.102 **	-5.509 ***
(c,3) ca_sri	-0.766	-2.329	-3.540 **	-5.771 ***
(t,1) ca_sri	-3.198	-3.954 **	-5.022 ***	-4.936 ***
(t,2) ca_sri	-2.698	-3.916 **	-2.969	-5.022 ***
(t,3) ca_sri	-2.930	-3.906 **	-3.230	-5.199 ***
(c,1) ca_tai	-3.564	-2.350 **	-2.891 *	-4.954 ***
(c,2) ca_tai	-2.139	-2.384	-1.661	-4.990 ***
(c,3) ca_tai	-2.439	-2.406	-1.483	-4.947 ***
(t,1) ca_tai	-2.073	-1.903	-3.518 *	-6.474 ***
(t,2) ca_tai	-1.319	-1.857	-2.378	-7.224 ***
(t,3) ca_tai	-2.108	-1.845	-1.434	-8.001 ***
(c,1) ca_thai	-2.784 *	-1.732	-3.963 ***	-2.959 *
(c,2) ca_thai	-1.235	-1.742	-2.982 *	-2.828 *
(c,3) ca_thai	-1.451	-1.639	-1.502	-2.648
(t,1) ca_thai	-2.914	-1.905	-4.112 **	-2.883
(t,2) ca_thai	-1.352	-1.890	-3.140	-2.735
(t,3) ca_thai	-0.871	-1.759	-1.955	-2.520

*** 1 % significant
** 5% significant
* 10% significant
DF= Dickey-Fuller Test
PP= Philip-Perron Test

Appendix 12

Johansen Co-integration Equation between Net External Debt and Trade Balance

Country	Sample (included observations)	Test Assumption	Series	Eigenvalue	Likelihood Ratio	5 Percent Critical Value	1 Percent Critical Value	Hypothesized No of CE(S)
Indonesia	1980-2001 (19)	No Deterministic trend in the data	NTDEBT-US-INDO TB-INDO	0.507 0.002	13.467 0.045	12.53 3.84	16.31 6.51	None* At most 1
Korea	1980-2001 (19)	Linear Deterministic trend in the data	NTDEBT-US-KOR TB-KOR	0.535 0.168	18.031 3.487	15.41 3.76	20.04 6.65	None* At most 1
Malaysia	1980-2001 (20)	Quadratic deterministic trend in the data	NTDEBT-US-MAL TB-MAL	0.479 0.279	19.577 6.532	18.17 3.74	23.46 6.40	None* At most 1**
Philippines	1980-2001 (20)	No Deterministic trend in the data	NTDEBT-US-PHI TB-PHI	0.383 0.209	14.358 4.696	12.53 3.84	16.31 6.51	None* At most 1**
Taiwan	1980-2001 (19)	Linear Deterministic trend in the data	NTDEBT-US-TAI TB-TAI	0.422 0.228	16.143 5.170	15.41 3.76	20.04 6.65	None* At most 1*
Thailand	1980-2001 (20)	No Deterministic trend in the data	NTDEBT-US-THAI TB-THAI	0.552 0.035	16.752 0.708	12.53 3.84	16.31 6.51	None** At most 1

Note: *(**) denotes rejection of the hypothesis at 5% (1%) significance level; L.R. test indicates 1 co-integrating equation at 5% (Indonesia; Korea; Thailand), 2 co-integrating equations at 5% significance level (Malaysia; Philippines, Taiwan).

Appendix 13

Johansen Co-integration Equation between Net External Debt and Current Account Balance

Country	Sample (included observations)	Test Assumption	Series	Eigenvalue	Likelihood Ratio	5 Percent Critical Value	1 Percent Critical Value	Hypothesized No of CE(S)
Indonesia	1980-2001 (19)	No Deterministic trend in the data	NTDEBT-US-INDO CA-INDO	0.571 0.038	16.799 0.733	12.53 3.84	16.31 6.51	None** At most 1
Korea	1980-2001 (19)	No Deterministic trend in the data	NTDEBT-US-KOR CA-KOR	0.552 0.010	15.458 0.197	12.53 3.84	16.31 6.51	None* At most 1
Malaysia	1980-2001 (19)	Linear deterministic trend in the data	NTDEBT-US-MAL CA-MAL	0.507 0.193	17.500 4.075	15.41 3.76	20.04 6.65	None* At most 1*
Philippines	1980-2001 (20)	No Deterministic trend in the data	NTDEBT-US-PHI CA-PHI	0.426 0.190	15.312 4.216	12.53 3.84	16.31 6.51	None* At most 1*
Taiwan	1980-2001 (13)	-	NTDEBT-US-TAI CA-TAI	-	-	-	-	-
Thailand	1980-2001 (20)	No Deterministic trend in the data	NTDEBT-US-THAI CA-THAI	0.646 0.018	21.145 0.373	12.53 3.84	16.31 6.51	None** At most 1

Note: *(**) denotes rejection of the hypothesis at 5% (1%), significance level; L.R. test indicates 1 co-integrating equation at 5% significance level (Indonesia; Korea; Thailand), 2 co-integrating equations at 5% significance level (Malaysia; Philippines).

PART II: COUNTRY CHAPTERS

CHAPTER 2

ISSUES IN EXTERNAL DEBTS IN INDONESIA: CONCEPTS AND MONITORING PROCEDURES FOR CRISIS PREVENTION

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1. Introduction

Different than some other Asian countries hit by the crisis, macroeconomic fundamentals of Indonesia were relatively in good shape prior to the outbreak of crisis. This was particularly shown by trivial export slowdown, not-loosening fiscal stance, moderate current account deficit, and well-managed rupiah exchange rate within an intervention band[1]. Instead, the crisis in Indonesia was more a result of both vulnerability of the domestic financial system and external vulnerability in the form of high levels of short-term debt—largely made by private non-financial corporations. Against this backdrop, the unfold of sharp rupiah depreciation as a result of sudden changes in market sentiment and followed interest rate hikes led to a widespread collapse of corporations and deteriorating banks' assets.

The source of domestic financial vulnerability and external vulnerability can be traced to a two decade long, accelerated process of structural and financial liberalisation in Indonesia which was not supported by well-developed institutions.

1. This band was several time widened to maintain country's competitiveness and withstand shocks.

In the banking sector, the fragility was worsened by a number of factors, including a hesitancy to close insolvent banks and a lack of transparent information on bank conditions. In the non-financial corporate sector, the weakness was mostly accounted from poor corporate governance. Under an euphoria of high economic growths as a result of structural reforms and an absence of effective legal institutions, particularly the settlement of bankruptcy process, many corporations aggressively undertook risky investments which in turn led to over-investment.

Over-investment by the private corporations was furthermore buoyed by two other factors. *First*, the increasing dynamism of Indonesian economy and stable rupiah for years under the managed floating regime created overconfidence on the part of foreign investors, thereby overlooking their prudence in extending loans to Indonesian corporations. *Second*, Indonesian corporations, taking advantage of interest rate differential, attracted substantial capital inflows, especially in the form of short-term borrowing. This relatively easy access to foreign capital was significantly responsible for the emergence of currency as well as maturity gap, i.e. short-term external debts financing long-term investments but with rupiah revenue.

The build up of short-term debts acted thus as a triggering factor in Indonesian crises. Indonesia was confronted with external liquidity crises as investors came to doubt that adequate reserves were available to service maturing foreign debts. Significant part of investor doubt was fueled by a lack of reliable data on (short-term) foreign debts. This lack of debt data posed however also problems to the authority. Since the size and nature of foreign debts were substantially unclear, the (monetary) authorities faced with difficulties in formulating and implementing proper policy to cope with the crisis situation.

2. Definition and Objective of Report

Learning from the experience, Bank Indonesia makes continuous efforts in a number of areas to improve collection and report on external debt data. The external debt is here defined as debt of resident to non-resident, denominated in foreign currency or rupiah. In this respect, Indonesia's external debt is the outstanding amount of Indonesia's external financial liabilities at a point of time. The external debt report is primarily aimed at gathering and presenting the statistics of external debts for the purpose of managing balance of payments and foreign exchange reserves as well as formulating monetary policy.

3. Legal Basis

As the central bank of Indonesia operated under the Central Bank Act No. 23/1999, Bank Indonesia has the right to determine the coverage, content, methodology, and periodicity of the (external debt) data that it collects and compiles[2]. The legal basis for report on external debt is the Bank Indonesia Regulation No. 2/22/PBI/2000 dated 2 October 2000 (State Gazette Supplement Number 4007), and also the Bank Indonesia Circular Letter No. 2/20/DLN dated 9 October 2000 and its amendment dated June 8, 2001. Copies of both regulations on this external debt reporting obligation can be obtained from Bank Indonesia's website at http://www.bi.go.id on icon Utama/Peraturan/Ketentuan Moneter.

4. Data Collection

The reporting parties of external debt data are all head offices of commercial banks of Indonesian legal entities and of foreign banks' branch offices domiciled in Indonesia, head offices of state-owned enterprises (SOEs), regional state enterprises (RSEs), private corporations, and individuals that have external debts. External debts to be collected are debts of residents obtained to non-residents, denominated in foreign currency or rupiah, based on loan agreements, securities or other agreements such as trade payables, but excluding banks' liabilities in the form of demand deposits, savings and time deposits of non-residents. External debt data collected is in the form of both flows and stock (position) data.

Data on securities to be reported include the securities issued on overseas capital markets, in rupiah or in foreign currency, including Bonds, Commercial Papers, Promissory Notes, Medium Term Notes (MTN), and Floating Rate Notes (FRN). Loans in terms of trade payables to be reported refer to external debts arising from international trade with or without settlement through L/Cs with tenors of over 6 months. The threshold of the amount of external commercial loans to be reported is USD 500,000 or equivalent in other currencies. There is no threshold for external debts based on securities and trade payables.

The basic data of external commercial borrowing and debt securities reports should be submitted to Bank Indonesia every time no later than 15 working days

2. There is no government access to the external debt data before their release to the public. There is also no ministerial commentary attached to the release of the data.

after an external debt agreement is executed and/or amended. Reports on both debt position and flows should be submitted every month, no later than the 15th day of the following month. Trade payable reports should be submitted no later than the 15th day of the following month. All above reports should be submitted to Bank Indonesia in the form of hard copy and/or on floppy disk delivered through courier services.

Data on external liabilities to be reported is denominated in the original (foreign) currencies of reporting parties (banks and other sectors). The exchange rate used to convert it into a unit of account is the mid-point between the Bank Indonesia's buying and selling Transactions Rates at the end of period. In principle, all data on external debt are valued at market prices and recorded in accordance to accrual method.

Data on external debt is based on administrative records. General Government and Monetary Authority debt data is obtained from the Debt Analysis and Management System (DAMS) of Bank Indonesia[3], while Banks and Other Sector data is processed from the External Debt Information System (EDIS) of Bank Indonesia[4]. Noteworthy is however that both DAMS and EDIS only processed external debt data based on loan agreements, securities or other agreements such as trade payables, but excluding banks' liabilities in the form of demand deposits, savings and time deposits. The last mentioned data type is administered from the Monthly Report of Deposit Money Banks and the central bank's balance sheet.

By definition, and in accordance to existing IMF standard, external debt data collected by Bank Indonesia is only data appearing on the balance sheet of reporting agents. However, learning from crisis experience, Bank Indonesia currently also maintains data on contingent external liabilities of private banks. This step is taken as Bank Indonesia, as part of policies to enhance public confidence on banking sector, puts a guarantee scheme on all bank liabilities, including contingent ones.

3. DAMS is a central computerised system to maintain Government and Central Bank External Debt.

4. EDIS is a private external debt reporting system. EDIS is based on a monthly report, collected with the help of floppy disk for realisation report and paper base for base loan data.

5. Data Report

The statistics of Indonesia's external debt is compiled in reference to the guidelines set out in the Final Draft November 2001 of the IMF's "External Debt Statistics: Guide for Compilers and Users". According to this guideline, data is disseminated in millions of US dollars on the gross outstanding (= position) external debt. In addition to that, the end-period positions of external debt are also presented by sectors, instruments, maturity, as well as currency and residency. Noteworthy is that although flows data on external debt is available, its current service is only limited to Bank Indonesia's internal analytical purposes.

By sectors, external debts are classified into debts made by general government, monetary authorities, banks, and other sectors[5]. By instruments, the classification is made into external debts in the form of money market instruments, loans, trade credits, currency and deposits, and other debt liabilities[6]. By maturity, a breakdown of total debt by original as well as residual maturity into short-term debt and long-term debt (defined as debt with a maturity of more than one year) is available (Template 1 and Template 2)[7]. The breakdown of external debt data is also made in currency and residency (Template 3). Finally, the external debt data can also be classified into type of liabilities, i.e. principal as well as interest payments (Template 4)[8]. Note however that no data on debt-service payment schedule is released for public.

The external debt data is released quarterly, with the lag period in dissemination of maximum three months after the end of the reference quarter[9]. An advance release calendar giving one-quarter-ahead notice of the approximate release date and then a week-ahead notification of the precise release date is disseminated through the Internet on the IMF's Dissemination Standards Bulletin

5. In the debt outstanding of other sectors is included direct investment (inter-company lending). The outstanding data of this breakdown is already released in SDDS-IMF.

6. The outstanding data of this breakdown is already released in SDDS-IMF.

7. The outstanding data of this breakdown is already released in SDDS-IMF.

8. The last classification can be seen for instance in the bulletin of Indonesian Financial and Economic Report (SEKI) published by Bank Indonesia. Both flows and stocks data on principal and interest payments are available.

9. For Bank Indonesia's internal use, external debt data is disseminated monthly with one-month lag.

Board. The data is first released simultaneously to all interested parties when posted on the Bank Indonesia's website (http://www.bi.go.id on icon statistics and Special Data Dissemination Standard (SDDS))[10]. The data is preliminary figures when first released and is subject to revision. The final data will be released on the next quarter.

Changes in methodology are noted at the time the changes are introduced. However, no documentation on methodology and sources used in preparing the external debt statistics is published. In the SDDS publication of IMF, the metadata on Indonesian external debt is presented to provide users with the basic and methodology of external debt report. This is in turn done to improve the transparency of the report on Indonesian external debts.

6. Challenges and Efforts towards Improvement

Currently, there are a number of challenges on data collection and reporting system in Indonesia. *First*, current efforts by Bank Indonesia to improve the report coverage by amending or abolishing the threshold on external debt still face some technical problems. *Second*, it is hard to examine whether the reporting parties provide the correct data or not. *Third*, it also remains uncertain whether the number of current reporting parties already covered the whole population of Indonesian residents possessing external debts.

Mainly to cope with the above challenges, efforts in the following issues are planned to be taken in the near future:

- To amend the threshold.
- To improve public awareness that having adequate and timely data statistics on external debt will serve the interests of all parties in the country, thus not just those of the authorities.
- To improve the accuracy of external debt data, Bank Indonesia currently makes efforts to compare the external debt data obtained from EDIS with those from Foreign Exchange Flows Monitoring (so-called LLD) system. These efforts will be more intensified in the near future with the focus on data reconciliation to individual reporting agents.
  To use the web technology to improve the External Debt Information System (EDIS).

10. Hard-copy data can be found in our Bulletin of Indonesian Economic and Financial Statistics (SEKI).

Template 1

Gross External Debt Position	End - March 2002	NOTE
I. **General Government**	**61,010.0**	I = I.1. + I.2.
I.1. **Short-term**	-	I.1 = sum (I.1.1 s.d. I.1.4)
I.1.1. Money Market Instruments	-	
I.1.2. Loans	-	
I.1.3. Trade Credits	-	
I.1.4. Other Debt Liabilities	-	
I.2. **Long-term**	**61,010.0**	I.2 = sum (I.2.1 s.d. I.2.4)
I.2.1 Bonds and notes	2,478.6	
I.2.2 Loans	58,531.4	
I.2.3 Trade Credits	-	
I.2.4 Other Debt Liabilities	-	
II. **Monetary Authorities**	**11,572.2**	II = II.1. + II.2.
II.1. **Short-term**	**949.0**	II.1 = sum (II.1.1 s.d. II.1.4)
II.1.1 Money Market Instruments	43.8	
II.1.2 Loans	-	
II.1.3 Currency and deposits	846.7	
II.1.4 Other Debt Liabilities	58.5	
II.2. **Long-term**	**10,623.2**	II.2 = sum (II.2.1 s.d. II.2.4)
II.2.1 Bonds and notes	-	
II.2.2 Loans	10,623.2	
II.2.3 Currency and deposits	-	
II.2.4 Other Debt Liabilities	-	
III. **Banks**	**11,172.6**	III = III.1. + III.2.
III.1 **Short-term**	**5,175.4**	III.1 = sum (III.1.1 s.d. III.1.4)
III.1.1 Money Market Instruments	259.0	
III.1.2 Loans	82.3	
III.1.3 Currency and deposits	1,287.1	
III.1.4 Other Debt Liabilities	3,547.0	
III.2 **Long-term**	**5,997.2**	III.2 = sum (III.2.1 s.d. III.2.4)
III.2.1 Bonds and notes	1,954.9	
III.2.2 Loans	4,012.6	
III.2.3 Currency and deposits	-	
III.2.4 Other Debt Liabilities	29.7	
IV. **Other Sectors** [1]	**53,570.6**	IV = IV.1. + IV.2.
IV.1 **Short-term**	**5,340.6**	IV.1 = sum (IV.1.1 s.d. IV.1.5)
IV.1.1 Money Market Instruments	1,403.2	
IV.1.2 Loans	2,813.3	
IV.1.3 Currency and deposits	-	
IV.1.4 Trade Credits	36.4	
IV.1.5 Other Debt Liabilities	1,087.7	IV.2 = sum (IV.2.1 s.d. IV.2.5)
IV.2 **Long-term**	**48,230.0**	
IV.2.1 Bonds and notes	4,547.5	
IV.2.2 Loans	43,682.6	
IV.2.3 Currency and deposits	-	
IV.2.4 Trade Credits	-	
IV.2.5 Other Debt Liabilities	-	
V. **GROSS EXTERNAL DEBT**	**137,325.4**	V = I + II + III + IV
[1] Included Direct Investment : Intercompany lending		
Debt liabilities to affiliated enterprises	126.3	
Debt liabilities to direct investors	6,586.4	

Template 2

External Debt by Sector, Instruments, Value and Remaining Maturity in (Reporting Economy)
(US$ million)
End 2nd Quarter 2002

Sectors/ Instruments	Nominal value1/			Face value2/			Market value3/		
	Out-standing	Remaining maturity		Out-standing	Remaining maturity		Out-standing	Remaining maturity	
		< 1 yr	Other		< 1 yr	Other		< 1 yr	Other
A. **General govt.**	**62,185**			**62,185**					
Loans	61,971			61,971					
Securities	214			214					
Deposits									
Trade credits									
Other debt liabilities									
B. **Monetary authorities**	**11,889**			**11,889**					
Loans	11,303			11,303					
Securities	586			586					
Deposits									
Trade credits									
Other debt liabilities									
C. **Banks**	**5,848**			**5,848**					
Loans	3,652			3,652					
Securities	1,184			1,184					
Deposits									
Trade credits	1,013			1,013					
Other debt liabilities									
D. **Other**	**52,121**			**52,121**					
Loans	46,090			46,090					
Securities	6,031			6,031					
Deposits									
Trade credits	-			-					
Other debt liabilities									
Total	**132,043**			**132,043**					
Indicators									
-Total Debt/GNP Debt/export									
- S-T debt Reserves/ S-T debt									

Template 3

Outstanding External Debt by Sector, Instruments, Currency and Residency
in (Reporting Economy)
(US$ million)
End 2nd Quarter 2002

Sectors/ Instruments	Currency				Residency			
	US$	Yen	Euro	Other	United States	Japan	Euro [1]	Other
A. **General govt.** [2]	**27,215**	**24,694**	**7,978**	**2,298**	**3,436**	**25,051**	**9,135**	**24,563**
Loans	27,169	24,694	7,978	2,298	3,436	25,051	9,135	24,517
Securities	46							46
Deposits								
Trade credits								
Other debt liabilities								
B. **Monetary authorities**	**2,434**	-	-	**9,455**	**586**	-	-	**11,303**
Loans	1,848			9,455				11,303
Securities	586				586			
Deposits								
Trade credits								
Other debt liabilities								
C. **Banks**	**5,678**	**125**	**7**	**38**	**1,347**	**701**	**406**	**3,394**
Loans	3,498	115	1	38	535	374	203	2,539
Securities	1,184	-		-	75	307	82	720
Deposits								
Trade credits	996	10	6	0	737	20	121	134
Other debt liabilities								
D. **Other** [3]	**47,801**	**3,476**	**108**	**736**	**7,270**	**13,573**	**10,436**	**20,842**
Loans	42,232	3,335	108	416	6,623	12,453	9,225	17,789
Securities	5,569	141	-	321	647	1,120	1,212	3,053
Deposits								
Trade credits								
Other debt liabilities								
Total	**83,127**	**28,295**	**8,093**	**12,528**	**12,639**	**39,325**	**19,977**	**60,102**

1) Consist of Belgium&Luxemburg,Germany,Spain, Netherlands,Austria,Finland,Ireland,Italy,France
2) Preliminary Figures
3) Included Domestic securities June02 : 1486.15 and Pertamina march 02 : 2.679 M

Template 4

Periode	Pemerintah *Government*			Swasta *Private*									Jumlah *Total*	Period
				Lembaga Keuangan						Bukan Lembaga Keuangan *Non-Financial Institution*				
				Bank *Bank*			Bukan Bank *Non-Bank*							
	Pokok *Principal*	Bunga *Interest*	Sub Jumlah *Sub Total*	Pokok *Principal*	Bunga *Interest*	Sub Jumlah *Sub Total*	Pokok *Principal*	Bunga *Interest*	Sub Jumlah *Sub Total*	Pokok *Principal*	Bunga *Interest*	Sub Jumlah *Sub Total*		
1996	5,216	2,781	8,996	3,096	677	3,773			-	5,501	2,705	8,206	20,975	1996
1997	4,712	2,561	7,274	2,497	822	3,318	1,028	194	1,222	8,217	3,847	12,064	23,870	1997
1998	3,204	2,701	5,905	2,934	490	3,424	1,666	227	1,892	10,463	4,001	14,464	25,685	1998
1999	2,580	3,220	5,800	4,196	1,114	5,311	1,897	219	2,116	18,662	4,821	23,503	36,731	1999
2000	1,769	3,543	5,313	3,230	521	3,751	956	99	1,055	14,871	3,912	18,783	28,902	2000
Trw.I	907	854	1,762	890	103	993	163	36	199	3,877	980	4,857	7,810	Qrt.I
Trw.II	185	883	1,068	623	149	771	381	25	406	3,900	1,176	5,076	7,321	Qrt.II
Trw.III	407	891	1,298	1,266	112	1,378	143	16	159	2,521	626	3,147	5,981	Qrt.III
Trw.IV	270	916	1,186	451	158	609	269	22	291	4,573	1,132	5,704	7,790	Qrt.IV
2001	1,486	1,692	3,158	3,709	415	4,124	561	59	620	8,321	2,494	10,815	18,716	2001
Trw.I	618	864	1,482	501	30	532	186	17	203	1,598	714	2,312	4,729	Qrt.I
Trw.II	648	828	1,476	566	89	655	95	15	110	2,177	771	2,948	5,188	Qrt.II
Trw.III				1,664	138	1,802	176	13	189	2,852	430	3,282	5,273	Qrt.III
Trw.IV				978	158	1,136	104	14	118	1,694	579	2,273	3,527	Qrt.IV
2002	-	-	-	2,087	161	2,248	350	18	368	3,580	454	4,034	6,650	2002
Trw.I				960	17	977	175	11	186	1,494	236	1,730	2,893	Qrt.I
Trw.II				1,127	144	1,271	175	7	182	2,086	218	2,304	3,757	Qrt.II

OUTSTANDING OF SHORT TERM EXTERNAL DEBT INDONESIA

(in Million USD)

ITEMS	1999	2000	2001
Total	**9,295.0**	**6,969.2**	**6,693.2**
1 Government	**142.0**	**25.7**	**49.6**
2 Private	**9,153.0**	**6,943.5**	**6,643.6**
2.1 Bank	1,404.0	38.2	84.3
2.2 Non Bank	7,749.0	6,905.3	6,559.3

Note :

The short term external debt data are base on original maturity (defined as debt with a maturity of less than one year).

Table 2.1

Indonesian Macroeconomic Data

		Year																					
		1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Gross Domestic Product	Million USD	77,888	94,727	97,788	78,091	83,355	87,472	67,457	77,958	86,306	100,171	115,102	125,486	136,952	156,292	173,736	196,930	223,486	212,634	96,785	140,629	139,613	143,363
Gross National Product	Million USD	69,164	81,537	83,681	74,788	80,171	82,716	60,018	71,997	78,095	88,740	101,518	108,710	119,999	150,343	169,078	191,139	217,497	206,416	91,328	130,102	124,008	137,778
Gross Domestic Savings	Million USD	19,558	22,556	19,335	13,208	16,582	18,227	12,208	17,109	20,846	26,156	29,362	30,849	57,616	63,363	73,637	49,227	58,355	55,191	28,709	34,144	35,993	36,796
Gross Domestic Investment	Million USD	16,794	23,055	24,793	19,660	18,552	20,177	16,307	19,378	22,398	27,436	32,592	35,241	37,325	41,075	47,900	55,987	66,157	60,192	24,612	28,361	28,001	29,995
Average Interest Rate																							
External Government Debt	% y-o-y	0.5-3.5	0.5-3.5	0.5-3.5	0.5-3.5	0.5-3.5	0.5-3.5	0.5-3.5	0.5-3.5	0.5-3.5	0.5-3.5	0.5-3.5	0.5-3.5	0.5-3.5	0.5-3.5	0.5-3.5	0.5-3.5	0.5-3.5	0.5-3.5	0.5-3.5	0.5-3.5	0.5-3.5	0.5-3.5	0.5-3.5
External Private Debt (= Libor+...)	% y-o-y	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1.12	0.97	1.18	1.47	1.33	1.24	1.16	1.01	1.59	2.03	2.00	1.98
Average Bank Indonesia Policy Rate	% y-o-y	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	15.92	19.31	15.99	10.62	10.29	14.13	13.82	14.50	49.32	23.14	12.55	16.64
Foreign Exchange Rate	Rp/USD	628	639	686	994	1,069	1,125	1,641	1,650	1,731	1,793	1,832	1,992	2,062	2,110	2,200	2,308	2,383	2,952	9,875	7,809	9,595	10,400
Total Export	Million USD	22,609	23,665	19,747	18,589	20,754	18,527	14,396	17,206	19,509	25,331	29,519	32,920	37,830	42,415	46,295	54,640	58,378	65,636	57,632	66,740	74,183	66,304
Total Import	Million USD	13,446	16,542	17,854	17,726	15,047	12,705	11,936	12,532	13,831	16,310	21,455	24,834	3,361	3,800	3,625	40,921	44,240	46,223	31,942	30,596	40,365	34,668
Current Account (Surplus)	Million USD	2,764	-499	-5,458	-6,442	-1,970	-1,950	-4,099	-2,269	-1,552	-1,280	-3,240	-4,392	20,291	22,278	25,737	-6,760	-7,802	-5,001	4,097	5,783	7,992	6,901
Total External Debt	Million USD	14,870	18,847	23,438	27,257	29,665	35,157	41,592	49,529	50,720	52,400	63,953	65,697	73,359	80,592	96,500	107,832	110,171	136,088	150,887	146,097	141,538	132,867
Government	Million USD	12,994	13,945	16,767	19,953	21,589	25,321	31,521	38,417	38,983	39,577	45,100	45,725	48,769	52,461	58,616	59,588	55,303	53,864	67,315	75,720	74,891	69,403
State Enterprises	Million USD	1,876	2,184	3,270	3,480	3,320	2,997	3,073	3,149	3,277	3,650	4,257	3,359	4,516	5,060	5,070	4,822	3,742	3,995	4,153	5,004	4,927	4,095
Private	Million USD	...	2,718	3,401	3,824	4,756	6,839	6,998	7,963	8,460	9,173	14,596	16,613	20,075	23,070	32,814	43,421	51,126	78,228	79,419	67,373	61,720	59,369
Debt Service	Million USD	1,340	2,587	2,942	3,107	4,216	4,654	5,488	6,731	7,834	8,368	8,559	9,495	13,314	13,165	15,114	16,579	20,974	29,200	33,378	33,341	30,484	27,443
Principal	Million USD	624	1,358	1,535	1,596	2,123	2,514	3,008	3,933	4,617	5,112	5,210	5,746	9,078	8,867	10,050	10,203	14,812	22,453	24,711	24,074	21,226	20,369
Interest	Million USD	716	1,229	1,407	1,511	2,093	2,140	2,480	2,798	3,217	3,256	3,349	3,749	4,236	4,298	5,064	6,376	6,162	6,747	8,667	9,266	9,258	7,074
International Gross Reserve	Million USD	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	9,666	12,562	16,417	18,679	17,151	18,583	25,140	21,482	23,762	27,054	30,422	28,935
Fiscal Revenue	Million USD	17,395	19,325	22,233	16,105	14,501	20,049	16,061	15,098	18,124	20,774	23,153	28,161	27,579	30,206	33,775	35,736	37,505	38,308	18,466	24,208	28,421	28,824
Broad Money (M2)	Million USD	n.a.	n.a.	n.a.	n.a.	n.a.	20,580	16,866	20,536	24,262	32,741	46,195	49,726	57,737	68,816	79,324	96,464	121,121	120,475	58,469	82,751	77,856	81,159

Source: Various Bank Indonesia Publication

CHAPTER 3

ISSUES IN EXTERNAL DEBT IN KOREA: CONCEPTS AND MONITORING PROCEDURES FOR CRISIS PREVENTION

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1. Introduction

1.1 Recent Development on Foreign Exchange System and External Debt

In late 1997, the currency crisis broke out and Korea turned to the IMF on November 21, 1997. Taking advantage of the opportunity presented by the crisis, Korea accelerated the speed of capital account liberalisation. It shifted to a free-floating exchange rate system on December 16, 1997. The ceiling on foreign investment in Korean equities was entirely abolished in May 1998, and the local bond markets and money markets were completely opened to foreign investors.

In June 1998, the government announced a plan to liberalise all foreign exchange transactions in two stages. The first stage of liberalisation took effect on April 1, 1999 with introduction of the new Foreign Exchange Transaction Act(FETA). Except for a few types of transactions, current account transactions by corporations and banks were fully liberalised. Regulations on capital account transactions converted into a negative system. Nonresidents were allowed to make deposits and open trust accounts denominated in Korean won with maturities of more than one year. To counteract any possible harmful effects of liberalisation, safeguard measures were also established.

The second stage of liberalisation took effect on January 1, 2001. The remaining ceilings on current account transactions by individuals have been eliminated, including the ceilings on overseas travel expenses, withdrawals of domestic assets by nonresidents and deposits and trusts.

On the other hand, since the crisis of 1997 South Korea is continuously trying to achieve reduction of amount of external debts and expansion of foreign reserves.

According to these, South Korea turned into a country of creditor from September in 1999. Moreover the ratio of external debt of one year or less on the basis of remaining maturity to foreign reserves lowered to 54.7% on August 2002 from 924.0% at the end of 1997, and short-term credit to short-term debt ratio has been maintaining around 300% since the end of 1998 in Korea.

Table 3.1
Trends of External Credits and Debts of South Korea

(in billion USD)

	Dec.1997	Dec.1998	Dec.1999	Dec.2000	Dec.2001	Aug.2002
Total External Debts	159.2	148.7	137.1	131.7	117.7	129.6
Short-term(A)	63.6	30.7	39.2	47.9	39.1	51.5
(1 year or less in residual maturity)(B)	(81.9)	(67.0)	(56.0)	(62.8)	(53.2)	(63.7)
Total External Credits	105.2	128.5	145.4	164.7	162.8	174.6
Short-term(C)	72.9	98.1	119.5	144.1	140.9	153.0
Net External Credits	-54.1	-20.2	8.3	33.1	45.2	45.0
(Foreign Reserves)(D)	(8.9)	(48.5)	(74.1)	(96.2)	(102.8)	(116.5)
B / D (%)	924.0	138.1	75.6	65.3	51.7	54.7
C / A (%)	114.7	319.5	304.8	300.8	360.1	296.9

1.2 Administrative Bodies Related to Foreign Exchange System

The foreign exchange system is operated by the Ministry of Finance and Economy (MOFE) and the Bank of Korea. Much of the authority is, however, delegated to foreign exchange banks.

The MOFE is responsible, under the FETA, for the establishment of overall foreign policies which are related to method of settlement, foreign exchange transactions, payments for non-merchandise transactions and capital transactions.

The Bank of Korea, as the central bank, holds and manages the nation's foreign exchange reserves and formulates, in cooperation with the MOFE, foreign exchange policy. The Bank is chargd by the MOFE with the management of certain transactions related to visible and invisible foreign trade and capital movements. The Bank is also authorised to supervise the money changers and foreign exchange brokers, as well as to oversee foreign exchange transactions through the Foreign Exchange Information Network.

2. Definition of External Debt

The definition of Gross External Debt in Korea is as follows :
"Gross External Debt is the amount, at any given time, of outstanding contractual liabilities of residents to non-residents in foreign currencies according to the World Bank rule, and besides includes domestic banks' off-shore and overseas branches' borrowings by agreement between our government and IMF in 1997".

However the Bank of Korea is undertaking to renew the standard of compilation of External debt according to "Debt Guide" proposed by IMF and other organisations last year. We will comprise Korean won-dominated external debt and international financial leases and others into the external debt, while extracting domestic banks' overseas branches' borrowings from that by the new standard.

3. Classification of External Debt

3.1 By Borrower/Sector

We classify the external debt statistics by four sectors, i.e, general government, central bank, banking sector and others. Public sector is composed of general government, Central Bank, public corporations and banks owned by government. Especially we define public corporations as these, government determine general corporate policies of which by legislation or choosing appropriate directors, control over which can be established through government ownership of more than half of the shareholder voting power.

3.2 By Maturity

By maturity we classify short and long term debts on the contractual basis, and besides we also classify those on the residual basis by way of estimating the amount of long-term debt due within a year.

3.3 By Instruments

External debts are composed of some kinds of instruments like loans, debt securities, trade credit and so on.

3.4 By Currency

We can classify external debt in government, central bank and banking sectors by currencies, but we cannot classify in other sector. It is not difficult to obtain their data classified by currency from government, central bank and banking sector, but it is very hard to get the same data from corporations. In reality we are surveying corporations' long-term external debts biannually, which comprise types of borrowing and debt securities, compositions of currencies and amortisations, and in addition a few of attributes. Therefore we have only biannual stocks of borrowing and debt securities in corporate sector. So it could be estimated composition of currencies in trade credit which is an important type of external debt in corporate sector by finding out currency composition of foreign exchange payment concerned with imports.

3.5 By Type of Liabilities

We are compiling external debt statistics only as principal, except for interests accrued.

4. Source of Data

We have various data collection processes by sectors.

4.1 Public Sector Debt

For the governmental sector, the stock data of external debt have been provided by the Ministry of Finance and Economy biannually. And so we have had to produce monthly stock data by adding the BOP flows to the biannual stock of bilateral official loans. However MOFE agreed to provide us with the

Table 3.2: Classification and Trends of External Debt

(In USD Billion)

		Dec.1997	Dec.1998	Dec.1999	Dec.2000	Dec.2001	Jul.2002
Total External Debt		159.2	148.7	137.1	131.7	117.7	129.1
By Sector	General Government	11.2	19.6	23.4	22.4	20.8	20.4
	Monetary authorities	11.1	16.9	6.1	5.8	0.0	0.1
	Banks	89.9	71.0	61.0	50.8	42.8	51.0
	Others	47.1	41.2	46.6	52.6	54.1	57.7
By Sector	Public Sector	60.3	71.1	58.5	53.6	43.9	45.1
	Private Sector	98.9	77.6	78.6	78.1	73.8	84.0
By Maturity	Original Maturity						
	Short-term	95.7	118.0	97.8	83.7	78.5	78.5
	Long-term	63.6	30.7	39.2	47.9	39.1	50.7
	Residual Maturity						
	Short-term	82.0	67.0	56.0	62.8	53.2	63.1
	Long-term	77.2	81.7	81.1	68.9	64.5	6.0
By Instruments	Loans	63.7	68.4	57.0	52.7	42.9	45.8
	Trade Credits	30.0	22.5	27.1	31.2	28.6	30.8
	Debt Securities	50.1	43.6	39.1	36.9	35.7	35.5
	Currency and Deposits	0.5	1.1	1.1	1.6	1.2	1.7
	Other debt liabilities	14.9	13.1	12.8	9.3	9.3	15.4
By Currency	USD	n.a	n.a	n.a	n.a	98.1	n.a
	JPY	n.a	n.a	n.a	n.a	16.1	n.a
	EUR	n.a	n.a	n.a	n.a	2.0	n.a
	GBP	n.a	n.a	n.a	n.a	0.1	n.a
	CHF	n.a	n.a	n.a	n.a	0.1	n.a
	Others	n.a	n.a	n.a	n.a	1.2	n.a

monthly stock data of bilateral official loans from October 2002. Therefore we can expect more precise statistics in government sector.

For the provincial governments and public corporations, we maintain the database of loans and debt securities of those entities by adding new borrowings and subtracting debts due to the database.

4.2 Private Sector Debt

For the banking sector, the external debt data is mainly from the banks' monthly balance sheets. Preliminary data of foreign currency denominated monthly balance sheets of banks are being used for preliminary external debt statistics in the banking sector. And a few months later confirmed external debt statistics are compiled by making use of fixed balance sheets of banks.

For corporate and other sectors, however, because accurate monthly stock data on debt positions is unavailable, flow data from other sources are the main data set. BOP figures and foreign exchange receipts and payments reports from banks are the main flow data to be connected with benchmark stock data inherent in those sectors. Benchmark stocks are obtained by the annual government statement of accounts for the public sector and by the comprehensive survey for the corporate sector every two or three years.

The survey pool for the corporate sector is composed of corporations under obligation, by the Foreign Exchange Transaction Act, to report their foreign exchange receipts and payments to banks.

5. Frequency of Data Availability, Coverage and Dissemination

5.1 Type of Releases

The Bank of Korea (BOK) takes charge of collecting and compilation of the data, while the Ministry of Finance and Economy (MOFE) is in charge of dissemination of External Debt statistics. Dissemination is performed in forms of distributing press release every month, in which there are contained external debt statistics classified by maturity and sector. Right after press release more concrete data are provided on the BOK website (www.bok.or.kr): classified by sectors, short and long term, instruments, and so forth.

5.2 Lag Period in Dissemination

MOFE's dissemination of external debt has one month lag, and BOK publishes the external debt statistics nearly at the same time on website.

6. Debt-service Payment Schedule following 5-10 years

6.1 By Sectors

The percentage of long-term debt due since 2006 out of total long-term debt is 45% in governmental sector comprising the Bank of Korea, and that of the amount due between 2004 and 2005 year is about 41%. Amortisation structure of government sector is comparatively good like these.

For banking & corporate sectors, however, the percentage of long-term debt due within year 2005 is around 70% respectively, and that of the amount due since 2006 is no more than 30%.

Table 3.3
Amortisations of Medium & Long-Term External Debt
(End of Year 2001)

(In USD million)

	End of 2001	2002	2003	2004	2005	2006-2010	Since 2011
Government Sector 1)	20,810	1,602	1,415	4,432	4,078	7,346	1,935
	(100.0)	(7.7)	(6.8)	(21.3)	(19.6)	(35.3)	(9.3)
Banking Sector	22,879	7,807	2,454	2,363	3,253	7,002	-
	(100.0)	(34.1)	(10.7)	(10.3)	(14.2)	(30.6)	(0.0)
Others 2)	24,973	5,719	3,871	5,094	2,073	3,596	4,620
	(100.0)	(22.9)	(15.5)	(20.4)	(8.3)	(14.4)	(18.5)
	68,662	15,128	7,739	11,890	9,405	17,944	6,555
	(100.0)	(22.0)	(11.3)	(17.3)	(13.7)	(26.1)	(9.5)

Note : 1) Government Sector comprises General Government and Central Bank
2) Loans & debt securities only

6.2 By Maturity

6.3 By Currency

6.4 By Instruments

By maturity, currency and instruments, we cannot know debt service payment schedule.

7. Use of Debt Data

There are several ratios used often in our country: short-term debt ratios on contractual or residual basis, debt due within one year to foreign reserves ratios, total external debt to GDP etc.

Firstly, the short-term debt ratio on the contractual basis is 39.2% in July this year, shifted up by 6%p. It is caused by 11.5 billion USD increase of short-term debt.

The reason why short-term debt jumped so greatly during this year is investment enlargement of foreign bank branches for won-denominated bonds and increase of trade credit according to economic recovery and so on.

On the other hand, debt due within one year to foreign reserves ratio is no more than 54.6% now, and so it seems that we don't have any problem concerning external paying ability.

Table 3.4
Principal Ratios Relating to External Debt

(In USD billion)

	Dec.1999	Dec.2000	Dec.2001p	Jul.2002p	During this year
External Debt(A)	137.1	131.7	117.7	129.1	11.5
Long-Term	97.8	83.7	78.5	78.5	0.0
Short-Term					
(Contractual)(B)	39.2	47.9	39.1	50.7	11.5
(Residual)(C)	56.0	62.8	53.2	63.1	9.9
Foreign Reserves(D)	74.1	96.2	102.8	115.5	12.7
GDP 1) (E)	405.8	461.7	422.2	-	-
<Ratios> (%)					
B / A	28.6	36.4	33.3	39.2	6.0p
C / A	40.9	47.7	45.2	48.9	3.6p
C / D	75.6	65.3	51.7	54.6	2.9p
A / E	33.8	28.8	27.9	-	-

Note : 1) Flows during the year

8. Issues on External Debt Data Collection and Reporting System Relating to Definition, Coverage, Accuracy, Frequency and Data Dissemination.

It is in corporate sector that we have difficulties in collecting external debt data. The Bank of Korea can request the data about external borrowing from corporations by the Foreign Exchange Transaction Act. But it lacks effective punishments meted out to the corporations which will not report the data.

Until now we have surveyed only loans and debt securities relating to corporate long-term debt every six months. Other basic data in corporate sector are difficult to obtain, and so we add flows of BOP and foreign exchange payment and receipt to existing stocks of statistics.

9. Deviation of Data Collection and Reporting System from Those of the BIS, OECD, IMF and World Bank

No Comment

10. Efforts Taken Towards Improvement of Data Collection & Standardisation of Data Definition and Reporting System

Efforts towards improvements of data collection:

1) In Korea most of the foreign transactions are being reported through the Foreign Exchange Information Network by economic entities. As for external debt statistics, we use the Foreign Exchange Information Network in collecting data of Korean Paper and balance sheet of financial institutions. (Korean Paper means bonds or securities issued by Koreans. We subtract Korean Paper data invested by residents from external debt data).

2) Besides we have made 11 shipbuilders of big size report their advances of deferred export data every month, because there have been some errors in advances of export on account of lack in accurate performance reporting in the course of ship building. In this way we have solved the problem.

Efforts towards improvements of standardisation of data definition:

1) We are undergoing the renewal of compiling standard of external debt statistics according to the Debt Guide issued by the IMF and other 7 organisations.

Differences between our compiling standard at present and Debt Guide:

By our present compiling standard, External debt statistics of Korea doesn't have Korean won dominated external debt, international financial leases and offshore borrowing by corporations' head offices. On the other hand, External debt statistics of Korea comprise borrowings by the overseas branches of domestic banks, nonresidents.

2) Our team is planning to accomplish the renewal until end of this year, and adopt new statistics officially from next year.

11. Was the Debt Situation a Factor in the 1997 Financial Crisis in Your Country? (Brief Analysis)

In Korea current account deficits had been accumulated to great extent on account of economic policy of 8-9% high growth over potential growth rate in

early 1990s. (Accumulated amount of current account deficits during 1990 to 1996 is 48.7 billion USD).

According to great extent of current deficits, external debt stock increased abruptly, total external debt to GDP ratio came up to 40.7%, and short-term debt ratio over 50%.

Table 3.5

(USD Billion)

	Dec.1996	**Sep.1997**	**Dec.1997**	**Dec.1998**	**Dec.1999**
External Debt	163.5	180.5	159.2	148.7	137.1
Long-Term	70.2	82.3	95.7	118.0	97.8
Short-Term	93.3	98.2	63.6	30.7	39.2
	(57.1)	(54.5)	(39.9)	(20.6)	(28.6)
External Debt/ GDP (%)	31.4	40.7	33.4	46.8	33.8

Note : Figures in ( ) represents short-term External Debt Ratio(%)

With chain bankruptcies of corporations, financial state of our domestic banks became worse and credit ratings by international credit rating companies were coming down quickly. And then foreign financial institutions withdrew money from domestic banks competitively, eventually foreign exchange crisis took place because of lack of liquidity.

The rapid increase of external debt and higher short-term debt ratio could be one of the several reasons for Korean economic crisis in 1997.

CHAPTER 4

ISSUES IN EXTERNAL DEBT IN MALAYSIA: CONCEPTS AND MONITORING PROCEDURES FOR CRISIS PREVENTION

by

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Malaysia has long recognised the adverse consequences of unsustainable debt levels, with the lessons drawn from the recession in the 1980s when Malaysia experienced twin deficits, namely deficits in the government budget and current account of the balance of payments. These were accompanied by high level of external borrowings. Since then, Malaysia has adopted a conservative approach to foreign debt management and kept its external debt at relatively low levels. Malaysia's framework for external debt management has been guided by prudential policies and an efficient debt monitoring system. The prudential policies have been designed to reduce the risk exposure to global interest rate shocks, exchange rate movements and shifts in investor sentiment.

1. Policies in External Debt Management

The rules governing external borrowings by both the private and public sectors are rather stringent. As part of prudent debt management, the public and private sectors were encouraged to diversify their borrowing in terms of currencies, debt instruments and creditors in order to spread risks, achieve a longer maturity profile and gain wider access to capital markets.

The Federal Constitution provides the legal framework, within which the Government can undertake borrowing from both domestic and external sources. The Cash Management Committee chaired by the Secretary General of the Treasury and comprising members from the Ministry of Finance, Bank Negara Malaysia (BNM) and the Accountant General's Office has primary responsibility with respect to public sector borrowing and debt management. Operations involving Government debt are subject to Parliamentary approval, as it is the Parliament

that sets a ceiling on the overall external debt level of the Federal Government. As at 2 October 2002, the limit for the Government's external borrowing is RM50 billion. The state governments, local authorities and statutory bodies are not authorised to borrow, except with the approval of the Federal Government. To date, their external financing requirements were met via the Federal Government, which borrowed from multilateral and bilateral sources and subsequently on-lent to them.

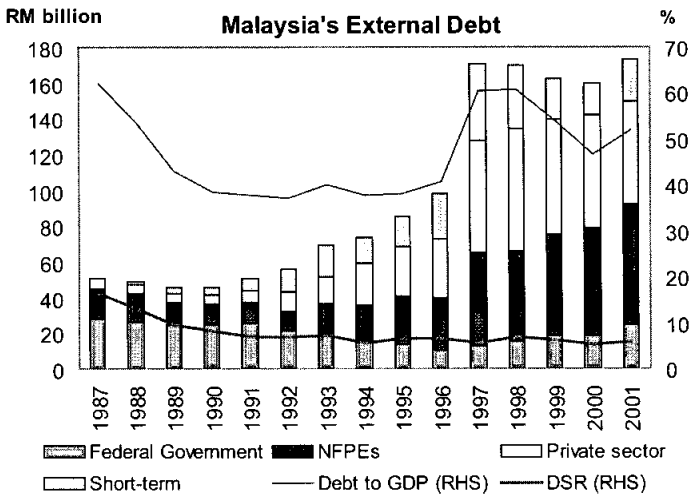
Private sector borrowing is governed by the Exchange Control Regulations administered by BNM. BNM imposes strict prudential rules, and approval is required for all foreign currency borrowings exceeding the equivalent of RM5 million by Malaysian companies, including non-financial public enterprises (NFPEs), and by individual Malaysian residents. Prudential criteria are applied for approval of external borrowings. In the case of private sector borrowing, BNM will verify that the borrower has sufficient sources of foreign currency earnings to service the external borrowing and ensure that the borrowing is utilised to finance productive activities that have significant linkages with the domestic economy. Companies are encouraged to raise loans with longer maturities but are not permitted to raise external borrowing to finance the purchase of properties or shares in the country.

Short-term borrowing, particularly borrowing to finance long-term investment, is generally not encouraged and closely monitored. The short-term debts are mainly in the form of revolving credits, inter-company credits through inter-company loans and external borrowing of the banks. The banks' external borrowing are mainly short-term debt as they relate to their normal trade financing activities and are fully hedged, and therefore does not pose any threat to banking system.

Taken together, the regulations governing foreign borrowing provide an important check on the amount of foreign loans that can be contracted by both the public and private sectors. In addition, in 1987, the Government embarked on a policy to selectively prepay the more expensive loans to contain the external debt at a manageable level and to reduce the debt-servicing burden. The NFPEs and private enterprises were also encouraged to prepay their external debt. The regular prepayment and refinancing exercises during 1987-97 have kept debt levels low, while the refinancing programmes have improved the debt maturity profile of the country. The bulk of Malaysia's medium- and long-term debt was loans with remaining maturities of between four and twenty years. As at end-1997, short-term debt accounted for 24% of total external debt, reflecting the

low reliance on short-term borrowing by the non-bank private sector. This share has declined further to 13.7% as at end-June 2002.

Figure 4.1



The lower external debt level of Malaysia has strengthened the country's capacity to weather the challenges associated with external shocks, including those associated with the Asian crisis in 1997-98.

2. Monitoring System and Source of Data

There is a strong institutional framework for monitoring the national external debt that enables the authorities to know the overall debt level, the structure of the debt as well as the debt servicing obligations of both the public and private sectors. The Federal Treasury has primary management authority of the public sector debt. This includes responsibility for approving all central government borrowing and borrowing of the NFPEs which requires the guarantee of the Government. The Accountant General (AG) Department as the operational arm of the Treasury maintains the database of the Federal Government's domestic and external debt. It is responsible for maintaining all information necessary to monitor, at the level of individual loans, the commitments, disbursements, terms, currencies, principal repayment and interest payment schedules, creditors and

end-uses of the loan proceeds of all public sector loans, including loans obtained by the NFPEs that are guaranteed by the Government. Quarterly reports on the status of the guaranteed loans must be submitted to the Treasury.

BNM is responsible for monitoring and maintaining similar information on the private sector and other NFPE loans. Under the exchange control requirement, the private companies, NFPEs and individual Malaysian residents with external loans in excess of RM1 million are required to provide information on loan amounts, disbursements, terms, currencies, debt servicing schedule, creditor name and purpose of loan. It is mandatory for companies that are granted approval by BNM for external loan in excess of RM5 million to submit quarterly report on external loans taken. Being the supervisory authority of the financial institutions in Malaysia, BNM receives and compile various monetary statistics including the external assets and liabilities of the banking institutions, from the monthly report by the financial institutions.

The three agencies have developed and maintained their own in-house debt collection and monitoring system. All consolidated information captured under the proprietary systems of the three agencies is readily available to the three parties and reports are forwarded on a regular basis to each other. BNM plays a central role in coordinating all these information and in publishing the external debt statistics of Malaysia on periodic basis. The aggregate external debt data compiled by BNM complements the balance of payments statistics and data on international investment position being compiled by the Department of Statistics of Malaysia.

3. Coverage and Compilation of External Debt Data

At present, the breakdown or classification of the external debt data compiled by Malaysia are not as detailed as outlined by the IMF in its Balance of Payments Manual Fifth Edition (BPM 5). External debt in the Malaysian context comprises mainly debt securities and loans, including inter-company loans. Currency and deposits are not included. Furthermore, the coverage does not include foreign currency debt obtained locally by residents as well as domestic currency debt held by non-residents.

As elaborated earlier, the compilation of the external debt data by Malaysia is primarily on **end-user or sectoral basis**, namely the public sector (Federal Government and NFPEs) and the private sector (bank and non-bank sectors).

Table 4.1

	Data availability	
Total external debt	*Frequency*	*Lag*
Medium and Long-term		
Public Sector		
Federal Government		
■ Market loan	monthly	1-2 weeks
■ Project loan[1]	monthly	1-2 weeks
Non-Financial Public Enterprises		
■ Guaranteed[2]	quarterly	5-6 weeks
■ Non-Guaranteed	quarterly	5-6 weeks
Private Sector		
Banking sector	monthly	2-3 weeks
Non-bank sector	quarterly	5-6 weeks
Short-term		
Banking sector	monthly	2-3 weeks
Non-bank sector	quarterly	5-6 weeks

1. loans from multilateral financial institutions and bilateral sources
2. loans with guarantees provided by the Federal Government

In general, the tabulation of the quarterly external debt data follows the format as shown in Table 4.1. Indication of data frequency and lag in availability is presented in the box on the right hand side of the table.

It should be noted that the short-term external debt comprises mainly borrowing by the private sector (bank and non-bank sector).

4. Classification of External debt

Malaysia's outstanding external debt reflects the nominal value of the outstanding principal amount. **By sector**, there has been a change in terms of share of the public and private sector in Malaysia's external debt. During 1980-87, the Federal Government accounted for about 55% of Malaysia's external debt. However, with the downsizing of the public sector since 1987 through the privatisation policy, the prepayment of its external loans and the sourcing of its funding requirement largely from the domestic market, the share of Federal

Government's external debt out of the nation's total has declined. As a matter of policy, the Government exercises prudence in its recourse to external borrowing and relies mainly on non-inflationary domestic borrowing. In recent years, the Government tapped the international capital markets, partly to maintain a market presence as well as to take advantage of lower US interest rates to set a benchmark rate to facilitate the corporate sector's access to the US, European and other international markets.

Meanwhile, the share of private sector in Malaysia's external debt has risen since 1987 following the private sector-led growth strategy adopted by the authority. The increased financing requirements of the private sector were financed partly by increased recourse to external borrowing. External borrowing by the NFPEs also increased during this period, albeit at a slower pace. By end-June 1997, the share of the public sector (federal government plus NFPEs) in external debt declined to 36%, with the Federal Government's share of only 7.9%, while the private sector's share increased to 64%.

Following the outbreak of the Asian crisis, the external borrowing by the private sector, especially short-term borrowing, slowed down due to increased debt burden arising from the depreciation of the ringgit and higher interest rates as well as slowdown in private investment activities amidst weak economic activity and uncertain outlook. As part of active debt management to reduce the overall debt servicing cost, some companies undertook prepayment as well as restructured their more expensive external debt through refinancing with cheaper domestic bank loans and the issuance of private debt securities. Meanwhile, the public sector's share has risen in recent years partly on account of the issuance of government bonds. Nevertheless, the private sector (inclusive of short-term debt) still accounts for a sizable share of Malaysia's external debt of 45.4% as at end-June 2002 (see Table 4.2).

On **maturity basis**, the bulk of Malaysia's external debt is medium and long-term debt (86.3% as at end-June 2002 as shown in Table 4.2), of which about two-thirds are of remaining maturity of more than three years. The share of short-term debt remains well within prudential limits of 13.7% of total external debt (25.3% in 1997) and 18.8% of international reserves of BNM. Including medium and long-term debt falling due within 12 months, it is still only one-third the level of international reserves.

In terms of **instruments**, the major instruments are namely loan and debt securities. Of the public sector external debt, about 54% is accounted by debt

Table 4.2: External Debt Outstanding of Malaysia, 1998 - 2Q 2002										
	1998		1999		2000		2001		2002 2Q	
	RM bil.	% share	RM bil.	% share	RM bil.	% share	RM bil.	% share	RM bil.	% share
Medium & long-term	**134.1**	**78.9**	**139.7**	**86.2**	**143.4**	**89.1**	**149.6**	**86.1**	**152.3**	**86.4**
Public sector	66.1	38.9	75.4	46.5	78.4	48.7	91.7	52.8	96.2	54.6
Federal Government	*14.9*	*8.8*	*18.4*	*11.3*	*18.8*	*11.7*	*24.3*	*14.0*	*28.5*	*16.2*
NFPEs1/	*51.2*	*30.1*	*57.0*	*35.2*	*59.6*	*37.0*	*67.4*	*38.8*	*67.6*	*38.4*
Private sector	68.0	40.0	64.3	39.7	65.0	40.4	57.9	33.3	56.1	31.8
Short-term	**35.8**	**21.1**	**22.4**	**13.8**	**17.6**	**10.9**	**24.2**	**13.9**	**24.0**	**13.6**
Banking institutions	20.3	12.0	12.7	7.8	9.3	5.8	11.9	6.9	14.6	8.3
Non-bank private sector	15.5	9.1	9.8	6.0	8.2	5.1	12.0	7.1	9.3	5.3
Total External Debt	**170.0**	**100.0**	**162.1**	**100.0**	**160.9**	**100.0**	**173.8**	**100.0**	**176.2**	**100.0**
% of GNP	63.4		57.9		51.4		56.3		52.4	
% of GDP	60.0		53.9		47.0		52.0		48.7	
% of exports of goods & services	51.0		43.5		37.1		43.9		42.0	
Debt service ratio	7.0		6.3		5.4		6.1		n.a.	
S-t debt/Net int. reserves	36.0		19.1		15.4		20.6		18.8	

securities as at end-2001. Meanwhile loans accounted for 23.8%, of which 14.6% emanated from official creditors (bilateral and multilateral) and 9.2% sourced from financial institutions. With respect to the private sector medium and long-term external debt, debt securities accounted for 14.3% of the sector's external debt.

Meanwhile, **by currency**, the bulk of Malaysia's external debt is denominated in the US dollar (76.9%), followed by the Japanese yen (15.3%) and Euro (3.4%) as at end-June 2002. Given the fluctuation of exchange rates, revaluation of Malaysia's outstanding external debt is done mainly on quarterly basis. During the Asian crisis and prior to the imposition of the ringgit peg to the US dollar in September 1998, Malaysia registered significant unrealized revaluation losses on the outstanding external debt as well as suffered increased debt servicing burden following the sharp depreciation of ringgit against the US dollar. Given the bulk of Malaysia's external debt is denominated in US dollar, the imposition of the ringgit peg to the dollar had to a large extent contained the swing in the revaluation gains or losses.

Malaysia's **external debt servicing** is segregated between repayment of the principal amount and interest payment. Debt servicing for recent years is shown in Table 4.3. Apart from the historical data, BNM keeps track of the debt servicing schedule of both the public and private sector external debt to ensure that there is no bunching of debt servicing in the future. In particular, the

Table 4.3: Malaysia's External Debt Servicing 1/				
	1998	1999	2000	2001
	RM million			
Total servicing (including short-term interest payment)	**23,280**	**23,312**	**23,533**	**24,257**
of which:				
Medium and long-term				
Repayment (excluding prepayment)	**14,849**	**15,726**	**14,882**	**16,957**
Federal Government	2,181	1,840	3,903	735
NFPEs	4,344	2,230	2,506	7445
Private sector	8,324	11,656	8,473	8777
Interest Payment	**6,079**	**6,058**	**7,097**	**6,310**
Federal Government	1,031	883	1,187	1150
NFPEs	2,659	2,755	3,408	3585
Private sector	2,389	2,420	2,502	1575
Debt service ratio (% of exports of goods and services) - total debt	**7.0**	**6.3**	**5.4**	**6.1**

1/ Data on Malaysia Airline System was included under private sector up to 2000 and under NFPEs from 2001

Source: Ministry of Finance and BNM

repayment schedule for the next 8 years is monitored on an individual year basis. Detail information compiled includes debt servicing by remaining maturity and by currency.

5. Dissemination of External Debt Data

The information on Malaysia's external debt are disseminated on quarterly basis, within a quarter after the end of reference period, in BNM's Monthly Statistical Bulletin, press release on the quarterly GDP growth, quarterly update on the federal government external debt in the SDDS database for the fiscal sector as well as in BNM's Annual Report. The information has also been posted on BNM web site. The Treasury Economic Report also disseminates information on external debt on annual basis. The external debt data disseminated by Malaysia at present are as follows:

- Stock of outstanding debt by maturity i.e. total debt, medium/long term and short term on original maturity basis;
- Stock of outstanding debt by sectors i.e. by the Federal Government, NFPEs and private sector;
- Total debt servicing (principal repayment and interest payment) and debt service ratio; and

- Indicator of debt – currency composition, short-term debt/reserves, total debt as % of GDP, GNP and exports of goods and services, debt service ratio as well as average maturity of debt.

6. Issues on External Debt Data Compilation and Reporting System

With respect to the banking sector external debt data, the existing data compilation system segregates debt in terms of maturity, namely the medium and long-term debt vis-a-vis short-term debt. While breakdown in terms of domestic and foreign currency on aggregate basis is also available, further segregation according to the type of foreign currency involved is not currently captured under the existing compilation system.

Currently, Malaysia treats the offshore entities at the Labuan International Offshore Financial Centre (LIOFC) as non-residents, thereby limited information can be collected from this group of entities.

7. Plans for Improvement

Malaysia, being one of the countries that subscribe to the SDDS, envisaged to meet the new SDDS external debt data requirements, that conforms to the IMF BPM 5 guidelines, in terms of concepts and definitions on external debt. Under the existing compilation system involving BNM, the Federal Treasury and the Office of the Accountant-General, most of the required information are available but not compiled on a regular basis. In this regard, BNM has embarked on a new computer statistical system to facilitate the collection and compilation of these information and additional data required. The new system will further enhance the collection, compilation and dissemination of external debt data to meet the new SDDS external debt data requirement such as the currency composition and external debt by creditors. Apart from meeting the requirements of the SDDS, the system will also cater to other requirements such as the provision international banking statistics (which include detailed external debt data of the banking system) to the BIS that Malaysia has agreed to participate. BNM is making progress towards meeting the SDDS requirements and has targeted to complete the process in 2003 in meeting the deadline of reporting end-June 2003 debt position, by end-September 2003.

CHAPTER 5

ISSUES IN EXTERNAL DEBT IN MONGOLIA: CONCEPTS AND MONITORING PROCEDURES FOR CRISIS PREVENTION

by

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1. Definition of External Debt

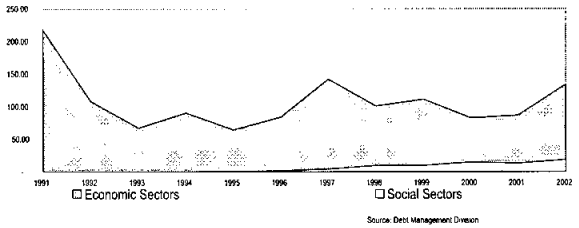
External Debt is the outstanding amount of those actual current, and not contingent, liabilities that require payments of interest and/or principal by the debtor in the future and that are owed to nonresidents by residents of an economy.

2. General Overview

During the last decade, since Mongolia has transferred to market economy, concessional loans and grants extended by donor countries and international financial organisations have been playing an important role in national development and in achieving objectives of economic and social sectors.

At the beginning of the economic transaction period, loans were dominantly extended for the purposes of meeting the equilibrium of balance of payments and financing necessary import expenses. However, during recent years there have been reforms in loan structure and majority loans have been used for the

Figure 5.1
Distribution of Loans, 1991-2002

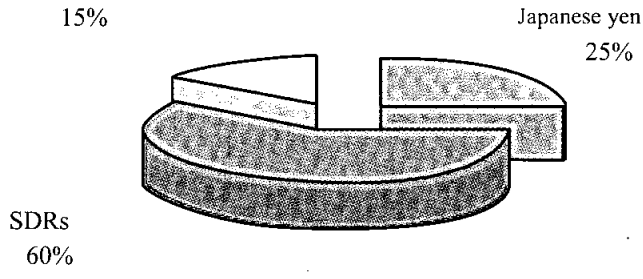


purposes of long-term projects and investments directed to certain social and economic sectors (Figure 5.1).

3. An Overview of External Debt Related Data

If look at the composition of total external loans by the original currency of the loan, the majority or 60% of loans have been extended in SDRs, 25% in Japanese yen and 15% in other currencies (Figure 5.2).

Figure 5.2
Composition of Total External Loans by Original Currency 2001

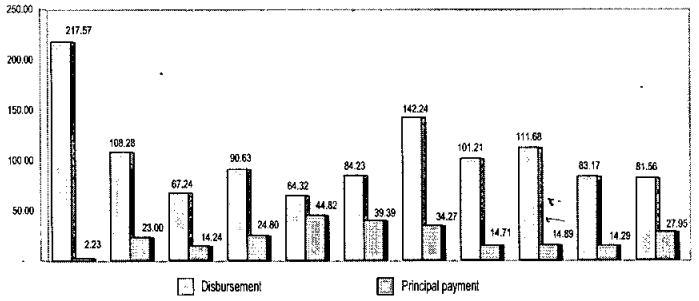


The majority of loans granted to the Government of Mongolia are granted by the donor countries such as Japan, Germany, Russia, China and international financial organisations such as Asian Development Bank, World Bank, International Monetary Fund, Nordic Development Fund, Kuwait Fund and etc. The loans are concessional long-term loans of 30-40 years with 1-3% per annum and 8-10 years of grace period.

If look at the composition of total disbursements made in 2001 by economic sectors, 19% of disbursements went to transportation and communication sector, 17% to mining, production, construction sectors, 16% to energy sector, 7% to housing, public utilities sector, 6% to health sector, 4% to agricultural sector, and the rest to other economic sectors.

Total debt outstanding at the end of 2001 have reached 887.6 million US Dollars equivalent. External debt service numbers are increasing each year, including the principal payments of earlier taken loans (Figure 5.3).

Figure 5.3
Composition of Total Disbursements, 2001



Source: Debt Management Division

The ratio of total external debt outstanding to GDP has been continuously increasing since 1996 and exceeded the appropriate 50 percent level (Figure 5.4).

4. Classification of External Debt

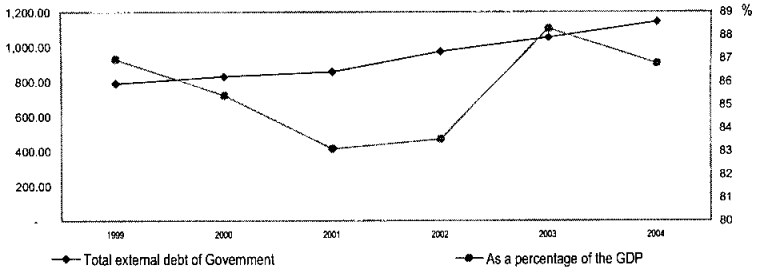
4.1 By Borrower/Sector

Public Sector

4.2 By Maturity

Long Term

Figure 5.4
External Debt of Government, 1999-2004



Source: Debt Management Division

4.3 By Instruments

Loans

4.4 By Currency

Foreign Currency
Long Term

4.5 By type of liabilities

(a) Principal
(b) Interest

5. Source of Data

Public Sector Debt

6. Frequency of Data Availability, Coverage and Dissemination

6.1 Type of Releases

(a) Quarterly in the BOP by the Bank of Mongolia (only disbursements and debt service data for the current Quarter)
(b) Annually by the Ministry of Finance and Economy of Mongolia (since 2001) covering total amount of debt outstanding

6.2 Lag Period in Dissemination
Quarterly Data

7. Debt Service Payment Schedule

7.1 By Sector

(a) Public

7.2 By Currency

8. Use of Debt Data

Selected Indicators for 2001:	
8.1 Debt/Exports	43.4%
8.2 Debt/GDP	84.0%
8.3 Debt Service/Exports	8.6%
8.4 Debt Service/NIR	16.2%
8.5 Debt Service/Fiscal Revenues	8.8%

9. The Organisation of the Compilation Work and the Coordination Among Agencies

The following organisations have been executing the Government's debt management functions upto date:

1991-1993 Government Commission for Foreign Loan and Grant Regulation
1993-1996 Economic Cooperation Department of National Development Office
1996-1998 Foreign Loan and Grant Regulation Office at the Prime Minister of Mongolia
1998-2000 Council for Foreign Investment, Loan and Grant Regulation of the Ministry of External Relations of Mongolia.

Since the year 2000 the Council for Foreign Loan and Grant Regulation headed by the Minister of Finance and Economy of Mongolia is responsible for debt management, debt strategy and policy formulation and implementation. The Director of the Economic Cooperation Department of the Ministry of Finance and Economy of Mongolia (MoFE) is the secretary of the Council.

The Economic Cooperation Department of the MoFE concludes new loan agreements with foreign parties and takes these agreements to the Parliament for ratification. The Treasury Department of the MoFE is obliged to ensure and monitor the implementation of the loans. Integrating the principal functions of debt management into one organisation made possible the creation of consolidated database, resulted in improvement of financial supervision and increase of efficiency in loan utilisation.

Functions such as recording of external debt data, analysing and monitoring, projection of future disbursements and its registration, projection and execution of loan interest and principal payments are carried out by the Debt Management Division of the Treasury Department of the MoFE.

Compilation of external debt data is currently done both in the Excel worksheets but they are already saturated with the large amount of information and are also registered in the DMFAS.

10. The Role of the Bank of Mongolia

The Bank of Mongolia (BoM) is a sole financial agent of the Ministry of Finance and Economy of Mongolia (MoFE) for all the transactions to and from foreign countries. The BoM registers disbursements, principal payments, interest and commission payments, and arrears in the Balance of Payments (BOP).

The BOP unit of the International Department keeps track of all payments to be made by the MoFE and provides the MoFE, 15 days and 2 days before the due date of the payment, the amount in local currency corresponding to the payment in currency. With the information the MoFE can provision his account in local currency at the BoM to allow the BoM to buy the foreign currency and execute the payments.

In order for the BoM to keep track of all the international payments without having a communication link with the MoFE, the BoM has to register the loans payment schedules at the bank. Also, the MoFE and the BoM have signed the Memorandum of Understanding that every quarter they reconcile the total outstanding debt stock and payments made. So the BoM has a duplication of loan transactions, outstanding balances and payments by loans for the past and projection of future payments by loans. This means that every time there is a new disbursement, the BoM also has to recalculate the future interest payments. However, as a result of close cooperation between the MoFE and the BoM, such drawbacks as paying more than required, late payments and overdue charges are almost eliminated.

11. Efforts Taken Towards Improvement of Data Collection and Reporting System

In order to improve external debt management and establish consolidated database, an international competitive bidding was announced within the framework of Fiscal Technical Assistance Project under the International Development Association loan. As a result, the UNCTAD was selected to execute works and services under the contract for Supply, Installation and Support of Debt Management and Financial Analysis System (DMFAS).

Upto date the UNCTAD consultants installed the DMFAS system at the MoFE and connected the BoM to the DMFAS using modems and telephone line. Loan managers were trained to register loans into the system, validate real disbursements and payments, to make user-defined reports for loans by producing the amortisation table and the loan statement. All external debt loans have been registered into the database as a result of the training.

CHAPTER 6

ISSUES IN EXTERNAL DEBT IN NEPAL: CONCEPTS AND MONITORING PROCEDURES FOR CRISIS PREVENTION

by

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1. Background

Nepal is a beautiful country lying in the lap of Himalayas with an area of 1,47,181 square kilometers. Scenic beauty, natural diversity and rich culture are the symbol of her easy going identity. It is a kingdom located in South Asia with diverse geography and climates, sandwiched between the two giant countries of China and India. These two countries have also been linked with Nepal from the time immemorial by the ties of geographical, cultural and social harmonies. While Nepal is a serene kingdom being the home of lord Buddha and Mount Everest, the economic activities of the country's 23 million people which could remain quite dynamic with stable prices, strong balance of payments position and average annual economic growth of 4 percent during the last few years was badly affected in the FY 2001/20002 due to the deteriorating peace and security situation inside the country and the September 11 incidents in the US affecting the tourism and export prospects of the country. The changing composition of the national income which, while being mainly contributed by agriculture, has a growing interplay by the manufacturing and services industry. As such services industries are growing rapidly with their share in gross domestic product now being almost equal to that of agriculture.

1.1 An Overview of the Nepalese Economy

The Nepalese economy which experienced an encouraging macroeconomic performance during the last few years characterised by economic growth and price stability has encountered a major setback in the fiscal year 2001/02. The Nepalese economy registered a disappointing growth of 0.8 percent in 2001/ 2002 against a robust growth of 5.9 percent in the fiscal year 1999/2000 and of 4.9 percent in fiscal year 2000/01. However, inflation based on consumer's price

index could be contained in 2001/02 which stood at 2.9 percent approximately similar to 2.4 percent that of the preceding year. A slowdown in the growth of the monetary aggregates has also been witnessed in the fiscal year 2001/02. Broad money increased only by 5.5 percent in 2001/02 compared with the growth of 15.4 percent in the previous year. Further, the private sector credit growth has also come down to 5.9 percent in 2001/02 compared to 15.8 percent in the preceding year.

The external sector which had already recorded a weaker performance with decelerating export growth and a further decline in service receipts in 2000/01 recorded a marked fall in 2001/02. Exports declined by 14.6 percent in 2001/02 against a growth of 11.7 percent in 2000/01. This is attributed to the significant drop in the exports of garments and carpets followed by the introduction of non-tariff barriers in Nepal's concessional exports to India. Likewise, a slow down in overall economic activities and particularly weak export prospects, suppressed the import demand for both consumer and capital goods resulting in a 7.7 percent decline in import. The growth rate of import was 4.5 percent in the preceding fiscal year.

The overall balance of payments marked a deficit (of 0.6 percent of GDP) in 2001/02 against a surplus in the previous years. A sharp decline in service receipt and lower capital inflow led to such a deficit in the balance of payments. Despite this, the existing gross official international reserves (held by NRB) remain sufficient enough to cover over 8 months of import of goods and services.

Despite high dependence on external resources to finance the government budget, Nepal does not fall in the category of highly indebted countries. Total external debt stood at 48.4 percent of GDP in 2001/02 approximately similar to that in the preceding year. Due to limited domestic resources, the external debt-servicing burden has been increasing. External debt servicing drained 13 percent of total revenue and 13.4 percent of regular spending of the government in 2001/02.

The fiscal situation continued to remain under stress due to high security expenditure need and weaker revenue performance attributed to economic slowdown. The budget deficit, however, narrowed down to 5.4 percent of GDP in 2001/02 compared with 5.9 percent of GDP in the preceding year. Despite the significant slowdown in revenue collection and marked surge in security expenditure, the budget deficit was maintained low by containing other expenditures.

2. What is External Debt

The amount of debt to be owed to the bilateral creditors, multilateral agencies, foreign commercial banks and non residents is refereed to the external debt. Many of the world's Least Developed Countries (LDCs) face a huge debt burden, which acts as a major constraint to their development. It is not so easy to answer how large is the debt burden of LDCs and how does it influence these countries path to social and economic development.

For a long time, there has been discussions with regard to the LDCs, their debt sustainability and the ways for debt relief. On the top, debt sustainability has remained a core issue which has been defined by the creditors as a capacity of the low income countries to meet their current and future external debt servicing obligations in full, without recourse to further debt relief, rescheduling or accumulation of arrears, and without unduly compromising growth. However, it is quite narrow from an overall development perspective. It does not deal with issues of domestic debt, which are important for fiscal sustainability, nor does it measure the adequacy of public resources to address priority development programs after debt service has been paid.

The impact of an unsustainable debt is very disastrous for an economy. Unsustainable debt levels keep countries caught in a cycle of poverty, aid dependency, and unsustainable debt levels or in a debt tarp. Unsustainable debt, through several mechanisms, represents a major stumbling block towards economic and social development and poverty reduction. The most obvious stumbling block is the cash flow implication of debt service obligations, the so called crowding out effect. It is obvious that in such a case the government has to pay large sums of money to foreign creditors, less can be spent on recurrent social expenditure or essential investments, such as infrastructure, health or education. LDCs, with extremely low levels of social and human development, often have to pay more to foreign creditors than they can afford to invest in basic health care or education.

Nepal, being one of the least developed countries of the world, is far behind in the level of social and human development. The Human Development Report 2002 has placed Nepal in 142nd rank out of the total 173 countries included in the report. The increasing burden of debt service has drained resources by curtailing the investment from socio-economic development and infrastructure building. The debt servicing has been consuming almost 30 percent of the regular expenditure for the last 15 years. Moreover, the external debt servicing

has dominated the debt service in the last few years. The external debt service alone drains nearly 13.0 percent of the government revenue which is almost more than 14.0 percent of the regular expenditure and is approximately 8.0 percent of the total government expenditure of a fiscal year. This trend on an average has been continuing for the last five to six years.

Though most of the Nepal's external debt is of concessional nature obtained from multilateral agencies and Nepal has partly opened its capital account; necessary surveillance over the composition, classification, sectoral concentration and repayment of the external debt is important. It is particularly because of the increasing external debt burden on one hand and the move of the Nepalese economy towards further liberalisation probably the liberalisation of capital account in future along with her entry into WTO, with the stringent terms and conditions of this rules based trading system, on the other. Given such perspective, application of the concepts and monitoring procedures of external debt, along with the emerging issues will of course be an ex-ante measures of crisis prevention for the Nepalese economy.

3. Classification of External Debt

Most of the external debt of Nepal is a public debt which is agreed and obtained by the government. The external debt burden of the private sector is insignificant. The external debt consists of both from bilateral and multilateral sources. The maximum period of the debt is of 40 years and may be less depending upon the agreement. The external debt data are regularly maintained by the Financial Comptroller General's Office (FCGO) which is under the Ministry of Finance (MOF). The FCGO is the main source of external debt data as the debt agreements are made by the MOF. The following classification of external debt of Nepal is availed from the FCGO. Therefore, the source of external debt data in most of the cases in this paper is FCGO, Nepal.

3.1 As shown below in Table 6.1, ADB and IDA are the major multilateral lenders of Nepal. However, the EEC, IFAD, NDF and OPEC are also other important donors for Nepal. Because of this, the significant amount of the outstanding debt of Nepal consists of multilateral agencies. Nonetheless, the loan facility provided by foreign governments is also in a significant amount.

3.2 Both the external debt burden and debt servicing of Nepal have been increasing since 1990/91 (Table 6.2). However, the amount of external debt has increased at higher ratio. It can be seen from the figure of the net

Table 6.1
Outstanding Balance of External Debt (By Lender and By currency)
As at July 16, 2002 (last date of the FY 2001/02)

(Amounts in million)

S.No.	Lender	Currency	Outstanding Debt
1	ADB	USD	140.5897192
2	ADB	SDR	716.5309071
3	IDA	USD	188.7650914
4	IDA	SDR	752.530927
5	Australia	USD	4.6013693
6	BEL	BEF	182.5
7	EEC	FRF	5.142225
8	EEC	BEF	10.119450
9	EEC	DKK	1.237680
10	EEC	DEM	4.864200
11	EEC	GBP	1.217592
12	EEC	IEP	0.011220
13	EEC	ITL	596.725800
14	EEC	LUF	0.318450
15	EEC	NGL	1.344750
16	FINISH	USD	5.53128286
17	FRANCE	EUR	44.31189013
18	IFAD	SDR	38.26936226
19	IFAD	USD	7.63176174
20	JAPAN	JPY	36816.485891
21	KOREAN	KRW	11847.887710
22	KUWAIT	KUD	2.25620965
23	NDF	SDR	15.16821266
24	OPEC	USD	16.01549879
25	RUSSIA	RUB	0.701855
26	SAUDI	SAR	61.96425943
27	USA	NPR	3.15360181
28	USA	USD	0.01755211

Table 6.2
External Debt and Debt Servicing

(Rs. in million)

	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93
Direct									
Outstanding upto last year	7500.00	9184.90	13042.80	16990.60	23861.80	31467.50	52688.80	64569.20	81738.10
Borrowing	1753.10	1287.50	2361.90	4069.90	5671.40	5959.60	7296.70	7281.80	6920.90
Repayments	68.20	160.00	249.60	296.50	387.60	700.80	588.00	941.10	1251.80
Interest Payments	119.70	124.90	235.80	293.00	312.20	419.60	497.00	722.30	878.60
Net Outstanding	9184.90	10312.40	15155.10	20764.00	29145.60	36726.30	59397.50	70909.90	87407.20
Indirect									
Outstanding upto last year	19.30	18.30	17.80	63.00	72.30	75.60	108.80	15.10	14.70
Borrowing	0.00	0.00	0.00	00.00	00.00	00.00	00.00	00.00	00.00
Repayments	1.00	0.50	1.00	1.00	1.00	1.00	1.00	1.10	1.10
Interest Payments	0.60	0.30	0.60	0.50	0.50	0.50	0.50	0.40	0.40
Net Outstanding	18.30	17.80	16.80	62.00	71.30	74.60	107.80	14.00	13.60
Total Foreign Loans									
Outstanding upto last year	7519.3	9203.2	13060.6	17053.6	23934.1	31543.1	52797.6	64584.3	81752.8
Borrowing	1753.1	1287.5	2361.9	4069.9	5671.4	5959.6	7296.7	7281.8	6920.9
Repayments	69.2	160.5	250.6	297.5	388.6	701.8	589	942.2	1252.9
Interest Payments	120.3	125.2	236.4	293.5	312.7	420.1	497.5	722.7	879
Net Outstanding	9203.2	10330.2	15171.9	20826	29216.9	36800.9	59505.3	70923.9	87420.8

	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00	2000/01
Direct								
Outstanding upto last year	94257.90	107504.90	120555.90	125214.10	150126.80	161813.60	182001.80	190913.10
Borrowing	9163.60	7312.20	9463.90	8963.90	13850.90	10839.50	12362.40	8156.80
Repayments	1467.20	1827.10	1986.60	2101.20	2779.00	3195.30	3679.90	2698.50
Interest Payments	1020.20	1156.20	1306.30	1246.70	1420.80	1548.60	1640.10	1018.40
Net Outstanding	101954.30	112990.00	128033.20	132076.80	161198.70	169457.80	190684.30	196371.40
Indirect								
Outstanding upto last year	13.50	12.00	12.30	11.20	10.50	9.30	8.10	6.90
Borrowing	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00
Repayments	1.00	1.10	1.10	1.20	1.20	1.20	1.20	0.80
Interest Payments	0.30	0.30	0.30	0.30	0.20	0.40	0.20	0.10
Net Outstanding	12.50	10.90	11.20	10.00	9.30	8.10	6.90	6.10
Total Foreign Loans								
Outstanding upto last year	94271.4	107516.9	120568.2	125225.3	150137.3	161822.9	182009.9	190920
Borrowing	9163.6	7312.2	9463.9	8963.9	13850.9	10839.5	12362.4	8156.8
Repayments	1468.2	1828.2	1987.7	2102.4	2780.2	3196.5	3681.1	2699.3
Interest Payments	1020.5	1156.5	1306.6	1247	1421	1549	1640.3	1018.5
Net Outstanding	101966.8	113000.9	128044.4	132086.8	161208	169465.9	190691.2	196377.5

outstanding external debt. At the end of the fiscal year 1989/90, this debt was Rs. 36.8 billion and suddenly it reached Rs. 59.5 billion at the end of fiscal year 1990/91. This trend of increasing external debt burden has further accelerated during the last few years. Consequently, the external debt burden stood at Rs. 200 billion at the end of the fiscal year 2000/2001 and approximately Rs. 215 billion at the end of the fiscal year 2001/2002. The reason for the increasing debt burden in the recent years is attributed to the overshooting regular (current) expenditure which has become difficult to meet only by the government revenue and also a decreasing ratio of grant to loan particularly during the first five years of nineties which remained only 38 percent (Table 6.3) whereas such ratio was nearly 45 percent in the last five years of eighties. However, this ratio improved in the last five years of nineties which approximately stood at 49 percent.

After the country adopted the multiparty system with more flexible economic policies, both the multilateral and bilateral donors have shown their interest in providing additional loan to Nepal particularly for her infrastructure development. The direct loan refers to the direct cash disbursement from the creditors whereas the indirect one refers to the cost borne by donors (lenders) for consultancy services and technical assistance and others which do not come in cash.

Table 6.3
Foreign Aid Disbursement by Sources

(Rs in Million)

	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93
Bilateral	1156.30	1480.30	1078.40	2251.60	1707.70	2544.90	2939.90	3597.30	3638.50
Grant	756.90	982.20	778.70	1789.10	1199.90	1544.30	1337.10	1207.50	2330.90
Loan	399.40	498.10	299.70	462.50	507.80	1000.60	1602.80	2389.80	1307.60
Multi-lateral	1520.10	2010.40	2236.10	2826.90	3959.20	3882.20	3050.10	4203.10	5597.10
Grant	166.50	138.40	173.90	195.10	278.30	254.50	292.90	323.50	943.00
Loan	1353.60	1872.00	2062.20	2631.80	3680.90	3627.70	2757.20	3879.60	4654.10
Total	2676.40	3490.70	3314.50	5078.50	5666.90	6427.10	5990.00	7800.40	9235.60
Grant	923.40	1120.60	952.60	1984.20	1478.20	1798.80	1630.00	1531.00	3273.90
Loan	1753.00	2370.10	2361.90	3094.30	4188.70	4628.30	4360.00	6269.40	5961.70

	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00
Bilateral	2627.10	3988.70	3533.30	6012.70	6297.70	4167.60	4929.10
Grant	2044.20	3271.40	3073.30	5162.00	4983.20	3583.60	4171.20
Loan	582.90	717.30	460.00	850.70	1314.50	584.00	757.90
Multi-lateral	8930.10	7260.70	10755.70	9019.20	10159.40	12021.40	12594.80
Grant	349.40	665.70	1751.80	826.30	419.40	753.00	1540.50
Loan	8580.70	6595.00	9003.90	8192.90	9740.00	11268.40	11054.30
Total	11557.20	11249.40	14289.00	15031.90	16457.10	16189.00	17523.90
Grant	2393.60	3937.10	4825.10	5988.30	5402.60	4336.60	5711.70
Loan	9163.60	7312.30	9463.90	9043.60	11054.50	11852.40	11812.20

3.3 The sectoral classification of debt includes agriculture, irrigation and forestry; transport, power and communication; industry and commerce; social services and others (Table 6.4). The significant portion of the external debt has been disbursed in the transport, power and communication sector. The external debt disbursed in transport, power and communication sector was 47 percent during 1985/86-1989/90, 39 percent during 1990/91-1994/95 and 41 percent during 1995/96-199/

Table 6.4
Foreign Loan Disbursement by Sectors

(Rs. in million)

	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	1991/1992
Agriculture, Irrigation and Forestry	**733.4**	**1068.7**	**834.5**	**1067**	**1255.4**	**1294.8**	**1112.1**	**1632.1**
Agriculture	376	542.3	287.2	482.7	446.9	443.7	547.2	270.4
Irrigation	294.4	473.9	455	453.3	720.8	725.5	414.9	1065
Forest	62.8	51.4	91.6	130.9	87.7	125.6	150	96.7
Others+	0.2	1.1	0.7	1	0	0	0	0
Transport, Power and Communication	**752.1**	**845.2**	**1097.5**	**1598.6**	**2447.9**	**1758.6**	**1531.8**	**2010.1**
Transport	400.1	116.5	259.6	349.7	683.5	378.6	670.3	953.5
Power	286.8	703.4	831.9	1135.1	1439.3	1275.4	806.9	943.1
Communication	65.2	25.3	6	113.8	325.1	104.6	54.6	113.5
Industry and Commerce	**141**	**232.6**	**120.3**	**193.6**	**145**	**645.9**	**1270.7**	**2143.7**
Social Services	**111.5**	**224.6**	**289.3**	**228.4**	**334.7**	**922.5**	**932.5**	**483.5**
Education	52.7	74.1	122.4	135.6	234.4	118.7	91.4	146.9
Health	5.9	4	0.2	1.6	0.8	3.3	0	0
Drinking Water	38.5	122.4	162.2	64.6	55.4	149.9	131.5	215.1
Others++	14.4	24.1	4.5	26.6	44.1	650.6	160.9	121.5
Others+++	15	0	20.3	6.7	5.7	6.5	61.6	0
Total	**1753**	**2371.1**	**2361.9**	**3094.3**	**4188.7**	**4628.3**	**4908.7**	**6269.4**

	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00
Agriculture, Irrigation and Forestry	**1465.4**	**4904.8**	**2429.8**	**3054.4**	**2201.6**	**2543.5**	**2925.1**	**2693.4**
Agriculture	553.5	1801	810	1013.5	273.7	780.5	808.9	788.3
Irrigation	834.2	1631	1569.4	1992.7	1876.8	1681.9	2003	1867.8
Forest	77.7	1132.4	50.4	48.2	51.1	81.1	113.2	37.3
Others+	0	340.4	0	0	0	0	0	0
Transport, Power and Communication	**3299.6**	**3273.1**	**3103.6**	**4461.4**	**5131.5**	**5813**	**6179.7**	**6039.5**
Transport	1409.4	1276	1120	1475.6	1995.9	2115.9	1945.6	847.2
Power	1579.5	1581.4	1201.8	2084.7	2565.5	3289.8	4234.1	5192.3
Communication	310.7	415.7	781.8	901.1	570.1	407.3	0	0
Industry and Commerce	**663.3**	**234.5**	**359.3**	**3.5**	**17.5**	**167.9**	**391.6**	**283.8**
Social Services	**553.4**	**751.1**	**1419.6**	**1784.3**	**1693**	**2530.1**	**2312.3**	**2795.1**
Education	139.3	452.1	866.8	853	933.9	923.6	535.8	709.8
Health	0	0	30.1	39.6	90.1	415.5	357.3	497
Drinking Water	275.7	299	191.9	586.7	37.1	695.7	623.2	839.8
Others++	118.4	0	330.8	305	292.9	495.3	796	748.5
Others+++	0	0	0	160.3	0	0	43.7	0.4
Total	**5981.7**	**9163.5**	**7312.3**	**9463.9**	**9043.6**	**11054.5**	**11852.4**	**11812.2**

2000. The external debt disbursement in the agriculture, irrigation and forestry was 32 percent, 31 percent and 20 percent during the above periods respectively. Such disbursement in social services sector was 12 percent, 12 percent and 17 percent and in industry and commerce was 8 percent, 14 percent and 3 percent during those periods respectively. The sectoral concentration of foreign loan is presented in the following table.

4. Source of Data, Frequency of Data Availability, Coverage and Dissemination

4.1 Analytical Framework, Concepts, Definitions and Classification System

Annual data for central government debt are disseminated by the Ministry of Finance (MOF) and the Nepal Rastra Bank (NRB). In both cases, data are presented in millions of rupees and distinction between domestic and foreign debt is based on currency. disaggregation by maturity (short-, medium-, and long-term loans) is not provided.

Domestic Debt:

Annual domestic debt data are published in the MOF's "Economic Survey" and presented by type of security (treasury bills, development bonds, national savings certificates, citizen savings certificates and special bonds) and by type of debt holder (NRB, commercial banks, financial institutions, provident funds, government business enterprises, private business enterprises, individuals, and non-profit organisations). These figures are generated by the Central Accounts Division and the Public Debt Department of the NRB and are also disseminated, at the same level of aggregation, in the NRB's "Quarterly Bulletin". Less detailed annual and monthly (accumulated) data on total domestic debt by type of security (treasury bills, development bonds, national savings certificates, citizen savings certificates and overdrafts) are also disseminated in the 'Government Budgetary Operations' table published in the NRB's "Main Economic Indicators" monthly report, "Current Economic Scenario" monthly press release, and on the NRB's website (www.nrb.org.np).

Foreign Debt:

Foreign debt consists entirely of loans from nonresidents. The MOF's "Economic Survey" includes data on foreign loan and debt servicing. Data are shown as (a) direct, (b) indirect (debts incurred by the central government for on-lending to local governments), and (c) total loans, each shown with the following disaggregation: outstanding up to last year, borrowing, repayments, interest payments, and net outstanding. Data are based on records of the loan agreement between the lender and the MOF, and actual treasury accounts. FCGO is updating Data Reporting and Management System (DRMS) and hopes to publish a detail report sometime within six months of this fiscal year. In its 'Government Budgetary Operations' table, the NRB disseminates total foreign cash loans with no disaggregation. These data are compiled by the Central Accounts Division of the NRB based on central bank accounts. The NRB also publishes separate tables on direct and indirect external debt of the government in its "Quarterly Economic Bulletin".

4.2 Scope of the Data

Unit Coverage: Debt data are comprehensive and represent all liabilities of all units of budgetary central government. There is no government guaranteed debt.

4.3 Accounting Conventions

Valuation: Debt denominated in local currency is recorded at face value. Debt transactions in foreign currency are recorded at the exchange rate on the date of the transaction. Foreign currency denominated debt is revalued every 6 months at the end period exchange rate.

Time of recording: Data are recorded as of the day proceeds of borrowing are received and payments made.

4.4 Nature of the Basic Data Sources

Domestic Debt: Domestic debt data in the form of cash are generated by the Central Accounts Division of the NRB. Domestic debt data in the form of securities are generated by the Public Debt Department of the NRB. Only the MOF can borrow domestically. When a decision to borrow is taken, the MOF

Table 6.5
External Debt Repayment Schedule

S.No	Lender	Currency	Payment 2002/03		Payment 2003/04		Payment 2004/05		Payment 2005/06	
			Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest
1	ADB	USD	8565223.92	1394547.7	8566223.92	1309118.5	8568623.92	1223438.2	8571123.92	1139233.5
2	ADB	USD	10197300	8342186.5	11254920	8238794	12555090	81221918	14167690	7992161.4
3	IDA	USD	7503413.5	1445548.8	7503413.5	1386788.9	7503413.5	1328029	7059413.5	1289598.9
4	IDA	SDR	11298858	6384511.7	12469840	6303113	16178676	6206750.2	16641026	6066270
5	AUS EFIC	USD	766883.5	0	766883.5	0	766883.5	0	766883.5	0
6	AUSTRIA	ATS	1963044	0	1963044	0	1963044	0	1963044	0
7	BEL	BEF	12500000	0	12500000	0	12500000	0	12500000	0
8	EEC	BEF	367980	108221.15	367980	104175.49	367980	100129.84	367980	96094.19
9	EEC	DAK	45840	13482.01	45840	12978.01	45840	12474.01	45840	11970.01
10	EEC	DEM	177180	52018.05	177180	50073.46	177180	48128.85	177180	46184.25
11	EEC	FRF	186990	54993.33	186990	52937.5	186990	50881.66	186990	48825.85
12	EEC	GBP	45111	13261.29	45111	12765.3	45111	12269.32	45111	11773.35
13	EEC	IRP	408	119.97	408	115.49	408	111.01	408	106.52
14	EEC	ITL	21699120	6381572.3	21699120	6143008.9	21699120	5016245.4	21699120	5665881.9
15	EEC	LUF	11580	2784.68	11580	2683.59	11580	2576.48	11580	2472.38
16	EEC	NGL	48900	11752.61	48900	11313.28	48900	10873.92	48900	10434.57
17	FRANCE	EUR	2413710.14	1214105.2	2413710.14	1214105.2	2413710.14	1214105.2	2413710.14	1214105.2
18	IFAD	USD	288000	75597.62	288000	72717.62	288000	69837.62	288000	66957.62
19	IFAD	SDR	1061744	1025886.1	1295076	768313.92	1295076	744241.75	1295076	721669.58
20	JAPAN	JPY	1748238180	56948851	1748238180	56948851	1748238180	56948851	1748238180	56948851
21	Korea	KRW	0	200000000	200000000	200000000	200000000	200000000	200000000	200000000
22	KUWAIT	KUD	371660	64036.05	371660	52886.25	445660	88236.45	445660	77086.65
23	NDF	SDR	86530.68	156101.87	184411.76	155452.88	184411.76	1154803.9	270553.84	153993.41
24	OPEC	USD	2048660	1030981.7	2048660	974406.49	1886092.06	836442.91	1723020	858803.39
25	RUSSIA	RUB	701855	95000	0	0	0	0	0	0
26	SAUDI	SAR	12937322	2852504.3	12499200	2499044.6	9999200	2208228.6	9999200	1917412.6
27	USA	USD	5013.5	122.2	5013.5	84.6	5013.5	47	5013.5	9.4
28	USA	NPR	886221.8	101137.94	886221.8	73385.37	886221.8	45629.81	625360	19347.6
29	FINISH	USD	850963.7	0	850963.7	0	850963.7		850963.7	0

Table 6.6
Use of Debt Data

	1996	1997	1998	1999	2000	2001	2002
Total outstanding Debt/GDP	65.2	59.9	66.4	64.0	64.5	63.7	
Total outstanding external debt/GDP	51.4	47.1	53.6	49.5	50.2	49.1	
Total outstanding external debt/ Government Revenue	459.0	434.9	489.4	454.9	444.6	412.2	
Total outstanding external Debt (as percentage of exports of goods and services)	223	161.1	198.3	206.7	191.1	196.3	
Total outstanding external debt/ Total Exports Debt Service/Export	644.0	583.5	585.9	474.8	382.6	362.0	
Debt Service/ Regular Expenditure	31.1	31.1	28.3	28.1	29.1	24.3	
Debt Service/ Total Expenditure	14.4	14.8	13.7	14.6	15.1	13.0	
Debt Service/Government Revenue	24.0	24.8	23.3	23.4	23.4	22.2	
External Debt Service/ Regular Expenditure	15.3	13.8	15.5	15.3	15.4	14.5	
External Debt Service/ Total Expenditure	7.0	6.6	7.5	8.0	8.0	7.8	
External Debt Service/ Government Revenue	11.8	11.0	12.8	12.7	12.4	12.7	
Short term debt/Gross official international reserves*	16.0	27.2	29.0	28.8	26.1	21.8	
Per capita external debt burden at the year end	6147.0	6192.5	7381	7575.5	8327.1	8613.2	

* Short term debt in the form of outstanding trade credits and amortisation due in the following year.

Table 6.7

(Rs. in million)

	1996	1997	1998	1999	2000	2001	2002
GDP (at current price)	248913	280513	300845	342036	379521	410194	428033
Total exports	19881.1	22636.5	27513.5	35676.3	49822.7	55654.1	
Total imports	74454.5	93553.4	89002	87525.3	108505	115687	
Total outstanding external debt	128044	132086	161208	169466	190691	201550	
Total debt service	6715	7527	7682	8723	10032	10388	
Total external debt service	3303	3349	4201	4745	5321	6200	
Regular expenditure	21562	24181	27174	31047	34523	42769	
Total Govt. expenditure	46542	50723	56118	59579	66272	79835	
Government revenue	27893	30373	32938	37251	42893	48893	
Population at the year end	20.83	21.33	21.84	22.37	22.9	23.4	

instructs the NRB to raise the funds by issuing securities, the statement of which serves as the basis for recording the transaction.

Foreign Debt: MOF data are based on records of the loan agreement between the lender and the MOF, and actual treasury accounts. NRB data on total foreign cash loans are compiled by the Central Accounts Division of the NRB based on central bank accounts.

4.5 Compilation Practices: Adjustments for grossing and netting of positions: All debt data are compiled and disseminated on a gross basis.

4.6 Other Aspects: The fiscal year begins July 15.

5. Issues on External Debt Data Collection and Reporting System

Issues regarding the external debt data collection and reporting system in Nepal can be outlined in the following topics:

(1) Policy: Nepal's Foreign Aid Policy guides the borrowing from foreign government and multilateral agencies. The Foreign Aid Coordination Division (FACD) in the Ministry of Finance (MOF) performs the coordinating function. Other various agencies involved in the MOF include the Budget Division, Revenue Administration and Legal Division (RALD) and Economic Affairs and Policy Analysis Division (EAPAD). The Ministry of Finance, National Planning Commission (NPC) and the Nepal Rastra Bank (NRB) come together to decide on policy issues.

(2) Regulatory: The legal authority for borrowing is outlined in "Loans and Guarantees Act" and "Authorisation to raise Internal Loans for Deficit Management Act" which lay down annual ceilings for borrowing. These ceilings are adjusted with the approval of the parliament. The government agencies do not borrow directly. Their recommendations for financing are submitted through the line miniseries to the National Planning Commission and/or the Ministry of Finance for further consideration and approval.

(3) Operational: The annual plans (budget speech) and five year plans provide the guideline for approaching donors and creditors for possible funding of projects. External commercial borrowings are not entertained as they are expensive and shorter maturity. The debt portfolio is examined while formulating the plans and annual budgets and judging the impact that changed in the global borrowing climate and Nepal's own situation have on the opportunities available.

(4) Accounting: Collecting detailed information on Nepal's debt on a loan-by-loan basis and ensuring that debt repayments are made in due time are responsibilities of the Financial Comptroller General's Office (FCGO). Data is collected from cash transactions which are recorded through the accounting system, the advice received from donors and creditors on disbursements directly to suppliers/ contractors or beneficiaries and periodical statements of transactions from donors.

6. Efforts Taken Towards Improvement of Data Collection and Standardisation of Data Definition and Reporting System

Nepal Debt Management Project was launched in 1997 and was funded by the government of the United Kingdom. This project aimed at strengthening the capacity of HMG of Nepal in domestic and foreign loan management. Under this project, Debt Recording and Management System (DRMS) software has been designed to record debt data and assist in the management of the debt. The program has the capability of loan administration, application of management tools, data extraction and others.

Under the Debt Management Project, a networking was aimed to develop between the Ministry of Finance, Financial Comptroller General's office and Nepal Rastra Bank. However, this has not been implemented yet. Similarly, a technical assistance from IMF for debt management and monetary operations was obtained in October, 1996. Furthermore, to improve its data collection and reporting system Nepal has entered into the General Data Dissemination System (GDDS) of IMF.

Table 6.8
Time Series Data:

(Rs. in million unless otherwise stated)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Gross Domestic Product	23351	25530	30988	33821	39290	46587	55734	63864	76906	89270	103416
Gross National Product	23845	27894	31603	34458	40015	47248	56443	65067	78481	90811	105350
Gross Domestic Savings	2591	2974	3088	2887	3886	6239	5887	7231	7604	10150	8143
Gross Domestic Investment	4270	4808	5314	6628	7351	10184	10599	12898	15237	19415	19076
Average Interest Rate[1]										5.24	6.2
Foreign Exchange Rate (Per US Dollar)[2]	12.1	12.1	13.3	14.6	16.5	17.8	21.3	22	23.7	27.6	29.3
Total Exports	1150.5	1608.6	1491.5	1132	1703.8	2740.6	3078	3191.5	4114.6	4295.3	5106.2
Total Imports	3480.1	4428.2	4630	6314	6511.6	7742.1	9341.2	10905.3	13869.6	16253.7	18324.9
Total External Debts (principal interest)	1807.3	2451.3	3177.8	4717.6	6321.1	9203.2	10330	15171. 9	20826	29216.9	36800.9
Debt Service (principal interest)	217	216.3	256.6	307	497.6	678.2	1019.3	1196.6	1441.6	1720.7	2279.2
International Gross Reserves (US Dollar in million)[3]	186.9	195.8	232.6	163.1	123.1	77.4	100.8	128.2	238.1	249.5	308.6
Fiscal Re venues	1880	2419.2	2679.5	2841.6	3409.3	3916.6	4644.5	5975.1	7350.4	7776.9	9287.5
Broad Money	5285.3	6307.7	7458	9222.4	10455.2	12296.6	15159	17498.2	21422.6	26605.1	31552.4
	1991	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**
Gross Domestic Product	120370	149487	171492	199272	219175	248913	280513	300845	342036	379521	410194
Gross National Product	122517	152202	174705	203135	223992	252479	285173	306870	352917	392646	426365
Gross Domestic Savings	11514	16207	23172	29220	3246 5	34426	39162	41438	46563	56995	60114

[1] Weighted average of 91 days treasury bills rate.
[2] Year end selling rate is taken.
[3] International Reserves held by Monetary Authority at the end of the fiscal year.

Gross Domestic Investment	25074	31619	39653	44644	55231	68017	71084	74728	70061	91690	99497
Average Interest Rate [1]	8.18	9.24	11.29	6.5	7.35	10.93	10.22	3.52	2.33	4.66	4.96
Foreign Exchange Rate (per US Dollar) [1]	42. 9	42.8	49.48	49.59	50.94	56.8	57.3	68.25	68.8	71.0	75.4
Total Exports	7387.5	13706	17266.5	19293.4	17639.2	19881.1	22627	27513.5	35676.3	49822.7	55654.1
Total Imports	23226.3	31940	39205.6	51570.8	63679.	74454.5	93553	98002	87525.3	108504.9	115687.2
To tal External Debts (principal interest)	59505.3	70924	87420.8	101967	113001	128044.4	132087	161208	169465.9	190691.2	201550.6
Debt Service (principal interest)	2407.4	3797.1	4560.5	4855.1	6083.3	6715.5	7527.2	7682.8	8723	10032.8	10388.4
Inte rnational Gross Reserves (US Dollar in million) [3]	360.5	463.1	586.8	714.5	698.7	605.5	647.2	712.4	790.6	942	1014.8
Fiscal Revenues	10729.9	13513	15148.4	19580.8	24575.2	27893.1	30374	32937.9	37251	42893.8	48893.6
Broad Money	37712.5	45671	58322.5	69777.1	80984.7	92652.2	103721	126463	152800.1	186120.9	214654.1

[1] Weighted average of 91 days treasury bills rate.

[1] Year end selling rate is taken.

[3] International Reserves held by Monetary Authority at the end of the fiscal year.

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CHAPTER 7

ISSUES IN EXTERNAL DEBTS IN PHILIPPINES: CONCEPTS AND MONITORING PROCEDURES FOR CRISIS PREVENTION

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1. Introduction

The need for management of Philippine external debt was prompted by the foreign exchange crisis in the late 60s. When the country's debt management machinery was institutionalised in 1971, the statistical database was limited to foreign exchange-denominated liabilities of the public and private non-bank sector. Today, the machinery has grown into a computer-based integrated external debt management system that covers all obligations of residents to non-residents.

1.1 Institutional /Legal Mandates for External Debt Management

In the Philippines, the responsibility for external debt management rests in a number of government agencies, led by the Bangko Sentral ng Pilipinas[1] (referred hereinafter as the BSP), and involves (a) identification of priority areas for foreign financing; (b) evaluation of financing terms and conditions; (c) determination of project viability and borrower's capacity to pay; and (d)

1. BSP took its reins as the country's independent central monetary authority effective July 3, 1993 from the old Central Bank of the Philippines, which was originally established in 1949. Being the new central bank, the BSP's main responsibility is to formulate and implement policies in the areas of money, banking and credit, with the primary objective of maintaining stable prices conducive to a balanced and sustainable economic growth.

assessment of the country's capacity to allocate foreign exchange for servicing existing obligations. The institutional setup also includes the Department of Finance (DOF), Investment Coordination Committee (ICC), Inter-Agency Committee on Review of Foreign Loan Documents, National Economic Development Authority (NEDA), and Board of Investments (BOI).

Being at the forefront of external debt management, the BSP's major tasks consist of the following: (a) monitoring the debt stock and keeping it at a manageable level; and (b) keeping borrowing costs reasonable by ensuring that terms are consistent with market rates. The BSP is mandated to collect, compile and generate monetary and financial statistics, including data on external debt, vital to its policymaking and regulatory functions based on the following laws and executive issuances:

- The Philippine Constitution of October 10, 1986 as the highest law of the country requires, among others, prior concurrence of the Monetary Board (the policymaking body of the BSP) for all direct/guaranteed foreign borrowings of/by the Republic of the Philippines. The Constitution also provides that foreign loans may only be contracted in accordance with the law and regulation of the central bank.

- The Foreign Borrowings Act of September 8, 1966 [Republic Act (R. A.) No. 4860], as amended, provides, among others, that the Central Bank shall promulgate and enforce such measures as necessary to keep external debt service requirements to manageable levels.

- Letter of Instruction No. 158 dated January 21, 1974 and Administrative Order No. 99 dated November 28, 1993 require all borrowing proposals of the government, government agencies, and financial institutions to be submitted for approval-in-principle by the Monetary Board.

- The New Central Bank Act (R. A. 7653 dated June 10, 1993) directs the Bangko Sentral, among others, to maintain international reserves sufficient to service demand for foreign currencies, and equips the BSP with moral influence and powers for compilation of information necessary for the management of its functions and responsibilities.

- Executive Order No. 352 dated July 1, 1996 entrusted to the BSP the generation of monetary and banking statistics as well as balance of payments accounts.

- Administrative issuances by the BSP constitute the policies and implementing rules and regulations that it deems necessary to accomplish its twin goals of maintaining price stability and convertibility of the Philippine peso.

The BSP performs these tasks through the Monetary Board (its highest policy- making body) and the International Operations Department[2] (which handles the day-to-day operations of debt management, among others).

1.2 Debt Monitoring System

The BSP has developed various tools in the pursuit of its debt management tasks and these tools have evolved over the years to cope with challenges posed by developments at home and overseas. As a debt management tool, a debt monitoring system to capture data on external debt was institutionalised in 1971, consistent with the systems then used by the World Bank and the International Monetary Fund. The system initially covered medium and long-term accounts of the non-banking sector, followed by the inclusion of short-term non-bank accounts in 1978. In 1983, the BSP shifted to the total external liabilities concept to include external obligations of the banking sector.

2. Definition of External Debt

Data on Philippine external debt pertain to gross obligations, disbursed and outstanding, owed by Philippine residents to non-residents. Philippine residents shall mean-

a. An individual citizen of the Philippines residing therein; or
b. An individual who is not a citizen of the Philippines but is permanently residing therein; or
c. A corporation or other juridical person organised under the laws of the Philippines; or
d. A branch, subsidiary, affiliate, extension office or any other unit of corporations or juridical persons which are organised under the law of any country and operating in the Philippines.

2. Originally organised in 1970 as the External Debt Management Office and later on as the Management of External Debt Department (MEDD), it was subsequently renamed to International Operations Department (IOD) in October 1999 to include trade and investments with external debt management, thereby expanding its core functions.

Non-residents shall mean an individual, corporation or other juridical person not included in the above definition.

3. Classification of External Debt

Philippine external debt statistics cover liabilities of all sectors and institutions to non-residents. The external debt monitoring system allows presentation of statistics on various levels of disaggregation, such as:

a. Sectoral - public or private. The public sector refers to the National Government and its agencies and instrumentalities, local government units, the central monetary authority (the BSP), government banks and financial institutions and government-owned/controlled corporations. The private sector consists of individuals as well as listed or non-listed corporations and partnerships (where government ownership is nil or less than 50 percent), whether or not their debts are publicly-guaranteed;

b. Institutional - bank or non-bank. Banks are institutions with deposit-taking activities. All other institutions are non-banks;

c. Maturity category - short-term (with a term of one year or less), medium-term (more than one year up to five years) and long-term (more than five years), both on original and remaining (residual) maturity bases;

d. Type of debt instrument - such as loans, trade credits, debt securities, and deposits;

e. Creditor type - multilateral, bilateral, banks and financial institutions, bondholders/noteholders and other creditors (e.g., suppliers/exporters);

f. Creditor country - based on head office (nationality) and residency (locational) concepts;

g. Interest rate - non-interest bearing, fixed and variable rates; and

h. Currency - individual loan accounts are maintained in original currency and converted to their US Dollar equivalent for aggregation purposes using exchange rates prevailing as of report date.

4. Sources of Data

Periodic reports being submitted to the BSP are major sources of both financial and non-financial information. Report forms are designed taking into consideration the type of data required (used both for regulatory and statistical purposes) and the source of information. The parties that report to the BSP are classified into three major categories:

a. Public and private sector borrowers for details of flows on, and stock of, their foreign loans.

   Since the borrowers are primary data sources, details of the loans they have contracted are in their ownership. Their familiarity with reportorial requirements prior to liberalisation of exchange controls, which have become part of their administrative and internal controls mechanism, facilitates compliance in reporting their international transactions.

b. Major creditors/institutional investors for data on the outstanding balance (as well as on transactions in some instances) of their exposures to Philippine residents.

   Creditors' reports provide validation of borrowers' data and serve as supplementary data to those sourced from other data suppliers.

c. Local banks—including branches/subsidiaries of foreign banks operating in the Philippines—for individual transactions coursed through these institutions involving foreign exchange acquisitions and dispositions that are external debt-related.

   International transactions reports of banks are monitoring tools for residents' transactions with the rest of the world, particularly those that bypass prior approval and/or registration with the BSP. Monetary penalties and other sanctions reinforce compliance with reportorial requirements.

News articles in local and international publications are also capitalised by the BSP in monitoring external debt data. The BSP likewise exerts moral influence over private sector borrowers (especially the large ones) to furnish data on their external position. Provisioning of data related to external debt under the present liberalised foreign exchange conditions is discussed in the Coverage section of this paper.

The BSP keeps financial and non-financial data (particularly on private sector accounts) anonymous and strictly confidential; therefore, released data are only summary figures. Clearance from the Monetary Board (the highest level in the BSP hierarchy) is necessary for disclosure of data on accounts or transactions of the reporting borrower. The BSP likewise secures the borrower's consent to the release of data or waiver of right to confidentiality.

5. Dissemination of Data

Outstanding external debt data are released quarterly within one quarter after the end of the reference period. Highlights are disseminated via a news release in the BSP website (www.bsp.gov.ph) and in major newspapers in the country.

Detailed debt statistics under different forms of disaggregation are available in the BSP website and in the statistics released by the BSP in its monthly publication of the Selected Philippine Economic Indicators series (a sample of the data released is shown in Table 7.1).

A report on the country's external debt profile is also included in the BSP Annual Report and quarterly Report on Economic and Financial Developments as well as in the BSP's series of special publications.

6. Debt Service Payment Schedule

The BSP regularly generates a projected debt service schedule which is internally used for various purposes, including evaluation of new loan proposals, financial programming exercises, and analysis of the indicators of external vulnerability/sustainability.

7. Use of Debt Data

The focus of the BSP's functions relative to managing the country's external debt is to ensure: (a) that the obligation funding an eligible project is obtained at the best possible terms, i.e., with minimum cost and longer maturity; and (b) that interest and principal payments can be serviced in an orderly and timely manner, and with due regard for the economy's debt servicing capacity.

Strict monitoring of the country's external debt is a priority of the monetary authorities. Over the years, monitoring has been enhanced to expand coverage,

Table 7.1

TOTAL EXTERNAL DEBT 1/
as of periods indicated
in million US dollars

	1995	1996	1997	1998	1999	2000	2001	September 2002
By Type of Debt	**39,367**	**41,875**	**45,433**	**47,817**	**52,210**	**52,060**	**52,355**	**53,613**
Medium and Long-Term	34,088	34,668	36,994	40,632	46,465	46,112	46,306	47,742
Short-Term	5,279	7,207	8,439	7,185	5,745	5,948	6,049	5,871
Trade	2,674	4,096	4,032	2,551	1,836	1,640	1,285	1,298
Non-Trade	2,605	3,111	4,407	4,634	3,909	4,308	4,765	4,573
By Borrower	**39,367**	**41,875**	**45,433**	**47,817**	**52,210**	**52,060**	**52,355**	**53,613**
Banking System 2/	6,266	9,037	11,553	12,777	11,726	11,462	11,537	10,946
Central Bank a/	0	0	0	0	0	0	0	0
Bangko Sentral a/	2,026	1,820	3,388	4,999	4,827	4,945	5,878	4,879
Banks	4,240	7,217	8,165	7,778	6,899	6,517	5,659	6,067
Government Banks 3/	2,240	1,838	2,187	2,368	2,741	2,992	2,664	2,860
Private Banks	2,000	5,379	5,978	5,410	4,158	3,525	2,995	3,207
Foreign Banks	259	348	609	494	423	333	731	463
Domestic Banks	1,741	5,031	5,369	4,916	3,735	3,191	2,264	2,744
Public and Private Non-Banks	33,101	32,839	33,880	35,040	40,484	40,598	40,818	42,666
Public	25,850	23,727	21,383	22,944	27,233	26,473	25,149	27,116
Public-NG & Others a/	24,358	22,538	20,504	22,262	26,679	26,010	24,835	26,839
CB - BOL	1,492	1,189	878	681	553	464	314	277
Red Clause/Export Advances	0	0	0	0	0	0	0	0
Private	7,251	9,112	12,497	12,096	13,251	14,125	15,669	15,550
of which: Red Clause/Export Advances	426	421	496	332	410	230	174	138
By Institutional Creditor	**39,367**	**41,875**	**45,433**	**47,817**	**52,210**	**52,060**	**52,355**	**53,613**
Banks 4/	5,106	7,415	8,872	8,584	8,904	9,453	9,455	9,924
Other Financial Inst. 4/	1,239	958	1,304	1,088	1,436	1,723	2,548	2,659
Suppliers	2,587	2,588	2,359	1,562	1,690	1,578	1,879	2,114
Multilateral	9,617	8,634	8,638	10,058	10,245	9,665	9,553	8,986
of which:								
I B R D	4,995	4,676	4,146	4,298	4,071	3,626	3,251	3,258
IMF	814	405	889	1,562	1,822	2,031	1,948	1,729
A D B	3,332	3,117	3,091	3,490	3,536	3,324	3,160	3,311
Bilateral	14,393	13,439	13,307	14,926	16,429	15,336	14,531	15,393
Export Agencies	3,939	4,677	4,718	5,312	2,089	1,925	2,380	2,399
Others	10,454	8,762	8,589	9,614	14,340	13,411	12,151	12,994
Bondholders/Noteholders	6,206	8,725	10,633	11,209	12,951	13,447	13,678	14,050
Others	219	116	320	390	555	858	711	486
By Country Profile 5/	**39,367**	**41,875**	**45,433**	**47,817**	**52,210**	**52,060**	**52,355**	**53,613**
Country	23,544	24,516	26,162	26,550	29,014	28,948	29,124	30,577
of which:								
USA	3,771	4,190	4,569	4,566	5,314	5,473	6,064	6,356
Japan	12,169	11,109	10,293	11,887	14,205	13,136	11,986	12,817
UK	611	511	445	399	438	662	527	545
France	961	1,579	1,899	1,743	1,621	1,230	1,000	1,118
Germany	967	1,298	1,635	2,122	2,435	3,133	3,467	3,424
Multilateral Agencies	9,617	8,634	8,638	10,058	10,245	9,665	9,553	8,986
Bondholders/Noteholders	6,206	8,725	10,633	11,209	12,951	13,447	13,678	14,050
1/ Under the 1995 revised reporting concept approved by the Monetary Board, the following accounts/items form part of/are excluded from said figures:								
Inclusion:								
Cumulative FX revaluation on US$-denominated multi-currency loans	1,742	817	129	447	491	(6)	(377)	(91)
Exclusion:								
Intercompany accounts (gross "Due to Head Office/Branches) of Philippine branches of foreign banks	861	2,694	3,074	3,060	2,906	2,072	2,291	2,249
Private sector loans without BSP approval/registration	455	562	925	1,404	1,331	1,765	1,748	1,980
Private sector obligations under capital lease agreements	0	396	1,296	1,228	1,597	1,532	1,428	1,354
2/ Effective July 3, 1993, accounts of old CB were split between Bangko Sentral ng Pilipinas and Central Bank - Board of Liquidators								
3/ Accounts of the Development Bank of the Philippines have been reclassified from public non-banking to banking sector liabilities starting 1996								
4/ Excludes amounts owed to foreign gov't. banks/FIs classified as bilateral creditors								
5/ Net of DA/OA Credits for the period 1983-1993								
a/ Revised from 1990-2000 to reflect reclassification of liabilities owed to the IMF from the National Government to the BSP								
* Totals may not add up due to rounding								
Source: IOD,BSP								

strengthen statistical database, improve quality of data capture and comply with internationally-recognised standards. Adherence to the principle of greater transparency is continuously and vigorously pursued.

Traditional Indicators

Debt data are principally used to analyse, among others, the country's capability to meet debt service burden and assess vulnerability to shocks. The indicators monitored are as follows:

- External Debt/Gross National Product (GNP)
- External Debt/Gross Domestic Product (GDP)
- Debt Service Burden (DSB)/Exports of Goods
- DSB/Exports of Goods and Receipts from Services and Income
- DSB/Current Account Receipts
- DSB/GNP
- DSB/GDP
- Gross International Reserves/DSB
- Short-term External Debt/Total External Debt

Indicators are published by the BSP in the monthly "Selected Philippine Economic Indicators" and are also made available in the BSP website (see Table 7.2). The first two indicators related to the debt stock are computed quarterly while debt service ratios are generated monthly, except for ratios involving GNP or GDP data.

New Indicators

Following recent financial crises in emerging markets, greater attention has been devoted to indicators that would measure external vulnerability. More recently, the BSP has been closely monitoring the ratio of reserves to short-term debt, both on original maturity and residual (remaining) maturity,[3] as it measures how quickly a country must make adjustments if it were cut off from external borrowing. It also provides an indication of the risk and potential size of a liquidity crisis.

3. Short-term external debt by remaining maturity is equivalent to short-term external debt on an original maturity basis plus principal payments on medium- and long-term loans and bonds falling due in the next twelve months.

Table 7.2

SELECTED EXTERNAL DEBT RATIOS

for periods indicated
in million US dollars

Item	1995	1996	1997	1998	1999 old concept [r]	1999 new concept [r]	2000 [r]	2001 [p/]	Jan-Sep 2002 [p/]	Jan-Sep 2001
I. Debt Service Burden (DSB) [2]										
Total	**5032**	**5026**	**5596**	**5095**	**6627**	**6627**	**6115**	**6625**	**5758**	**4855**
Principal	2853	2820	3029	2838	3820	3820	3062	3694	3740	2666
Interest	2179	2206	2567	2257	2807	2807	3053	2931	2018	2189
II. Export Shipments [1]	17447	20543	25228	29496	35037	34211	37295	31243	25422	23263
III. Exports of Goods, and Receipts from Services & Income [1]	31821	39549	48063	43413	47920	47096	49071	41418	33694	31075
IV. Current Account Receipts [1]	32968	40734	49733	44171	48565	47703	49623	41935	34139	31470
V. Gross National Product (GNP)	76166	86259	85791	68523	80231	80231	79126	75566	58969	54600
VI. Gross Domestic Product (GDP)	74120	82848	82764	65548	76076	76076	74837	71325	55525	51443
VII. External Debt (End-of-Period)										
Total	**39367**	**41875**	**45433**	**47817**	**52210**	**52210**	**52060**	**52355**	**53613** [a/]	**52426** [a/]
Public	30116	27385	26958	30310	34800	34800	34412	33691	34856 [a/]	33886 [a/]
Private	9251	14490	18475	17507	17410	17410	17648	18664	18757 [a/]	18541 [a/]
VIII. Gross International Reserves (End-of-Period)	7762	11745	8768	10806	15024	15024	15024	15658	16025 [a/]	14549 [a/]
IX. Ra Banks 4/										
Other Financial Inst. 4/										
1. DSB to Export Shipments	28.84	24.47	22.18	17.27	18.91	19.37	16.40	21.20	22.65	20.87
2. DSB to Exports of Goods, and Receipts from Services & Income	15.81	12.71	11.64	11.74	13.83	14.07	12.46	16.00	17.09	15.62
3. DSB to Current Account Receipts	15.26	12.34	11.25	11.53	13.65	13.89	12.32	15.80	16.87	15.43
4. DSB to GNP	6.61	5.83	6.52	7.44	8.26	8.26	7.73	8.77	9.76	8.89
5. DSB to GDP	6.79	6.07	6.76	7.77	8.71	8.71	8.17	9.29	10.37	9.44
6. External Debt to GNP	51.69	48.55	52.70	69.40	65.10	65.10	65.82	69.34	67.12 [b/]	70.07 [b/]
7.External Debt to GDP	53.11	50.54	54.89	72.95	68.63	68.63	69.56	73.40	71.10 [b/]	74.35 [b/]
Public	40.63	33.05	32.57	46.24	45.74	45.74	45.98	47.24	46.22 [b/]	48.06 [b/]
Private	12.48	17.49	22.32	26.71	22.89	22.89	23.58	26.17	24.87 [b/]	26.30 [b/]
8. Gross International Reserves to Debt Service Burden	154.25	233.68	156.68	212.09	226.71	226.71	245.69	236.35	278.31	299.67
By Country Profile 5/										

[1] Based on the revised methodology from 1990 to 1998. Starting January 2000, the comparative monthly data were based on the concept under the Balance of Payments Manual 5th edition.

[2] Debt service burden represents principal and interest payments after rescheduling. In accordance with internationally-accepted concept consists of:

- Principal and interest payments on fixed MLT credits including IMF credits, loans covered by the Paris Club and commercial banks rescheduling, and New Money Facilities

- Interest payments on fixed and revolving short-term liabilities of banks and non-banks

but excludes the following:

- Prepayments on future years' maturities of foreign loans

- Principal payments on fixed and revolving ST liabilities of banks and non-banks

[a/] As of End-September

[b/] For comparability with annual figures, GNP and GDP numbers used are based on the sum of 1st to 3rd quarters 2002 and 4th quarter 2001 data

[p/] preliminary

[r] Revised to reflect data updates

At the close of 1997, the ratio of reserves to short-term debt based on residual maturity fell at 0.8 below the unity mark. This was due primarily to the drop in the level of reserves during the height of the Asian crisis as monetary authorities were forced to sell foreign exchange in an effort to stem the speculative pressures on the peso. As exchange rates stabilized due in part to stabilisation of macroeconomic fundamentals, the ratio of reserves hit the equivalent of 1.4 times the level of short-term external debt based on remaining maturity as of end-2001 and remained the same as of end-September 2002.

8. Issues on External Debt Data Collection and Reporting System

Coverage. As the Philippines embarked on gradual deregulation of cross-border transactions, particularly for trade and other current account items, potential reporting gap on the data quality of Philippine external debt became clear and the comprehensiveness of traditional monitoring tools had been diminished. To address these concerns, the BSP has been implementing a number of initiatives to enhance data coverage.

Among others, the lifting of the mandatory surrender requirement for foreign exchange receipts has given residents several options on disposition of their foreign exchange receipts (i.e., the funds can be retained abroad, deposited in foreign currency accounts with local or foreign banks or converted to local currency). No prior BSP approval is required to fund foreign exchange payments from these resources. The BSP has implemented documentation and reporting of acquisitions/ dispositions of foreign currencies on both trade and non-trade transactions by foreign exchange corporations (that are subsidiaries of banks/quasi-banks under the supervision and examination of the BSP) where physical exchange of foreign currencies that bypassed the banking system takes place.

Another reporting burden was borne out of relaxation of rules and regulations on foreign borrowings of the private sector,[4] provided access to the foreign exchange resources of the banking system is not tapped for servicing of principal and interest payments. As a condition to the approval of private sector borrowing proposals, the BSP requires periodic submission of formatted-reports on the status of BSP-approved loans and flows of funds thereon. Similar compliance is required from borrowers that did not seek prior approval of their loans with

4. Borrowings of the public sector remain subject to the prior approval requirement of the BSP due to the requirements of the 1986 Philippine Constitution.

the BSP for statistical purposes in order to allow the compilation of more comprehensive data on private sector external liabilities.

The BSP takes a pro-active stance by communicating directly with private non-bank corporate borrowers (particularly new ones with substantial funding requirements), providing advisory on the BSP's reportorial requirements, explaining the need for and uses of data requirements, and exercising moral suasion to obtain the borrower's cooperation. It collaborates with other regulatory government agencies and non-government organizations to provide data-even on an aggregate level-pertaining to transactions on and/or outstanding amount of other liabilities to non-residents not captured by the BSP monitoring system.

Even with the more liberal regulatory environment, the BSP continues to wield substantial influence on key areas affecting the economy and enjoys a high credibility, allowing it to successfully solicit the cooperation of data providers.

Data Validation/Dissemination. To validate the scope of statistical database and data integrity, the IOD staff conducts regular comparison and reconciliation of BSP debt statistics vis-à-vis statistical publications of international institutions such as the BIS' Quarterly Review, OECD/BIS' Statistics on External Indebtedness, as well as the World Bank's Global Development Finance. Data validation proved to be generally comparable therewith.

9. Use of the Foreign Exchange Liabilities Concept

In addition to total external debt, the BSP also monitors closely the level of foreign exchange liabilities, i.e., all foreign exchange-denominated obligations of the monetary authorities and the central government, whether owed to residents or non-residents. Monitoring is done to assess the country's foreign currency liquidity position considering that foreign currency obligations of these public sector entities constitute drains on the country's official international reserves. This concept is particularly used in the BSP's monthly submission of the Data Template on International Reserves and Foreign Currency Liquidity, a prescribed category under the IMF's Special Data Dissemination Standards.

10. The Financial Crisis in 1997 and Its Impact on the Country's External Debt

Prior to the onset of the Asian financial crisis that began in mid-1997, the country's external debt situation was firmly under control. The maturity profile of the Philippine external debt was largely medium and long-term, ranging from 83-87 percent of the total external debt from 1988-1996. During the crisis period, the share of short-term external obligations rose slightly to 18.6 percent but it gradually declined to 15.0 percent by end-1998. As of end-September 2002, short-term debt comprised only 11.0 percent of total external debt.

Meanwhile, the ratio of external debt to GDP increased by only 4 percentage points in 1997 compared to 50.5 percent in 1996. However, the ratio has increased to 71.1 percent as of end-September 2002 following the combined effects of (a) the rise in the level of debt due in turn to the additional borrowings by the general government to pump prime the economy and to finance shortfalls in fiscal revenue,[5] and (b) the lower level of GDP in U.S. dollar terms compared to the level of production in 1997 as a result of both the economic slowdown, particularly in 1998, and the depreciation of the peso against the U.S. dollar. The private sector's borrowings have remained relatively stable at around US$19 billion.

Even the ratio of debt service to exports of goods and receipts from services and income continued to be favorable, declining to 11.6 percent in 1997 from 12.7 percent in 1996 as a result of lower principal and interest payments as well as higher export receipts. Notwithstanding the increase in the ratio to 17.1 percent for the first nine months of 2002, the Philippines remains within the moderately indebted category based on the IMF/World Bank's criteria for assessing severity of external debt.[6]

5. The decision of the National Government to tap the international market was influenced largely by the declining trend in global interest rates and in order not to exert upward pressure on domestic interest rate.

6. A ratio of debt service to merchandise exports of 12-20 percent classifies a country as moderately indebted; below 12 percent, a country is considered less indebted while a ratio of 20-25 percent is regarded as heavily indebted.

CHAPTER 8

ISSUES IN EXTERNAL DEBT IN SRI LANKA: CONCEPTS AND MONITORING PROCEDURES FOR CRISIS PREVENTION

by

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1. Introduction

Since the regaining of independence in 1948, the Sri Lankan economy has been continuously dependent on foreign aid to meet the domestic resource gap (savings gap) as well as the external resource gap (trade gap), both have been permanent features in the past. An expansionary fiscal policy adopted throughout most of this period was responsible for a significant share of the domestic resource gap, which was largely financed through borrowings from external sources. The Sri Lankan government first started borrowing from bilateral sources in 1950, and then from multilateral sources from 1954. Most of such borrowings were tied to the specific public investment programmes during the period from the 1950s to the mid 1970s. Since the liberalisation of the economy in 1977, under which open economic policies have been implemented, the domestic resource gap has widened significantly as a result of the increase in investment, both private and public, which depended to a large extent on external sources. This has directly impacted on the high borrowing from external sources, causing the stock of outstanding external debt to accumulate at a faster rate. Although central government budgetary operations are responsible for a large share of the accumulated external debt, the government policy of extending guarantee facilities for public enterprises and private sector for external borrowings also contributed. In addition, private non-guaranteed borrowings such as suppliers' credit, various financial arrangements of commercial banks and government borrowings especially from the IMF to fill the external resource gap also enlarged the country's total gross liability to the outside world.

In the case of external debt held by the central government, resources were raised mainly from bilateral and multilateral sources (94 per cent of total government external debt), mostly under concessional terms and conditions. Borrowings from external commercial sources by the government and under a government guarantee were generally maintained at a low level (16 per cent of the total external debt in 2001). Because, in the past, the government followed a very cautious policy in external borrowings that prevented the raising of high cost commercial borrowings from external sources. In 1998, Floating Rate Notes (FRN), valued at US$ 50 million, with a 2 year maturity, were issued by the government to the external capital market. The main objectives of this issue was to establish a bench- mark for Sri Lanka bonds in the international capital market. In addition, government intended to raise funds from external sources by issuing United State dollar denominated bonds (Sri Lanka Development Bonds-SLDBs) valued at US$ 250 million with a 2 year maturity in 2001 and 2002, to ease the government borrowing pressure on the domestic market. However, almost the entire issue was subscribed by banks operating locally using dollar deposits in their FCBUs and DBUs. (Therefore, according to the new classifications these borrowings are not classified as foreign borrowings). As at end 2001, government liabilities to external commercial creditors (excluding implicit guarantees) amounted to only 6 per cent of the total outstanding government external debt.

The outstanding external debt stock in Sri Lanka could be divided broadly into two categories, viz., debt raised under the Foreign Loan Act and all other external debt raised through various other mechanisms. The first category includes external debt raised by the government (80 per cent of the total external debt stock at end 2001), while the second includes debt raised with or without a government guarantee by public enterprises and the private sector. Given the existing capital account controls, medium and long-term borrowings under the second category require prior approval from the Monetary Board of the Central Bank. So far the Central Bank has adopted a very conservative policy on private sector borrowings from external commercial sources. This has restricted the accumulation of high risk external debt that prevented an excessive exposure of the country to high risk external commercial debt. The prudent external debt management strategy adopted so far has helped the country to avoid any solvency and liquidity problems in servicing external debt. At end 2001, the outstanding gross external debt recorded under the second category amounted to 18 per cent of total external debt, (net of banking sector liabilities) and was equivalent to 10 per cent of GDP and 116 per cent of gross official reserves at end 2001. Of

the total of the second category, short-term external borrowings (37 per cent of the second category total or 7 per cent of the total external debt stock), mainly comprises suppliers' credit by the private sector is not properly captured under the present monitoring system.

The main objective of this country paper is to provide basic information on concepts, compilation methods, monetary procedures and reporting system of external debt in Sri Lanka for the research study on "Issues in External Debt in the SEACAN countries; Concepts and Monitoring procedures for Crisis Prevention" conducted by the SEACEN Centre in Malaysia. The main objective of this research study is to develop better monitoring procedures and reporting system which would help in early assessing the vulnerability of the economy to solvency and liquidity risk away from the country's external debt. Therefore, the study requires to have more detailed examination of the composition of the external debt and related activity for the sustainability analysis of the external debt. In this regard, this paper expected to provide the necessary data also on composition of external debt in relating to ownership, maturity structure, functional categories, instruments, currency compositions and profile of debt service.

The presentation of the country paper is based on the outlines provided by the SEACEN Centre for country researchers as follows: The Section 2 will discuss the definitions and core-accounting principles for the measurement of external debt. The Section 3 will explain the classification of external debt. The Section 4 will briefly explain sources of data, frequency of data availability, coverage and dissemination, debt service payment schedule, use of debt data, issue in data collection and reporting system and efforts taken towards improvement of data collection and standardisation of data definition and reporting system. The final section will attempt to summarise the issues and recent developments to improve the management of external debt.

2. Definitions and Core-accounting Principles for the Measurement of External Debt

2.1 Definition of External Debt

Since 1997, external sector statistics of Sri Lanka have been published according to the Fifth edition of the Balance of Payment Manual (1993) - BPM5 of the International Monetary Fund (IMF). It defines the distinction between

resident[1] and non-resident, under which transactions are classified between the foreign and domestic. Accordingly, the external debt is defined as the gross liability of residents in the economic territory[2] to the residents of the rest of the world at any given time that requires payment in the future.

With the introduction of the new system - BPM5, Foreign Currency Banking Units (FCBUs) of commercial banks within the economic territory are treated as resident enterprises and transactions between resident units and FCBUs of commercial banks, which were treated as foreign transactions before 1997 (under BPM4) are now treated as domestic transactions. Concomitantly, the gross liabilities of resident units to FCBUs of commercial banks are classified as domestic debt. In addition, external debt statistics have been presented in US dollars along with local currency, Sri Lankan rupees. Before 1997, external debt statistics were presented in SDR and in local currency.

At present, the total external debt of resident units covers the gross liabilities of central government, other public institutions and private sector. Under the existing constitutional framework, sub-national governments are not permitted to raise funds from external sources.

Before 1997, deposits holders in Non-Resident Foreign Currency (NRFC) accounts were treated as non-residents and the balances in their accounts were taken as foreign liabilities. The survey conducted in 1996 revealed that about 50 per cent of deposits in NRFC accounts in value term held by residents mainly by returned migrants. Therefore, only 50 per cent of the deposits in NRFC accounts are accounted as non-residents which is recorded as liabilities of resident banks to non-residents.

2.2 Outstanding and Actual Current Liabilities

The present external debt compilation and dissemination system provides the actual outstanding stock of external debt and the amount of external debt yet to be disbursed separately. The stock of debt without the amount of debt yet to be disbursed is generally considered as actual outstanding external debt stock

1. According to the definition of residence, individuals who are in the country for more than one year are treated as residents while business enterprises including foreign financial institutions operating in a country, even if they are incorporated elsewhere, are treated as residents, because it is the location of enterprises engaged in economic activities that are considered for the definition of a resident.
2. Economic territory is defined as geographic territory administered by the government.

for various economic analyses. An amount of external debt yet to be disbursed is also a useful indicator, which shows the possible expansion of the external debt stock in the immediate future. The outstanding debt stock excludes arrears of debt service payments and possible liabilities in the future due to various other commitments such as contracted liabilities.

2.3 Principal and Interest

The external debt service payments are further disaggregated into principal and interest under the present data recording system. The principal payments are commonly referred as amortisation payments and the cost of using the principal is referred to as interest.

The payment of interest on external debt is on a periodic basis for medium and long-term debt[3]. For short-term debt[4], it is mostly at the time of redemption of the debt. However, the present external debt data collection system does not have a mechanism to gather interest liabilities of non-guaranteed private short-term external debt. The principal payments are also on a periodic basis for medium and long-term debt, while for short-term debt the total value of the principal is paid at the time of maturity. The payment of principal reduces the value of the outstanding debt stock. The outstanding debt stock shows the total liability of principal payments excluding interest commitments in the future.

External debt with variable interest rates or debt with floating interest rates (such as interest rates linked to a specified market interest rate, with a margin) or with currency options would create serious difficulties for efficient debt management in the economy. The continuous fluctuation of market interest rates to which the debt instruments are linked and changes in cross-exchange rates would result in deviation of debt service payments from the original projections that would lead to difficulty in finding resources at the time of settlement.

2.4 Time of Record

The transactions of the public sector external borrowings are recorded on the day the proceeds of borrowings are received in cash, while loans in kind are recorded on the date when goods are received. In the case of payment of such

3. Medium and long-term debt have the original or extended maturity of more than 1 year.

4. Original maturity of short-term debt is 1 year or less than 1 year.

borrowings, they are recorded on the day the principal and/or interest payments are made.

In the case of government guaranteed medium and long-term debt of public enterprises and the private sector, information on loan disbursements and debt service payments are collected through semi-annual surveys (in December and in June) conducted by the Central Bank. The survey data are recorded in the month, disbursements and payments made. Under the present data collection system, there could be unreported information on external debt under this category to a maximum period of six months for borrowers who came to the system between the two survey periods. Although there could be such unreported transactions, all such borrowings are subject to the prior approval of the Monetary Board of the Central Bank. This allows the Central Bank to keep track of such borrowings between the two survey periods.

The survey conducted by the Central Bank in 1995 revealed that the short-term external borrowings are basically suppliers' credit for BOI as well as non-BOI exporters and the amount of credit is linked to the value of raw materials and intermediate goods imported for the production of exports by these exporters. Based on the survey results, and considering 1995 as a base year, monthly flows of external debt transactions are estimated based on their import data, which are generally collected with a six weeks lag.

The interest costs that have accrued but are not yet payable are excluded from the gross external debt stock. In certain loan agreements, interest payments are capitalised and due interest payments from debtor to creditor are set-off by reducing equal amounts from loan disbursement. However, this is recorded as two transactions on the due date and the value of the transaction is taken into account under interest as well as loan disbursements separately.

2.5 Valuation

External debt transactions are recorded at the transaction rate on the reference date. The stock of external debt is re-valued on a monthly basis using end of month exchange rates. Under the present system, the necessity of estimating the market value of the external debt does not arise as tradable debt instruments are not in the present stock of external debt. The current practice of valuation of external debt therefore gives the nominal value of the outstanding debt stock.

2.6 Unit of Account and Exchange Rate Conversion

Under the present data recording system, external transactions; loans raised, debt service payments made and the stock of debt held in a variety of currencies are accounted in local currency, i.e. Sri Lanka rupees, and in US dollars. Transactions in a variety of other currencies are first converted to US dollars using cross exchange rates on the reference date on which the transaction is made and then converted to rupees using the spot rate of dollars in the market. At the same time the transactions are recorded in US dollars, which is useful for inter-period comparisons.

2.7 Maturity

The total outstanding external debt stock is broadly divided into two groups on the basis of maturity. The debt stock with the original maturity of one year or less is classified as short-term debt while the stock of debt with the original or with an extended maturity over one year is classified under medium and long-term debt. Further, external debt raised with a put option/call option of one year or less are treated as short-term while others are classified as long-term maturity.

3. Classification of External Debt

3.1 By Borrower/Sector

3.1.1 Public Sector

The public sector is defined as the combination of general government sector, non-financial public enterprises and financial public institutions. The general government sector is defined as the combination of all government units, namely, central government, state/provincial governments, local governments and any supranational authorities exercising tax and governmental expenditure functions within the national territory. (IMF-Government Finance Statistics (GFS) Manual).

Under the present fiscal arrangements in Sri Lanka (under the 13th Amendment to the Constitution in 1987), the general government consists of central government, provincial councils and local governments. The borrowings from external sources are limited to the central government, while necessary powers have not been devolved for provincial councils and local governments to raise funds externally under the present Constitution. The external debt classified and reported under the government is therefore strictly the liabilities of the

central government and could be represented as the liability of the general government too. In view of existing external debt stock, the central government is responsible for over 70 per cent of the total stock and most of these loans are of concessional nature obtained from multilateral and bilateral donors (Table 8.1).

External liabilities of the monetary authority and commercial banks are classified as banking sector external liabilities of the country. Banking sector liabilities to the external sector are reported along with the country's outstanding external debt and the total is classified as outstanding external debt and banking sector external liabilities of the economy. (Table 8.1).

The present data dissemination system does not disaggregate the liabilities of the public sector banks from private banks. However, bank-wise information are collected under the current data collection system, allowing the authorities to compile the liabilities of public and private sector separately, if necessary.

The definition of the public sector includes public non-financial corporations too. However, under the current compilation and reporting system, the outstanding external debt of non-financial public corporations has not been compiled and reported separately. In the recent past, some of the key public enterprises have been privatised by divesting part of the ownership of the government and transferring management authority of the enterprises while the government's holding minority/majority shares of the enterprise. There is no clear definition to classify such enterprises either as private or public, leaving the authorities in a dilemma in classifying their holding of external debt. Therefore, outstanding external debt of non-financial public corporations are compiled and reported together with the private debt. (Table 8.1).

3.1.2 Private Sector

The classification issues discussed under the public sector above prevent the compilation of private sector external debt. Due to the above problem, the private non-bank sector and the publicly guaranteed and non- guaranteed debt are reported under the same category of private debt.

This issue invites data compilers to consider a internationally accepted definition for private and public sectors to distinguish operations of semi-privatised public enterprises. This would help develop the classification as well as analysis of external debt.

Table 8.1
Classification of External Debt by Maturity, Borrower and Source

(US Dollars Mn.)

Item1997	1998	1999	2000	2001	
1 Long and Medium-term	7,719	8,264	8,613	8,456	8,009
1.1 Government	6,346	6,902	7,125	6,989	6,808
- Multilateral	2,380	3,159	3,225	3,053	3,104
- Bilateral	3,078	3,437	3,707	3,633	3,271
- Financial Markets	234	210	152	86	164
- Supplier Credit	204	96	41	217	269
1.2 Public Corporations and private sector with government guarantees	670	718	945	1,028	744
- Financial Markets	531	563	803	906	698
- Supplier Credit	139	155	142	122	46
1.3 Public Corporations and private sector without government guarantees	270	277	286	278	248
- Financial Markets	270	277	286	278	248
1.4 IMF Drawings	433	367	258	161	209
2 Short-term and Banking Sector Liabilities	478	1,442	1,360	1,651	1,675
2.1 Short-term	478	484	475	575	557
- Central Government	-	-	-	-	-
- Others	478	484	475	575	557
2.2 Banking Sector External Liabilities	na	958	885	1,076	1,119
- Central Bank	-	-	-	-	2
- Commercial Banks	-	865	765	938	1,009
- ACU Liabilities	-	92	121	137	107
3 Total Debt and External Liabilities	8,197	9,707	9,934	10,106	9,684

Source: Central Bank of Sri Lanka

3.2 By Maturity

The maturity is defined as the original (or extended) maturity indicated at the time of borrowing for the classification. The outstanding external debt stock (including public and private, without banking sector liabilities) is broadly classified as short-term and medium and long-term debt. The identification of the length of the maturity is based on the original or extended maturity indicated in the loan agreement. External debt with an original maturity of one year or less held by public and private sectors are classified as short-term debt. External debt with the original or extended maturity of over one year held by government, non-financial corporations, private and IMF drawings are classified as medium and long-term debt. Of the total outstanding stock, medium and long-term debt accounts for 83 per cent while balance of 17 per cent belong to short-term debt and banking sector liabilities (Table 8.1).

The classification of the debt stock based on the residual maturity is not available in the existing data reporting system. However, the present data management system - CS DRMS package has an option to generate the outstanding debt stock under the residual maturity. Reporting of outstanding debt based on the residual maturity would be useful to identify the liquidity risk in the short-run.

3.3 By Instruments

The present data compilation and dissemination system classifies the medium and long-term external debt by loan instruments. Accordingly, medium and long-term debt stock is disaggregated into projected loans, non-project loans (mostly commodity loans), suppliers' credit, IMF drawings and other loans. Other loans generally include medium and long-term loans of non-financial public corporations and private sector institutions. The existing external debt stock does not include marketable debt instruments and therefore debt securities are not in the current classification of external debt. Project loans account for 56 per cent of total debt stock followed by non-project loans (11 per cent) of which, both are largely in concessional nature (Table 8.2).

Under the present classification system, the instrument-wise classification is limited only to medium and long-term external debt and no such analysis is available for short-term external debt and banking sector liabilities.

Table 8.2
Classification of External Debt by Instruments and Source

(US Dollar Million)

Item	1997	1998	1999	2000	2001
1. Medium and Long-term Debt	**7,719**	**8,264**	**8,613**	**8,456**	**8,009**
1.1 By Instrument	7,719	8,264	8,613	8,456	8,009
- Project Loans	4,530	5,150	5,517	5,346	5,385
- Non-project loans	1,612	1,656	1,612	1,426	1,144
- Supplier Credits	343	251	182	338	316
- IMF Drawings	433	367	258	161	209
- Other Loans	801	840	1,043	1,185	956
1.2 By Source	7,719	8,264	8,613	8,456	8,00
- Multilateral	3,263	3,526	3,483	3,214	3,313
- Bilateral	3,078	3,437	3707	3,633	3,271
- Financial Markets	1,035	1,050	1,240	1,271	1,109
- Supplier Credits	343	251	182	338	316
- Other Private	-	-	-	-	-
2. Short-term debt and baking sector liabilities	**478**	**1,442**	**1,360**	**1,651**	**1,675**
3. Total External Debt and Liabilities	**8,197**	**9,707**	**9,934**	**10,106**	**9,684**

Source: Central Bank of Sri Lanka

3.4 By Currency

The analysis of the outstanding external debt in terms of domestic currency as well as a selected foreign currency is important for monitoring an economy's potential vulnerability to solvency and liquidity risk. This analysis is very useful for developing countries which are highly indebted to the external sector, as a sharp depreciation of the exchange rate against the currencies in which foreign loans were raised increases the burden of foreign currency debt liabilities in domestic currency terms for the resident debtors. Further, payment in foreign currency debt can cause pressure on local currency leading to sharp depreciation and causing capital flight from the economy.

Considering the importance of compiling the external debt on a currency basis, Sri Lanka's external debt stock is also classified in terms of local currency and in US dollars. The currency based compilation of foreign debt is further disaggregated to identify the short-term and long-term liabilities under each currency category.

The present external data management system (CS-DRMS) has the facility to generate external liabilities of the government by loan currency basis. However, the reporting of external debt by currency basis is now limited to liabilities of the central government. Of the total government external debt, SDR denominated debt accounts for 39 per cent of the total followed by Yen denominated debt (29 per cent) and US Dollars denominated debt (21 per cent) (Table 8.3).

Table 8.3
Classification of Government Debt by Currency

(Rupees Billion)

Item	1997	1998	1999	2000	2001
By Currency	376.3	461.3	507.9	542.0	634.6
SDR	142.7	179.1	195.8	214.5	249.7
US Dollars	83.1	89.9	91.3	98.1	135.3
Japan Yen	98.7	132.4	164.8	172.9	185.1
Deutsche Mark	25.7	29.7	27.4	28.5	33.1
Others	26.0	30.2	28.6	28.0	31.4

Source: Central Bank of Sri Lanka

3.5 By Type of Liabilities

The debt service payments comprise principal repayments and/or interest payments to the external creditors. At present, detail terms and conditions on the public sector external debt data are maintained in the debt management system. This system has the facility to generate future debt service liabilities in terms of

principal repayment and interest payment on both monthly and annual basis. The semi-annual survey conducted by the Central Bank collects information on disbursement, principal payment and interest payment for public guaranteed or non-guaranteed external debt raised by non-financial public corporations and the private sector. The survey collects information on monthly basis for 36 months including the current year and the two consequent years followed by a further 4 years on an annual basis. Therefore, the existing monetary system has a comprehensive information base for medium and long-term external debt held by the public and the private sector.

The present external debt compilation and recording system do not have a clear base to identify the short-term debt and their commitments of service payments. It is entirely dependent on the estimates based on the survey results in 1995 and current year imports for export by BOI and non-BOI exporters.

4. External Debt Statistics: Sources, Frequency of data availability, Coverage and Dissemination

4.1 Source of Data

4.1.1 Public Sector

The primary source of information about central government liabilities to the external sector is the External Resources Department of the General Treasury which shares this information with the Public Debt Department of the Central Bank. Therefore, this information is simultaneously available at both institutions.

The Central Bank maintains the list of non-financial public corporations which have raised funds from external sources, as such borrowings need prior approval from the Monetary Board of the Central Bank. The list of such approvals is very useful for the Central Bank to collect information about the medium and long-term borrowings of these public entities through the semi-annual survey.

The external debt liabilities of financial institutions (monetary authority and commercial banks) are also collected in detail from the original sources. The monetary survey conducted on monthly basis provides detail information on banking sector liabilities to the external sector.

4.1.2 Private Sector

Private sector debt with medium and long-term maturity raised under either a government guarantee or without government guarantee needs prior approval from the Central Bank. This condition has enabled the Central Bank to track the details of debtors by collecting information from them through a semi-annual survey.

The outstanding liabilities and debt service commitments of private commercial banks are collected directly from the respective banks by the Central Bank on monthly basis.

There is no direct source to collect information about short-term private sector external debt. The sources for the estimation of short-term private debt are private sector survey results (in 1995) and raw material imports for export purposes.

4.1.3 Scope for New Sources of Public and Private Debt

The government is in the process of establishing a more independent debt office, under which the debt management function would be removed from the Central Bank. With the new set-up, the responsibility of collection, compilation, monitoring and dissemination of information about public sector debt could be entrusted with the new debt office.

The lack of a proper mechanism to identify and gather data on private sector short-term debt (suppliers credit/trade credit) is an area that needs some improvement. Further, there is a need for a mechanism to test the accuracy of the present estimation system. In relation to debt linked to the value of raw materials imported by producers and their exports which operates through the banking system, a new mechanism could be designed to identify the linkages between these variables that would help improve the accuracy of future estimates.

4.2 Frequency of Data Availability, Coverage and Dissemination

External debt data relating to the central government is available on monthly basis with a lag of two months and released on monthly, semi-annual and annual bases. Government guaranteed and non- guaranteed public and private debt and short-term private debt data are available in semi-annual basis and released on annual basis with the comprehensive analysis of overall debt stock

of the country. Generally central government debt data are disseminated with a lag of two months, while the lag in reporting other debt is about four months. Detailed debt statistics classified by maturity, borrower, creditor type, currency, creditor country and instrument type are available on an annual basis in the Central Bank Annual Report and Central Bank Website. In addition, monthly bulletin of the Central Bank disseminate data related to external debt of the central government.

4.3 Use of Debt Data

At present, the Central Bank is responsible for the compilation and dissemination of all external debt. Details about the stock of external debt, external debt service payments and the vulnerability of the external debt is discussed in the Central Bank Annual Report (Chapter 9). In addition, issues in central government external debt and debt service payments are discussed separately in the Central Bank Annual Report (Chapter 8). These analysis show the external debt burden of the country. The Central Bank uses the standard international indicators in measuring the burden of the country's external debt as follows:

- Total external debt/Gross Domestic Products
- Total banking sector external liabilities/Gross Domestic Products
- Short-term external debt/Gross Domestic Products
- Short-term external debt and banking sector liabilities/Gross Domestic Products
- Short-term external debt/Total external debt
- Short-term external debt and banking sector liabilities/Total external debt
- Total external debt service payments/Total merchandise exports & services
- Total external debt service payments/Total merchandise exports, services, income and private transfers
- Government external debt service payment/Total external debt service payments

The ratio of external debt to GDP remained at high about 60 per cent in comparison to international standards during the recent past. However, the share of short-term debt and banking sector liabilities were maintained below 20 per cent of the total debt indicating the relatively low level of potential risk. Further, external debt service liabilities were also remained at relatively lower level due to the high volume of concessional debt. The ratio of debt service payments to export of goods and services was lower than 15 per cent while it was below 12 per cent compared to export of goods and services, income and private

transfers. Accordingly, external debt service payment indicators in Sri Lanka indicate relatively less vulnerability in comparison to most of other countries with same level of external debt stock.

Table 8.4
External Debt Indicators

(US Dollar Million)

Item	1997	1998	1999	2000	2001
1. Total External Debt and Liabilities as % of GDP	62.3	61.6	63.5	61.0	61.8
2. Short-term Debt on Banking Sector External Liabilities as % of GDP	11.1	9.2	8.7	10.0	10.7
3. Short-term Debt and Banking Sector External Liabilities as % total external debt	17.9	14.9	13.7	16.3	17.2
4. Short-term Debt as % of official reserves	23.6	24.4	29.0	54.8	41.6

Source: Central Bank of Sri Lanka

The Central Bank releases all information to various international organisations (such as the IMF) on an annual basis (IFS data publication), while the position of government external debt is released on a monthly and annual basis (eg. the IMF - GFS data publication).

4.4 Debt Service Payments Schedule

The future liability of debt service payments by the public and private sector according to the maturity, currency and instrument profile, are available under the current data compilation and management system at the General Treasury

and the Central Bank. The CS - DRMS package which is operated at Ministry of Finance has the facility to generate the above information for government external debt. The CS - DRMS data management system has the facility to generate debt service payment commitments until the principal is completely settled. Meanwhile, the Central Bank's semi-annual survey collects future liabilities from non-financial public corporations and from the private sector. This survey gathers information on payment commitments of public enterprises and the private sector for a 6 year period. Deviations are however possible for debt service information of private and non-financial public corporations due to the six month gap between the two surveys.

Table 8.5
External Debt Service Payments

(US Dollar Million)

Item	1997	1998	1999	2000	2001
1 Total Debt Service Payments	733	759	846	953	811
1.1 Amortisation to	430	469	550	621	558
- IMF	66	83	100	97	78
- Others	364	387	450	524	480
1.2 Interest Payments to	303	289	296	332	253
- IMF	6	7	5	5	4
- Others	297	282	291	327	249
Memorandum :					
Total Debt Service Payments as % of exports & services	13.3	13.3	15.2	14.7	13.3
Total Debt Service Payments as % of exports, services, income and private transfers	11.0	11.0	12.4	12.2	11.1
Government Debt Service Payments as % of total Debt Service Payments	53.7	55.3	53.1	45.9	55.3

Source: Central Bank of Sri Lanka

4.5 Issues in External Debt Data Collection and Reporting Systems

Issues relating to the definition, coverage, accuracy, frequency and data dissemination are listed below:

- The present compilation and reporting system for external debt excludes the liabilities of the financial sector which estimate separately.
- Classification of semi-privatised, privately managed public enterprises into public and private.
- The lack of a direct mechanism to collect short-term external borrowings, and debt service payments by the private sector on a regular basis.
- The lack of a proper mechanism to assess the accuracy of the estimation of private sector short-term external debt.
- Difficulty of capturing the transaction of medium-term borrowings by the public and the private sector between the two semi-annual survey periods.
- Effective and accurate mechanism for the identification and collection of external debt data under an open capital account environment.
- Effective mechanism for the monitoring of external debt under a devolved fiscal structure in which sub-national governments are given authority to independently raise external debt.

4.6 Efforts Taken Towards Improvement of Data Collection and Standardisation of Data Definition and Reporting Systems

The Central Bank and the Ministry of Finance have been continuously involved in improving the collection, compilation, standardisation and reporting mechanism of external debt. Some of the key improvements are listed below:

- Changing of external data compilation and reporting systems in line with new developments in order to improve the standardisation of the data system. (At present, follows BPM5).
- Introduction of CS - DRMS package in 1985 for external debt recording and monitoring in the country. This package has been continuously upgraded to improve the recording and monitoring system and at present version 7.2 is in operation. Further, the authority is planning to move to most updated version of CR-DRMS 2000++.
- Conducting surveys to estimate the short-term external borrowings by the private sector and improving its coverage.
- Working towards meeting the requirements for a Special Data Dissemination System (SDDS) by 2004.

5. Conclusion

The prudent and cautious external debt management policy adopted so far has helped the country to avoid any solvency and liquidity problems in servicing external debt. The requirement of government approval in raising medium and long-term external debt by the semi-government and private sector under the existing capital account controls prevented an excessive exposure of the country to high risk external commercial type debt. This policy which restricted an excessive accumulation of high cost and relatively short term debt, helped the country to protect from direct impact of external shocks such as the Asian crisis.

Sri Lanka is now in the process of opening its capital account on a gradual basis. With this, restrictions imposed on external borrowings on the private sector would be lifted. In addition, changes have been proposed to the Constitution which would permit sub-national governments to raise foreign loans independently. Therefore, considering the economic cost of the recent Asian financial crisis, as well as the debt crises experienced in other parts of the world, there will be a paramount need to introduce a better surveillance and monitoring system for the country's external debt to avoid the vulnerability caused by an expanding external debt stock, and to prevent any crisis in the future. In this process, special attention is necessary to adopt a new technique to improve the estimation system of short-term private sector external debt and classification of semi-privatised public enterprises. These are the main issues to be addressed with the establishment of a new independent debt office to develop an efficient debt management system in the country.

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CHAPTER 9

ISSUES IN EXTERNAL DEBT IN TAIWAN: CONCEPTS AND MONITORING PROCEDURES FOR CRISIS PREVENTION

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1. Definition of External Debt

The external debt of ROC can be divided into:

(1) public external debt, and
(2) private external debt.

Public external debt includes the debts of government and of public banks. Private external debt includes primarily the debts of local private banks, of foreign banks in Taiwan, ROC, of offshore banking units (OBUs) and of private enterprises or manufacturers. The Central Bank of China, Taipei (CBC) not only compiles the external debt statistics, but also takes charge of government procedures to control and monitor the issuance of external debt (See Table 9.1).

2. Classification of External Debt

2.1 By Borrower / Sector

2.1.1 Public Sector

(a) Central Government
The external debt is raised by the central government, and the Ministry of Finance is the sole debtor.
(b) Monetary authorities
None
(c) Banks
7 public banks declare their external debts.

Table 9.1

Diagram showing the Coverage of External Debt of Taiwan, ROC

	Creditor / Debtor	Maturities	International Financial Organizations	Foreign Governments	Foreign Financial Institutions	Foreign Enterprises	Individual	Non-Specific Creditors			Others
								Bonds Issued	Money Markets Instruments	Others	
PUBLIC SECTOR	Central Government	<= 1 year			Repo purchased by QFII and foreigners (Juridical persons)		Repo purchased by non-residents	Repo purchased by local investment and trust companies on behalf of foreign funds			
		> 1 year	IDA	Loans from U.S. and Saudi Arabian Governments	Government bonds purchased by QFII and foreigners (Juridical persons)		Government bonds purchased by non-residents	Government bonds purchased by local investment and trust companies on behalf of foreign funds			
PRIVATE SECTOR	DBU	<= 1 year			International liabilities of authorized foreign exchange banks. TWD deposits from QFII.	International liabilities of authorized foreign exchange banks. TWD deposits from foreigners(Juridical persons)	International liabilities of authorized foreign exchange banks TWD deposits from non-residents			TWD deposits from local investment and trust companies on behalf of foreign funds	Other accounts payable
		> 1 year			International liabilities of authorized foreign exchange banks			Fiancial debentures issued abroad		Negotiable certificate of deposits	Other accounts payable
	OBU	<= 1 year			Deposits from foreign correspondent banks. Money market funds.	Deposits from off-shore companies. Bank acceptances					Interest payable Other liabilities
		> 1 year			Deposits from foreign correspondent banks. Money market funds.	Deposits from off-shore companies					Interest payable Other liabilities
	Private Enterprises	<= 1 year				Import trade credits			Money markets instruments purchased by foreigners and QFII. Money markets instruments purchased by local investment & trust companies on behalf of foreign fund.		
		> 1 year			Loans from foreign financial institutions. Corporate bonds purchased by QFII & foreigners	Buyer's credit. Loans form parent companies abroad		External corporate bonds			

2.1.2 Private Sector

(a) Banking Sector and Non-Banking Sector
Private external debt includes the external debt of the banking sector which comprises of the debts of authorised domestic foreign exchange banks and foreign banks in Taiwan and of OBUs.
The external debt of the non-banking sector comprises of debts of private enterprises and manufacturers.

(b) Publicly Guaranteed and Non-Guaranteed
The private external debt in the ROC is not guaranteed.

2.2 By Maturity

2.2.1 Short-Term

The maturity of the short-term public and private debts is less than and including one year.

2.2.2 Long-Term

The maturity of the long-term public and private debts is more than one year.

2.2.3 Original Maturity

N.A.

2.2.4 Residual Maturity

N.A.

2.3 By Instrument

2.3.1 Loans

Loans extended by IDA, foreign governments, international financial institutions and parent company abroad.

2.3.2 Trade Credits

Import trade credits

2.3.3 Debt Securities

Debt securities include government bonds, REPOs, financial debentures and external corporate bonds (ECB).

2.3.4 Currency and Deposit

Foreign currencies deposits in authorised foreign exchange banks from non- residents. TWD deposits in local banks and foreign banks in Taiwan from non-residents.

2.3.5 Other Debt Liabilities

Money market instruments, such as commercial papers, negotiable CDs. Other account payable by local authorized foreign exchange banks and interest payable by OBUs.

2.4 By Currency

2.4.1 Foreign Currency

(a) Short-Term
USD and TWD
(b) Long-Term
USD, SRL, JPY, EUR, CHF, HKD and TWD

2.4.2 Domestic Currency

(a) Short-Term
TWD
(b) Long-Term
TWD

2.5 By Type of Liabilities

(a) Principal
N.A.
(b) Interest
N.A.

3. Source of Data

3.1 Public Sector Debt

Public external debt data provided by Ministry of Finance

3.2 Private Sector Debt

Declared by authorised foreign exchange banks (including domestic and foreign banks), OBUs and private enterprises (according to Regulations Governing the Declaration of Medium and Long Term External Debts by Private Enterprises)

3.3 Scope of New Source for Both Sector Debts

N.A.

4. Frequency of Data Availability, Coverage and Dissemination

4.1 Type of Release

Quarterly

4.2 Lag Period in Dissemination

Quarterly data

5. Debt-Service Payment Schedule (Following 5-10 Years)

5.1 By Sector

(a) Public
6 years

(b) Private
N.A.

5.2 By Maturity

N.A.

5.3 By Currency

N.A

6. Use of Data

6.1 Debt/Exports

27.95% ended of 2001

6.2 Debt/GDP

12.16% ended of 2001

6.3 Debt service/Export

N.A.

6.4 Reserves/Short-Term Debt

365.02% ended of 2001

6.5 Others

N.A.

7 Issues on External Debt Data Collection and Reporting System Relating to Definition, Coverage, Frequency and Data Dissemination

The external debt statistics is compiled by the CBC. Hence, the CBC is in charge of all the debt data collection. Except the public external debt data provided by Ministry of Finance, the CBC collects private external debt data from the private banks and OBUs in accordance with the existing reporting

system between the CBC and the authorised foreign exchange banks and OBUs. In order to collect data on long-term private debts, the "Regulations Governing the Declaration of Medium and Long-Term External Debts by Private Enterprises" were enacted in 1987. Private enterprises are required to declare their long-term debts to CBC quarterly in accordance with the said Regulations.

The external debt statistics is compiled on a quarterly basis and is published on the 20th day of February, May, August and November accordingly, both in print form and on the CBC's web sites (See Table 9.2).

8 Deviation Data Collection and Reporting System from Those of the BIS, OECD, IMF and World Bank

The external debt data collection conducted by the BIS, OECD, IMF and World Bank are mostly from creditor countries and market sources. But the CBC collects those data directly from domestic debtors, although there are some gaps in coverage. The comparison of debt instruments collected by Joint BIS-OECD-IMF-World Bank and CBC statistics on external debts is described below (for related figures please see Table 9.3):

(1) Bank Loans
BIS- Loans reported by resident banks in 32 creditor countries.
CBC- The authorised foreign exchange banks, OBUs and private enterprises report their borrowings from international financial institutions to CBC directly.

(2) Debt Securities Issued Abroad
BIS- Provided by creditor countries based on their purchases of securities in the international markets and money market instruments.
CBC- The authorised foreign exchange banks and private enterprises report their issues of securities and ECBs abroad, but excluding the issues of ECBs abroad by off-shore companies.

(3) Non-Bank Trade Credits
BIS- Official and officially guaranteed non-bank export creditors from 25 OECD countries.
CBC- Import trade credits reported from authorized foreign exchange banks.

(4) Multilateral claims
BIS- Loans from international financial organizations.
CBC- IDA.

(5) Others
BIS- N. A

Table 9.2

External Debt and Debt-Service Ratio

Taiwan, Republic of china

In millions of US dollars

End of Year / Month	Total External Debt	Long-term			Short-term			External Public Debt-Service Ratio (%)
		Total	External Public Debt	External Private Debt	Total	External Public Debt	External Private Debt	
1999	38,628	7,167	60	7,107	31,461	8	31,453	0.01
2000	34,757	8,465	23	8,442	26,292	7	26,285	0.03
2001	34,336	8,055	19	8,036	26,281	9	26,272	0.01
1999 12 (Dec.)	38,628	7,167	60	7,107	31,461	8	31,453	0.01
2000 3 (Mar.)	40,753	7,564	31	7,533	33,189	10	33,179	0.08
6 (Jun.)	41,460	7,670	36	7,634	33,790	23	33,767	0.01
9 (Sep.)	40,486	8,283	33	8,250	32,203	14	32,189	0.01
12 (Dec.)	34,757	8,465	23	8,442	26,292	7	26,285	0.02
2001 3 (Mar.)	32,329	8,039	22	8,017	24,290	6	24,284	0.00
6 (Jun.)	31,705	7,741	23	7,718	23,964	5	23,959	0.01
9 (Sep.)	35,868	8,186	19	8,167	27,682	1	27,681	0.01
12 (Dec.)	34,336	8,055	19	8,036	26,281	9	26,272	0.01
2002 3 (Mar.)	34,901	8,824	15	8,809	26,077	9	26,068	0.01

Notes: 1. Long-term external debt is defined as debt payable to non-resident creditors with an original maturity of over one year; while short-term debt has a maturity of up to and including one year.

2. External public debt is defined as debt payable to non-resident creditors which is a direct obligation of, or has repayment guaranteed by, the public sector of the Republic of China. External private debt is defined as an external obligation of the private sector that is not guaranteed for repayment by the public sector.

3. The debt-service ratio represents payments of amortization and interest on external debt as a percentage of the exports of goods and services, and is based on debt service actually paid and not on contractual service due.

Table 9.3

Comparison of Joint BIS-IMF-OECD-World Bank and CBC Statistics on External Debt

Ended December 2001

Unit : US$ million

Items	BIS (1)	CBC (2)	Difference (1) - (2)
External debt - all maturities			
A. Bank loans	14,904	12,075	2,829
B. Debt securities issued abroad	7,128	4,297	2,831
D. Non-bank trade credits	1,958	1,533	425
E. Multilateral claims	5	11	- 6
Others *	-	16,420	- 16,420
Total	23,995	34,336	- 10,341

* Deposited by OBU from off-shore companies and deposited by DBU from non-residents.

CBC- Deposited by OBUs from off-shore companies and deposited by OBUs from non-residents.

9 Efforts taken Towards Improvement of Data Collection and Standardisation of Data Definition and Reporting System

Due to the fast inflow and outflow of short-term debt and to the technical difficulty of collecting short-term debt data directly from private sector, the CBC did not compile private short-term external debt statistics before 1999. After the financial crisis of 1997, although Taiwan was the economy least affected by the Asian financial crisis, the CBC notices that short-term debt statistics has an important role in monitoring and for crisis prevention and could help reduce the probability of future crisis. Therefore, the CBC began collecting short-term debt data from financial institutions at the beginning of 1999 and has been compiling short-term external debt since 2nd quarter of 1999.

CHAPTER 10
ISSUES IN EXTERNAL DEBT IN THAILAND: CONCEPTS AND MONITORING PROCEDURES FOR CRISIS PREVENTION

by

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This paper attempts to explain Thailand's external debt's definition, data source, data compilation, as well as the efforts to improve data collection and compilation. Furthermore, it provides the analysis of external debt situations leading up to the crisis in the 1997 and afterwards from the existing monitoring procedures.

1. Concepts and Monitoring Procedures

Following the IMF's Special Data Dissemination System (SDDS), external debt is defined as the remaining stock of liabilities, excluding equity, which residents have over nonresidents and are obliged to repay the principal amount and/or interest in the future. External debt includes liabilities of all currencies and all types of instruments.[1]

The source of data can be classified by sectors into public sector and private sector data. The public sector data consist of central government debt data, state enterprise debt data, and the Bank of Thailand (BOT)'s debt data. The central government debts include external debts of all ministries and state enterprise external debts guaranteed by the ministry of finance. On the other hand, state enterprise debts comprise the non-guaranteed external debts of state enterprises. Public sector debt data are collected and compiled from loan contracts and disbursement reports.

Regarding private sector data, they are classified into two groups: bank sector and non-bank sector data. Bank sector external debt data include those of commercial banks, Bangkok International Banking Facilities (BIBFs), as well as non-guaranteed external debt data of state financial institutions. Non-bank

1. Contingent liabilities are not included in the definition of external debt.

sector data consist of private corporations' and finance companies' external debts. All of the bank sector data are from the foreign transaction (FT) reports which follow the International Transaction Report System (ITRS). Banks are required to submit the FT reports for all foreign exchange transactions. On the other hand, the non-bank sector data come from two main sources: the financial transaction reports and the external debt survey. The latter was initiated in 1998 and is conducted every quarter.[2] The initially reported monthly data are from the financial transaction reports. However, they will be adjusted after quarterly data from the survey are available.[3]

Concerning the frequency of data availability and dissemination, the above data are released on a monthly basis except those from the survey which are on a quarterly basis. Lag periods are two months and one quarter for the monthly data and the quarterly data respectively. For Thailand, there is no legal mandate specifying which organisations are responsible for data reporting and dissemination. The BOT releases both public and private external debt data while the Ministry of Finance (MOF) also releases public external debt data. However, their figures of public external debt data can be slightly different. For government bonds issued overseas, the MOF's external debt data include the total amount of these bonds whereas the BOT's external debt data which are based on the residency concept do not include these bonds held by Thai residents.

As for data collection improvement, the FT report was improved in 2000 in order to obtain better information about the objectives of foreign transactions. Besides, there is also a project to build up a database for debt securities. In addition, the Bank of Thailand is developing a data warehouse which will contain all relevant data for the central bank including external debt data. All dimensions of external debt and BOP data will be stored in such a way that they can be retrieved and compiled for use easily and efficiently.

2. However, two kinds of debt creating inflow data cannot be captured by financial transaction reports. The first one is domestic currency debt in which foreigners are creditors. The second one is foreign debt incurred abroad by domestic debtors in which foreign currencies are not brought into Thailand. Nonetheless, these two elements are partly captured in the survey.

3. All external debt data are converted into US dollars at the average rate in the New York market following the IMF Balance of Payments Manual V.

2. Analysis of External Debt

After the financial liberalisation initially started in 1990, capital inflows into Thailand increased markedly. Net capital account inflows rose from US$ 9.7 billion in 1990 to US$ 21.9 billion in 1995. The majority was in the form of debt creating inflows, leading to a huge accumulation of external debt during that period. It can be noticed that from 1970, cumulative current account deficits have grown in the same direction and with similar magnitude as gross external debt subtracted by gross foreign reserves.

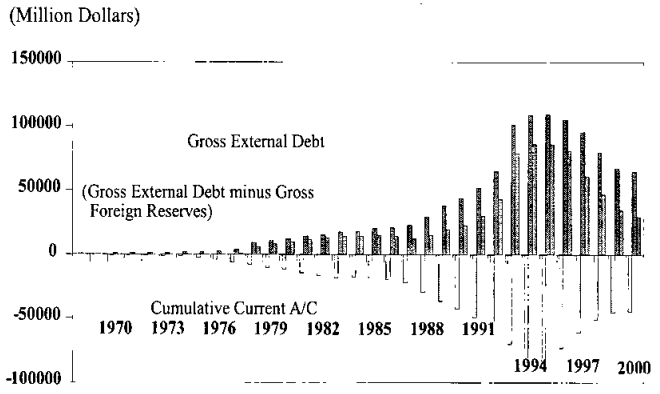


Figure 10.1

Cumulative Current Account Deficit and External Debt Outstanding, 1970-2002

As for the structure of the external liabilities, this paper takes a look at classification by sector, maturity, currency denomination, interest rate structure and creditors. These are crucial determinants of the country's ability to withstand shocks.

External vulnerability had increased after Thailand started to liberalise its capital account in the early 1990s. The corollary of this feature was a fast accumulation of private external debt through commercial bank's borrowings, BIBFs borrowings as well as direct borrowings to take advantage of lower interest rates abroad. By 1995, about 42 percent of total debts were those of the banking sector's, compared with the ratio of about 12 percent in 1991. The borrowings of commercial banks and BIBFs were mostly short-term in nature. They declined sharply after the crisis due to higher credit risk and lower demand for capital. As for the non-bank sector, since the outbreak of the crisis, its debt

outstanding has also declined markedly in line with debt repayments.[4] Other factors contributing to this decline in external debt outstanding include proceeding debt restructuring, higher exchange rate volatility, high liquidity and low interest rate in the domestic market.

Table 10.1
External Debt Classified by Sector

Billions of US$	**1995**	**1997**	**1999**	**2001**	**2002***
1. Public sector	**16.4**	**24.1**	**36.2**	**28.3**	**27.1**
1.1 Government	4.9	6.0	8.9	8.7	8.6
1.2 State Ent.	11.5	10.9	14.5	11.3	11.2
1.3 BOT	0.0	7.2	12.8	8.3	7.3
2. Private sector	**84.4**	**85.2**	**58.8**	**39.2**	**37.6**
2.1 Bank sector	41.9	39.2	17.7	9.4	9.0
2.2 Non-bank	42.5	46.0	41.1	29.8	28.6
Total	**100.8**	**109.3**	**95.1**	**67.5**	**64.7**

Note: * As of April 2002
Source: Bank of Thailand

On the other hand, public borrowing became more prominent after the crisis. Before that, low borrowing coincided with persistent fiscal surplus. Government borrowing during that time largely belonged to state enterprises as the government itself had access to lower cost of funds. With the borrowing ceiling at 10 percent of the government budget, the government borrowed from abroad around 80 percent of the ceiling during 1987 and 1996. This foreign borrowing option has been limited in recent years as there exist concerns about possible high debt burden regarding the Bank of Thailand's (BOT) debt and delays of some project loans.[5] Currently, the government external debt accounts

4. During 1997- April 2002, the non-bank private sector already paid their external debt by US$ 17.4 billions (including a valuation change). As a result, the non-bank private debt outstanding stood at US$ 28.6 billions.

5. The government borrowed US$ 4.3 billion in 1998, US$ 3.7 billion in 1999, but nil in 2000, and only US$ 300 millions in 2001. In 2002, the government set a ceiling at only US$1.0 billion.

for approximately 22 percent of total government debt (including the FIDF's).[6]

Table 10.2 shows the maturity profile of external debt. Short-term external debt to total external debt is considerably large in the year leading to crisis. This, in part, was due to the intermediation of the banking sector, particularly the BIBFs. Most of the borrowings through the BIBFs were short-term. Moreover, some of the long-term debts were subject to put options, rendering them effectively short-term.[7] The BOT's external debt survey showed that in March 1998 US$ 2.4 billion of the long-term private non-bank sector's external debt was in the form of put options. This amount, however, fell to a mere US$ 9 million in March 2002. The higher the short-term debt ratio is, the more vulnerable the economy is, particularly when short-term liabilities were not matched by foreign assets of similar characteristics. As many observers argued, this maturity mismatch was one of the crucial factors indicating financial fragility as witnessed during the crisis.

Table 10.2
External Debt Classified by Maturity

% of Total Debt	1995	1997	1999	2001	2002
1. Original					
Long-term	48.0	65.0	79.1	80.2	79.7*
Short-term	52.0	35.0	20.9	19.8	20.3*
2. Remaining					
Long-term	n.a.	56.8	70.2	68.8	68.3**
Short-term	n.a.	43.2	29.8	31.2	31.7**
Total	n.a.	100.0	100.0	100.0	100.0

Note: * As of April 2002.
** As of first quarter 2002
Source: Bank of Thailand.

6. The share will increase to around 30 percent, if the public enterprise debt is included. As for fiscal sustainability analysis, see Chensavasdijai and *et al* (2002). As the BOT's debt is expected to vanish by 2005, the government has more room to increase its external financing.

7. The recent estimates suggested that more than US$ 30-40 billion in outstanding emerging market debt instruments have put options attached to them (BIS, 2000).

However, the maturity profile has changed dramatically following the crisis; this was mainly due to debt repayments of the private sector and an increase in long-term borrowings by the public sector. It is important to note that the maturity profile has been roughly the same since 1999 due to amble liquidity in the domestic market coupled with the appreciation of the baht[8] as of the first quarter of 2002, short-term external debt by remaining maturity of the government and state enterprises accounted for only 10 percent of their total debt. While the banking sector holds approximately the same proportion between short term and long term debt, most of the non-bank private sector debts are long term. Non-bank average original maturity is 8 years and 2 months and the average remaining maturity has been shortened. On the other hand, the average maturity of government debt is 19 years.[9]

Since the crisis, foreign currency exposure has declined despite high concentration ratios in the US Dollar and the Japanese Yen. The US dollar denominated debt still has the largest share, approximately 60 percent of total debt, even though it has been decreasing. On the other hand, the Yen-denominated debt, particularly debt of public enterprises, has gained more importance. The banking sector borrows equally in Yen and US Dollar, while the non-banking sector borrows mainly in US dollars. An increase in Yen borrowings by the banking sector has been observed since the crisis due to low interest rates. It should be noted that foreign currency debt has been increasingly hedged.[10] This makes the external debt position less susceptible to fluctuations in the foreign exchange market.

8. Debt prepayments stood at US$ 5.6 billion in 1999, US$ 5.8 billion in 2000 and US$ 3.5 billion in 2001.

9. Greenspan (1999) suggested a benchmark of more than three years and that the scheduled repayments should also be evenly distributed over time.

10. As of end 2001, around 40 percent of corporate external debt-service payment was financially hedged and it is estimated that more than 25 percent were natural hedges.

Table 10.3
External Debt Classified by Currency

% of Total Debt	1995	1997	1999	2001	2002:Q1
US$	77.9	73.9	58.4	59.2	58.0
Yen	17.1	20.8	33.5	31.2	32.1
SDR	0.0	2.2	3.6	2.5	2.0
DM	1.8	1.0	1.1	1.0	0.9
GBP	1.0	0.4	0.4	0.5	0.5
CHF	1.0	0.7	0.5	0.5	0.5
Others	1.2	1.0	2.6	5.1	6.0
Total	100.0	100.0	100.0	100.0	100.0

Source: Bank of Thailand.

As for the interest rate structure, the share of fixed interest rate debts is relatively high. Such structure makes the debt burden less vulnerable to the changing world interest rates. However, floating rate debts was tended to increase due mainly to the increase in government borrowings. As some non-bank private sector debtors have undergone debt restructuring and refinancing, the interest rate structure is likely to change over time. The London Inter Bank Offered Rate (Libor) based floating rate accounts for the largest share of private external debt, followed by the Singapore Inter Bank Offered Rate (Sibor) based floating rate as most borrowings were from Japan, Singapore and the United States.

Table 10.4
External Debt Classified by Interest Rate

%	1999	2000	2001	2002*
Total	100.0	100.0	100.0	100.0
Fixed	*53.1*	*57.6*	*57.3*	*55.2*
Float	38.9	34.4	34.5	35.9
*Others***	*8.0*	*8.0*	*8.2*	*8.9*
Public sector (excl. BOT)	100.0	100.0	100.0	100.0
Fixed	*67.7*	*69.2*	*64.6*	*64.2*
Float	*32.3*	*30.8*	*35.4*	*35.8*
Private sector100.0	100.0	100.0	100.0	
Fixed	*37.1*	*40.9*	*44.5*	*41.9*
Float	*50.0*	*45.1*	*41.4*	*43.0*
*Others***	*12.9*	*14.0*	*14.1*	*16.0*

Note: * As of first quarter
** Including other debt, non-interest and trade credit.
Source: Bank of Thailand

Table 10.5: Debt Service Payments

	1995	1997	1999	2000	2001
Debt Service Payments	8,253	11,629	14,136	12,893	16,081
Principal	4,059	6,071	9,623	8,811	12,718
Interest	4,194	5,558	4,513	4,082	3,363
Debt Service Ratio	11.4	15.7	19.4	15.4	20.7

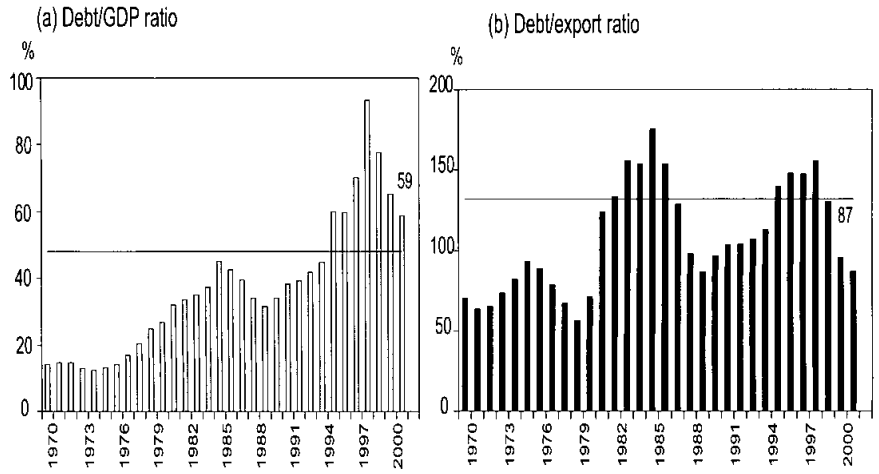
Debt service payment started to increase after the financial liberalisation. However, the debt service ratio was always below the international standard of 20 percent before the crisis because exports increased faster than debt service payment. However, it exceeded 20 percent in 1998 and 2001 because of increasing public debt service and slower export growth.

Other than the above composition analysis, two kinds of external debt indicators are monitored to assess its sustainability. They are solvency and liquidity indicators.

1) Solvency or Creditworthiness Indicators

Two solvency indicators are examined here: external debt-to-GDP and external debt-to-export ratio.

The external debt-to GDP ratio showed an increasing trend over most of the covered periods. It increased from approximately 12 percent in the late 1960s, to 16 percent in the 1970s, to 36 percent in 1980s and to 55 percent in 1990s. After being stable over the period 1987 to 1992, the debt-to-GDP ratio resurged sharply to reach the peak of 93.2 percent in 1998. This large increase contributed to the emergence of an external crisis in 1997. Meanwhile, this ratio was corrected to 58.8 percent in 2001 along the lines of exchange rate stabilisation, current account improvement, and real interest rate reduction.



The standard creditworthiness analysis typically uses maximum sustainable debt-to-GDP or debt-to-export ratios.[11] The rules of thumb for dangerous levels of debt are 40 percent of GDP and 200 percent of exports. With the debt-to-GDP ratio below the above level, the conditional probability of the debt crisis is around 2-5 percent and would rise to 15-20 percent when the ratio reaches its benchmark (Lane and Ghosh, 2002). Similarly, the World Bank's debt reduction initiative for highly indebted poor countries (HIPC) sets limits of less than 132 percent for the ratio of net present value of foreign debt to exports and 48 percent of the ratio of net present value of foreign debt to GNP as less indebtedness countries.

From the above criteria, there were 2 episodes in which external debt exceeded 40 percent of GDP. Those were during 1985-1986 following the baht devaluation in 1984 and during 1993-2001 after the financial liberalization in 1992. However, the pressure on insolvency tends to decline as the private sector and the Bank of Thailand continues to repay their debts.

2) Liquidity Indicators

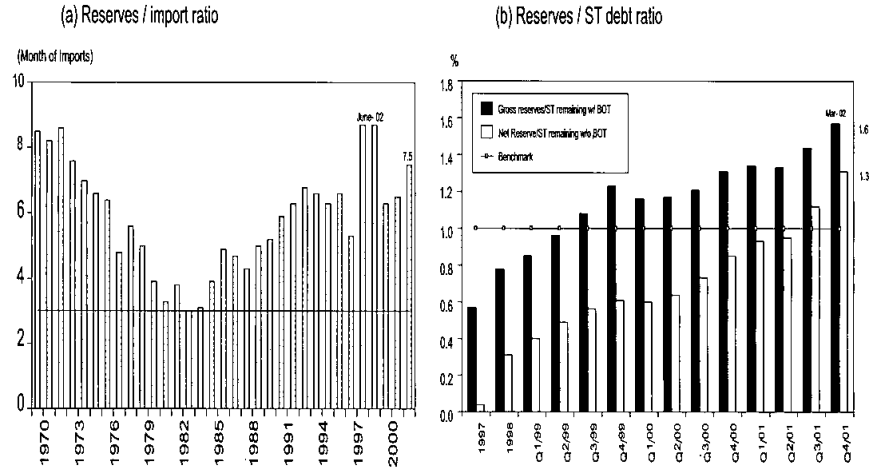
Conventionally, reserve adequacy measured by months of imports is a widely used liquidity indicator. The useful rule of thumb is three months of imports. Nonetheless, this ratio may not be an appropriate indicator if the country is subject to high capital movements. This indicator did not demonstrate liquidity problems in the past. A more suitable indicator would be a ratio of international reserves to short-term external debt, which reflects a country's ability to withstand the withdrawals of short-term capital. This rule would also be a good predictor of debt crisis (Detragiache and Spilimbergo, 2001).

The Figure below shows that this ratio has remained above unity since the second quarter of 1999, meaning that short-term capital was fully backed by international reserves. However, the ratio would be smaller when using "net" international reserves instead of gross international reserves.[12] Nevertheless, compared with pre-crisis levels, this ratio has increased significantly due in part

11. Williamson and Mahar (1998) argued that debt-to-GDP ratio may be considered a more appropriate long-term criterion because the adjustment policies can transform domestic output into exports.

12. In June 1997, crisis-hit countries had an average level of international reserves equivalent to 3.8 months of imports and the ratio of reserves-to-short-term debt at 66 percent.

to an increase in foreign reserves. This indicates that Thailand has enough external liquidity to service its short-term debt over the next 12 months.



Both kinds of indicators have showed that increasing external debt was a important factor contributing to the crisis in 1997.

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