

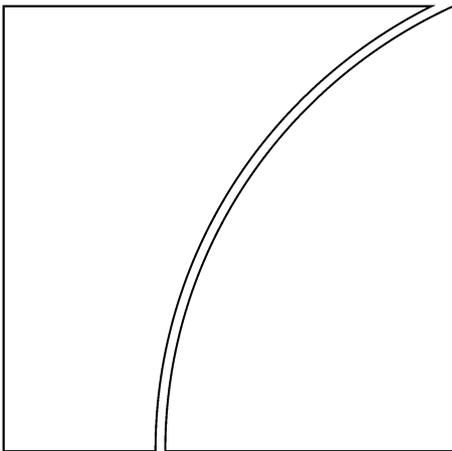


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Comparison of creditor and debtor data on short-term external debt



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Introduction¹

The Asian financial crisis in 1997 revealed important deficiencies in the monitoring of short-term external debt, often the most important and also most volatile component of countries' external obligations. As underlined in the report prepared by the Working Group on Capital Flows of the Financial Stability Forum, "short-term flows entail liquidity risk and, therefore, are of special concern from a financial stability perspective". As a result, "... special attention to the build-up of short-term debt is warranted".²

The new Joint BIS-IMF-OECD-World Bank Statistics on External Debt collaboratively published by the four international organisations since March 1999 facilitate the monitoring of external debt. They bring together in one place and on a consistent basis creditor and market data disseminated by the individual agencies, and major components of short-term debt are identified separately. Conceptual and statistical discrepancies between creditor- and debtor-based statistics have, however, caused concern.

As a consequence, the BIS, with support from a number of emerging market central banks, has undertaken a study to compare existing creditor and debtor data on external debt. The results are presented in this report, which mainly serves the following purposes:

First, we explain conceptual and practical differences between creditor short-term external claims series, which are supplied mainly by the BIS, and the corresponding debtor series.

Second, we discuss possible options for adapting the presentation of the BIS data (assuming unchanged reporting) to reduce perceived differences between creditor and debtor data.

Third, senior statisticians and economists from nine emerging market central banks provide a description of the current collection and publication of external debt statistics in their respective countries.

The report is divided into two parts. Part I of the report contains the results of the BIS comparative study, while Part II covers the national contributions on external debt statistics.

Part I consists of four chapters. Chapter 1 describes recent progress in improving the accuracy of BIS creditor data. In Chapter 2 the main conceptual differences between official guidelines for the reporting of external debt, on the one hand, and reporting conventions for the main source of creditor data, the BIS consolidated and locational banking statistics, on the other, are discussed. There is currently no prospect of changing the reporting of BIS data, because these data are not collected for external debt monitoring purposes. However, one can adjust components of both BIS data sets to approximate more closely standard external debt concepts. On the basis of a survey of 22 developing countries and follow-up visits to eight countries, Chapter 3 compares short-term creditor and debtor data in practice. The chapter identifies both general and specific sources of differences and describes the feasibility and limits of reconciliation. Chapter 4 discusses possible options for changing the presentation of BIS creditor data in the joint statistics to reduce differences from short-term debtor data.

Part II of the report contains contributions by senior statisticians and economists from nine emerging market central banks for a workshop held at the BIS in April 2002 to discuss the results of the comparative study undertaken by the BIS. The contributions describe the current collection and publication of external debt statistics in the respective emerging market countries and provide additional analysis on the causes of differences between national debtor data and BIS creditor data on external debt. In addition, Part II of the report includes a contribution from the IMF on the new draft guide on external debt statistics.³

¹ This report incorporates comments by Rainer Widera of the BIS Monetary and Economic Department, Cristina Luna of the Bank of Spain, colleagues in the BIS Monetary and Economic Department, staff in central banks, at the IMF, World Bank and the OECD, and the participants in the expert workshop held at the BIS in April 2002. Chapter 2 of Part I draws on analysis by Jean Kertudo, a former BIS economist, who, working as a consultant, also gathered many of the 1999 national data used in this report.

² See Financial Stability Forum, *Report of the Working Group on Capital Flows*, Basel, April 2000, p 10.

³ Final draft of *External debt statistics: guide for compilers and users*, December 2001; see <http://www.imf.org/external/np/sta/ed/guide.htm>.

Part I

Comparison of creditor and debtor data on short-term external debt

Comparison of creditor and debtor data on short-term external debt

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Bank for International Settlements⁴

1. Implications of using creditor data in monitoring external debt

1.1 BIS international financial data as an indicator of external debt

Because the reporting conventions of the BIS locational banking statistics and international debt securities statistics are consistent with those of balance of payments and international investment position statistics, these statistics have increasingly been found useful as comparative creditor data for monitoring external debt, although they are not collected for this purpose. The 1997 Asian financial crisis highlighted that creditor data collected by the BIS provided information that complemented and in some cases exceeded that available from debtor country statistics at the time.⁵ For example, BIS data on the external banking and securities debt of residents of Thailand matched national statistical data⁶ fairly closely in the years preceding the crisis. During the crisis, some advantages of the creditor data became clear. Firstly, BIS data were available to debt analysts on a more timely basis than the data from the borrowing country itself. Secondly, BIS creditor data registered what appeared to be additional capital flows during the surge immediately preceding the crisis that seem to have escaped measurement by the national statistical system. Lastly, BIS data are available for many countries on a standardised basis.

Good coverage of banking and securities debt is not sufficient for those countries which have substantial amounts of other types of international debt to private sector creditors, such as Brady bonds or non-bank trade credit, which are not covered by BIS data. The required data are, however, available to a large extent from other international financial agencies, the World Bank and the OECD. In discussions at the Inter-Agency Task Force on Finance Statistics (TFFS),⁷ it was agreed that users and compilers of external debt data would benefit if these complementary creditor data could be made available in one place and on a consistent basis, together with data on official bilateral loans and unilateral loans from international organisations.⁸ The production of joint creditor statistics on external debt was therefore collaboratively undertaken by four of the international agencies that participate in the TFFS.

⁴ The views expressed in this report are those of the author and do not necessarily reflect those of the Bank for International Settlements.

⁵ For a special feature exploring this issue, see Bank for International Settlements: "The BIS consolidated international banking statistics in perspective", in *International Banking and Financial Market Developments*, August 1998, pp 32-43.

⁶ National statistical data refer to the World Bank's external debt statistics, which exclude debt repayable in local currency. As a result, national statistical data compiled according to BOP methodology are different from World Bank data.

⁷ The TFFS is one of the inter-agency task forces endorsed by the UN Statistical Commission and the Administrative Committee on Coordination (Sub-Committee on Statistical Activities) set up in 1992. It was reconvened in 1998 to coordinate work among the participating agencies to improve the quality, transparency, timeliness and availability of data on external debt and international reserve assets. The IMF chairs the Task Force which has recently prepared the *External debt statistics: guide for compilers and users*, December 2001. Representatives from the BIS, the Commonwealth Secretariat, the European Central Bank, Eurostat, the IMF, the OECD, the Paris Club Secretariat, the United Nations Conference on Trade and Development and the World Bank participate.

⁸ Private sector bank risk managers had 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. See Bank for International Settlements, "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*, Basel, 1998, p 9.

1.2 Joint BIS-IMF-OECD-World Bank Statistics on External Debt

The Joint BIS-IMF-OECD-World Bank Statistics on External Debt (joint statistics hereafter) were first released on 15 March 1999 on the OECD website⁹ with hyperlinks available from the websites of the BIS, the IMF and the World Bank. The purpose of the site is to facilitate timely and frequent access by a broad range of users to a single set of creditor and market data on components of countries' external debt and international reserve assets that the contributing international agencies had been compiling and publishing separately before.

The types of debt covered in the joint statistics comprise bank loans, debt securities issued abroad, Brady bonds, officially guaranteed non-bank export credits, multilateral claims,¹⁰ and official bilateral loans. The joint statistics are mostly from creditor and market sources, but also include some data provided by debtor countries. At the time of writing, data are available for more than 175 developing economies. Data are also shown on external financial assets in the form of claims on banks and holdings of international reserve assets, which are prepared by the BIS and the IMF, respectively.

The joint statistics provide stock data of major debt components for each country for the last five quarters and the previous December and flow figures for the latest complete two years and two recent quarters. Short-term data, based on the residual maturity concept, are also provided for major debt components. The data are published five months after the end of the quarter.¹¹

These data do not provide a fully comprehensive and consistent measure of total external debt. For example, they currently do not cover:

- (i) non-officially guaranteed suppliers' credit not channelled through banks;
- (ii) direct investment: intercompany lending;
- (iii) domestically issued debt securities held by non-resident non-banks;
- (iv) deposits of non-residents with domestic banks;
- (v) lending by governments that are not members of the OECD's Development Assistance Committee (DAC).

A set of metadata is provided along with the data, indicating how the data relate to internationally agreed concepts to enable users to take account of the data limitations and to promote best practice in using the data.

There are well-documented gaps and overlaps in the coverage of the joint statistics. The statistics are not intended as a substitute for data from national sources and no total creditor estimate of external debt is provided. Rather, the data serve as a complement to national data by providing counterparty information about components of external debt from creditor reporting.

1.3 Implications for the BIS international financial statistics

1.3.1 Recommendations to reduce and explain data differences

The BIS international financial statistics being used more intensively in the analysis of external debt from 1999, users became more aware and critical of existing practical and conceptual limitations of BIS data in the external debt context. Statisticians in borrowing countries, in particular, pointed out some problems with users relying on BIS data without taking due account of some of the known

⁹ See <http://www.oecd.org/dac/debt>. According to the OECD, where the joint website is managed, the joint debt statistics table is one of the most popular pages on their website. Numerous questions from users are dealt with on a regular basis.

¹⁰ At the time of writing, the multilateral claims covered by the data in the joint statistics are loans from the African Development Bank, Asian Development Bank and Inter-American Development Bank, use of IMF credit and loans and IDA credits from the World Bank.

¹¹ The lag refers to the BIS international banking statistics, which are the core series in the joint statistics. Lags in the reporting of BIS consolidated banking data have progressively improved over the years, from more than six months on average in the early 1980s to only three months currently. In the process, the publication procedure has been simplified, from paper publications with an extensive commentary to initial website releases with a shorter press summary.

weaknesses and overlaps in the statistics. Although the BIS banking statistics were not originally designed to measure external debt but rather to monitor the international exposure of reporting countries' banking systems and the role of financial centres, the innovative additional use being made of the data necessitated rectifying these limitations where possible.

In 2000, a working group of the Financial Stability Forum¹² noted some gaps in the creditor- and market-based statistics and urged continued efforts to fill these. In particular, the group suggested that the possibility of adding a maturity breakdown in the BIS locational international banking statistics should be explored. The coverage of reporting by offshore centres should be improved and enlarged and the number of reporters should be increased. The working group drew attention to substantial discrepancies between the creditor-based BIS international banking statistics and debtor-based sources for some countries. While a complete reconciliation was not expected to be feasible for various methodological and practical reasons, including the different objectives of debtor-side and creditor-side data, efforts to reconcile the differences as far as possible, or at least to explain them, were considered essential for the credibility of these data.

These recommendations were addressed and implemented by the BIS in two ways. Firstly, data gaps highlighted by the FSF were investigated and reduced where possible. The progress that has been achieved is explained in more detail below.

Secondly, to improve the understanding of remaining differences between short-term creditor and debtor data, detailed (partly unpublished) external debt data were collected for a number of countries to provide a solid basis for comparison. External debt data were obtained from 22 emerging economies. Eight countries in central Europe (Hungary and Slovakia), Latin America (Argentina, Chile and Mexico) and Asia (India, Korea and Thailand) were visited by the consultant to collect further data and to discuss discrepancies with creditor data. The conceptual and practical differences found between creditor and debtor measures of components of short-term external debt are discussed in Chapters 2 and 3 below.

1.3.2 Improvements in BIS data

The major follow-up actions taken by the BIS to improve the accuracy of its data relate to the coverage of the data, to double-counting of holdings of securities and to locally funded claims in foreign currency.

Regarding the *coverage of BIS data*, foreign bank subsidiaries in countries not reporting to the BIS have increased their share of worldwide lending. For example, a recent study found that BIS data understate slightly the increase in foreign bank penetration in Argentina and Brazil.¹³ According to this research, in Argentina, foreign bank subsidiaries from non-reporting countries increased their share of total claims from 0.15% in December 1994 to 2.32% in December 1999. In Brazil, the share of claims of foreign subsidiaries from non-reporting countries also increased, from 0.55% to 2.33%, reaching a peak of 3.21% in December 1997.

The BIS has asked a number of non-reporting countries with substantial external banking business to consider joining the BIS statistical system. At the time of writing, eight additional countries have been able to provide the necessary detailed data to be included in the BIS locational or consolidated statistics. A number of central banks worldwide and in Latin America in particular are working on collecting additional data to enable them to join the BIS statistical system. As is evident from Table 1, banks headquartered in countries that have recently joined the reporting system accounted for almost 6% of total consolidated claims outstanding on developing countries at end-2001. The ongoing addition of reporting countries should therefore enable the BIS data to continue to cover more than 95% of foreign banks' lending to most developing countries.

¹² Financial Stability Forum (op cit), pp 49-50.

¹³ Joe Peek and Eric S Rosengren, *The role of foreign banks in Latin America*, Central Bank of Argentina, August 2000. The report also noted that Mexico does not have foreign subsidiaries from countries not reporting to the BIS, so that BIS data should cover 100% of foreign bank lending to Mexico.

Table 1

**Share of new reporting centres in total consolidated lending
to developing economies, end-2001**

(in billions of US dollars and percentages)

	Lending	Share
India	2.3	0.28
Turkey	2.9	0.35
Portugal	4.9	0.59
Taiwan, China	6.7	0.80
Singapore	9.7	1.17
Hong Kong SAR	20.6	2.48
All reporting countries	833.4	100.00

Source: BIS.

Another aspect of the coverage of BIS data is the exclusion of Brady bonds from the BIS database on international securities. Although these data are provided in the joint statistics by the World Bank, analysts using the BIS data have asked that Brady bonds be integrated more closely with the securities data published by the BIS itself (see Table 2). Similar considerations apply to the restructuring of bank loans. Currently, when loans are restructured into bonds, the loans are removed from banks' balance sheets, and thus from the BIS banking statistics, but any ensuing new long-term securities are not taken into account in the BIS international securities statistics. The BIS International Financial Statistics Section is currently developing a comprehensive database of stocks and repayments of individual outstanding Brady bonds and other securities that have been issued in connection with the restructuring of loans, so that appropriate corrections can be made to the stock of outstanding international bonds.

Table 2

International debt securities and Brady bonds outstanding for selected countries

(in billions of US dollars)

	Argentina			Brazil			Mexico		
	International debt securities	Brady bonds	Total	International debt securities	Brady bonds	Total	International debt securities	Brady bonds	Total
End-1998	54.8	17.9	72.8	41.4	36.0	77.4	48.9	24.0	73.0
End-1999	63.4	16.7	80.0	44.2	31.9	76.2	55.7	23.5	79.2
End-2000	75.6	10.8	86.4	54.1	25.3	79.2	58.0	16.1	74.1
End-2001	89.9	6.8	96.7	58.6	19.2	77.8	55.4	7.3	62.7

Source: Joint statistics.

Regarding the *double-counting of holdings of securities*, in the past, locational banking data reported by Caribbean financial centres to the BIS did not identify separately holdings of securities. Because these securities were classified as loans in the BIS data, there was substantial double-counting of international securities issues in the case of some Latin American countries and thus an inflation of their external debt as measured by creditor data. As of end-1999, following discussions with the BIS, four major financial centres started to report loans separately. As can be seen from Table 3, this change has led to very substantial improvements in creditor data for some major borrowers.

Table 3

Financial claims of Caribbean banks on selected countries in Latin America, end-2000

(in billions of US dollars)

	Total claims	Banks' holdings of international debt securities	Loans and deposits	Percentage of total claims previously double-counted
Total Latin America & Caribbean	78.9	19.5	56.6	25
Brazil	31.9	12.2	19.4	38
Mexico	16.7	2.9	12.2	18
Argentina	13.3	3.7	9.1	28

Source: BIS.

Lastly, *locally funded foreign currency claims* should be excluded from external debt data. However, when the BIS consolidated banking statistics were designed in 1982, the emphasis was on the repayment risks lending banks might face. Hence, all claims denominated in foreign currency are indistinguishably included in total "international" claims on borrowers resident in a given country.

Ideally, the BIS locational data would be used for external debt comparison purposes instead, because they are based on standard residence criteria consistent with external debt standards. Since the locational statistics are not reported with a maturity breakdown, however, the consolidated BIS banking statistics have to be used to obtain information on short-term borrowing. Taking into consideration that the BIS consolidated banking statistics are not collected for external debt purposes, it has to be accepted that the reporting conventions for these statistics cannot be modified for the time being.

The impact of this feature of the BIS consolidated reporting system is expected to grow as international banks expand their local networks worldwide. It is known from BIS data that locally funded claims in local currency, which are reported separately, have grown strongly over time. One may thus assume that local claims in foreign currency have increased as well. Current data from Chile and Argentina (Table 6 in Chapter 2 below) suggest that, under strong assumptions, locally funded foreign currency claims could account for as much as 10-30% of the reported BIS short-term international bank claims in these countries. But these are upper-bound estimates.

Argentina and Chile provide the data on foreign banks' locally funded foreign currency claims to the BIS on a regular basis. The data are added as footnotes to the respective country tables in the joint external debt table, enabling analysts to make appropriate adjustments.

2. Main conceptual differences between creditor and debtor data

2.1 Introduction

Conceptual differences are important when comparing creditor and debtor data. Table 4 below compares six reporting conventions for the two major sets of BIS international banking statistics with those of the 1988 "Grey Book" *Guide on external debt*, the past standard for the compilation of external debt.¹⁴ Only the BIS consolidated banking statistics provide a maturity breakdown which can

¹⁴ The 1988 "Grey Book" *Guide on external debt* framework is largely consistent with SNA and balance of payments reporting standards. New statistical standards have since been developed in the IMF *Balance of payments manual* (1993), the IMF Data Dissemination Standards and the IMF *External debt statistics: guide for compilers and users*, 2001.

be compared with debtor country data on short-term external debt. Since these statistics differ conceptually in a number of ways from debtor data, however, comparisons with debtor statistics are subject to a fairly wide margin of uncertainty.

Alternatively, one could envisage estimating a maturity breakdown for the BIS locational statistics, which are based on balance of payments compilation principles and are thus conceptually more closely aligned to external debt data. This approach is subject to uncertainty introduced by the estimation procedure, which is detailed in the following chapter.¹⁵

Table 4
**Comparison of reporting conventions between the
1988 “Grey Book” *Guide on external debt* and
the BIS reporting standards for the international banking statistics**

	“Grey Book” <i>Guide on external debt</i>	BIS consolidated banking statistics	BIS locational banking statistics
Coverage	External debt based on residence of debtor and creditor	Consolidated external and local foreign currency claims (debt and non-debt instruments) ¹	External debt based on residence of debtor and creditor ²
Valuation	Nominal value	Nominal, cost or market value	Nominal, cost or market value
Maturity breakdown	Short- and long-term according to <i>original</i> maturity	Short- and long-term according to <i>remaining</i> maturity	None
Type of debt instrument	Securities, trade credits and other loans	All financial claims indistinguishably included	Loans (including trade credits) and securities
Type of debtor	Banks, government, others	Banks, ³ non-bank private sector, public sector	Banks, ³ non-banks
Type of creditor	Sectoral breakdown of creditors not required	Commercial banks	Commercial banks

¹ Non-debt instruments are included in the unallocated category in the maturity composition of claims. ² Some non-debt instruments (eg equity participations) are reported as additional separate items. ³ Commercial and central banks.

2.2 The consolidated banking statistics

2.2.1 Coverage

2.2.1.1 Current status

The BIS consolidated banking statistics were introduced in the wake of the Latin American debt crisis in the early 1980s to assess the country exposure of commercial banks lending to developing countries.¹⁶ Consolidation is by the nationality of reporting institutions, irrespective of their location or

¹⁵ Due to the additional reporting burden for respondent banks, the collection of a maturity breakdown by vis-à-vis country for the locational statistics is not feasible at this time.

¹⁶ The countries providing consolidated banking data (first year of data availability in brackets) are: Austria (1983), Belgium (1983), Canada (1983), Denmark (1983), Finland (1985), France (1983), Germany (1983), Hong Kong SAR (1997), Ireland (1983), Italy (1983), India (2001), Japan (1983), Luxembourg (1983), the Netherlands (1983), Norway (1994), Portugal (1999), Singapore (2000), Spain (1985), Sweden (1983), Switzerland (1983), Taiwan, China (2000), Turkey (2000), the United Kingdom (1983) and the United States (1983).

country of residence. The statistics therefore focus on the home country (or country of origin) of the creditor institution, as opposed to its country of location (residence).

Consolidation implies in practice that the country exposure of individual reporting institutions covers that of their affiliates in all countries, including those resident in debtor countries. In the process of consolidation, reporting banks make two opposite adjustments. On the one hand, positions between related offices of the same banking group (intragroup positions) are excluded, which eliminates a number of cross-border positions that are part of external debt. On the other hand, local affiliates' local claims in foreign currency on residents of the debtor country are added to the reporting (as part of international exposure). While these claims are internal debt in foreign currency, so that their inclusion is a departure from balance of payments and existing external debt concepts, it is important to note that part of these internal claims is funded by the external claims removed during the consolidation. The potential overstatement of external debt in the consolidated data is therefore less than would appear from an isolated consideration of the local claims in foreign currency.¹⁷

Local claims of own affiliates in domestic currency (internal debt in local currency) are not included in the exposure measure on the grounds that they do not represent international positions. They are reported separately along with local liabilities of own affiliates in domestic currency.

Graph 1 illustrates the major channels through which international banking funds can flow to a debtor country:

- Case 1 covers direct lending from abroad to a local non-affiliated entity, including to the affiliates of other reporting banks (subcase 1a).
- Case 2 covers lending through a reporting bank's own local affiliate directly in foreign currency.
- Case 3 covers lending through a reporting bank's own local affiliate in local currency.

In Case 1, the funds are directly lent from abroad (either from the home country or from another foreign affiliate of the reporting bank) in domestic or foreign currency.¹⁸ Since it involves cross-border flows, this scenario is consistent with the balance of payments reporting principles and 1988 "Grey Book" *Guide on external debt* and therefore also with the BIS locational banking statistics. However, it gives rise to double-counting in the aggregated BIS consolidated banking data whenever foreign currency funds are channelled to the local affiliates of other reporting banks, whose local foreign currency claims are already covered in the BIS consolidated banking statistics as international claims (subcase 1a). To measure this possible double-counting the BIS requests separate recording of these claims as a memorandum item.¹⁹

In Case 2, the country exposure of the creditor bank is in the form of local claims in foreign currency (through its local affiliate). As noted above, inclusion of such claims is fully justified when funding takes place from abroad through the creditor bank's own network (cross-border claims that are excluded by the consolidation process). However, the inclusion of local claims in foreign currency as external debt is not appropriate if these claims represent the counterpart of local foreign currency deposits, which may be quite substantial.

¹⁷ This conclusion is supported by the observation that aggregate *consolidated* lending of all reporting countries to a given vis-à-vis country tends to be similar to aggregate *locational* lending reported for that country (see Section 2.3 and Graph 4 below).

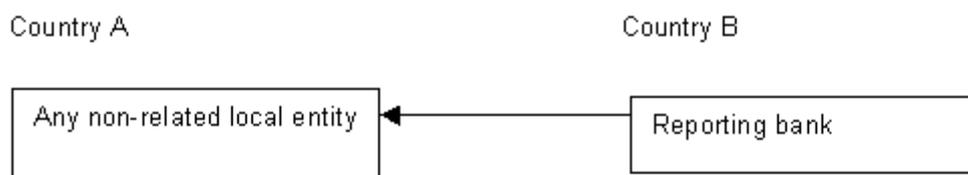
¹⁸ The distinction between domestic and foreign currency is from the point of view of the debtor country, as opposed to the creditor country.

¹⁹ Ideally this item should cover only claims on banks with head offices in other BIS reporting countries. However, the designers of the consolidated BIS statistics accepted that it would be too burdensome for reporting banks to have to distinguish between lending to BIS reporting banks and to other foreign banks. In practice, therefore, all claims on banks with head offices outside the country of residence of the borrower are reported as a separate item. This overstates the amount of double-counting.

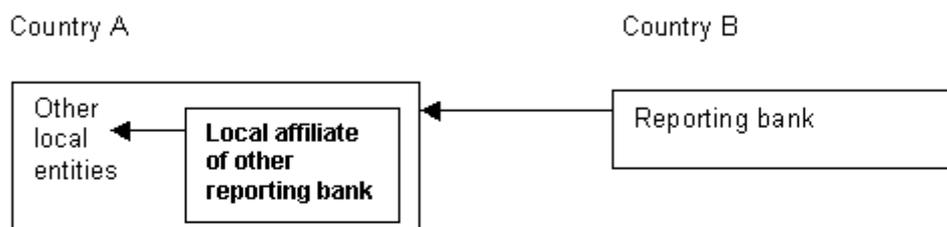
Graph 1

**Consolidated country exposure of a BIS reporting bank:
main financing channels**

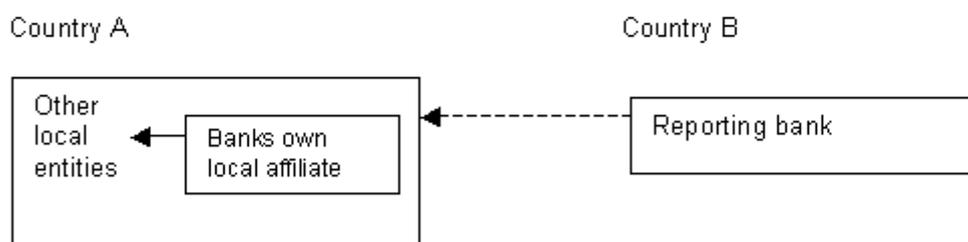
Case 1: Direct cross-border lending (in any currency) to non-affiliated entity



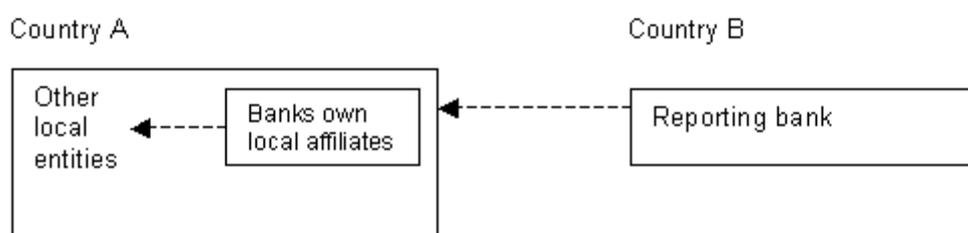
Subcase 1a: Direct cross-border lending to local affiliate of another reporting bank



Case 2: Foreign currency lending through own local affiliate



Case 3: Domestic currency lending through own local affiliate



Note: A solid arrow indicates that the lending flow is included in the consolidated data reported by the bank; a dotted one indicates that such lending is excluded from the exposure data.

In Case 3, the country exposure of the creditor bank is in the form of local domestic currency claims through its local affiliate. Such claims are currently excluded from banks' exposure data on the grounds that they do not represent international positions. However, the local assets and liabilities in domestic currency of reporting banks are reported as memorandum items. A net (positive) position resulting from subtracting the liabilities (or domestic funding) from the assets would provide an indication of additional cross-border flows involved on the funding side between offices of the consolidated group, ie cross-border claims that are removed in the process of consolidation.²⁰

²⁰ A net asset position in domestic currency does not necessarily have to be funded by cross-border liabilities, since foreign currency deposits by residents may have been onlent by banks in domestic currency. See Muneesh Kapur, "External debt statistics of India", in Part II of this report, pp 63-70.

Although the reporting does not distinguish between short-term and long-term exposure, one could assume that most funding takes place in the short-term interbank market and therefore is short-term in nature. This is clearly a strong assumption for intragroup funding.

2.2.1.2 Adjustments with unchanged reporting

Three adjustments could be made to the short-term component in the BIS consolidated banking data to provide an estimate that might be more consistent with the *Guide on external debt*:

- (1) Claims on local affiliates of foreign banks (claims on banks with head offices outside the country) could be deducted from total short-term claims. This is an upper bound estimate of potential double-counting, since it also includes claims on banks in non-reporting countries, which do not give rise to double-counting. In addition, because there is no maturity breakdown for this item, one needs to assume that it reflects mostly short-term interbank transactions. Taking these caveats into account, subtracting the item would result in an underestimation of short-term claims as compared with the current overestimation. This item amounts to about 6% of short-term claims on developing countries on average, but as can be seen from Table 5, there is considerable variation in this percentage.

There is little evidence that these claims are exclusively short-term. Historically, this measure of potential double-counting has accounted for only about 2% of overall consolidated claims reported vis-à-vis emerging markets. The Group of Statistical Experts for the Consolidated Banking Statistics has therefore recommended that reporting of this item be discontinued as of end-2004 to reduce banks' reporting burden.

Table 5

Upper bound estimate of double-counting of external debt to BIS reporting banks

(in billions of dollars)

	Claims of up to and including one year		Claims on banks with head offices outside the country of residence		Upper bound percentage of potential double-counting	
	End-1999	End-2001	End-1999	End-2001	End-1999	End-2001
Total developing countries	410.0	385.1	22.4	23.8	5.5	6.2
Europe	67.0	80.4	4.2	4.5	6.3	5.6
Latin America & Caribbean	133.7	126.4	5.0	4.2	3.7	3.3
Africa & Middle East	69.5	61.4	2.6	2.7	3.7	4.3
Asia & Pacific	139.8	116.8	10.7	12.5	7.6	10.7
<i>of which</i>						
Malaysia	7.7	7.8	1.1	1.2	14.5	14.8
China	18.9	19.4	2.5	4.9	13.4	25.1
Philippines	7.6	6.6	0.9	0.5	11.4	7.9
Taiwan, China	15.3	10.3	1.2	0.8	8.0	7.7
South Korea	35.1	31.0	2.6	2.1	7.3	6.9

- (2) Short-term local liabilities in foreign currency of reporting banks' foreign affiliates could be deducted. As noted above, these data are not available within the framework of the consolidated banking statistics, but other borrowing countries could emulate Argentina and Chile and provide the information to the BIS on a regular basis.

There is a further complication in implementing this adjustment, because the deduction should not include the local foreign currency liabilities of foreign affiliates of US banks. US banks do not include the local foreign currency lending by their reporting banks' foreign affiliates in reported international claims, but include it indistinguishably with local domestic

currency lending by reporting banks' foreign affiliates instead (since mid-1998). Thus only the amount due to non-US banks should be subtracted from the BIS data to avoid replacing the current overestimate with a possibly substantial underestimate of external debt (see Table 6 and Annex Table 4a). Since local foreign currency lending is funded to some extent by cross-border interbank claims removed in consolidating the data, this adjustment would tend to overcorrect short-term external debt.

- (3) Net local assets (assets minus liabilities, if positive) of reporting banks' foreign affiliates in domestic currency could be added to short-term external debt. These data could be indicative of cross-border funding of domestic lending by local offices of foreign banks.²¹ To the extent that the assumption that these funds are fully short-term is incorrect,²² the item would bias estimates of short-term debt to banks upwards compared with the current downward bias.

Table 6
Banks' local claims in foreign currency

	End-1999	End-2000
Argentina		
(a) banks' total short-term claims	35.1	38.7
(b) o/w financed by local positions in foreign currency	21.6	...
(c) o/w US banks	13.2	11.9
(d) o/w non-US banks	8.4	...
(e) potential overstatement of external debt (d/a)	24%	...
Chile		
(a) banks' total short-term claims	6.8	8.3
(b) o/w financed by local positions in foreign currency	2.5	2.9
(c) o/w US banks	1.7	0.3
(d) o/w non-US banks	0.8	2.6
(e) potential overstatement of external debt (d/a)	12%	31%

Note: Item (b) is national data from Annex Table 4a. Item (c): "US banks' local positions in Argentina" estimated by their local liabilities in "local" currency, which are assumed to be denominated fully in US dollars. US banks' local positions in Chile reported by Chile. (d) is calculated as difference.

Sources: National data; BIS consolidated statistics.

2.2.2 Valuation

Valuation at nominal or face value is the recommended principle of valuation of external liabilities in the 1988 "Grey Book" *Guide on external debt* as this reflects the amount contractually owed by debtors.²³ In contrast, BIS creditor banks may use different valuation methods in reporting both the consolidated and the locational statistics, ie valuation at nominal (face) value, cost value (purchase price) or market value (market price). This depends mainly on whether the assets belong to the bank's banking book or trading book. Usual practices in the treatment of on-balance sheet assets among reporting countries are summarised in Table 7 below.

²¹ This assumption may not be correct if the residents of the debtor country have substantial foreign currency denominated deposits with the local offices of foreign banks and if these offices onlend these deposits in domestic currency.

²² For example in India most of the funding relates to deposits with a predominantly longer maturity. See Muneesh Kapur: "External debt statistics of India", in Part II of this report, pp 63-70.

²³ In order to bring the recording of external debt more into line with SNA and IIP principles, reporting of traded debt valued at both nominal and market values is recommended in the draft *External debt statistics: guide for compilers and users*, 2001.

Table 7

**Valuation of claims of commercial banks in the
BIS international banking statistics**

	Banking book	Trading book
Loans <i>of which: purchased on the secondary market</i>	Nominal or cost value <i>Nominal or cost value</i>	Nominal, cost or market value <i>Nominal, cost or market value</i>
Securities	Nominal or cost value ¹	Market value

¹ Except for discounted bonds, such as zero coupon issues, which are periodically revalued to account for capitalised interest.

In practice, discrepancies between creditor and debtor data on short-term external debt as a result of the application of different valuation rules are probably small for the following two reasons. First, traditional loans, which still account for the major part of banks' business with developing countries, are mostly valued at nominal prices in both creditor and debtor reporting systems. Second, differences between nominal and other valuation methods should only marginally affect the short-term debt data. This is due to the fact that the shorter the maturity of the positions, the smaller the gap between face and market values (except for periods of debt crisis, when debt instruments could be quoted at deep discounts).

2.2.3 Maturity breakdown

Official debt sources tend to publish the maturity distribution of external debt based on the original maturity of debt instruments.²⁴ In contrast, BIS consolidated data are collected and published on the basis of residual or remaining maturity. This conceptual difference implies that in most cases, short-term debt according to the BIS definition will be higher than that published in official borrower country statistics.

For debt liabilities, the forthcoming Guide²⁵ to external debt retains the traditional distinction, based on the formal criterion of original contractual maturity, between long- and short-term maturities.²⁶ However, the Guide also provides an illustrative framework for the presentation of external debt on a remaining maturity basis.²⁷ Debt on a remaining maturity basis provides more information on the liquidity position of a country, since the amounts due to be refinanced or repaid within a year are directly evident. The BIS consolidated data were defined in such a way that for reconciliation purposes, original maturity data can be reconstructed approximately from the BIS data under some assumptions. This is made possible by collecting data in the one to two-year remaining maturity bracket. By relating these amounts one year earlier to the current amounts of one-year maturity or less, it is possible to calculate the approximate contribution of maturing debt of original long-term maturity to the current stock of short-term debt. As can be seen in Table 8, maturing long-term debt can account for around 7-37% of the total amount of short-term debt due for refinancing.

2.2.4 Type of debt instrument

There are issues of both under- and overrecording of holdings of international securities which are indistinguishably included in reported international claims in the consolidated banking statistics.

²⁴ The intention is to show the extent to which borrowers have access to long-term funds.

²⁵ See *External debt statistics: guide for compilers and users*, 2001.

²⁶ Long-term is defined as debt with a maturity of more than one year or with no stated maturity. Short-term debt, which includes currency, is debt repayable on demand or with a maturity of one year or less.

²⁷ See *External debt statistics: guide for compilers and users*, 2001.

Incomplete coverage stems from the fact that foreign holdings of domestic and international securities are in practice only available for BIS reporting banks (but not reported separately in the consolidated statistics). Overrecording occurs to the extent that international securities have been purchased by BIS reporting banks and are indistinguishably included in the consolidated international banking data.

Table 8

Share of maturing long-term debt in remaining maturity short-term debt, end-2000

	End-1999	End-2000	
	Over one year up to two years	Up to and including one year	Percentage share of long-term maturing debt in total short-term debt
	In billions of US dollars		
Argentina	5.9	38.7	15.2
Brazil	4.1	33.6	12.2
South Korea	6.7	32.8	20.4
Mexico	2.7	22.3	12.1
Indonesia	3.0	20.1	14.9
China	4.3	19.3	22.3
Taiwan, China	0.9	12.2	7.4
Thailand	2.6	10.3	25.2
Chile	3.2	9.7	33.0
Peru	0.7	9.1	7.7
India	2.2	9.0	24.4
Malaysia	1.3	7.0	18.6
Philippines	1.5	6.6	22.7
Venezuela	0.9	4.7	19.1
Colombia	1.5	4.2	35.7

Source: BIS consolidated banking statistics.

2.2.5 Type of borrower

Concerning the sectoral breakdown of borrowers, the BIS consolidated banking statistics provide a classification of counterparties into three separate groups - banks, the public sector and the non-bank private sector. The sectoral grouping of borrowers in debtor reporting systems, which follows SNA and balance of payments standards, distinguishes between monetary authorities, general government, banks and other sectors. BIS consolidated banking statistics include monetary authorities, which are identified separately in debtor reporting systems, under banks. While BIS consolidated banking statistics include all entities (other than banks) which are owned or controlled by the government under the public sector, the corresponding "government" sector in debtor reporting systems only covers government departments and not enterprises. The residual category of the non-bank private sector in creditor reporting systems and the category of "other sectors" in debtor reporting systems therefore differ from each other to the same extent. Due to these conceptual differences it is currently not feasible to reconcile creditor and debtor data by sector of the borrower.

The implementation plan for enhancements to the BIS consolidated banking statistics determines that as of end-2004 claims will be reported as follows:

- (1) Publicly owned enterprises are to be included under the non-bank private sector, which will allow for a better correspondence between creditor and debtor data, as the public sector should be closer to the definition of "general government".
- (2) Central banks are to be included under the public sector. This will be a departure from bank balance sheet sectoral classifications and balance of payments standards, but is consistent with ultimate risk analysis.

2.2.6 Type of creditor

A reconciliation of creditor and debtor data by type of creditor is often not possible because most debtor reporting systems do not provide a breakdown of external debt by type of creditor. Such a breakdown is also not requested in the 1988 "Grey Book" *Guide on external debt*.

On the creditor side, there are only limited data on lending by the non-bank private sector, in particular with regard to non-bank holdings of securities and bank deposits by foreign non-bank entities.

2.3 The locational banking statistics

2.3.1 Coverage

The BIS locational banking statistics²⁸ are collected in accordance with balance of payments principles and are therefore fully in accordance with the principles on the collection of external debt in the 1988 "Grey Book" *Guide on external debt*. Coverage should therefore be consistent with borrowers' external debt data.

2.3.2 Valuation

Valuation issues are the same as for the consolidated statistics. Thus, in practice, discrepancies between creditor and debtor data on short-term external debt as a result of the application of different valuation rules are likely to be comparatively small for the reasons discussed previously.

2.3.3 Maturity breakdown

The major stumbling block in comparing the locational statistics with short-term external debt data is that there is no prospect at this time of all reporting banks providing a maturity breakdown of the locational data or even of loans and deposits only. Although a number of central banks do collect a country/maturity breakdown, reliable aggregate data would depend on such data being available for most reporting countries. Currently the maturity breakdown of the locational data would thus have to be estimated on the basis of the maturity distribution of the consolidated data. It would not suffice, however, to obtain existing partial locational maturity data from some reporting countries and to provide estimates based on the consolidated statistics for the other countries. To see this, one should recall that the locational data record the assets of all banks located in a given reporting country, irrespective of the nationality of the head office of those banks. In contrast, the consolidated banking data are collected from the head offices of banks, so that all the offices of a given bank worldwide contribute to the data.

Using London as an example of an important financial centre may help clarify the difference between the two concepts. Banks resident in the United Kingdom (denoted as "GB" in Graph 2) account for about 14% of all banks' total international lending to developing countries on a locational basis. In contrast, on a consolidated basis, UK domestic banks, ie those with headquarters in the United Kingdom, account for only 10% of total international lending.²⁹ For Germany ("DE" in Graph 2), the reverse is the case, with worldwide claims of German banks exceeding those of banks located in Germany (21% against 13% of total claims). The absolute differences in amounts outstanding in the two statistics are only part of the story, however.

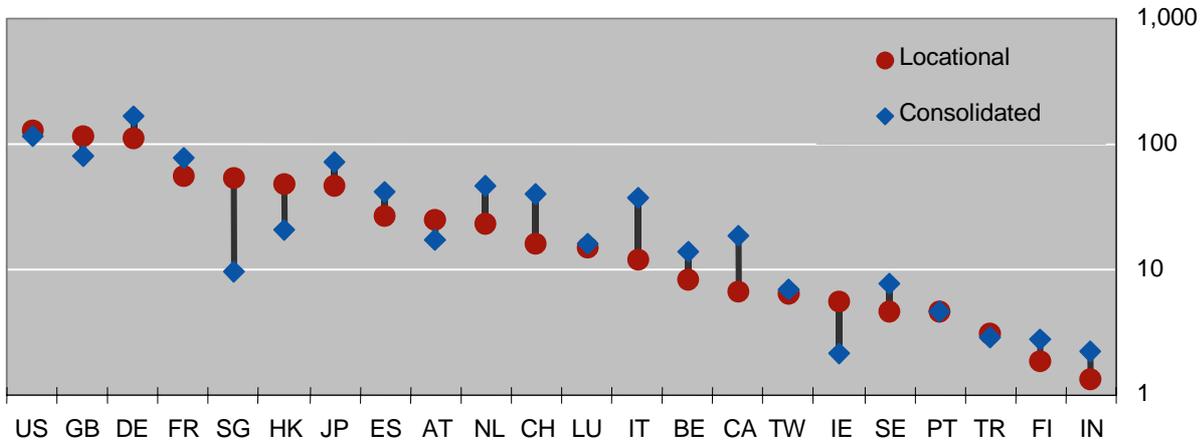
²⁸ Reporting countries providing locational banking data (first year of data availability in brackets): Australia (1997), Austria (1977), the Bahamas (semiannual reporting) (1983), Bahrain (1983), Belgium (1977), Canada (1977), the Cayman Islands (semiannual reporting) (1983), Denmark (1977), Finland (1983), France (1977), Germany (1977), Hong Kong SAR (1983), India (2001), Ireland (1977), Italy (1977), Japan (1977), Luxembourg (1977), the Netherlands (1977), the Netherlands Antilles (1983), Norway (1983), Portugal (1997), Singapore (1983), Spain (1983), Sweden (1977), Switzerland (1977), Taiwan, China (2000), Turkey (2000), the United Kingdom (1977) and the United States (1977).

²⁹ Worldwide locational data exceed the consolidated data substantially in aggregate, because all interbank business between related offices is excluded from the latter by definition.

Graph 2

Total locational and consolidated international bank claims on developing countries by reporting country

(semi-logarithmic scale, in billions of US dollars, Q1 2002)



Source: BIS.

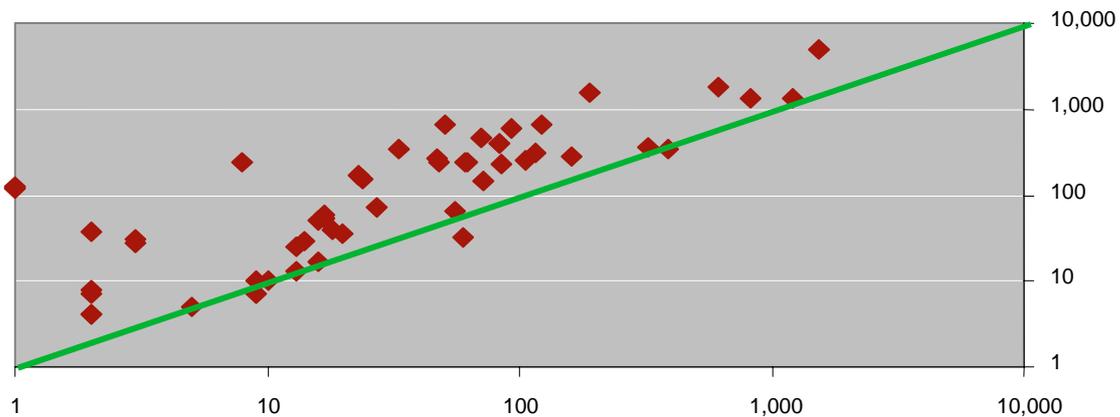
Consider the example of Canada (“CA” in Graph 2), which collects a maturity breakdown for both locational and consolidated data. One can use these data to test the validity of the assumption that the maturity distribution of the one set of statistics could be applied to the other with limited negative consequences for the accuracy of the estimated locational distribution. On reflection it is, however, clear that the geographical distribution of lending of banks resident in Canada (ie including all foreign bank offices in Canada) and the lending of all offices of Canadian banks worldwide are not closely related. Thus, the geographical maturity distribution of the one set of statistics can give only limited insight into the distribution of the other. This conclusion is substantiated by the data from Canada. Graph 3 plots locational and consolidated lending to individual developing countries, illustrating a comparatively low correlation between the two (0.88), as one would expect.

Graph 3

Canada's international bank claims on emerging market countries

(logarithmic scales, in millions of US dollars, Q4 1999)

Locational versus consolidated claims¹



¹ The x-axis measures locational claims and the y-axis consolidated claims. Values exactly on the line represent countries for which bank claims in both reporting systems are equal.

Sources: Bank of Canada; BIS.

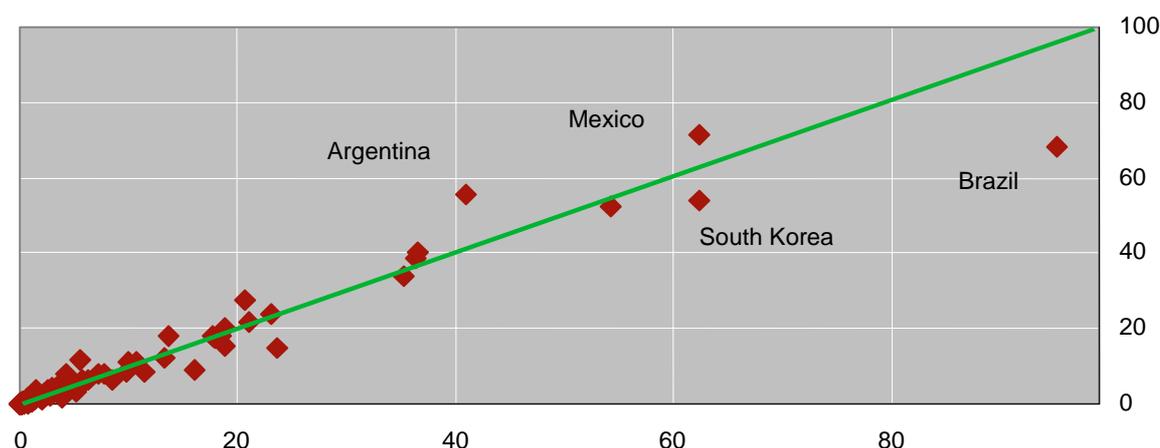
In general, the locational data reported by Canada are substantially smaller than the consolidated data, reflecting the fact that the worldwide presence of Canadian banks in total is larger than the international claims of all (foreign and domestic) banks resident in Canada.

Furthermore, even if amounts reported vis-à-vis a given country are similar in magnitude, a large proportion is likely to have been reported by different bank offices in both statistical systems. The only overlap between both systems is the international lending of Canadian bank offices resident in Canada. There can thus be little presumption that the maturity structure of both sets of data would be very similar.

Not all is lost, however. Once one considers banks worldwide from all reporting countries, many credit positions are contained in both sets of statistics, so that total locational and consolidated aggregates correlate quite well (0.97), as illustrated in Graph 4. Still, the differences between the two sets of data can be quite substantial for some countries. For example, in the fourth quarter of 2001, total consolidated bank lending to residents of Brazil and Mexico amounted to 72% and 115% of locational lending respectively. In exceptional cases, short-term lending reported in the consolidated statistics can even exceed total lending reported in the locational data.

Graph 4
Aggregate international bank claims on emerging market countries
(in billions of US dollars, end-2001)

Locational versus consolidated claims¹



¹ The x-axis measures locational claims and the y-axis consolidated claims. Values exactly on the line represent countries for which bank claims in both reporting systems are equal.

Source: BIS.

Large differences can be due to lending via offshore centres and other reporting countries or via a subsidiary located in a non-reporting country. In the first case, funds channelled through a banking office in say the Cayman Islands to Brazil would be reported twice in the locational statistics, once as lending to the Cayman Islands and once as lending (by a bank resident in the Cayman Islands) to Brazil. In contrast, the consolidated statistics would show only the credit to Brazil, because they exclude cross-border inter-office claims removed in the consolidation process. In these cases, a maturity transformation of funds could have taken place. In the second case, funds channelled through a banking office in say Argentina (currently not a reporting country) to Brazil would be reported as lending to Argentina in the locational statistics, while the consolidated statistics would show a credit to Brazil. More comprehensive (worldwide) lending and the inclusion of local positions in foreign currency can contribute to a consolidated figure that is larger than the locational figure, but there are many countries for which locational claims exceed consolidated claims. In the case of Brazil, this is due to the fact that a number of offshore centres do not yet contribute to the consolidated statistics. For those countries which report both sets of statistics, consolidated claims on Brazil tend to exceed locational claims.

In summary, the expected error in using the maturity structure of the *aggregate* consolidated data to estimate that of the locational data may be limited in many cases. Among the larger borrowers, some caution is advisable for Brazil, Mexico, South Korea and Argentina.

2.3.4 Type of debt instrument

The locational banking statistics provide separate data on loans and deposits and on securities. Since this is a fundamental breakdown in national balance of payments statistics, external debt data often provide this breakdown as well. Concerning loans and deposits, official bilateral credits may overlap with BIS international banking data. Some official lending may be effected through institutions that are part of the BIS reporting system and thus may be counted twice. This requires clarification whether some official or quasi-official institutions are covered in the creditor reporting system of the BIS consolidated international banking statistics. Creditor data are likely to underrecord loans to the extent that not all countries report creditor data for the BIS banking statistics. However, as noted in Chapter 1, the ongoing extension of the number of BIS reporting countries should ensure that this remains a comparatively minor source of differences.

2.3.5 Type of borrower

The locational data make a distinction only between lending to non-banks and the total. This distinction is in principle available in debtor statistics as well, in particular as debtor statistics are normally relatively successful in monitoring external bank borrowing. However, borrowing by non-banks is often largely unrecorded in the debtor statistics, especially if the country has liberalised its current account and there are no effective mechanisms to record external private sector non-bank borrowing.

2.3.6 Type of creditor

As noted above, national external debt statistics tend to provide limited information on the type of creditor, which limits the possibility of reconciling creditor and debtor data in this dimension.

2.4 International securities

A third group of BIS statistics reports on the securities markets. The data on international securities issues tend to overestimate foreign holdings of international securities issued by the debtor country because securities may be purchased partly by residents and partly by foreign banks, with the latter holdings already reported in the BIS consolidated banking statistics. On the other hand, creditor data tend to underestimate foreign holdings of domestic securities as only the holdings of banks reporting to the BIS are available. Debtor data are likely to underrecord external holdings of *domestic debt securities*. In practice it is difficult to collect information on holders of securities issued as bearer instruments and which are therefore not registered.

2.5 Non-bank trade credit

With respect to trade-related credits, there are similar problems of incomplete coverage on the debtor side and incomplete coverage and overrecording on the creditor side. On the debtor side, there often seems to be no complete information available on total non-bank trade credit. On the creditor side, separate data are only available on official and officially guaranteed trade credits from OECD countries. In addition, there might be an issue of partial overrecording insofar as the BIS banking statistics indistinguishably include some of the official and officially guaranteed trade credits reported by OECD countries, to the extent that export bills have been discounted by BIS reporting banks.

2.6 Summary of main differences

The main conceptual differences between creditor and debtor reporting systems for short-term external debt can be summarised as follows:

Debtor reporting systems often do not adequately capture data on foreign holdings of debt securities issued by debtor countries in both the domestic and international markets and on non-bank trade credit. These difficulties seem to increase the more foreign exchange controls are abolished and external accounts are liberalised. Furthermore, there is a tendency to underestimate short-term debt in those debtor countries which calculate external debt only on the basis of original and not of remaining maturity.

In contrast, the creditor reporting system of the joint statistics tends to either overestimate or underestimate external debt as follows:

- Regarding the data on bank lending from the consolidated banking statistics, a number of adjustments in presentation for external debt purposes could be envisaged that might bring them more into line with the standard concepts of external debt and thus reduce some over- and underrecording of external debt. Alternatively, the maturity structure of the consolidated data might be applied to the locational data, which is conceptually more closely aligned to external debt data. But this would come at the cost of uncertainty concerning the extent to which both reporting systems cover the same claims.
- Regarding *securities issues*, exact data on external debt are difficult to obtain, because there are overlaps between the sources used and securities held by non-banks are not identified.
- Regarding *trade credits*, creditor data tend to underestimate borrower data as they only cover official and officially guaranteed non-bank trade credits.

3. Comparison of creditor and debtor short-term data in practice: feasibility and limits

3.1 Introduction

The aim of the present chapter is threefold. First, to compare BIS consolidated data before and after the adjustments suggested in Chapter 2, under the assumption that no change in BIS reporting is possible. Second, to provide possible estimates of short-term locational bank lending and of short-term consolidated bank loans. Third, to compare creditor and debtor data on three components of short-term external debt: bank loans, debt securities and trade credit. BIS creditor data are adjusted as discussed in Chapter 2 above, while the required short-term debtor data were provided by 18 countries in response to the BIS questionnaire and follow-up visits.³⁰

3.2 Alternative measures of short-term consolidated banking data

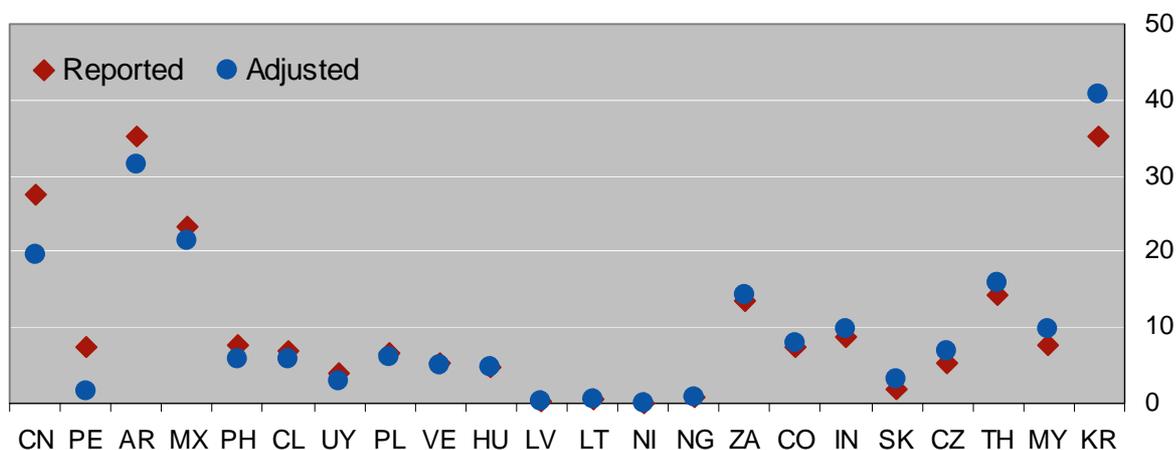
In Chapter 2 it was suggested that the consolidated BIS data could be adjusted to remove potential double-counting of lending to foreign banks and/or local funding of local foreign currency claims of foreign banks. It was also suggested that foreign funding of foreign banks' local domestic currency credits could be added to the consolidated BIS data.

The impact of the suggested adjustments to short-term BIS consolidated banking data (including banks' holdings of securities) is calculated in Annex Table 4a and is summarised in Graph 5 below, in which countries are sorted in terms of the difference between the two measures. The proposed adjustments reduce the consolidated banking data in seven countries, with the largest effects seen in China, Peru, Argentina, Mexico and the Philippines. The adjustment for local funding of foreign currency claims accounts for most of the difference, although - as discussed in Chapter 2 - this is an upper-bound estimate. In contrast, the adjustments increase creditor banks' claims in eight countries.

³⁰ Data for some countries include estimates; see footnotes to Annex Table 1a. Countries that were not in a position to provide separate data on short-term external loans and debt securities are excluded from this comparison.

Foreign funding of local lending accounts for the shifts, but only vis-à-vis South Korea is there a substantial effect.

Graph 5
Reported and adjusted short-term consolidated banking data
 (at end-1999 or end-1998, in billions of US dollars)



Countries are sorted by size of adjustment.

Source: BIS. See also Annex Table 1a.

3.3 Estimated short-term bank loans

3.3.1 Maturity estimates based on extrapolating locational maturity data

As noted in Chapter 2, the locational statistics are conceptually more compatible with external debt data than the consolidated statistics, and they provide a breakdown by instrument. The introduction of a maturity breakdown in the locational statistics would provide short-term creditor data fully compatible with debtor data and external debt concepts. Ongoing discussions with central bank statisticians have, however, led to the conclusion that such an expansion of the locational statistics is not currently feasible.

An alternative procedure might be to estimate a maturity breakdown for the locational statistics. One approach might be to extrapolate short-term locational data for the six reporting countries that collect a full maturity/country breakdown of locational data to all reporting countries. A second approach is to apply the maturity breakdown of the consolidated statistics to the locational statistics.

Separate short-term locational data on bank loans and holdings of securities are available from six countries: Switzerland, Germany, the Netherlands, Belgium, Italy and Canada (ordered by size of total short-term loans). The United States reports only bank loans, as there is no regular information on holdings of securities. Japan and France report short-term locational data without an instrument breakdown. Taking into account the data of all nine countries means that 51% of total loans and 54% of securities holdings are reported at least with aggregate maturity information. One might be tempted to assume that the maturity distribution of the subsample is representative of the total and then apply the short/long-term ratio found in the sample for each borrowing country to the total amount of bank lending outstanding. However, there is a further complication. Four countries (the United States, Switzerland, Italy and Canada) collect claims with residual short-term maturities; the rest collect original short-term maturities (see Table 9 below). This implies that the data for half of the group of countries need to be converted to either original or residual estimated maturities to be compatible with the other half. This conversion could be made using the overall ratio of residual to original maturity data reported for every debtor country. However, the quality of estimates resulting from such a schematic, two-stage estimation procedure based on strong assumptions would be questionable. This approach was therefore discarded.

Table 9

Instrument breakdown of banks' short-term locational claims by reporting country
(end-1999, in millions of US dollars)

Short-term securities							
Vis-à-vis	CH	IT	CA	NL*	BE*	DE*	Total by borrower
Mexico	1	0	0	6	0	0	7
Argentina	1	27	0	11	2	0	41
South Korea	6	6	0	5	1	67	85
China	0	27	0	15	0	0	42
Thailand	1	0	0	0	0	5	6
Total by lender	9	60	0	37	3	72	181

Short-term loans							
Vis-à-vis	CH	IT	CA	NL*	BE*	DE*	Total by borrower
Mexico	250	28	292	387	52	417	1,426
Argentina	225	644	52	592	589	1,858	3,960
South Korea	90	14	272	662	67	905	2,010
China	24	109	61	315	223	242	974
Thailand	39	9	18	26	19	616	727
Total by lender	627	804	695	1,982	950	4,038	9,096

Note: * signifies reporting based on original maturities.

Source: National locational statistics.

3.3.2 *Locational estimates based on the consolidated maturity ratio*

The application of the consolidated maturity ratio to locational data should provide reasonable estimates, given that the locational data and the consolidated data have similar coverage for many countries, as noted in Chapter 2 above. Apart from the conceptual advantages of using locational data based on standard balance of payments definitions, this approach would ensure that short-term claims do not exceed total claims.

3.3.3 *Short-term consolidated loans estimated from the locational instrument breakdown*

Even the consolidated short-term creditor data cannot be compared directly with short-term debtor data, because they include holdings of short-term securities, which are not reported separately. Debtor data, on the other hand, provide an instrument breakdown (loans and securities), but they do not distinguish between bank and non-bank creditors. If bank claims were to include large unidentified holdings of short-term securities, it would be impossible to compare both sets of data without relying on strong assumptions.

It can be argued that in practice, short-term bank claims by original maturity are unlikely to contain a large amount of securities, simply because securities tend to be long-term instruments. This assumption is supported by the very small amount of outstanding securities in large emerging market borrowers' outstanding liabilities to banks, contained in the original maturity data provided by the Netherlands, Belgium and Germany (Table 9).

However, if a remaining maturity definition is applied, maturing long-term securities which are due to be repaid within a year also need to be taken into account. Switzerland, Italy and Canada provide the instrument composition of short-term locational bank claims by remaining maturity (Table 9). It is clear that even on the basis of remaining maturities, holdings of short-term securities are either very small or at least small compared to outstanding loans (the maximum shares are 4% and 24% for Italy vis-à-vis Argentina and China respectively). It therefore seems plausible to generalise this result; ie it can be assumed that the short-term component in banks' consolidated claims is comprised almost entirely of loans, not securities, even on a remaining maturity basis.

This conclusion is consistent with the available aggregate data. Taking as given that few securities have an original maturity of less than one year, what has to be estimated is the amount and the composition of long-term debt coming due within a year. Across all developing countries, at end-1999, about 15% of short-term claims in the consolidated banking data were accounted for by maturing long-term claims.³¹ If the proportion of securities in total maturing long-term claims is roughly the same as in total locational claims on developing countries (11%), then 2% (.11 x .15) of all short-term claims should be due to maturing long-term securities. A 2% share is generally consistent with the data in Table 9.

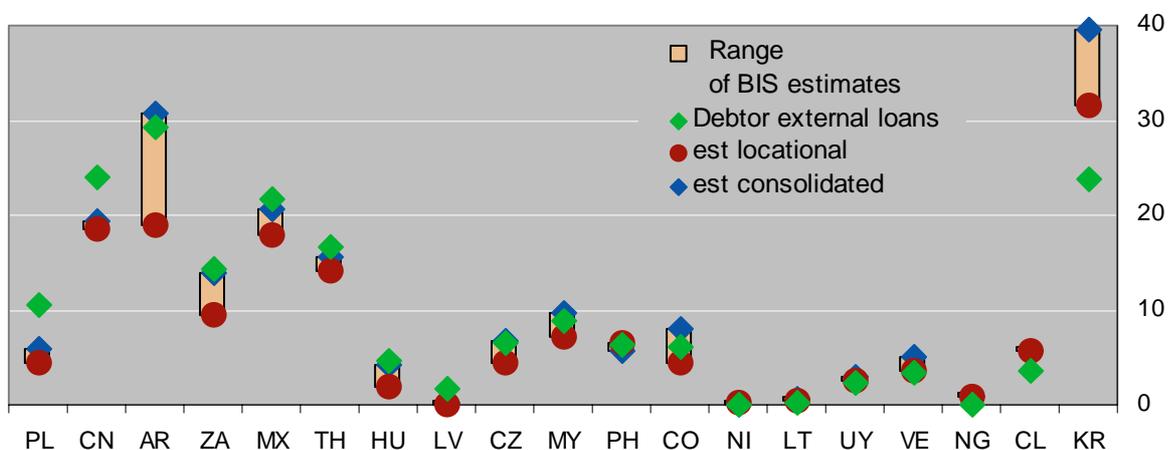
Banks' estimated holdings of short-term securities will vary from country to country. They can be calculated using the available creditor data for each borrowing country and are provided in Annex Tables 1a and 1b (column C). Subtracting this estimate from total short-term claims provides a short-term loans estimate for each country which can be compared with debtor countries' external short-term loans data.

3.4 Comparison with short-term debt components reported by debtor countries

3.4.1 Short-term bank loans

In Sections 3.3.2 and 3.3.3 above, two estimates for short-term bank loans were discussed: estimates of locational data based on the maturity ratios of the consolidated banking statistics and estimates of consolidated bank loans (excluding holdings of securities). The range of these two estimates, which are both subject to some inaccuracy, can be compared to debtor country reported short-term borrowing from banks. This should enable a judgment whether discrepancies between creditor and debtor data are significant or not. In Graph 6, the countries are sorted by the difference between debtor data and the midpoint of creditor data. Three groups of countries can be distinguished.

Graph 6
Estimated creditor short-term bank loans and debtor short-term bank borrowing
 (at end-1999 or end-1998, in billions of US dollars)



Sources: BIS; national data. See also Annex Table 1a.

³¹ The required calculation can be seen in Table 8 in Chapter 2 above. In contrast, according to debtor country data in Annex Table 5, total short-term debt on a remaining maturity basis is up to 50% higher than original maturity short-term debt. The difference must be due mainly to non-banks holding maturing international bonds.

Firstly, for Argentina, South Africa and South Korea, the range of BIS estimates is particularly wide. In the case of the first two, adjusted consolidated data are very close to the data reported by the country itself, which seems to indicate that the consolidated data may provide the more reliable estimates. In South Korea, an initially closer correspondence was widened by the proposed adjustment to the consolidated data, suggesting an overcorrection in this case.³²

Secondly, for China, Mexico, Poland and Thailand, short-term external debt to banks is higher than the range of BIS estimates. This may indicate additional foreign funding in the form of bank loans from non-reporting banks, or perhaps non-bank deposits, which are not included in BIS creditor data.

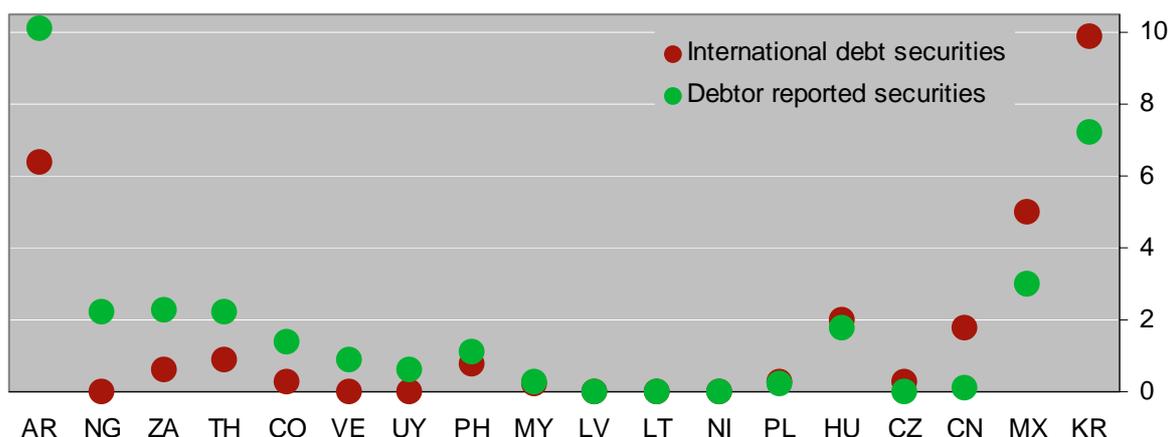
Finally, in the remaining group of countries, the absolute differences between creditor and debtor data seem limited, although they can be large in relative terms because of the comparatively small stocks of external debt involved. Given the many estimation steps involved in comparing the two sets of data, this level of accuracy may be the best that can reasonably be expected.

3.4.2 Short-term securities

In the first seven countries shown in Graph 7, short-term securities data from the debtor side exceed short-term international debt issues monitored by the BIS by USD1-4 billion (Annex Table 1a). As noted above, banks do not appear to hold substantial amounts of short-term securities. Thus the assumption must be that non-bank holders play a significant role in external holdings of domestic securities of these countries.

Graph 7

Comparison of BIS and debtor data on short-term external securities issues
(at end-1999 or end-1998, in billions of US dollars)



Sources: BIS; national data. See also Annex Table 1a, columns D and I.

In the next eight countries, BIS data and debtor data seem to be in close correspondence. Finally, in China, Mexico and Korea there appears to be underreporting of short-term external securities liabilities.

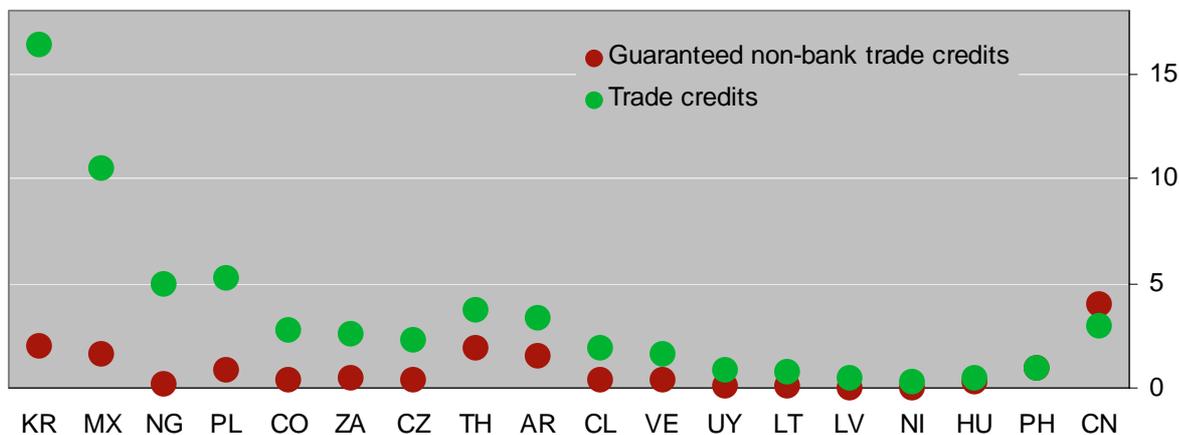
3.4.3 Trade credit

As is evident from Graph 8, debtor reported trade credit in most countries exceeds the guaranteed trade credits by a substantial margin, with South Korea the most extreme case. This is not a surprise,

³² Korea currently includes the borrowing of overseas branches of domestic financial institutions and subsidiaries in external debt, which makes the discrepancy in the data all the more puzzling. However, debt in domestic currency is excluded from external debt. Finally, underreporting of bank loans is to some extent offset by overreporting of trade credits - see Graphs 8 and 9.

given that only partial data, namely those on officially guaranteed trade credits, are available on the creditor side and that guaranteed trade credits by banks are included under bank loans. The exception seems to be China, suggesting possible underreporting there.

Graph 8
Comparison of trade credit
 (at end-1999 or end-1998, in billions of US dollars)

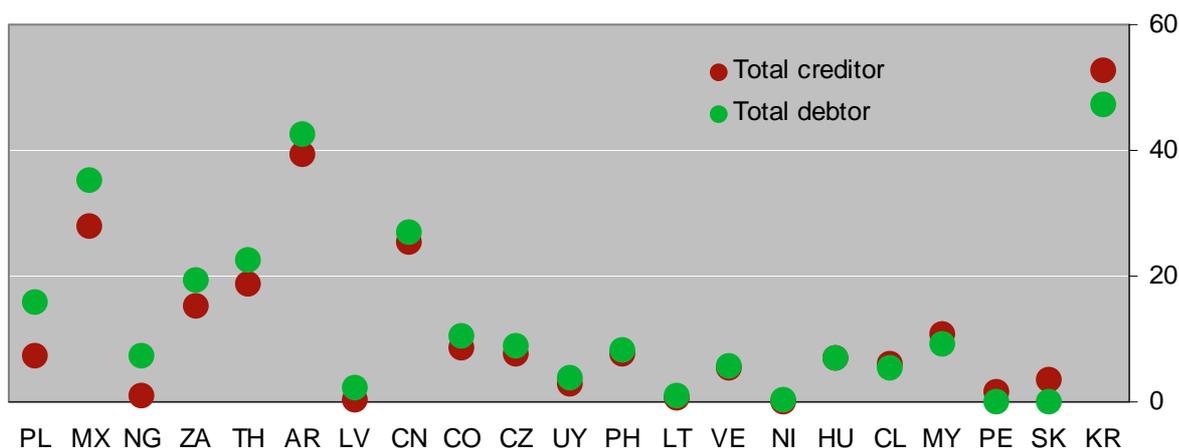


Sources: BIS; national data. See also Annex Table 1a, columns E and J.

3.4.4 Comparison of total short-term claims

Having compared the individual components of short-term debt reported in the joint statistics, namely bank loans, securities and trade credit, with debtor country data, it is instructive to also compare the aggregates of these three instruments. As can be seen from Graph 9 below, for most countries the sum of short-term external debt components reported in the joint statistics is either less than or similar to that reported by the country itself.³³

Graph 9
Comparison of aggregate short-term loans, securities and trade credit
 (at end-1999 or end-1998, in billions of US dollars)



Sources: BIS; national data. See also Annex Table 1a.

³³ Bank loans are based on the adjusted consolidated claims.

This is as one would expect, since the joint statistics do not cover non-guaranteed non-bank trade credit or non-bank holdings of domestic debt securities. In addition, the coverage of creditor data on banks' external positions, though high, is a few percentage points short of 100%. In the case of these countries, the current creditor data serve as a valuable cross-check, assuring users that debtor country monitoring systems are likely to provide full coverage of the country's short-term external debt.

On the other hand, there is a group of four countries where creditor reported short-term external debt exceeds that reported by the debtor country by more than USD1 billion: Korea, Slovakia, Peru and Malaysia (by size of the difference). Much of this can be explained by gaps in the reporting systems of the countries concerned, as detailed below in Section 3.4.6. Here the creditor data serve as a useful benchmark to the debtor country authorities, which may want to examine the coverage of their own external debt data. Where costs of collection of data appear prohibitive (possibly for the external transactions of non-banks), selective use of creditor data could be made (see Section 3.6).

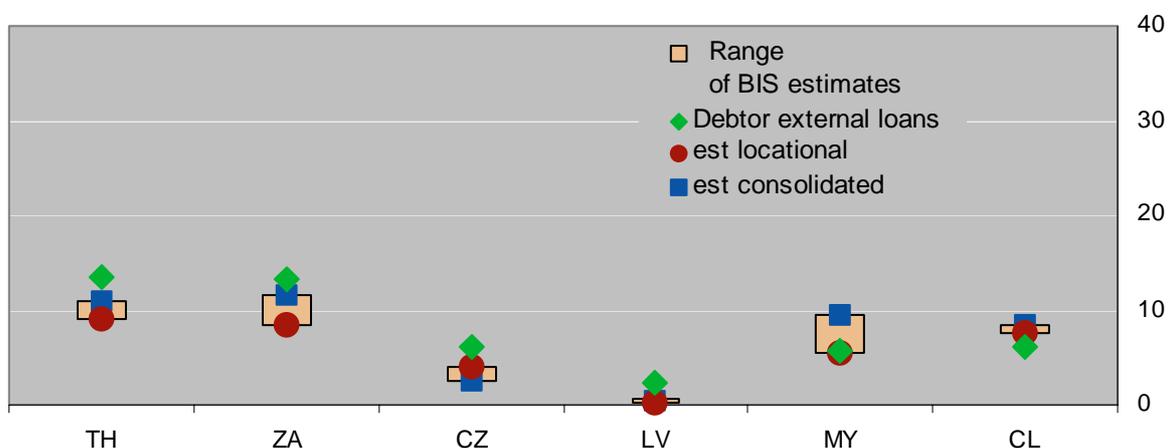
Overall, the aggregates of short-term debt agree more closely than the components individually. A possible explanation may be the statistical treatment of repurchase agreements, which may be reported as collateralised lending by the one side and as a securities transaction by the other. In addition, trade credits may be included in banks' loan data. The adjustments made to BIS data also need to be examined critically in terms of their success in narrowing the gap between debtor and creditor data. In eight cases (one third of the total) the adjustments actually increase the gap between creditor and debtor data, while in another third of cases there is a small narrowing of the gap. In the remaining third of cases, there is little change.

3.4.5 Comparison with end-2000 data

Six countries were able to provide comparable short-term external debt data for end-2000 as well (see Annex Table 1b). A comparison of these data with BIS data (Graph 10) should provide some insight on the stability of the relationship between creditor and debtor data in the short run.

Graph 10

Estimated creditor short-term bank loans and debtor short-term bank borrowing
(at end-2000, in billions of US dollars)



Sources: BIS; national data. See also Annex Table 1b.

The following conclusions can be drawn:

Firstly, the range of BIS estimates increased somewhat for three countries (Thailand, Malaysia and Chile), decreased for two (South Africa and the Czech Republic) and remained stable for one (Latvia).

Secondly, for all countries in this small sample, reported short-term external debt to banks has a similar relationship to the BIS estimates as in the previous year: Thailand, South Africa, the Czech Republic and Latvia report somewhat more external short-term bank debt than the BIS estimates. The data reported by Malaysia has moved to the lower end of the estimated range, while Chile lies slightly below the range, as in the previous year. For this small sample and short period, the relationships between country external debt data and BIS data appear stable.

Thirdly, the impact of the proposed adjustments to BIS consolidated short-term data relative to the data reported by countries themselves is small and mixed. For Chile, Latvia, South Africa and Thailand, the adjustments move BIS data marginally in the direction of the country data, but account for only a small fraction of the original difference. In the cases of the Czech Republic and Malaysia, the adjustments clearly increase differences between creditor (consolidated) and debtor data sets that were broadly in agreement to begin with.

3.4.6 Main gaps in coverage in debtor reporting systems

As noted above, debtor reporting systems may encounter difficulties in covering all short-term debt. Based on the questionnaire sent to 22 selected debtor countries, the main gaps in coverage of short-term external debt statistics can be summarised as follows:

First, not all countries are yet in a position to provide information on maturing long-term debt (ie long-term debt falling due within the following 12 months). While complete lack of coverage in this respect is limited to five countries within the sample (China, the Czech Republic, Latvia, Lithuania and Nicaragua), three other countries (Mexico, Poland and South Africa) are not in a position to provide this information for all debt instruments. Annex Table 5 highlights the importance of data on long-term debt maturing within 12 months, which exceeds 20% in all the selected countries for which the information is available, and even 50% in a few instances. Banks' holdings of securities are, however, small, so that this effect does not have a large impact in the comparison with BIS consolidated banking statistics.

Second, while it seems to be generally acknowledged that borrowing from foreign banks should at the very least include both loans and deposits, data on deposits are not recorded as part of external debt at least in three countries (Chile, Korea and Mexico). Debtor reporting systems were originally designed to meet the requirements of the World Bank with respect to medium- and long-term debt. Not all countries have broadened coverage to include deposits (including working balances), which are predominantly of a short-term nature.

Third, both under- and overrecording of foreign holdings of debt securities are evident among debtor countries. Coverage of debt securities is limited to international securities in six countries. At the same time, data on international debt securities, when included, do not distinguish between those held by non-residents and residents in all but four countries. This means that in the majority of countries residents' holdings of their country's international debt securities are not deducted from external short-term debt, which results in potential overrecording.

Fourth, although the coverage of trade credits in debtor reporting systems in principle follows IMF guidelines for balance of payments reporting,³⁴ at least six countries do not provide a comprehensive coverage. Thus, whereas maturing long-term credits are not covered in Korea and trade credits are not covered separately in South Africa, all or part of short-term credits are excluded in Chile (all), Hungary (less than 90-day credits) and India (less than 180-day suppliers' credits).

To sum up, not only are there often significant gaps in coverage of external debt statistics based on debtor data, but debtor reporting systems also seem to lack sufficient homogeneity for cross-country comparisons of short-term external debt. This has two implications. One is that any assessment of the external short-term debt situation of a country cannot be solely based on either creditor or debtor sources, but should preferably use information from both reporting systems. The other is that creditor data will, for the time being, need to be consulted for cross-country comparisons of short-term external debt data.

3.5 Summary of feasibility and limits of comparison

This study illustrates the difficulty of undertaking a comparison between short-term creditor and debtor data on the one hand and the limits of a cross-country comparison of debtor data on the other hand. The following conclusions can be drawn from the exercise:

³⁴ See fifth edition of the IMF *Balance of payments manual* (1993), page 95.

- BIS creditor data on short-term international bank loans could be adjusted or estimated in some cases in order to bring them more into line with external debt concepts and thus with the respective debtor data. By providing a range of likely values rather than a point estimate for short-term loans received from foreign banks, we draw users' attention to the potential range of variation in estimates of short-term banking debt. In addition, some difficulties are attached to the adjustment intended to correct for potential double-counting of bank loans. Firstly, the adjustment is an upper-bound estimate of double-counting, so a full adjustment leads to an underestimate. Secondly, taking into account the limited size of the adjustment and the reporting burden associated with it, central bank statisticians have decided not to report this item in future, which will render the merits of the adjustment a moot point soon.
- BIS data on short-term international debt securities issues can be used to assess the coverage of debtor data on foreign holdings of securities. Indeed, these data may signal possible underestimation of short-term debt securities on the debtor side, as in the case of China, Mexico and Korea.
- Similarly, OECD data on guaranteed non-bank trade credits may signal underreporting on the debtor side, whenever the numbers are larger than debtor data, such as in the case of China.

3.6 Workshop on country experiences in collecting and improving short-term debt statistics

Representatives of central banks and monetary authorities from 15 emerging market countries and five industrial countries, as well as representatives from four other international institutions, attended a workshop on this report organised at the BIS in April 2002. Each emerging market representative contributed a presentation lasting between 15 and 30 minutes. Three main topics were covered:

- How statisticians in each country collect external debt data, what difficulties they experience and what progress in the collection of short-term external debt data they expect in the near future.
- The extent to which creditor data on bank lending and securities issues published by the BIS and other international organisations is or may be helpful to cross-check and improve the coverage of external debt reporting. For example, developed countries have found that creditor data on the external liabilities and assets of non-banks are useful to their compilers of external debt and balance of payments statistics.
- Further steps envisaged to enhance the reporting of external debt, taking into account the new draft *External debt statistics: guide for compilers and users*.³⁵

From the presentations, the following main issues were identified which hamper full and comparable reporting of external debt on the debtor side:

- A. In a number of countries, there are no published short-term external debt data on a remaining maturity basis. If the amounts of long-term debt maturing during the next 12 months are not known, the amounts which need to be repaid or rolled over can be understated by a substantial amount.
- B. The reporting coverage of a number of countries is not complete. Foreign deposits with domestic banks are sometimes not included in external debt. Domestic holdings of international securities are sometimes not deducted from external debt because of limited data. Offshore banking units may not be considered as residents and their liabilities are therefore not included in external debt. Intercompany loans of corporations may not be separated from bank loans, making creditor and debtor data comparisons difficult.

Of particular significance in most countries are the difficulties in achieving complete coverage of short-term trade credit and of the external positions of the non-bank sector in general. In those countries where foreign borrowing is subject to official approval, full

³⁵ (<http://www.imf.org/external/pubs/ft/eds/Eng/Guide/index.htm>).

coverage is largely achieved. But as countries liberalise their foreign exchange controls, exempt transactions below specified thresholds from authorisation or even abolish reporting requirements, it becomes progressively more difficult to achieve full coverage of the non-bank sector at reasonable cost. Sample surveys are not necessarily effective because they are costly to sample respondents, who can be unhappy about the extra burden relative to their competitors not included in the sample.³⁶

- C. The coverage of derivatives positions is limited. As Mexico and Poland noted, forward transactions and swaps are increasingly used by banks and other residents as convenient instruments for short-term borrowing. Borrowers may use derivative instruments to circumvent reporting requirements and restrictions on short-term borrowing. For example, by combining a spot/forward transaction, a repayment liability can be moved off-balance sheet and thus escape short-term debt reporting requirements.³⁷ Although positions in these instruments are not included in the official definition of external debt, the new Guide recommends collecting data on residents' open positions in derivatives as memorandum items.
- D. The gaps and data overlaps in creditor data discussed in this report were also noted. Positions of banks not reporting to the BIS are necessarily omitted. Direct investment loans and non-bank intercompany loans in general are not covered by the joint statistics. Locally funded foreign currency claims included in the BIS consolidated banking data are not external debt. Discrepancies between the locational and consolidated statistics are growing because of the increasing presence of foreign banks in emerging markets, with implications for the accuracy of the estimates of short-term debt. Data on resident holdings of securities issued abroad are not available, but these should in principle be subtracted from market data on international issuance of securities. For some countries the broad-brush assumptions this report needed to make to derive short-term estimates for some debt components were not necessarily correct.

4. Summary and options for change

4.1 Summary

Following the Asian crisis, BIS data were made more widely available together with other external debt data in the Joint BIS-IMF-OECD-World Bank Statistics on External Debt. The purpose of this report is to explain the conceptual and practical differences between creditor external claims data supplied in the joint table and the corresponding debtor data. The focus is largely on short-term debt, since this is often the most volatile component of external debt and warrants special attention according to the Financial Stability Forum. Possible options for adapting the presentation of creditor data in the joint statistics to reduce discrepancies are provided.

Chapter 1 outlines various measures that have improved the accuracy of the BIS banking statistics:

Coverage of BIS data: By 1999, foreign bank subsidiaries from countries not reporting to the BIS had increased their share of total foreign bank lending to some Latin American countries to around 2-3%. The BIS has invited a number of non-reporting countries with substantial external banking business to join the BIS statistical system. This increase in the reporting population should enable the BIS data to continue to cover 95% or more of foreign banks' lending to most developing countries.

³⁶ A number of industrialised countries use counterparty creditor data as a cost-effective way of improving their IIP coverage of non-bank positions. For a discussion of the use of BIS data by the United States, see Christopher L Bach, "US international transactions, revised estimates for 1989-2000", *Survey of current business*, US Department of Commerce, July 2001, pp 30-6.

³⁷ See Samuel Alfaro, "External debt statistics of Mexico" in Part II of this report.

Double-counting of securities holdings: As of end-1999, four major offshore centres report their banks' holdings of securities separately. This eliminates substantial (around 25%) double-counting of banks' outstanding claims on developing countries in Latin America.

Locally funded foreign currency claims: The BIS consolidated banking statistics include local claims in foreign currency that should be excluded from the official definition of external debt. The resulting potential overstatement of short-term external debt for some Latin American countries can be adjusted by using additional data (supplied by debtor countries) on the respective country pages in the joint statistics.³⁸

In *Chapter 2*, official guidelines for the reporting of external debt and reporting conventions for the BIS consolidated and locational banking statistics, BIS securities and OECD trade credit statistics are compared in terms of coverage, valuation, maturity measurement, types of debt instruments, types of borrower and types of creditor. While numerous differences exist, in practice in many cases these appear either not to compromise the comparability of creditor and debtor data in substantive ways or else are likely to result in creditor data that are lower than debtor data. For example, discrepancies in short-term external debt data due to different valuation rules are probably limited. Firstly, traditional loans, which still account for the major part of banks' business with developing countries, are mostly valued at nominal prices in both creditor and debtor reporting systems. Secondly, the shorter the maturity of the positions, the smaller the gap between face and market values (except for periods of debt crisis, when the market value of debt instruments could - temporarily - drop sharply).

Chapter 3 provides empirical comparisons between short-term creditor and debtor data. For 15 out of the 21 countries for which a detailed analysis was feasible, aggregates of short-term bank loans, securities and trade credit reported in the joint statistics are less than those reported by the debtor countries themselves. This result illustrates why the purpose of the creditor statistics cannot be to measure external debt. Instead, their purpose is to function as a cross-check, providing users and statisticians with counterparty data that help them to assess to what extent components of external debt are comprehensively reported. Given that the creditor data are necessarily incomplete, as explained in detail above, debtor statistics that exceed creditor counterparty data are to be expected and should be regarded as the normal case. In this sense, the short-term creditor data provide a lower bound to short-term debt estimates and contribute to users' confidence in official external debt data.

For the remaining four countries, creditor data exceeded debtor data by up to 15%. In some cases, this is due to an overly narrow national definition of short-term external debt, which implies that certain debt components are excluded from national debt aggregates. In these cases, comparisons with creditor data can encourage statistical authorities to review the comprehensiveness of their external debt monitoring and reporting, in particular that concerning external debt with a remaining maturity of less than one year.

Even after the extensive efforts made to ensure that the data used in this research piece are comparable, margins of error remain. The size of these is illustrated by the estimation bands provided by the two BIS estimates for bank lending derived from the consolidated and the locational data. Taking into account the many estimation steps involved in comparing the two sets of creditor and debtor data, this level of accuracy may be the best that can reasonably be expected. Nevertheless, given the research provided in this paper, users should be in a better position to understand and analyse the existing differences between short-term creditor and debtor data.

4.2 Possible options for changing the presentation of BIS banking data

Regarding *loans and deposits*, the BIS consolidated banking statistics tend to partly overestimate and partly underestimate short-term external debt to foreign banks in debtor countries. Some *presentational* adjustments might therefore be made to the consolidated data.

³⁸ As discussed in Chapters 1 and 2, users should not subtract the full amount of liabilities to foreign banks financed locally in foreign currency (line b in Table 6) from the BIS total, because this would underestimate external debt substantially.

Option: Claims on affiliates of foreign banks

The separately reported claims on affiliates of foreign banks could be subtracted from the presentation of consolidated banking data in the joint statistics. The item is, however, an upper-bound estimate of potential double-counting. Because there is no maturity breakdown for the item, one needs to assume that it fully due to short-term interbank transactions. For both reasons, subtracting the item would result in an underestimation of short-term claims compared with the current overestimation. Another constraint is that central banks will stop collecting this item as of 2004 to limit the burden on reporting banks.

Option: Locally funded foreign currency claims

Locally funded local liabilities in foreign currency of banks' foreign affiliates are not part of the official definition of external debt. Other borrowing countries could emulate Argentina and Chile and provide the information to the BIS on a regular basis. This information could be published as a footnote in the joint statistics for every debtor country providing the information.

There are two arguments against subtracting these amounts directly from the published positions. Firstly, the adjustment would result in a mix of creditor and debtor data, thus undermining the use of creditor data as a cross-check for debtor data. Secondly, unless positions of US banks can be excluded, the adjustment could lead to an underestimate of external debt larger than the current overestimate.

Option: Locally funded domestic currency claims

Net local assets (assets minus liabilities, if positive) of reporting banks' foreign affiliates in domestic currency could be added to the total amounts outstanding. These data represent international funding of domestic lending. Although they are not available with a maturity breakdown, it could be assumed that the foreign funding is mostly short-term, but this will tend to bias estimates of short-term debt to banks upwards compared with the current downward bias.

4.3 Conclusions

In the group of countries where creditor reported short-term external debt exceeds that reported by the debtor countries themselves, discrepancies can be explained at least partly by gaps in the reporting systems of the countries concerned. Here the creditor data serve as an indicator to users, and to debtor country statistical authorities, that the coverage of debtor data needs to be re-examined.

Major progress has been made recently in improving the accuracy of the reporting of the BIS banking statistics, which has also improved their comparability with short-term external debt data. The remaining discrepancies between debtor and creditor data appear relatively small and due mostly to limitations in identifying short-term debt specifically owed to banks. Some of the options discussed for adjusting the presentation of the BIS statistics may be useful, but the potential gains in accuracy become progressively smaller and even ambiguous.³⁹

Participants in the BIS workshop on debt comparison did not voice strong support for any of the possible changes in the presentation of the BIS data in the joint external debt statistics described above. It was noted that none of the possible changes would lead unambiguously to more accurate data. The main and valuable contribution of this research had been to contribute to a better *understanding* of the differences between creditor and debtor data.

The IMF and the OECD noted that from the user side the most important improvement to creditor statistics would be the introduction of a maturity breakdown in the BIS locational statistics. The BIS reported that this request had been discussed at recent meetings of reporting central banks but that the additional costs of such a breakdown to banks and data compilers were currently viewed as being too high.

³⁹ It is assumed that the potential gains in accuracy are not large enough to justify additional reporting burdens for the reporting banks.

4.4 Follow-up to the BIS workshop on external debt statistics

At the BIS workshop on short-term external debt statistics in April 2002, it was agreed to follow up on the comparison exercise with the following steps:

- The BIS would continue to take steps to reduce gaps in, and improve the quality of, creditor statistics. Double-counting of securities could be reduced further by providing estimated data for two offshore centres (Bahrain, Netherlands Antilles). Additional economies would join the reporting system (eg India in 2002 and a number of other countries, such as Australia, Brazil, Chile, Malaysia and Mexico, in the near future). The BIS would investigate potential overlaps between BIS consolidated banking data and OECD data on officially guaranteed trade credits and the extent to which reporting by official lending agencies might overlap with bi- and multilateral official loans.
- Comments and revised data provided by the workshop participants would be incorporated into the BIS report.
- Given the major progress countries were reporting in current efforts to improve the coverage and quality of external debt reporting, it would be useful to incorporate in the report comparative debtor and creditor data for end-2000 for a subsample of countries where these data are available. This would enable users to understand better whether the relationships between the two sets of data tended to be stable or even closer over time.
- The results of the workshop would be discussed at the Inter-Agency Task Force on Finance Statistics (TFFS) in May 2002.⁴⁰ At its meeting, the task force welcomed the research the BIS had conducted into the comparison of short-term creditor data and debtor data. In the ensuing discussion, several agencies agreed to encourage countries to report data to the BIS on the foreign currency denominated domestic claims of foreign-owned banks operating in the local economy, which would enable users of the Joint Debt Statistics to bring the BIS consolidated statistics on short-term debt into closer alignment with the concepts and definitions employed in external debt statistics.
- The BIS would publish its report including the results of the workshop. Participants would consult with their respective authorities whether their contribution to the workshop could be written up and published as an addendum to the BIS report.

⁴⁰ The Inter-Agency Task Force on Finance Statistics is also the forum in which the needs of the main official users of statistics are raised. The FSF Working Group underlined the importance of taking such views fully into account in consideration of developing creditor-based statistics (FSF 2000, p 49).

Annexes 1-5: Tables

Table 1a

Short-term external debt: a comparison of debtor and creditor data
(at end-1999, unless otherwise stated; in billions of US dollars)

	Creditor and market data					Debtor data				
	Reported BIS consolidated banking data ¹	Adjusted BIS consolidated banking data ²	Of which: estimated holdings of securities ³	International debt securities	Guaranteed non-bank trade credits	Total	Loans and deposits ⁴	Of which: loans from official multilateral and bilateral agencies	Debt securities	Trade credits
	A	B	C	D	E	F	G	H	I	J
Argentina	35.1	31.5	0.9	6.4	1.5	44.9	31.5	2.3	10.1	3.3
Chile ⁵	6.8	5.7	0.0	0.0	0.4	5.9	4.0	0.5	...	1.9
China ^{6,7}	27.5	19.6	0.3	1.8	4.0	27.0	24.0	...	0.1	3.0
Colombia ⁶	7.3	8.0	0.1	0.3	0.4	10.4	6.2	...	1.4	2.8
Czech Republic	5.3	6.9	0.1	0.3	0.4	8.8	6.5	0.0	0.0	2.3
Hungary	4.8	4.8	0.7	2.0	0.3	7.6	5.2	0.5	1.8	0.5
India	8.6	9.8	0.1	0.2	1.0	10.3	...	2.0	...	...
Korea ⁸	35.1	40.8	1.3	9.9	2.0	53.3	29.7	6.0	7.2	16.4
Latvia	0.2	0.2	0.0	0.0	0.0	2.1	1.6	...	0.0	0.5
Lithuania ^{6,7}	0.6	0.6	0.0	0.0	0.1	1.1	0.3	...	0.0	0.8
Malaysia	7.7	9.8	0.1	0.2	0.8	9.2	8.9	...	0.3	na
Mexico ⁹	23.3	21.3	0.7	5.0	1.6	40.8	27.2	5.6	3.0	10.5
Nicaragua ^{6,7}	0.1	0.1	0.0	0.0	0.0	0.4	0.1	...	0.0	0.3
Nigeria ⁶	0.9	0.9	0.0	0.0	0.2	7.2	0.0	...	2.2	5.0
Peru ⁶	7.5	1.5	0.0	0.0	0.2	6.2	...	...	...	...
Philippines	7.6	5.7	0.1	0.8	1.0	10.2	8.1	1.8	1.1	1.0
Poland	6.6	6.0	0.2	0.3	0.9	15.8	10.5	0.0	0.2	5.2

Table 1a (cont)

Short-term external debt: a comparison of debtor and creditor data

(at end-1999, unless otherwise stated; in billions of US dollars)

	Creditor and market data					Debtor data				
	Reported BIS consolidated banking data ¹	Adjusted BIS consolidated banking data ²	Of which: estimated holdings of securities ³	International debt securities	Guaranteed non-bank trade credits	Total	Loans and deposits ⁴	Of which: loans from official multilateral and bilateral agencies	Debt securities	Trade credits
	A	B	C	D	E	F	G	H	I	J
Slovakia	1.9	3.2	0.1	0.1	0.2	4.1	...	...	...	...
South Africa	13.5	14.2	0.3	0.6	0.5	19.3	14.4	0.0	2.3	2.6
Thailand	14.2	15.9	0.3	0.9	1.9	28.2	18.1	1.4	2.2	3.7
Uruguay ⁶	3.9	2.9	0.0	0.0	0.1	3.9	2.4	...	0.6	0.9
Venezuela ⁶	5.2	5.1	0.1	0.0	0.4	5.8	3.3	...	0.9	1.6

¹ Short-term consolidated claims of BIS reporting banks. ² Column A adjusted to exclude total claims on foreign banks and total domestic funding of local foreign currency credits of foreign banks, and to include total international funding of domestic lending by foreign banks. All claims and funding assumed to be short-term. For details, see Annex Table 4a. ³ Estimated as described in Chapter 3.3.3. ⁴ Includes lending by official multilateral and bilateral agencies. ⁵ Debtor data for Chile adjusted to include country estimates of short-term trade credits and borrowing earmarked for foreign investment. ⁶ End-1998 data. ⁷ Debtor data for China, Lithuania and Nicaragua include estimates for maturing long-term debt. ⁸ Debtor data for Korea adjusted to include borrowing for investment abroad and foreign deposits. ⁹ In the case of debtor data for Mexico, all interbank loans and deposits, not available with a maturity breakdown, have been allocated to the short-term category. ¹⁰ Allowance for local foreign currency funding of foreign banks partly based on estimates from both short- and long-term positions. ¹¹ No allowance made for local foreign currency funding due to lack of appropriate information.

Sources: Columns A to D: BIS; column E: joint external debt table; columns F to J: national data.

Table 1b

Short-term external debt: a comparison of debtor and creditor data

(at end-2000, unless otherwise stated; in billions of US dollars)

	Creditor and market data					Debtor data				
	Reported BIS consolidated banking data ¹	Adjusted BIS consolidated banking data ²	Of which: estimated holdings of securities ³	International debt securities	Guaranteed non-bank trade credits	Total	Loans and deposits ⁴	Of which: loans from official multilateral and bilateral agencies	Debt securities	Trade credits
	A	B	C	D	E	F	G	H	I	J
Chile	9.7	9.2	0.0	0.2	0.4	8.4	6.4	0.3	...	2.0
Czech Republic	5.7	2.5	0.0	0.1	0.4	9.1	6.2	0.0	0.1	2.9
India	9	...	...	0.5	1.0	10.1	...	...	...	...
Latvia	0.4	0.5	0.0	0.0	0.0	2.8	2.3	...	0.0	0.5
Malaysia	7	9.5	0.0	1.1	0.7	6.3	5.6	...	0.7	na
Mexico	22.3	...	...	9.0	1.3	36.6	21.5	2.2	3.4	11.6
Philippines	6.6	5.3	...	1.4	0.9	10.2	7.7	0.9	1.5 ⁵	1.0
Poland	7.4	...	...	0.2	0.8	12.7	6.8	0.0	0.3	5.6
South Africa	11.1	11.5	0.0	0.5	0.6	16.1	13.3	0.0	0.0	2.8
Thailand	10.3	11.0	0.0	2.4	1.3	27.7	17.7	4.3	2.0	3.3

¹ Short-term consolidated claims of BIS reporting banks. ² Column A adjusted to exclude total claims on foreign banks and total domestic funding of local foreign currency credits of foreign banks, and to include total international funding of domestic lending by foreign banks. All claims and funding assumed to be short-term. For details, see Annex Table 4b. ³ Estimated as described in Section 3.3.3. ⁴ Includes lending by official multilateral and bilateral agencies. ⁵ Net of Philippine residents' holdings.

Sources: Columns A to D: BIS; column E: joint external debt table; columns F to J: national data.

Table 2

Coverage of external short-term debt statistics in selected debtor countries

	Includes maturing long-term debt (Y = yes, N = no)	Loans (L) and deposits (D)	Domestic (D) and international (I) debt securities	Supplier and buyer trade credits (Y = yes)	Other limitations in recording
Argentina	Y	L+D	D+I	Y	
Chile	Y	L	I	Y	Short-term trade credits provided separately.
China	N	?	?	?	Inter-office accounts are netted out.
Colombia	Y	L+D	D+I ¹	Y	
Czech Republic	N	L+D	D+I ¹	Y	Securities valued at market price.
Hungary	Y	L+D	D+I	Y (except if < 90-day)	
India	Y	L+D	D+I ¹	Y (except for < 180-day supplier credits)	
Korea	Y ²	L+D	I ¹	Y (except long-term credits)	External borrowing for foreign investment and non-resident deposits provided separately.
Latvia	No	L+D	D+I	Y	
Lithuania	N	L+D	I ¹	Y	
Malaysia	Y	L+D	D+I	?	Excludes repos.
Mexico	Y ³	L	I ^{1,3}	Y	Excludes working balances and some supplier credits. Inter bank loans and deposits assumed to be short-term.
Nicaragua	N	?	?		?
Nigeria	Y	?	?	?	?
Peru	Y	L+D	?	Y	
Philippines	Y	L+D	I	Y	Excludes foreign currency liabilities of offshore banks located in the country but includes their claims on Philippine residents.
Poland	Y ⁴	L+D	I ⁴	Y	
Slovakia	Y	L+D	D+I ¹	Y	

Table 2 (cont)

Coverage of external short-term debt statistics in selected debtor countries

	Includes maturing long-term debt (Y = yes, N = no)	Loans (L) and deposits (D)	Domestic (D) and international (I) debt securities	Supplier and buyer trade credits (Y = yes)	Other limitations in recording
South Africa	Y	L+D	D+ I	Y (except long-term credits)	
Thailand	Y	L+D	D+I	Y	
Uruguay	Y	?	?	?	
Venezuela	Y	L+D	D+I	Y	

¹ Includes, in addition, residents' holdings of international debt securities, owing to lack of appropriate breakdown. ² Excludes maturing long-term debt securities issued by non-bank entities.

³ Securities issued by non-banks only. ⁴ Debt securities only include short-term issues.

Table 3
Frequency and time lag of debtor reporting systems
(in months)

	Frequency			Time lag		
	Bank loans	Securities	Trade credits	Bank loans	Securities	Trade credits
Argentina	3	3	3	3	3	3
Chile	1	1	1	1	1	1
China	1	1	1	1	1	1
Colombia	3	3	3	0.5-2	0.5-2	0.5-2
Czech Republic	1 ¹	3	3	2	2	2
Hungary	1	1	1	1.75	1.75	1.75
India	3	3	3	5	5	5
Korea	1	1	1	1.5	1.5	1.5
Latvia	1 ¹	1 ¹	3	1 ¹	1 ¹	3
Lithuania	1 ¹	1 ¹	3	0.5-3	0.5-3	3
Malaysia	1 ¹	1	...	1-2	1	...
Mexico	3 ²	1 ³	...	1.3-2	1-1.3	1.3-2
Nicaragua	1	...	1	0.25	...	0.25
Nigeria	...	...⁴	... ⁴	...	6	...
Peru	3	3	3	3	3	3
Philippines	3	3	3	3	3	3
Poland	3	3	3	3	3	3
Slovakia	1	1	1	2	2	2
South Africa ⁶	1	3	3	2-6	2-6	2
Thailand	3 ⁵	3 ⁵	3	3	3	3
Uruguay	3	3	3	3	3	3
Venezuela	1-6	1-6	1-6	1-6	1-6	1-6

... = not available. ¹ Three months for non-banks. ² One month for banks. ³ Three months for government. ⁴ Except for the central bank (six months). ⁵ One year for non-banks, one month for banks, six months for others. ⁶ Published on a six-monthly basis with a six-month lag.

Table 4a

Adjustments to short-term BIS consolidated international banking data

(end-1999 data, unless otherwise stated; in billions of US dollars)

	Reported claims	<i>minus claims on banks with head offices outside the country of residence</i> ¹	<i>minus local funding of local foreign currency claims</i> ²	<i>plus foreign funding of local domestic currency claims</i> ¹ (<i>local currency liabilities minus claims</i>)	Adjusted claims	<i>Memo: Details of data for column C</i>	
						<i>Local foreign currency liabilities of foreign banks</i>	<i>Local foreign currency liabilities of US banks</i>
	A	B	C	D	E	F	G
Argentina	35.1	1.0	6.5	3.9	31.5	19.7	13.2
Chile	6.8	0.1	1.8	0.8	5.7	2.5	0.4
China ³	27.5	2.8	5.6	0.5	19.6	6.3	0.7
Colombia ³	7.3	0.1	0.0	0.8	8.0	0.2	1.4
Czech Republic	5.3	1.0	0.0	2.6	6.9	nr	nr
Hungary	4.8	0.6	0.1	0.7	4.8	0.8	0.7
India	8.6	0.4	0.0	1.6	9.8	...	4.6
Korea	35.1	2.6	0.0	8.3	40.8	1.4	5.5
Latvia	0.2	0.0	0.0	0.0	0.2	0.0	0.0
Lithuania	0.6	0.0	0.0	0.0	0.6	0.0	0.0
Malaysia	7.7	1.1	0.0	3.2	9.8	2.5	4.5
Mexico	23.3	0.1	1.9	0.0	21.3	10.1	8.2
Nicaragua	0.1	0.0	0.0	0.0	0.1	0.0	0.0
Nigeria	0.9	0.0	0.0	0.0	0.9	0.0	0.2
Peru ³	7.5	0.1	6.0	0.1	1.5	6.6 ⁴	0.6
Philippines	7.6	0.9	1.0	0.0	5.7	...	3.2
Poland	6.6	0.6	0.0	0.0	6.0	...	1.6
Slovak Republic	1.9	0.0	0.0	1.3	3.2	...	0.3
South Africa	13.5	0.4	0.0	1.1	14.2	0.3	1.2
Thailand	14.2	0.8	0.0	2.5	15.9	2.0	2.2
Uruguay ³	3.9	0.2	1.3	0.5	2.9	2.2	0.9
Venezuela ³	5.2	0.1	0.0	0.0	5.1	...	0.6

... = not available; nr = not relevant. ¹ All claims assumed to be short-term. ² Non-US banks only, since US banks do not include local foreign currency claims in their reported international claims. Data are equal to the positive difference between columns F and G. ³ Data relate to end-1998. ⁴ Includes both short- and long-term liabilities; short-term component assumed to account for 60% of total.

Sources: Columns A to D: BIS; column F: national data; column G: estimate based on US banks' reporting of "local" currency positions, which in the US case include both foreign and domestic currency.

Table 4b

Adjustments to short-term BIS consolidated international banking data

(end-2000 data, in billions of US dollars)

	Reported claims	<i>minus claims on banks with head offices outside the country of residence¹</i>	<i>minus local funding of local foreign currency claims²</i>	<i>plus foreign funding of local domestic currency claims¹ (local currency liabilities minus claims)</i>	Adjusted claims	<i>Memo: Details of data for column C</i>	
						<i>Local foreign currency liabilities of foreign banks</i>	<i>Local foreign currency liabilities of US banks</i>
	A	B	C	D	E	F	G
Chile	9.7	0.1	2.6	2.2	9.2	2.9	0.3
Czech Republic	5.7	1.1	2.5	0.4	2.5	2.9	0.4
India	9.0	0.3	...	3.1	...	...	3.0 ³
Latvia	0.4	0.0	0.0	0.1	0.5	0.0	0.0
Malaysia	7.0	0.9	0.0	3.4	9.5	3.3	5.3 ³
Mexico	22.3	0.8	...	3.0	...	...	9.9 ³
Philippines	6.6	0.5	0.9	0.1	5.3	2.8	1.9
Poland	7.4	0.3	...	0.1	...	...	6.0 ³
South Africa	11.1	1.1	0.0	1.5	11.5	0.0	0.0
Thailand	10.3	0.7	0.8	2.2	11.0	1.2	0.4

... = not available; n = not relevant. ¹ All claims assumed to be short-term. ² Non-US banks only, since US banks do not include local foreign currency claims in their reported international claims. Data are equal to the positive difference between columns F and G. ³ Estimate based on US banks' reporting of "local" currency positions, which in the US case include both foreign and domestic currency.

Sources: Columns A to D: BIS; columns F and G: national data except where noted.

Table 5

Debtor data on short-term debt according to original and remaining maturity

(end-1999 data; in billions of US dollars)

	Original maturity	Remaining maturity	Ratio of A to B (%)	<i>Memo: Ratio of original to remaining short-term debt according to the BIS consolidated banking statistics (%)</i>
	A	B	C	
Argentina	26.1	44.9	58	88
Chile	1.2	4.0	30	76
China ¹	17.3	...	...	86
Colombia ¹	4.7	10.4	45	86
Czech Republic	8.8	12.4	71	77
Hungary	4.1	7.6	54	77
India	4.3	10.3	42	85
Korea	42.3	53.3	79	76
Latvia ¹	1.7	...	...	88
Lithuania	0.9	...	...	92
Malaysia ¹	6.4	9.2	69	98
Mexico	4.2	11.4	38	91
Nicaragua	0.4	...	...	50
Nigeria	...	7.2	...	81
Peru ¹	...	6.2	...	96
Philippines	5.7	10.2	56	87
Poland ¹	10.7	15.7	68	92
Slovakia	2.7	4.1	66	79
South Africa	14.1	19.3	73	89
Thailand	19.5	28.2	69	83
Uruguay ¹	2.9	3.9	74	98
Venezuela ¹	2.3	5.8	40	90

¹ Data relate to end-1998.

Annex 6:
**Proposed questions to central banks participating in the
BIS international consolidated banking statistics**

1. Do your reporting banks include the positions of their non-bank financial subsidiaries in their reported consolidated international claims (please specify if different treatment for pension fund, insurance or money market fund subsidiaries)?
2. Do reported consolidated international claims include any export bills discounted by reporting banks? Can you quantify the amounts involved?
3. How do your reporting banks cover positions of affiliates in their reported consolidated claims if the participation level is less than 50% (no consolidation, pro rata consolidation or full consolidation)?
4. Do you include any official lending agency in your reporting population and any other official lending in your consolidated banking statistics? Please provide the names of the institutions. Can you quantify the relevant amounts?

Annex 7: Case studies for eight countries

In the autumn of 2000, the consultant travelled to eight countries to discuss how to narrow the gap between creditor and debtor data and how to explain remaining differences. Two central European countries (Hungary and Slovakia), three Latin American countries (Argentina, Chile and Mexico) and three Asian countries (India, Korea and Thailand) were visited.

(i) Argentina

The BIS consolidated banking data show, at the end of 1999, short-term claims on Argentina of USD 35 billion on an unadjusted basis and of nearly USD 32 billion on an adjusted basis (Annex Table 1a). Following further adjustments for estimated holdings of short-term securities on the creditor side and for official multilateral and bilateral loans on the debtor side, the gap between BIS consolidated data and debtor short-term external loans data can be fully closed. The comparatively large discrepancy between adjusted consolidated and estimated locational data in Graph 6 is due to the more comprehensive coverage of BIS consolidated data in the case of Argentina.

(ii) Chile

The adjusted banking data on short-term claims on Chile are almost identical to the debtor data on total external short-term debt (including estimates for short-term trade credits and borrowing for foreign investment) (Annex Table 1a). During the country visit it was suggested that creditor data may include of some official bilateral lending in BIS banking data and double-counting of non-bank trade credits when trade bills are discounted with BIS reporting banks. On the debtor side, the lack of data on short-term correspondent bank balances, intercompany trade credits and foreign non-bank deposits were mentioned as possible but limited causes of debtor underestimation.

(iii) Hungary

The creditor aggregate short-term loans, securities and trade credit data fall short of debtor short-term estimates by USD 1.2 billion (Annex Table 1a). In addition, external short-term debt reported by the Hungarian authorities excludes less than 90-day trade credits. The gap may be partly due to overcorrection of BIS data on claims on foreign banks (USD 0.6 billion, Annex Table 4a) and partly due to loans and non-bank deposits which are not covered in the BIS consolidated banking data.

(iv) India

In the case of India, the creditor aggregate short-term loans, securities and trade credit data are lower than the debtor short-term estimates by about USD 0.5 billion (Annex Tables 1a and 4a). No detailed data are available for the short-term components on the debtor side. Apart from an overadjustment of the BIS data, the difference is probably due to the following three factors. First, foreign funding, whether short- or long-term in nature, is indirectly covered by the adjusted BIS consolidated banking data through the inclusion of the net local rupee claims of foreign affiliates of BIS reporting banks in India. Second, debtor data exclude a large fraction of trade credits, ie those with maturities of up to 180 days. To the extent that these trade bills have been discounted by BIS reporting banks, they are, however, also included in the creditor data. Third, the debtor data include short-term non-resident deposits which are not included in the creditor data.

(v) Korea

Aggregate short-term loans, securities and trade credit for South Korea are roughly similar for creditor and debtor statistics, namely USD 51.4 billion against USD 53.3 billion (including borrowing for foreign investments and foreign deposits). A small difference of USD 1.9 billion or 4% of the total (Annex Table 1) remains. The gap is probably due to two factors. First, partial inclusion of the large volume of

trade credits in the BIS consolidated banking data to the extent that the relevant trade bills have been discounted by BIS reporting banks. This presumably explains why BIS loans at USD 39.5 (unadjusted: 33.8) billion (excluding estimated holdings of securities) taken alone are so much higher than the external loans and deposits (USD 23.7 billion, excluding multilateral and bilateral loans) reported by South Korea. Second, possible underreporting of foreign holdings of debt securities in the Korean debtor reporting system. BIS data on Korean international securities issues (USD 9.9 billion) are larger than Korean data on foreign holdings of international debt securities (USD 7.2 billion). (Korean external debt data exclude domestic securities purchased by foreigners.)

(vi) Mexico

Aggregate creditor short-term loans, securities and trade credit for Mexico amount to USD 27.2 billion, USD 8 billion or 23% less than debtor data (Annex Table 1a). There is a possible downward overadjustment of BIS data (up to USD 2 billion, Annex Table 4a). The bulk of the difference is accounted for by trade credits.

(vii) Slovakia

Before adjustment, the consolidated short-term claims of BIS reporting banks on Slovakia amount to USD 1.9 billion at end-1999, with the adjustment raising the figure to USD 3.2 billion. This increase is the result of a significant amount of foreign funding of local domestic currency lending by foreign banks in Slovakia, possibly in the form of deposits from expatriates (Annex Table 4a). The lack of information in the debtor country on individual debt instruments does not allow assessment of the volume of foreign debt owed to creditors other than BIS reporting banks. Nevertheless, the positive USD 0.7 billion difference between debtor data and total adjusted creditor data (Annex Table 1a) suggests some underrecording of loans and deposits, foreign holdings of securities and trade credits on the creditor side.

(viii) Thailand

Unadjusted and adjusted claims of banks on Thailand were USD 14.2 billion and USD 15.9 billion respectively (Annex Table 1a). The creditor figure is similar to the USD 16.7 billion short-term loans and deposits provided by Thailand (excluding multilateral and bilateral loans, Annex Table 1a).

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Part II

National contributions on external debt statistics and IMF paper on the new external debt guide

External debt statistics of Chile

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1. Introduction

The collection of statistics and analysis of the external debt of Chile have been the responsibility of the Central Bank of Chile since 1976 and the area in charge is the External Statistics Department. This department carries out its activities using computer systems to store and process the information.

The standing that the institution has in the country facilitates cooperation in the compilation of external debt statistics with both the public and private sector.

The Central Bank carries out its work in the areas of monetary policy, credit policy, financial policy and foreign exchange policy based on the Constitutional Organic Act. In the context of the latter, the Central Bank has issued a regulation that allows it to collect statistical data on external debt through the so-called Compendium of Foreign Exchange Regulation.

2. External debt statistics

The compilation of the external debt statistics is in accordance with the following definition of external debt: "gross external debt is the amount, at any given time, of disbursed and outstanding contractual liabilities of residents of a country to non-residents to repay principal, with or without interest, or to pay interest, with or without principal". The data are collected from the debtor side. The official publication of the external debt of Chile includes data on loans and bonds issued by resident companies and agencies abroad.

2.1 Scope of information

The principal source of information for medium- and long-term external debt, except for the Central Government and CODELCO (National Copper Corporation of Chile), is based on the regulation of the Compendium of Foreign Exchange Regulation. This allows the collection of data on flows and stocks and financial arrangements of external debt.

Data on short-term external debt of the financial sector must be reported to the Central Bank of Chile on a weekly basis. The information is received electronically and covers individual transactions, information on financial arrangements and schedules of payments.

In the case of medium- and long-term debt, the Central Government and CODELCO provide monthly reports on stocks, disbursements, debt service, schedules of payments and financial conditions. Data on stocks of short-term debt are received on a weekly basis.

2.2 Surveys

Surveys are used to collect complementary information for the private sector.

⁴¹ The views expressed are those of the author.

2.3 Others

In addition, informal sources are used, such as telephone calls, meetings with companies and information from newspapers.

2.4 Limitation of the information

Although short-term trade credits and loans used to finance investments abroad fall into the category of external debt, these data are not included because the information is not yet available.

2.5 Publications

The Central Bank of Chile publishes statistics of external debt related to flows and stocks monthly and annually. In the annual report, an analysis of the evolution of the external debt and ratios between external debt and some macroeconomic variables are also included.

The External Statistics Department also publishes a confidential monthly report that contains information about external debt, evolution of the spread of loans and bonds, international reserves, foreign investment, investment abroad, the balance of payments and derivatives. Moreover, occasional reports are prepared if the authorities require this.

2.6 Computer systems

The current computer system generates reports about debt service, stocks and flows of external debt. The problem is that this system is very old and almost obsolete. Therefore, the Central Bank of Chile, after a previous evaluation during 2001, plans to buy the Debt Management and Financial System (DMFAS) developed by UNCTAD. This system is used in more than 60 countries and it will be put in operation in Chile during the first half of 2003.

3. Presentation of external debt

3.1 Maturity

The external debt statistics distinguish between short-term external debt and medium- and long-term external debt, using the original maturity and the remaining maturity. In the annual report, Chile publishes the total external debt by remaining maturity and medium- and long-term debt by original maturity.

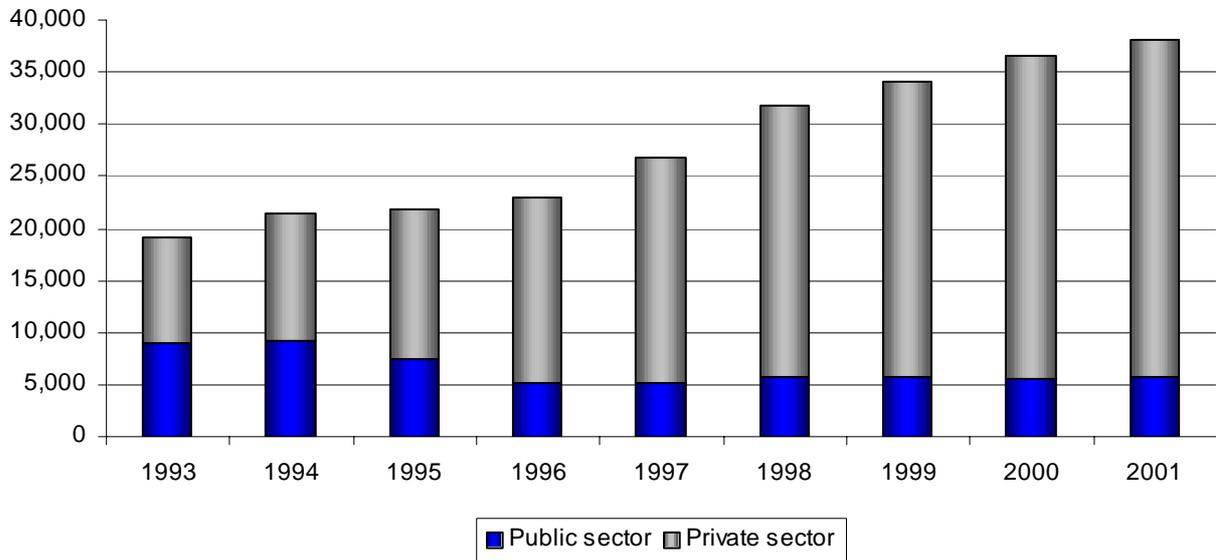
3.2 Classification

The external debt is broken down by debtor sector (public sector including financial institutions, non-financial and publicly guaranteed private sector debt), creditor sector (multilateral organisations, government sector, banks and financial institutions, suppliers and other creditors and bonds), country, economic activity, currency and type of interest rate. All of these breakdowns are available in the annual publication and in a confidential report.

3.3 External debt balance

Chile's total external debt at 31 December 2001 amounted to USD 38,032 million, up USD 1,555 million over its level at the end of 2000, adjusted by statistical corrections and parity changes. The weight of private sector debt has grown continuously throughout the last year. In 2001, the private sector accounted for 84.9% of total external debt, and the public sector for 15.1%. As can be seen from the following graph, the private sector's share has risen steadily from 53% in 1993 to 84.9% in 2001.

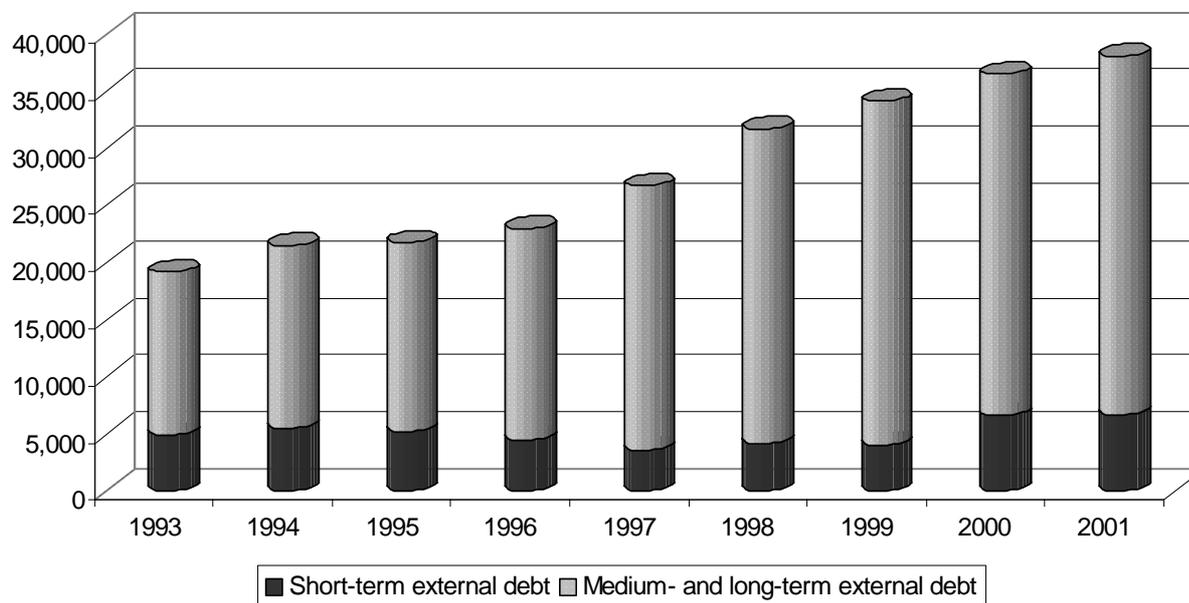
Graph 1
Evolution of external debt
(millions of US dollars)



3.4 External debt by residual maturity

Short-term external debt by residual maturity at 31 December 2001 amounted to USD 6,705 million, accounting for 17.6% of total external debt. Until 1996, short-term loans by original maturity were significantly higher than short-term liabilities derived from amortisations on longer-term debt falling due within the next year. However, due to the sharp rise in medium- and long-term external borrowing, the situation has since been reversed.

Graph 2
External debt by remaining maturity
(millions of US dollars)



3.5 Medium- and long-term external debt by original maturity

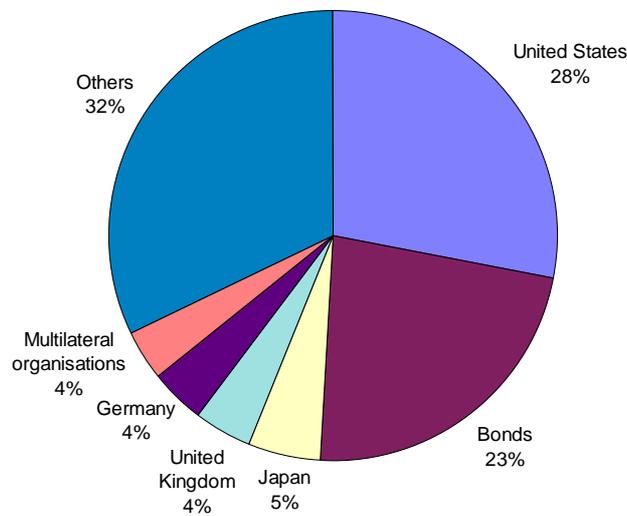
Medium- and long-term external debt by original maturity totalled USD 35,981 million at the end of 2001. Commercial banks were the most important source of external financing, at 45% of the total. The share of total medium- and long-term debt owed to multilateral organisations fell from 28% in 1993 to 4% in 2001. Financing through bond issues of Chilean companies abroad continues to rise noticeably as well, up from 2% of medium- and long-term debt in 1993 to 24% in 2001.

Table 1
Composition of medium- and long-term external debt by type of creditor¹
(percentages)

Year	Multilateral organisations	Government organisations	Banks and financial institutions	Other creditors and suppliers	Bonds
1993	27.9	8.7	44.8	16.5	2.1
1994	24.4	8.0	48.5	17.3	1.8
1995	16.5	7.1	53.3	19.7	3.4
1996	12.1	6.1	51.2	20.8	9.8
1997	7.4	5.1	51.7	21.0	14.8
1998	5.9	5.2	51.6	21.9	15.4
1999	5.0	5.4	49.1	20.9	19.6
2000	4.5	4.7	46.6	23.2	21.0
2001	4.0	4.7	45.0	22.3	24.0

¹ Original maturity.

Graph 3
Total external debt by country¹
(percentages)



¹ Original maturity.

3.6 Other classifications

During 2001, the most important creditor country was the United States with 28% of total external debt followed by bond issues abroad with 23%.

The debt structure by economic sector changed significantly between 1993 and 2001. In 1993, the economic sectors with the highest level of indebtedness were financial institutions (29%), public administration (27%) and mining (20%), whereas by 2001 mining took the lead (28%), followed by financial institutions (17.8%) and the electricity sector (16.9%), adding up to 62.7% of total external liabilities.

The mining sector's share has dropped from 32% in 1998 to 28% in 2001. This fall is explained by the completion of big investment projects mainly related to copper extraction.

Table 2
Medium- and long-term external debt by economic sector¹
 (percentages)

Economic sector	1993	1994	1995	1996	1997	1998	1999	2000
Farming, livestock, fishing and forestry	1.3	1.5	1.9	2.1	2.0	2.0	1.6	2.2
Mining	19.7	22.3	27.9	31.8	30.8	32.1	29.9	28.8
Manufacturing	9.9	10.0	10.7	11.2	12.5	11.7	9.8	10.9
Electricity, gas and water	6.2	6.4	7.2	10.8	14.1	15.0	15.7	14.3
Construction	0.5	0.6	0.7	1.3	1.4	1.4	1.4	1.6
Commerce	1.9	2.0	2.2	3.2	3.6	3.8	3.5	3.3
Transport, storage and communications	4.2	5.5	5.6	7.6	8.8	10.1	10.0	9.0
Financial institutions and services ²	29.4	27.4	26.0	18.8	17.8	16.4	19.7	22.2
Personal, social and community services	0.2	0.2	0.2	0.2	0.1	0.3	0.6	0.6
Public administration	26.7	24.1	17.6	13.0	8.9	7.2	7.8	7.1

¹ Original maturity. ² Including CORFO (Corporación de Formento de la Producción). As regards the distribution of external borrowing by currency, at the end of 2001, 96% was denominated in US dollars and the remaining 4% was mainly in euros and yen. By type of interest rate, 59% was at floating rates and 41% at fixed rates.

3.7 Improving external debt statistics

To provide more complete external debt statistics, Chile is currently working on the compilation of data such as short-term trade credits and loans used to finance investments abroad, which, although falling into the category of external debt, are not included in Chile's debt statistics because the necessary information is not yet available. To solve this problem, surveys and other data collection methods are being introduced.

Regarding the new guide on external debt statistics which is currently being prepared by international organisations, the Central Bank of Chile is working to adapt the statistics according to the new requirements. Although the majority of the information is available, the structure of presenting the external debt data must be changed. For the gross external debt position, the statistics for "other sectors" as defined in the new guide must be improved. (For example, information about money market instruments, trade credits, notes, currencies and deposits must be collected.) In relation with various memorandum items, the Central Bank of Chile is working on collecting data on financial derivatives and studying how to collect data on equity liabilities and repurchase transactions.

3.8 Improving balance of payments statistics

To improve balance of payments statistics, Chile is using the data published by the BIS in its locational banking statistics as an estimate for foreign deposits by the non-bank sector in Chile. During the first half of this year Chile published the balance of payments statistics and its international investment position in accordance with the 5th edition of the IMF *Balance of payments manual*.

3.9 Liberalisation of the financial account

In recent years, Chile has gradually liberalised its financial account transactions. For this reason, many controls have been eliminated and new forms to collect the statistical information have been designed. A new Compendium of Foreign Exchange Regulation was published in March of this year. The principal objective of this compendium is to eliminate the controls for foreign exchange operations. Moreover, institutions only have to inform about their operations. This new regulation tries to rationalise the collection of information, based on international standards, and to improve the data quality control.

3.10 Reporting country for the BIS international banking statistics

In September 1999, Chile received an invitation to join the international banking statistics of the BIS. Since then, the Central Bank has been working on that project and meanwhile the structure to collect the data is ready, including the methodology and report forms. The Central Bank of Chile has been working together with the Superintendency of Banks and Financial Institutions (SBIF), which is the regulatory agency for bank supervision in Chile, in order to coordinate the compilation of external assets and liabilities. Chile hopes to join the statistics during the last quarter of this year.

In addition, since 1998, the Central Bank of Chile has been participating in the central bank survey of foreign exchange and derivatives market activity coordinated by the BIS.

4. Statistical System of International Transactions (SSIT)

The SSIT system forms the basis for the new Compendium of Foreign Exchange Regulation published in March of this year. It is a project that implements a new data compilation system encompassing external assets and liabilities.

The data compilation system uses the structure of foreign exchange regulations for statistical purposes. It is based on a broad definition of "foreign currency transactions" compatible with the new liberalised exchange market rather than being limited to sales and purchases of foreign exchange against the domestic currency.

With this system, Chile will be able to improve the scope of its data collection through the incorporation of the "non-formal exchange market". In addition, Chile will enhance the quality of the data collection as it will be based on the concept of foreign currency transactions and it will improve the coverage of the data collection due to a larger number of reporting entities and reported operations.

4.1 Convergence of BIS and Central Bank of Chile external debt statistics

Chile is one of the countries whose external debt statistics do not match with the international banking statistics published by the BIS. To reconcile the data between the BIS and Central Bank of Chile, Chile began a research project to explore the reasons for the discrepancies. The conclusion of this investigation is that the BIS statistics use a wider concept of external debt than the Central Bank of Chile. The main issue is the fact that the BIS short-term banking data in the joint statistics on external debt include items such as local claims of foreign banks in foreign currencies vis-à-vis residents in Chile, which are generally not considered to belong to the core definition of external debt.

Other differences between the BIS and Central Bank of Chile data can be explained as follows:

First, the BIS includes in its figures external loans used to finance foreign trade through the issuance of trade bills which are subsequently discounted by a bank, mainly on a forfait basis. Conversely, the external debt of Chile includes only the commercial credit of medium- and long-term maturity, which is classified as debt owed to suppliers. According to our estimation at end-December 2000, USD 2,000 million could be claims held by BIS reporting institutions with a remaining maturity of up to one year.

Second, the data on bond holdings of BIS reporting banks are another potential source of discrepancy. Although bond liabilities to non-residents are in principle included by the Central Bank of Chile in its external debt statistics, the creditors are not always known. At end-December 2000, Chile's total bond liabilities were USD 4,603 million and it is estimated that around 20% (USD 920 million)

represent claims that are indistinguishably included in consolidated banking data reported to the BIS and not included in the external debt data of the Central Bank of Chile. Of this total, USD 276 million were thought to be of a short-term maturity.

Third, loans contracted by Chilean companies and used to finance investment abroad, are not recorded by the Central Bank, but are included in the BIS statistics. At end-December 2000, these loans amounted to USD 40 million of a short-term remaining maturity.

Finally, the main difference is that the BIS considers local claims in non-local currency on residents of offices of foreign banks in Chile as external liabilities of Chile, whereas in measuring external debt, liabilities of residents to other residents are excluded. This position amounted to USD 2,962 million (excluding US banks).

Table 3

	Dec 1999	Dec 2000
	(USD millions) up to and including one year ¹	
BIS	6,818	9,694
Central Bank of Chile ²	2,582	5,132
Discrepancy, of which:	-4,236	-4,562
Discounting of trade bills (forfeiting)	1,900	2,000
Bonds	259	276
Loans to Chilean companies used in investments abroad	62	40
Local claims in foreign currency	2,584	2,962
Residual amount	569	716

¹ Operations with residual maturity up to and including one year. Residual maturity is defined as amortisation falling due during the following 12-month period. ² The data include loans from financial institutions and special financial government institutions ie KfW and EDC.

4.2 Conclusion

Chile has to improve the coverage and sources of external debt data; in particular, it has to collect data on short-term trade credits, loans used to finance investment abroad and it has to adapt the statistics to the new guide for the compilation of external debt statistics which is currently being prepared by international organisations. However, it is also important that debtor countries are informed about the methodology which is being used when data on their external debt are being published by international organisations based on data sources other than from the debtor countries themselves. In this context, from 1993 to 1999 the World Bank used for Chile's series of short-term external debt the figures published by the BIS and for the medium- and long-term external debt used the series published by the Central Bank of Chile. This was inconsistent and led to double-counting of debt liabilities. The Central Bank of Chile appreciates that in the last publication of its *Global Development Finance* (2002), the World Bank modified the figures of external debt for Chile using the short-term external debt by original maturity published by the Central Bank of Chile.

External debt statistics of China

Guo Song,⁴² State Administration of Foreign Exchange

Since 1979, China has followed a policy of opening to the outside world, and domestic institutions have begun to make borrowings from abroad to make up for the shortage of domestic funds. From 1985, China has started to establish its External Debt Statistical System (EDSS). With assistance from international financial organisations such as the World Bank, China's EDSS came into being in 1987 after three years of hard work and three general investigations of external debt information. China's EDSS can be described by the following three features: government regulations on external debt statistics; external debt registration; processing and analyses of external debt data.

1. Government regulations on external debt statistics

With the approval of the State Council, SAFE promulgated the *Provisional Regulations on External Debt Statistics* (the Regulations) on 27 August 1987. The Regulations have defined the government department which shall be responsible for the external debt statistics, the concept and scope of China's external debt, reporting methods and related penalties for violations of the Regulation. In accordance with the principles established in the Regulation, SAFE stipulated the *Detailed Rules for External Debt Registration* (the Rules) in November 1989, which was revised in 1997. The main contents of the Rules are as followed:

- *Definition of external debt:* China's external debt refers to all contractual liabilities denominated in foreign currencies, assumed by China's government agencies, organisations, enterprises, financial institutions, etc which are obliged to be repaid. Borrowings made from foreign-funded banks registered in China are regarded as external debt; borrowings made by foreign-funded banks are not considered as external debt.
- *External debt registration:* The government practices a registration system for external debt. All domestic entities must register external debt in accordance with the regulation.
- *Debtor reporting system:* It is the domestic borrower's obligation to report to or register with SAFE after the loan contract has been signed.
- *External debt registration methods* are categorised into (A) periodic registration and (B) case by case registration. Periodic registration is only applied to government agencies and domestic banks, which must report to SAFE on the signing of loan agreements and debt service occurring the previous month within five days of the current month. The case by case registration is for other domestic borrowers, who must, within 15 days after the signing of the contract, register with SAFE, and provide feedback after the borrowers make withdrawals and repayments.
- *The State Administration of Foreign Exchange* is authorised to be in charge of the external debt registration.
- *Registration* is on the basis of domiciliation. Borrowers must comply with the external debt registration procedures at local SAFE offices where the borrower has its legal address.
- *External debt registration* is a precondition for debt repayment. Penalties will be imposed on borrowers who delay registering or fail to register external debt, or deliberately provide false information on changes in debt. In this case, borrowers are not allowed to service the debt until SAFE has imposed a penalty.

⁴² The views expressed are those of the author.

In other words, the Chinese government pays much attention to EDSS: the law and act promulgated by the state council provide a sound guarantee to the system.

2. External debt registration

Procedures of external debt registration can be outlined as follows:

- *Registration for the signing of the loan agreement*, including: (1) information on borrower and lender; (2) main clauses contained in the contract, such as amount, maturity and interest rate; (3) use of borrowed funds; (4) planned withdrawals and debt servicing.
- *Registration for changes of the debt*: borrowers who register periodically must report to SAFE the balance of the outstanding debts, withdrawals and repayment of the previous month within five days of the current month. Borrowers who register on a case by case basis must report to SAFE within five days whenever there is a change in the status of the external liability.
- *Registration control*: the repayment of debt principal and interest is required to be verified by SAFE to ensure the accuracy and timeliness of debt information. For the periodic registration, SAFE periodically examines the borrowers' behaviour in borrowing, investing and repayment. As for the case by case registration, the borrower must apply to SAFE for approval of the repayment of debt upon the presentation of the debt registration certificate, contract and lender's notice for debt service. SAFE will not allow the repayment of debt that has not been registered. With the approval of the borrower's repayment, SAFE can check the authenticity of the debtor's report.

3. Processing of external debt data

As mentioned above, China's EDSS is able to collect all raw data relating to external debt at stages of signing of contract, withdrawals and repayment, which are then processed for later analysis and for making a forecast. Therefore, the capacity for processing the debt data has a direct bearing on the quality of China's EDSS. China has been using computers to help accomplish the job since the establishment of EDSS.

The first version of the External Debt Statistics and Monitoring System was introduced in 1987. Since then, SAFE developed the second and third version in 1992 and 1995. Debt information collected by SAFE's branches or offices is reported once a month to the head office by means of diskettes and network connection, which is then aggregated in EDSS. The third version can be operated on a Windows platform via personal computers, with debt data from SAFE branches being transmitted to the head office either through the network or on diskettes. Borrowers incurring a large amount of work in debt registration can also report debt data in electronic form. The new version of EDSS has significantly improved the efficiency in external debt data collection.

The establishment and smooth operation of EDSS has provided China with comprehensive and accurate information relating to China's external debt. Detailed debt statistics produced by EDSS have given a firm ground to government decision-making in controlling the national external debt volume and absorbing foreign funds. The World Bank and IMF have spoken highly of China's EDSS.

4. Adjustment of definitions and concepts of external debt of China

As mentioned above, the definitions and concepts of external debt in China are different from international standards. In 2001, China adjusted the definitions and concepts of external debt as foreign-funded banks in China are now considered as residents of China. Therefore, their borrowings from overseas are external debt of China. In addition, all trade credits are regarded as external debt

and the remaining maturity is used to classify short-term debt. After the adjustment of definitions, the concepts are consistent with the new international guide on external debt.

Table 1

Year/ quarter	Series	Type	Borrower	Joint external debt statistics	China's own data (SAFE)
				in millions of US dollars	
2001 Q2	A Bank loans	Stocks	China	50,760.00	48,420.00
2001 Q2	B Debt securities issued abroad	Stocks	China	14,656.00	13,513.78
2001 Q2	D Non-bank trade credits	Stocks	China	11,006.64	23,200.00
2001 Q2	E Multilateral claims	Stocks	China	25,218.00	26,902.44
2001 Q2	G Liabilities to banks - due within a year	Stocks	China	20,805.00	
2001 Q2	H Debt securities issued abroad - due within a year	Stocks	China	3,004.00	
2001 Q2	I Non-bank trade credits - due within a year	Stocks	China	3,900.79	
2001 Q2	J Total liabilities to banks (locational)	Stocks	China	57,670.00	50,176.00
2001 Q2	K Total liabilities to banks (consolidated)	Stocks	China	53,778.00	34,056.00
2001 Q2	L Total trade credits	Stocks	China	27,183.12	23,900.00
2001 Q2	M Total claims on banks	Stocks	China	104,499.00	
2001 Q2	N International reserve assets (excluding gold)	Stocks	China	183,861.00	

5. Comparison of external debt data with the joint BIS-IMF-OECD-World Bank statistics on external debt

When national data on China's external debt are compared with other data sources, it is necessary to be familiar with the different definition and coverage of external debt data of different organisations. Without adjustments to the definitions, it is difficult to compare China's national data with those of the BIS. However, after such adjustments, the above table demonstrates that some of the national data of China's external debt are very similar to those of the joint external debt statistics.

6. Difficulties of external debt statistics, in particular regarding trade credits

- There are three types of trade credits: letters of credit, deferred payments and prepayments (being in receipt of money before the export of goods or services). Data on letters of credit can be collected from banks. The data on the other two types of trade credits are not yet available, similar to the situation in many other countries.
- The missing data are estimated on the basis of IMF experience and some additional surveys.

7. Planned improvements

- It is planned to introduce new computer software to enhance the efficiency of the data collection. A network connection will be implemented with all SAFE branches. Thus, it will be possible to transmit all debt data to the SAFE head office within one day. This system will become available this year. If the system works smoothly, it will be linked to all banks in China.
- It is planned to conduct a survey to collect the data on trade credits. However, China is a big country. Total trade of China in the year 2001 was higher than USD 500 billion. Imports reached about USD 240 billion. So, it is a tough challenge and more information and assistance are needed from other countries in order to collect comprehensive and reliable data on trade credits.

External debt statistics of the Czech Republic

Evzen Woller,⁴³ Czech National Bank

1. Institutional aspects

The Czech National Bank (CNB) is the compiling agency for the balance of payments, international investment position and external debt statistics in the Czech Republic. This authorisation ensures data compilation, data presentation and publication are performed in a permanently consistent manner.

External cooperation with entities incurring external liabilities is being developed:

- commercial banks including branches and subsidiaries are providers of monthly balance sheet data on deposits and loans received from abroad;
- corporate sector units provide data on financial loans and trade-related credits from abroad;
- the Ministry of Finance supplies data on external loans received by the general government sector (the CNB also provides its own records due to its function as agent for government debt servicing);
- securities clearing centres and securities traders supply the CNB with information on domestic securities holdings in the hands of non-residents.

1.1 Legislative provision

The data collection and compilation are based on the following legal acts:

- Act No 6/1993 Coll. on the Czech National Bank, revised by Act No. 442/2000 Coll. Article 41, which set up the reporting obligation for the banking sector;
- Act No 219/ 1995 Coll. (the Foreign Exchange Act) Article 5, which defines the reporting obligation for the non-banking sector.

1.2 External debt concepts and core accounting principles

External data compilation follows guidelines and concepts of the fifth edition of the IMF *Balance of payments manual* and the "Grey Book" (1988).

1.3 Principle of residence

All economic units including branches and subsidiaries which have their centre of economic interest on the territory of the Czech Republic are treated as residents.

1.4 Maturity

External debt data are reported, compiled and published according to the concept of original maturity (estimates for debt data according to residual maturity are possible).

⁴³ The views expressed are those of the author.

1.5 Valuation

Valuation at market prices for traded instruments is generally used; for non-traded instruments nominal prices (book values, face values) are used as a proxy for market values.

1.6 Time of recording

Entries made in books of debtors determine the creation and extinction of financial liabilities.

1.7 Unit of account and exchange rate conversion

Stocks of financial liabilities in original currency are converted into domestic currency by using the market (spot) rate on the reference date.

1.8 Accruals of interest costs

Accrued interest costs on banking deposits and government loans are reported according to existing accounting principles. In the case of debt securities or corporate credits, accruals are calculated by using simple estimation methods.

2. External debt data composition

External debt data are published:

- with quarterly periodicity within three months after the date of reference;
- by maturity (short-term, long-term);
- by sector of debtor (monetary authorities, commercial banks, general government, other);
- by sector of creditor (multinational official agencies, banks, other);
- by instrument (debt securities, deposits, loans, trade-related credits).

At present, no breakdown by currencies and by countries is available. These more detailed breakdowns can be compiled for some segments of debt data (debt securities) only.

2.1 Analytical presentation

The regular analytical presentation of external debt developments concentrates on the evaluation of trends in quarterly reports on balance of payments and international investment position data. Main indicators of external vulnerability are monitored in accordance with the new draft guide on external debt statistics which has been prepared by international organisations:

- External debt /GDP.
- External debt/exports of goods and services.
- Short-term debt/CNB international reserves.
- Debt service/exports of goods and services.

2.2 Comparison of short-term creditor and debtor statistics

The possibility of a complete and exhaustive comparison of creditor and debtor statistics is limited due to different methodological guidelines of the two sets of statistics and the absence of certain data aggregates which could explain differences and ensure consistency of the two sets of data. In the case of the Czech Republic, the first approach to resolve this issue by the BIS showed higher short-term liabilities according to debtor statistics as compared to creditor data. This can mainly be explained by the existence of a certain amount of short-term deposits from non-banks and

intercompany loans due to strong foreign direct investment inflows into the Czech Republic in recent years. These liabilities are not covered by the BIS statistics. Nevertheless, a comparison of debtor data with corresponding creditor data is valuable for verifying the completeness and quality of debtor countries' own data and helping to understand larger discrepancies. Therefore, the international cooperation on this issue is appreciated.

2.3 Future plans for improving external debt statistics in the Czech National Bank

New statistical requirements of international institutions (such as the new draft guide on external debt statistics) are a challenge for the Czech National Bank. The Czech Republic, as a subscriber to the SDDS, has taken initiatives to meet SDDS reporting obligations of detailed external debt data by end-September 2003.

At present, the CNB is preparing in close cooperation with the country's Securities Settlements Centre a project which is aimed at the creation of a security-by-security database. Compiling the geographical breakdown of the international investment position and the external debt statistics is also a core interest with respect to future EU membership.

Finally, methodological and statistical improvements to the international investment position and external debt statistics have to be consistent with the methodological changes in the balance of payments statistics. These improvements are at present being intensively discussed among users, compilers and reporters at the international level. Additional efforts will be required in order to find a reasonable trade-off between the improvement of data quality and demands for a lower statistical burden for reporting agents and for cost reduction.

External debt statistics of India

Muneesh Kapur,⁴⁴ Reserve Bank of India

1. Introduction

One of the important factors underlying the Asian financial crisis was the build-up of external debt and, in particular, short-term debt. A related issue that emerged from the crisis was the quality of external debt statistics, in regard to both their coverage and their timeliness. Issues relating to an appropriate measure of short-term debt, ie by residual maturity, also came to the forefront of international discussions. These concerns have been reflected in international efforts to improve the conceptual framework of external debt statistics culminating in the form of a new guide on external debt statistics under the aegis of the Inter-Agency Task Force on Financial Statistics. Simultaneously, there have been efforts to improve the dissemination of external debt statistics based on creditor sources which have taken the form of quarterly Joint BIS-IMF-OECD-World Bank Statistics on External Debt arising out of collaboration between the BIS, the IMF, the OECD and the World Bank. Given the criticality of short-term debt, the BIS explored the robustness of the short-term component of external debt available from its creditor reporting system vis-à-vis that of the data emanating from debtor country sources in a draft report *Comparison of creditor and debtor data on short-term external debt* in July 2001.

Against this background, this contribution provides an assessment of the external debt statistics of India. The issues relating to the conceptual framework, the sources of data and dissemination practices of India's external debt statistics, with a focus on short-term debt, are addressed in Section 2. The section also provides a brief discussion of the policy framework in India in regard to incurrence of external liabilities. Section 3 examines the BIS draft report *Comparison of creditor and debtor data on short-term external debt* and explores the relevance of the assumptions underlying the BIS report and the applicability of these assumptions in the Indian context. Concluding observations are in Section 4.

2. Conceptual framework of India's external debt statistics

The conceptual framework of India's external debt statistics is more than a decade old and was established well before the recent Asian financial crisis. The framework of India's external debt statistics owes its origin to the *Report of the Policy Group on External Debt Statistics of India* (RBI (1992)). The Policy Group (PG) was set up in the aftermath of the external payments crisis of 1990 in India. One of the factors underlying the payments crisis was the size of external debt and its short-term component. At the same time, the true magnitude of external debt was also an issue of concern due to the absence of an agreed definition of external debt. The payments crisis raised the need for transparency and consistency in the definition, coverage and classification of India's external debt statistics. The PG, which submitted its Report in 1992, made extensive recommendations relating to the definition of external debt, the coverage and presentation of external debt including its structural aspects and exclusions, and institutional arrangements for collection of data and database management. The PG adopted the core definition of gross external debt provided in 1988 by the International Working Group on External Debt Statistics (IWGEDS). While accepting the definition, the PG recognised that none of the organisations which set up the IWGEDS completely adhered to the core definition in their presentation of external debt.

The PG proposed a classification of external debt which was both analytical and exhaustive. It distinguished between types of debtor/creditor, by maturity, ie long-term and short-term, by type of

⁴⁴ The views expressed are those of the author.

transaction, ie deposit or trade-related and by element of concessionality. The PG recommended that external debt statistics be expressed in original currencies to give an idea of the currency mix of debt. Furthermore, they could also be expressed in local currency (Indian rupees) and in US dollars. The PG also recommended monitoring of the maturity profile of the country's external debt to obtain a realistic picture in the context of the time available for the discharge of debt.

These issues were re-examined by the *Report of the Technical Group on External Debt* (RBI (1998)) in the aftermath of the Asian financial crisis. The Technical Group noted that the IWGEDS was equivocal regarding the recommended concept of maturity, ie original maturity (the period from commitment or disbursement to final repayment of loan) or residual maturity (the time remaining until the final repayment of the loan). Given the conceptual superiority, transparency and usefulness of the residual maturity approach over original maturity in presenting external debt statistics, the Technical Group recommended that India's external debt be compiled and presented on both an original and residual maturity basis for some time before a final shift to residual maturity is made. Residual maturities should be presented over a span of five years ahead of a reference date with the remaining maturities clubbed together.

The issues relating to external debt statistics were also examined by the National Statistical Commission (NSC) (Government of India (2001)), which looked into the entire gamut of the Indian statistical system. The NSC noted that India's external debt statistics could be considered as among the best in comparison with other debtor countries in terms of coverage and transparency. Nonetheless, it found scope for improvement in a few areas. It recommended that the time lag of dissemination needed to be reduced from about five months at present to three months. The NSC also recommended that efforts be made to capture suppliers' credits of up to 180 days and obtain data on residual maturity in respect of non-resident deposits.

In view of the above, it is pertinent to note that the external debt statistics in India have been established on a strong conceptual framework broadly consistent with internationally agreed concepts. Moreover, the importance of data and monitoring in the context of deregulation is widely recognised.

"As the Asian crisis has shown, we simply cannot afford to ignore the need for improvements of reporting systems while deregulating. With the easing of restrictions on both current and capital account transactions, the availability of up-to-date and accurate information has assumed critical importance, both to initiate appropriate policy responses and to meet the information demand from market participants and several international agencies. Our statistics and reporting systems should be constantly upgraded to cope with the developments in markets as well as policies" (Reddy (1998)).

2.1 Debt components: stylised facts on major items

Reflecting the historical external financing pattern, a predominant share of financing was through external assistance until the 1970s (see Kapur (1997) for an overview of India's external sector developments). Accordingly, a large part of India's external debt is on government account and owed to multilateral and bilateral agencies. The period since the early 1980s witnessed an increasing recourse to commercial debt and non-resident deposits. As at end-September 2001, almost one half of India's external debt was owed to multilateral and bilateral agencies while 30% of the debt was on account of commercial borrowings (including Resurgent India Bonds (RIBs) and India Millennium Deposits (IMDs) issued by the State Bank of India and aimed at non-resident Indians). Repatriable non-resident deposits constituted another 16% of total external debt. In terms of maturity classification (original maturity), almost 97% of external debt was of a long-term nature while short-term debt formed only 3% of India's external debt. Total external debt at end-September 2001 was USD 100.4 billion, almost the same level as at end-March 1995. As a proportion of GDP, external debt has recorded a steady decline from a peak of 38.7% at end-March 1992 to 22.3% by end-March 2001 and further to 21.0% by end-September 2001 (Table 1 and Graph 1).

The sharp reduction in the external debt/GDP ratio over the 1990s reflects the policy framework which was predominantly influenced by the recommendations of the *Report of the High Level Committee on Balance of Payments* (Chairman: Dr C Rangarajan) (RBI (1993)) which recommended, inter alia, the need to contain the current account deficit within sustainable limits; attract non-debt creating flows, especially direct investment flows; de-emphasise short-term debt flows; and build adequate reserves. Accordingly, India has followed a cautious approach to capital account convertibility whereby "liberalisation of capital account has to be viewed as a process and not as a single event. It has to be

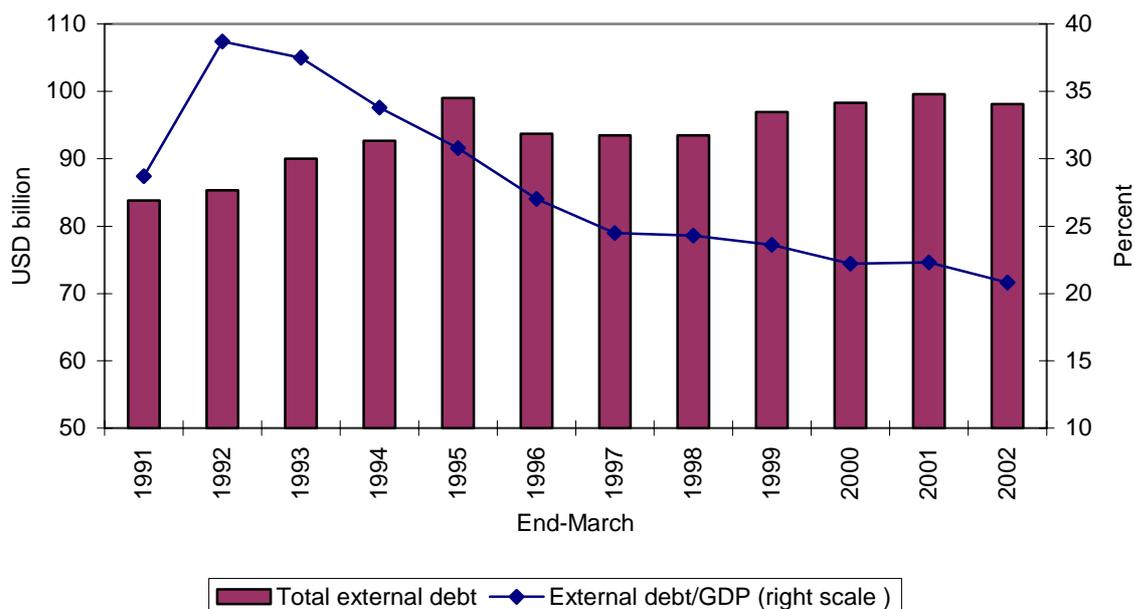
embarked upon cautiously as part of overall economic reforms as well as an assessment of the emerging scenario relating to international economic and financial architecture” (Jalan (1999)).

Table 1
India's external debt
 (USD billion)

Components	End-March					End-September 2001
	1991	1992	1995	2000	2001	
Multilateral	20.9	23.1	28.5	31.4	31.1	31.6
Bilateral	14.2	15.5	20.3	18.2	15.9	16.6
IMF	2.6	3.5	4.3	0.03	0	0
Commercial borrowings	14.5	15.7	19.6	26.7	30.0	29.9
NRI deposits	10.2	10.1	12.4	13.6	15.4	16.3
Rupee debt	12.8	10.4	9.6	4.4	3.7	3.2
Short-term (by original maturity)	8.5	7.1	4.3	3.9	3.5	2.8
Total debt	83.8	85.3	99.0	98.3	99.6	100.4
<i>Memo:</i> Total debt/GDP (%)	28.7	38.7	30.9	22.2	22.3	21.0

Sources: *Handbook of statistics on Indian economy*, 2001, Reserve Bank of India; *Economic survey*, 2001-2002, Government of India.

Graph 1
India's external debt



Borrower-wise classification, an alternative way of looking at external debt, indicates that the government sector and the financial sector are the major borrowers with shares of 45% and 32%, respectively, of outstanding external debt at end-March 2001. Public sector units and the private corporate sector had a share of 8% and 12% in total external debt.

Instrument-wise classification of India's long-term external debt at end-March 2001 reveals that loans are the predominant form of borrowing, constituting almost 64% of country's long-term debt, followed by deposits (15%) and bonds and notes (14%).

2.2 Data sources

As regards data sources, the data on government account are collected by the office of the Controller Aid Accounts and Audit (CAA&A), Ministry of Finance (MoF). These data are maintained on the Commonwealth Secretariat - Debt Recording and Management System (CS-DRMS). Accordingly, timely and comprehensive information on government debt is available. As an important step in data dissemination and transparency, debt service payments on government account (principal repayments and interest payments) over the next 10 years are also published on an annual basis.

With regard to commercial borrowings, the borrowers are required to submit quarterly returns providing, inter alia, details on disbursements, repayments, outstanding and utilisation pattern of commercial borrowings to the Reserve Bank of India. These returns, called "ECB" returns, are the source of compiling data on commercial debt although they suffer from reporting lags. As a part of prudent debt management policy, access to commercial borrowings is allowed under a dual route: an automatic route for borrowings up to USD 50 million and a case by case approval for borrowings above the ceiling by the MoF and/or the Reserve Bank. In all cases, even those relating to automatic approval, the borrowers are required to do the quarterly reporting to the Reserve Bank. These data are also maintained on the CS-DRMS and hence are amenable to providing comprehensive information like future debt service schedules etc.

On non-resident deposits, the deposits are accepted in both domestic currency and foreign currency. As regards repatriability, until recently (end-March 2002), both repatriable and non-repatriable deposits were accepted. However, effective 1 April 2002, with a view to providing full convertibility on non-resident deposit schemes, non-repatriable account schemes were discontinued with no fresh acceptance of deposits. Existing accounts under these non-repatriable schemes, however, can be continued up to the date of maturity. In presentation of India's external debt statistics, such non-repatriable deposits are not included given the non-repatriability of the principal amount. As regards the sources, the data on total non-resident deposits are available from the banking sector through the statutory Section 42(2) returns under the Banking Regulation Act, 1949, received in the Reserve Bank on a fortnightly frequency. The maturity aspects of these deposits are available from specially designed monthly returns called "STAT" returns. An important limitation of the data on non-resident deposits is that the maturity breakdown is available only by original maturity since such deposits are accepted all over the country by bank branches, many of which are not automated to provide such details.

2.3 Short-term debt management and monitoring

The Indian policy in regard to short-term debt recognises the volatility of short-term credits. "In many emerging market countries, with deregulation and liberalisation, adequate attention has not been paid to the maturity profile of the external debt portfolio. In fact, in some cases, even information gathering on this subject was dispensed with as part of deregulation. Determining the maturity was a micro decision left to the final borrowers, whose main consideration was cost reduction. [...] The recent crises showed that this could be risky" (Reddy (1999)). In view of such pitfalls of excessive short-term debt, short-term credits in India are allowed strictly for trade-related purposes. Suppliers' credits of maturity above 180 days and buyers' credits of all maturities require prior approval; moreover, these are permitted within overall ceilings (see Mohanty and Kapur (2000) for a detailed discussion). Given the need to monitor these short-term credits on a regular basis, the borrowers are required to provide monthly returns on such credits. Such trade credits are included as part of India's external debt. Suppliers' credits of up to 180 days, on the other hand, are allowed without prior approval; hence, no information is available on such credits and as such, these are not included in India's external debt. Another component of short-term debt is non-resident deposits with a maturity of up to 12 months. In order to minimise the short-term debt, foreign currency denominated non-resident deposits are permitted only for a minimum maturity of one year. Moreover, such foreign currency deposits are

subject to interest rate ceilings so as to attract only stable deposits; the interest rate ceiling, which was hitherto Libor/swap rates, was revised downwards to Libor/swap rates for the corresponding maturities minus 25 basis points effective 29 April 2002.

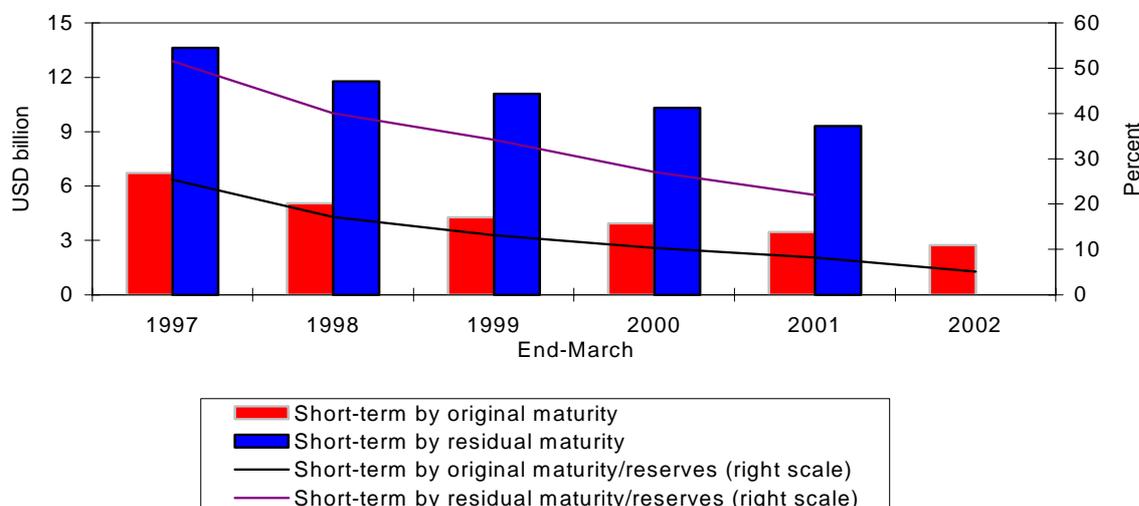
In view of the above-mentioned policy regime, the short-term debt by original maturity was USD 2.8 billion (or only 3% of total external debt) at end-September 2001 as against USD 3.5 billion (3% of total) at end-March 2001 and USD 8.5 billion (or 10% of total) at end-March 1991. The short-term debt, even by residual maturity, was moderate at USD 9.3 billion (around 9% of total debt) at end-March 2001 as against USD 13.6 billion (around 15% of total debt) at end-March 1997. A more relevant indicator of the short-term debt vulnerability is the ratio of short-term debt to foreign exchange reserves. By this criterion, the ratio of short-term debt by residual maturity to foreign exchange reserves was fairly modest at 22.0% at end-March 2001 as against 51.6% at end-March 1997, reflecting a decline in short-term debt as well as an increase in foreign exchange reserves over the period (Table 2 and Graph 2).

Table 2
India's short-term external debt

	End-March 1997	End-March 2000	End-March 2001	End-September 2001
Short-term by original maturity				
Amount (USD billion)	26.7	3.9	3.5	2.8
As a percentage of total debt	7.2	4.0	3.5	2.8
As a percentage of foreign exchange reserves	25.5	10.3	8.2	6.2
Short-term by residual maturity				
Amount (USD billion)	13.7	10.3	9.3	–
As a percentage of total debt	14.6	10.5	9.3	–
As a percentage of foreign exchange reserves	51.6	27.1	22.0	–

Sources: *India's external debt: a status report* (October 2001), Government of India; *Economic survey, 2001-2002*, Government of India.

Graph 2
India's short-term debt



2.4 Data dissemination

At present, India's external debt statistics are disseminated on a quarterly basis with a lag of around five months. The disseminated data provide details, inter alia, on maturity. While data for the quarters ending March and June are disseminated by the Reserve Bank of India, those for September and December are disseminated by the Ministry of Finance. The data are presented both in local currency (Indian rupees) and US dollars. In addition, a comprehensive analysis of India's external debt analysis is provided in an annual publication titled *India's external debt: a status report*. This publication provides, inter alia, information on residual maturity of external debt, a currency breakdown and a 10-year ahead debt service schedule. As a further step towards improving transparency, the external contingent liabilities of the government are disseminated, even though these are not part of external debt.

3. An assessment of the recommendations of the BIS report on comparison of creditor and debtor data

This section examines Part I of this report, ie the part on the comparison of creditor and debtor data on short-term external debt. Part I discusses, inter alia, the feasibility of providing maturity estimates for the locational banking data. It also observes that, once appropriate adjustments are made, creditor and debtor data on short-term bank loans and deposits at end-1999 tended to be quite similar in most cases. The adjustments suggested by the BIS are an important step in improving the comparability of creditor and debtor data. In what follows, the various recommendations of Part I of this report are examined. The comments pertain both to the recommendations of Part I and to references to India:

An implicit assumption underlying the various recommendations of Part I is that liabilities in foreign currencies are a proxy for external debt. In an era of growing capital account liberalisation, an increasing proportion of assets/liabilities of residents with resident banks (including branches of foreign affiliates) may get denominated in foreign currency. Since these would be transactions between two residents but denominated in foreign currency, these will not be a part of external debt. It is not apparent as to how the BIS system would be able to identify such resident transactions in the future.

The above problem arises due to the fact that, at present, the BIS obtains the maturity breakdown of external debt from its "consolidated banking statistics" (CBS). A feature of the CBS is that they are not based on the residency criterion underlying the balance of payments/external debt compilation. On the other hand, the BIS "locational banking statistics" (LBS), which are based on the residency criterion and consistent with the conceptual framework of external debt, do not provide a maturity breakdown into short-term and long-term debt. Accordingly, the introduction of a maturity breakdown in the BIS locational statistics may be a better proposition than a number of adjustments to the CBS data.

The BIS international banking statistics include local lending in non-local currency by the reporting banks. That is, the data include loans in foreign currency extended to residents by branches of foreign banks. For instance, in the Indian context, the BIS data would include loans extended to Indian companies by branches of foreign banks out of their Foreign Currency Non-Residents Banks (FCNR(B)) deposits. While such a treatment to the creditor-based system may be appropriate, the possibility of misinterpretation arises when analysts try to combine the BIS creditor and the country's debtor reporting system. For instance, in the external debt data released by the Reserve Bank of India (RBI)/Ministry of Finance (MoF), repatriable NRI deposits are explicitly included in India's external debt. Under these circumstances, any attempts to combine the BIS data on "liabilities to banks" with the RBI data on NRI deposits would lead to an element of double-counting. This point is further elaborated below.

Part I of this report recommends that net local assets in domestic currency of reporting banks' foreign affiliates could be added to the total CBS amounts outstanding. These data are recommended for inclusion on the assumption that they represent international funding of domestic local currency lending. However, this presumption may not be correct if the residents of debtor countries have substantial foreign currency denominated deposits with domestic banks and the banks' onlend these deposits in domestic currency through appropriate pricing of the exchange risk. Such loans in domestic currency would lead to net local assets even though these might have been funded by residents' foreign currency denominated deposits. Under these conditions, the BIS assumption that

these represent international funding may not be appropriate and could provide an upward bias to short-term debt.

Since the maturity breakdown is not available for net local claims in domestic currency, Part I of this report suggests that the foreign funding could be assumed to be mostly short-term. Again, this presumption may not be universal. The maturity pattern of net local claims could be more than one-year if the corresponding local foreign currency deposits are predominantly of a longer maturity and the banks also lend for a longer maturity. For instance, in the Indian context, as noted in Section 2, the minimum maturity of foreign currency denominated deposits is one year (that is, no short-term deposits) while the maximum maturity is three years. If the branches of foreign banks operating in India swap their foreign currencies and lend them in rupees, the maturity profile of their lending is likely to follow the maturity profile of their deposits. And, since there are no short-term deposits, the BIS adjustment may impart an upward bias to short-term debt. A similar argument would apply to the assets of affiliates of foreign banks funded from the corpus of their other non-resident deposits where the deposits are normally of more than one-year maturity and above.

Most of the adjustments appear to be rather ad hoc. While the adjustments may be useful, the potential gains in accuracy, as Part I of this report itself admits, become progressively smaller and even ambiguous.

3.1 Implications of the BIS adjustment on India's short-term debt

According to the BIS consolidated banking statistics (CBS), India's short-term debt (by residual maturity) amounted to USD 8.6 billion at end-December 1999. However, following the recommended adjustments in the BIS report, the BIS now estimates the short-term debt would increase from USD 8.6 billion to USD 9.8 billion (Annex Table 4a of Part I of this report) as indicated below (Table 3).

Table 3
BIS report: adjustments to India's data
(USD billions)

CBS claims	8.6
Minus claims on foreign banks	0.4
Minus local funding of local foreign currency claims	–
Plus foreign funding of local domestic currency claims	1.6
Total adjusted short-term [1 – 2 – 3 + 4]	9.8

The critical item in the above adjustment is the addition of USD 1.6 billion on account of foreign funding of local domestic currency claims. The robustness of this assumption is not apparent in view of the following:

As noted above, this adjustment is made by the BIS on the assumption that net local assets of foreign banks in the country must have been funded from outside the country. In the Indian context, these net local assets are most likely to have been funded out of the corpus of the NRI deposits of these banks. On the other hand, the repatriable part of these NRI deposits is explicitly included in the debtor reporting system of India's published statistics on external debt. In theory, the two data sources should not be superimposed on each other. In practice, analysts often use banking data from the BIS statistics and take other components from the debtor reporting system. This would result in double-counting, of almost USD 1.6 billion. The BIS could highlight these issues of double-counting.

A second, more serious, weakness is that Part I of this report assumes all these claims of USD 1.6 billion to be short-term. As far as India is concerned, NRI deposits, as noted earlier, are subject to prudential minimum maturity restrictions and most of the deposits have a maturity of one year and above. Since the banks' assets are funded out of these deposits, the assets are most likely to be of longer maturity. Thus, at least in the Indian context, the BIS presumption of all international funding being of a short-term nature may not be appropriate.

4. Concluding observations

India's external debt statistics adhere broadly to internationally accepted definitions of external debt. A large part of India's external debt, more than three quarters in value terms, is maintained on CS-DRMS software which enables debt monitoring and management on an ongoing basis. Efforts are under way to computerise the remaining components of external debt in a phased manner. External debt data are available, by both original maturity and residual maturity; a noteworthy feature of transparency in data dissemination is publication of the debt serving schedule for the next 10 years. The data are comprehensive and provide currency-wise as well as instrument-wise cum borrower-wise details. The data are also marked by periodic (quarterly) dissemination. A few areas for improvement in data compilation and dissemination can be identified. These are: reducing the time lag of dissemination from about five months at present to three months; the need to capture suppliers' credits of up to 180 days; and the need to obtain data on residual maturity in respect of non-resident deposits.

As regards the BIS creditor reporting system, it is an important source of timely data. Part I of this report is a welcome effort to understand the differences between the creditor and debtor sources of data on short-term debt. However, in view of the strong assumptions underlying the report, country-specific adaptations of the BIS statistics may be necessary.

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External debt statistics of Latvia

Dace Piraga,⁴⁵ Bank of Latvia

External debt statistics in Latvia are collected and compiled in accordance with the new *External debt statistics: guide for compilers and users*. The core concepts for external debt are drawn from the 1993 SNA and the fifth edition of the IMF *Balance of payments manual*.

Latvia has subscribed to the SDDS, and the Bank of Latvia will provide gross external debt data starting with the second quarter of 2003.

1. Gross external debt

The data are compiled with the following breakdowns:

- by sector from the debtor's side: general government, monetary authorities, banks, other sectors;
- by instrument: direct investment excluding equity capital, debt securities, trade credits, loans, currency and deposits and other liabilities;
- by maturity: long-term and short-term by original maturity.

The main data sources are as follows:

- for the general government: the Treasury's reports on external debt stocks and payments;
- for monetary authorities: the Bank of Latvia's monthly balance sheet;
- for banks: monthly financial position reports in line with ECB requirements and quarterly reports on external liabilities and payments;
- for other sectors: survey of enterprises on foreign direct investment and statistics on non-bank external payments.

2. Data not included in creditor statistics

The following types of data are not included in creditor statistics:

- trade credits that are not officially guaranteed;
- banks' liabilities arising from deposits received from non-OECD country non-banks;
- components of direct investment, such as intercompany loans.

3. Further steps for improvement of external debt statistics

The following improvements to Latvia's external debt statistics are envisioned in the future:

- more accurate information on debt flows, in particular on payment schedules;

⁴⁵ The views expressed are those of the author.

- data breakdown by type of creditor;
- data comparison with creditor data;
- in a longer run: maturity profile of debt according to the residual maturity.

External debt statistics of Mexico

Samuel Alfaro,⁴⁶ Bank of Mexico

1. Introduction

Mexico has one of the largest foreign debt stocks in the world, amounting to more than USD 144 billion as of the end of 2001. During 1982 and 1995 Mexico experienced serious balance of payments crises, which were triggered by the concentration of maturing short-term liabilities in foreign currency, having global consequences. The first event initiated a debt problem involving the default of many countries on their external debt and the credit crunch in developing countries by most commercial banks. The debt problem began to be solved in 1990, when Mexico renegotiated its liabilities with foreign commercial banks. The 1995 crisis was characterised as the first balance of payments crisis originated by a capital flow reversal that caused a speculative attack against a predetermined exchange rate regime. Two years later some Southeast Asian countries faced similar balance of payments difficulties.

The purpose of this paper is to discuss the procedures to compute Mexico's external debt statistics and to show the main trends of such statistics that can be observed from the most recent data. We attempt to draw attention to the main problems that have been faced when assembling the external debt statistics. Next we focus on describing the methodology applied to obtain the total external debt stock. Then we explain the experience for determining short-term external debt measured by remaining maturity. The Bank of Mexico conducted a survey with a large sample of foreign financial institutions regarding their outstanding consolidated claims on Mexico that should produce results comparable with those obtained from the creditor statistics compiled by the BIS. This comparison is evaluated in the last section of the paper.

2. Methodology of Mexico's external debt stock

The external debt stock of Mexico comprises the aggregate amount of payment obligations with non-Mexican residents denominated in foreign currency of the following domestic residents:

Public sector entities (Federal Government, state-owned companies and development banks), commercial banks and non-banking private sector (firms and private individuals).

Data on foreign debt are mainly collected from information provided by the borrowers. The exception is the stock of private sector external liabilities, which is obtained from a survey directly conducted by Bank of Mexico with foreign creditors.

The responsibility for collecting and processing the information required to compute Mexico's external debt stock is distributed between the Ministry of Finance and Bank of Mexico as follows:

- public sector: Ministry of Finance;
- commercial banks: Bank of Mexico;
- non-banking private sector: jointly by both.

Table 1 shows the recent evolution of Mexico's external debt stock disaggregated by debtor and by type of instrument. From this data, it is evident that the total amount has been following a decreasing trend because both the public sector and commercial banks have been pursuing a policy directed towards a smaller amount of their respective foreign liabilities. In the case of the public sector, decreasing external indebtedness follows from the intention of the Federal Government to refinance

⁴⁶ The views that are expressed are those of the author.

the emergency credits obtained during 1995 with domestic debt, so that the composition of the public sector total debt stock returned to the situation prevailing before the 1994 crisis. With respect to the reduction of commercial banks' foreign liabilities, this can be mainly explained by the intention to substitute the use of traditional interbank credit, following a strategy that is explained in further detail below.

Table 1
External debt of Mexico
(stocks in millions of US dollars, at the end of the year)

	1999	2000	2001
Total	160,050	149,755	144,275
<i>By debtor:</i>			
Public sector	92,290	84,600	80,325
Non-banking private sector	49,171	53,952	54,959
Commercial banks	14,121	11,203	8,991
Bank of Mexico	4,468	0	0
<i>By instrument:</i>			
Loans and deposits	65,273	57,461	54,749
Debt securities	54,901	58,917	64,634
Brady bonds	23,468	16,065	7,340
Trade credits	16,409	17,312	17,552

In terms of the instruments used the information presented in Table 1 shows that there has been a substitution of loans and deposits by debt securities. This is mainly explained by the possibility that debt securities provide to raise relatively large amounts of funds to finance the operation of an economic agent and by spreading the credit risk among different creditors. On the other hand, in the last three years, there has been a large amortisation in advance of Brady bonds because the Federal Government has decided to take advantage of the fact that their secondary market prices have not fully incorporated the value of the collateral associated with them. This amortisation in advance also explains the reduction of the public sector external debt.

The stock of foreign public sector debt is obtained on a monthly basis as part of the process to compute the public sector deficit. By law, the Ministry of Finance has to present to Congress detailed data that are published each quarter in a report.

Commercial banks' external liabilities are assembled from the analytical information that each bank provides on a monthly basis to the Bank of Mexico. This information is used to produce the banking statistics that the central bank publishes normally on a monthly basis in the form of monetary aggregates, credit and finance indicators, etc.

Non-banking private sector debt represents the most difficult component to collect for the financial authorities. This is because, since exchange rate controls were abolished in 1991, there is no obligation for private firms and individuals to report information on their foreign liabilities. Given that the information on bonds and commercial paper placements is relatively easy to obtain, the main problem is related with the characteristics of the credits received from foreign banks, in terms of amounts, terms to maturity and interest rates, among other variables. In order to solve this information problem the Mexican financial authorities have relied on two surveys:

- The Bank of Mexico requests from those foreign financial institutions that have been authorised to do business in Mexico to specify the amount of outstanding claims with each of the domestic sectors that are needed for the external debt statistics.
- The Ministry of Finance gathers information from the most important private firms regarding the credits received from foreign banks. This information is complemented with detailed data obtained from companies registered with the Mexican Stock Exchange.

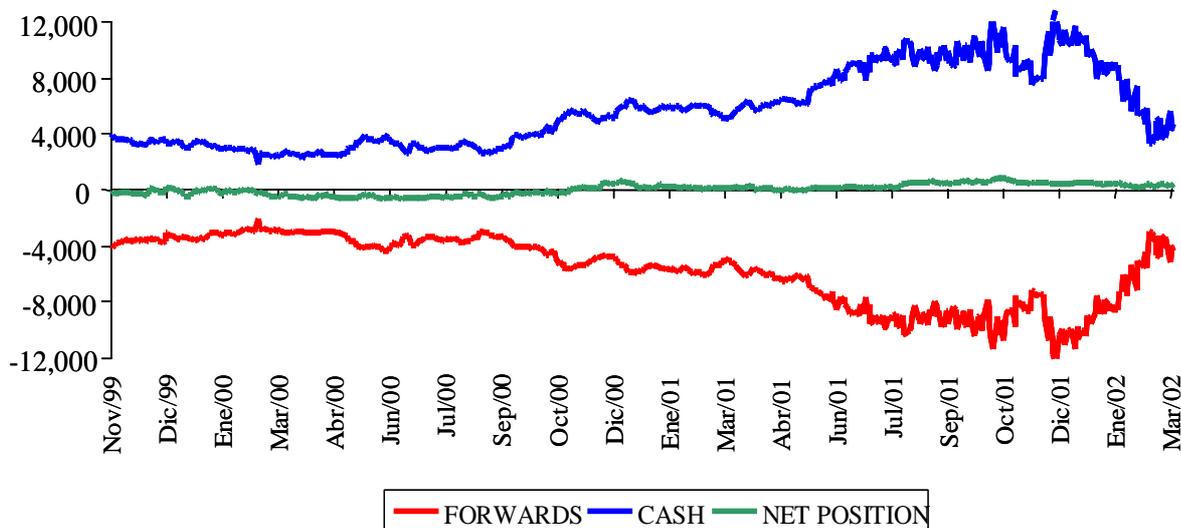
Due to the banking secrecy that forbids foreign creditors to specify the identity of their clients, the data from the Bank of Mexico's survey cannot be compared with the detailed information available to the Ministry of Finance on the credits received from foreign commercial banks by a specific non-banking private agent. To cope with this shortcoming, the financial authorities have established a procedure to verify on a quarterly basis that both statistics follow similar trends. It is important to remark that the stock of non-banking private sector foreign liabilities obtained from the Bank of Mexico's survey has shown a higher degree of consistency with creditor data than the one obtained by the Ministry of Finance. Consequently, the Bank of Mexico's information has been the source for the balance of payments statistics.

Another important problem regarding the methodology for measuring the external debt stock of Mexico has surfaced with the use of derivatives as an investment instrument by many foreign participants. The most evident example of this problem refers to the use of forwards by some Mexican commercial banks as an alternative way to document credit operations with foreign financial institutions. The operational mechanics of this operation are the following:

- A Mexican bank records its payment obligation involved in a credit from a foreign financial institution as a forward sale of US dollars against Mexican pesos. In particular, the foreign creditor is also the counterparty of the forward operation.
- The principal amount and the term to maturity of the credit are the same as those of the forward operation (generally short-term operations).
- In order to balance its foreign exchange position (short US dollar forward), the domestic bank conducts an opposite spot operation (buying the US dollars obtained from the credit). This operation also squares the position of its counterparty.

Graph 1 shows the behaviour of the commercial banks' foreign exchange position and its breakdown between the cash and forward components. It is evident that the forward element has a negative sign indicating a short US dollar position, reflecting the use of forwards to document some credit operations received by Mexican commercial banks from foreign financial institutions. In particular, this short position followed an increasing trend up to December 2001 when it was reversed because of the perception of an improvement of the Mexican sovereign risk to investment grade by Standard & Poor's. This last trend also reflects the flexibility of the forwards to serve as an investment instrument that quickly adapts to the changing market perceptions. On the other hand, the other part of the interbank credit documentation through forwards, involving the purchase of dollars in the spot market, is also reflected in Graph 1 through the long position in cash.

Graph 1
Commercial banks' foreign exchange position
(millions of US dollars)



3. Experience in assembling Mexico's short-term external debt data

The importance of gathering reliable information on the amount of short-term external debt became evident with the 1994-95 crisis. In particular, in January 1995 Mexico had almost completely depleted its international reserves and faced the burden of owing an amount of foreign currency liabilities that exceeded the stock of international reserves. However, the only available information on such payment obligations was initially limited to:

- the amortisation schedule of bonds and commercial paper; and
- a measurement of the public sector's foreign liabilities by original maturity.

At the beginning of 1995, it was evident that the most serious problem in terms of external debt was related with rolling over the commercial banks' credit lines with their foreign counterparties. Initially, this problem was not perceived as too relevant because the indicators obtained from the prevailing regulation restricting the banks' exchange rate position pointed towards a balance between assets and liabilities denominated in foreign currency. However, since that regulation left aside the duration gap between assets and liabilities denominated in foreign currency, banks faced a liquidity problem since credit lines were being closed and they did not have enough liquid assets to cover such foreign currency demand. To deal with this problem, the Bank of Mexico implemented an emergency window of foreign currency loans with the deposit insurance trust fund, which in turn directed them to the banks experiencing liquidity problems. This facility reached a maximum level of USD 3.8 billion in March and was closed in August 1995 when all Mexican commercial banks regained normal access to interbank foreign credit.

To overcome the 1995 crisis, Mexico implemented a significant structural reform comprising a freely floating exchange rate, independent monetary policy, strong fiscal discipline, open foreign trade, overall deregulation and enhanced transparency. As part of the process of providing meaningful information to the public on a timely basis, the financial authorities have realised the importance of an adequate measure of short-term external debt. In particular, they have concentrated their efforts in collecting data in order to obtain statistics measured according to their remaining maturity. However, assembling such statistics turned out to be a difficult endeavour since most of the private sector debtors do not have a detailed amortisation schedule and foreign creditors initially were not cooperative enough to make available the requested information.

Nevertheless, the Mexican financial authorities have been able to assemble a time series for the short-term external debt measured according to remaining maturity. The breakdown by debtors and by instruments of this information is the same as for the total stock. The recent behaviour of short-term external debt is presented in Table 2. These figures point towards a decreasing trend of short-term foreign liabilities that is explained by a sharp reduction of the short-term liabilities of commercial banks, a finding that is consistent with the total debt data. The amount of public sector short-term external debt has been almost constant, differing from the total debt stock, which has been decreasing in the last three years. This discrepancy is mainly explained by the early amortisation of Brady bonds, which is not incorporated in the short-term debt data. On the other hand, regarding the instruments in which short-term foreign liabilities are documented, it is also visible that short term loans and deposits have been substituted by debt securities.

In terms of the difficulty to compile short-term external debt statistics, the information of the public sector has been relatively easily accessible. Therefore, data on short-term public sector foreign liabilities have been available since 1997.

Private sector external debt has been difficult to classify according to remaining maturity. This difficulty results from the lack of reliable amortisation schedules for the most important firms that provide data to the Ministry of Finance. The Ministry of Finance has been estimating this item from information on the amortisation schedule of the firms that are registered on the Mexican Stock Exchange. However, the lack of representativeness of this sample and some deficiencies in the questionnaire have been hindering the use of this information. To cope with this problem, the financial authorities and the IMF designed in 1999 a format to obtain information on loans provided to the private sector by those foreign financial institutions that respond to the Bank of Mexico's survey on their outstanding consolidated claims on Mexico (see Table 3). Given that the surveyed financial institutions were not ready to provide promptly the requested information, it has taken time to have a consistent data series, which is only available since December 2001.

Table 2

Short-term external debt of Mexico
(in millions of US dollars, at the end of the year)

	1999	2000	2001
Total	40,757	36,565	35,266
<i>By debtor:</i>			
Public sector	11,432	10,772	11,936
Non-banking private sector	18,126	19,717	18,448
Commercial banks	8,305	6,076	4,882
Bank of Mexico	2,894	0	0
<i>By instrument:</i>			
Loans and deposits	27,191	21,526	17,950
Debt securities	3,023	3,437	6,860
Trade credits	10,543	11,602	10,455

Regarding the commercial banks' short-term external liabilities and given the experience of the 1995 crisis, the Bank of Mexico began in 1996 to collect information on a detailed amortisation schedule of commercial banks' foreign currency denominated assets and liabilities as part of a regulation to limit the duration gap. However, this information has not been useful to measure the amount of short-term external debt because there is no breakdown of the operations conducted by commercial banks with their foreign and domestic clients. Nevertheless, starting in 2000, the Bank of Mexico has asked commercial banks for an amortisation schedule of their foreign currency liabilities with non-Mexican clients that is not so detailed as the duration gap regulation, but rather similar to the format depicted in Table 3, so that it enables their short-term foreign debt to be captured.

Table 3

Outstanding consolidated claims on Mexico
V. Amortisation schedule (USD millions), 31 December 2001

	Total	2002				2003	2004	2005	2006	2007+
		1st quarter	2nd quarter	3rd quarter	4th quarter					
Va. Claims on the private sector	0	0	0	0	0	0	0	0	0	0
42. Loans (43+44)	0	0	0	0	0	0	0	0	0	0
43. Non-trade (43a+43b)	0									
43a. Guaranteed	0									
43b. Non-guaranteed	0									
44. Trade related (44a+44b)	0	0	0	0	0	0	0	0	0	0
44a. Guaranteed by export receivables	0									
44b. Other loans	0									
45. Credit lines guaranteed by ECAs ¹	0									
46. Other items	0									
IX. Total (41+42+45+46)=II	0	0	0	0	0	0	0	0	0	0
48. Contingencies (except financial derivatives)	0									
X. Total (47+48)	0	0	0	0	0	0	0	0	0	0

¹ Export credit agencies.

4. Comparison of Mexico's external debt measured from creditor's data

Given that the Bank of Mexico conducts a survey regarding the outstanding claims of foreign creditors with Mexico, this information should be highly comparable with the BIS statistics. However, this process of comparison has been difficult to conduct because of the different methodologies used by the BIS. Nevertheless, as shown in Table 4, the BIS data on loans and deposits from its locational banking statistics are relatively consistent with the Bank of Mexico statistics. In terms of the information obtained by the BIS from its consolidated banking statistics, the corresponding stock exceeds by a significant amount the stock obtained by the Bank of Mexico. This difference seems to be explained by the impact on the BIS consolidated data of the recent acquisition of some Mexican banks by foreign financial institutions. In Table 4, this explanation is evident when comparing the amount of claims on Mexican commercial banks, which is for the BIS consolidated data five times higher than the corresponding amounts from the statistics of the Bank of Mexico.

Table 4

Outstanding consolidated claims on Mexico: data obtained from foreign creditors

(stocks in millions of US dollars, at the end of September 2001)

	Public sector	Private sector	Commercial banks	Other	Total
Bank of Mexico					
Total	22,790	27,913	8,421	0	59,124
Loans and deposits	10,823	27,118	8,263	0	46,204
BIS					
Consolidated	10,625	18,078	44,916	40	73,659
External positions					61,941
Loans and deposits					44,931

Note: Excludes holdings of Brady bonds and other securities.

External debt statistics of the Philippines

Esperanza Q Adriano,⁴⁷ Central Bank of the Philippines

1. Introduction

As an emerging economy, the Philippines extensively taps external financing for the implementation of its economic development programme. From a macro perspective, the external debt management system encompasses the entire debt cycle, from the project conception and selection stage up to the servicing of the credits which funded the project. An integral component of the system is a monitoring mechanism that allows tracking and analysis of movements in and developments regarding the stock of external debt.

2. BSP mandate

The Central Bank of the Philippines (Bangko Sentral ng Pilipinas - BSP), the country's central monetary authority, is authorised to collect information including data on external debt vital to policymaking and its regulatory functions based on its mandate under various laws and executive orders including the following:

- (a) The Philippine Constitution, which:
 - requires, among other things, prior concurrence of the Monetary Board of the BSP for all foreign loans to be contracted or guaranteed by the Republic of the Philippines;
 - provides that foreign loans may only be incurred in accordance with the law and the regulation of the monetary authority.
- (b) Administrative orders which require all proposals for foreign borrowings of the public sector as well as private sector accounts which are publicly guaranteed to be submitted for prior approval to the Monetary Board of the BSP.
- (c) The Foreign Borrowings Act, which provides, among other things, that the central bank shall promulgate and enforce certain measures to reduce external debt service requirements.
- (d) The New Central Bank Charter, which provides that:
 - the BSP shall maintain international reserves adequate to meet demands for foreign currencies considering the volume and maturity of FX assets and liabilities insofar as known and can be estimated; and
 - the BSP is authorised to collect data necessary for its activities.

3. Coverage

Statistics on Philippine external debt pertain to gross debt, disbursed and outstanding, owed by Philippine residents to non-residents under all maturity categories (short, medium/long-term). Data cover all sectors of the Philippine economy, ie public and private sectors, bank and non-bank institutions, and include obligations to non-residents denominated in local currency.

⁴⁷ The views expressed are those of the author.

4. Data sources

Sources of data fall under three major categories:

(a) *Borrowers*

Borrowers are important data sources as they have first hand knowledge on the loans they have contracted. Familiarity with the reporting system, which was instituted during the era of exchange controls many years back, facilitates compliance by borrowers as this has become part of their internal systems and procedures.

(b) *Major creditors/institutional investors*

Creditors' reports provide validation of information provided by the borrowers and at the same time supplement data obtained from other sources.

(c) *Local banks including branches/subsidiaries of foreign banks operating in the Philippines*

Bank reports provide data on cross-border transactions, particularly those that no longer require prior approval and/or registration. Monetary penalties and other sanctions help ensure compliance with reporting requirements.

5. Data processing and storage

Reported data, particularly on private sector accounts, are treated strictly confidential by the BSP and released only in aggregates. Disclosure of data on individual accounts or transactions requires clearance at the highest level, ie the Monetary Board, and the concerned party's consent to the release of data or waiver of right to confidentiality.

An external debt database is maintained which allows monitoring of accounts through the entire loan cycle from approval through disbursement and repayment. The database is maintained in original currencies but may easily be translated into US dollars or other currencies.

6. Output reports and capabilities

The system can produce consolidated or detailed reports on loan accounts, different profiles of total outstanding debt such as by maturity, borrower's sector, currency and creditor's country (based either on location or head office/citizenship); transaction summaries (which serve as inputs, among others, for balance of payments reporting); and projected debt service burden. The system is also capable of generating data on short-term external debt based on original as well as residual maturity concepts.

The quarterly report on stocks shows the following disaggregation:

- (a) by maturity category;
- (b) by debtor type;
- (c) by creditor type;
- (d) by currency;
- (e) by country.

7. Recent developments

Rules on foreign exchange transactions, particularly for trade and other current account items, were liberalised with improvements in the economy. This policy was adopted in tandem with the decision to lift the mandatory surrender requirement for FX receipts of residents. Prior to this, all FX receipts were

required to be exchanged for local currency with banks, while all FX payments had to be approved in advance by the BSP. Currently, however, residents can freely dispose of their FX receipts, ie the funds can be retained abroad, deposited in foreign currency accounts with local banks or converted to local currency. Correspondingly, FX payments for these accounts can be freely executed without BSP intervention.

This development has diminished the usefulness of banks as a data source for external debt accounts since not all transactions involve the purchase or sale of FX by banks.

With the liberalisation of foreign exchange rules, the BSP has become more active in propagating information on, and compliance with, its reporting requirements. It takes a proactive approach in this regard by directly communicating with borrowers (particularly new ones with substantial funding requirements), providing advice on the Bank's reporting requirements, explaining the need for and uses of data requirements, and exerting moral suasion to obtain the borrower's cooperation. Even with the more relaxed regulatory environment, the BSP continues to wield substantial influence on other key areas affecting the economy and enjoys high credibility, allowing it to successfully solicit the cooperation of data providers. Still, the BSP is interested to explore other data sources for external debt monitoring.

Offshore banking units (OBUs) operating in the country were previously classified as non-residents in the statistics, including external debt. Therefore, borrowings of Philippine residents from these OBUs were treated as external debt. However, reclassification of OBU accounts as resident accounts for statistical purposes has recently been approved in line with international practice. Thus, OBU liabilities to non-residents will now form part of external debt figures as their exposures to Philippine borrowers are now considered domestic credits.

To implement this, a new reporting system has been introduced to capture data requirements for various statistical reports. Since the system is in its initial implementation phase, adjustments to the relevant statistics have yet to be fully effected.

8. Validation of debt statistics

Realising that gaps are possible under the existing environment where trade and other current account transactions have been liberalised, comparison of debt statistics produced from the system is regularly done with other statistical publications such as the *BIS Quarterly Review*. So far, Philippine statistics have been found generally comparable.

External debt statistics of Poland

Pawel Michalik,⁴⁸ National Bank of Poland

The institution responsible for the compilation of external debt statistics in Poland is the National Bank of Poland (NBP), Department of Statistics. External debt data are published with quarterly frequency three months after the reference period.

External debt data are reported by all entities involved in transactions with non-residents. Reported data represent actual stocks of liabilities vis-à-vis non-residents. Instruments included in the external debt definition are the same as in the non-equity part of the international investment position. External debt data cover liabilities in both foreign and domestic currency. For the publication of external debt data the definition of short-term debt based on original maturity is used.

Short-term external debt data cover liabilities of the following sectors:

- National Bank of Poland:
 - loans;
 - deposits.
- Central and local government:
 - loans;
 - money market instruments.
- Commercial banks:
 - loans;
 - money market instruments;
 - deposits.
- Other sectors:
 - loans;
 - trade credits;
 - money market instruments.

For the compilation of short-term external debt statistics, different data sources are used. The NBP provides data about loans and for repo transactions and deposits based on its balance sheet information. For the central government sector, financial agents such as the Bank Handlowy and the NBP supply the data on external loans. The data on money market instruments are supplied by the Central Depository of Treasury Bills, which is located in the NBP. The information on commercial banks' loans, repo transactions and deposits are derived from banks' balance sheet money and banking statistics. Custodians supply the amount of commercial banks' money market instruments held by non-residents. For enterprises and households (other sectors) a number of surveys are conducted by the NBP to obtain the required information. There are separate quarterly surveys for loans and trade credits. Custodians supply the amount of money market instruments issued by enterprises and held by non-residents.

⁴⁸ The views expressed are those of the author.

As far as plans for the future are concerned, the NBP considers resolving the following issues of highest importance:

- implementation of a new integrated data compilation system;
- introduction of a further breakdown by borrowing sector (according to the new external debt guide of the international organisations);
- introduction, as a standard product, of the collection of data on short-term external debt on a remaining maturity basis.

External debt statistics of South Africa

Hannu Grobler,⁴⁹ South African Reserve Bank

1. Overview

The Balance of Payments Division of the South African Reserve Bank compiles South Africa's foreign debt under government notices 702 and 703 of April 1956. The external debt position of South Africa is published every six months in the *Quarterly Bulletin* and annually in the *Annual Economic Report*. A survey on public and publicly guaranteed debt is also prepared on a quarterly basis for the World Bank.

The definition of foreign debt covers all current external liabilities on which an interest and/or principal payment will be made towards a non-resident in the future. The principle of accrual accounting is followed where possible. The external debt is measured at nominal value for loans and at market value for bonds denominated in local currency. For bearer bonds and notes issued on foreign markets the nominal value is used. Debt flows in the financial account of the balance of payments are reconciled with debt stocks by taking into account exchange rate valuation effects. Liabilities in foreign currency are converted into US dollars as the common unit of account.

1.1 The reporting format

- Debt in US dollars:
 - by local debtor sector;
 - by type of debt instrument;
 - by maturity.
- Debt denominated in local currency:
 - by local debtor sector;
 - by type of debt instrument;
 - by maturity.

1.2 Coverage in terms of sectors, instruments and maturities

Sector classification

- Monetary sector:
 - monetary authority;
 - private banking sector.
- Public sector:
 - general government;
 - government agencies.
- Private non-banking sector.

⁴⁹ The views expressed are those of the author.

Type of loan classification

- Renegotiated debt.
- Longer-term loans (ie with a maturity of more than 10 years).
- Other normal long-term loans.
- Short-term trade financing and working capital.
- Bearer bonds and notes.

Debt denominated in local currency

- Bearer bonds and notes issued by the government and other agencies.
- International rand issues.
- Deposits in local currency by non-residents with our banking sector.
- Other loans in local currency.

Since 1995, the maturity structure of South Africa's external debt has been published biannually, with all short-term debt (original maturity of one year and less) also included. The total external debt stocks were published annually from 1986 until 1995. Since then they have been published biannually. These stock data are disseminated according to sectors and type of debt.

To control the accuracy of the external debt statistics, a reconciliation is carried out with the financial flows in the financial account of the balance of payments every six months prior to publication. The debt stocks are reconciled annually with the IIP, prior to publication of the IIP and the external debt position.

2. Organisation of the compilation work and coordination among agencies

External debt information covers:

- sample surveys;
- statutory returns obtained from the banking system;
- news media reports.

The external debt information is captured on the basis of sample surveys. The population of these surveys was mainly determined during the external debt standstill moratorium of 1985. During this period, South African institutions, companies, individuals and banks were required to report these loans to the South African Reserve Bank. These surveys are constantly being updated to ensure a true representation of all individuals and institutions with external debt. Before acquiring a foreign loan, all institutions and individuals have to apply for authorisation with the Bank's Exchange Control Department. These approvals are followed up and institutions are then included in the sample surveys. The details of the loan or debt liability are then furnished on a specific debt reporting return that is used to populate a database on a loan-by-loan basis. Standardised summary reports are prepared from the computerised database. The information is then disseminated on spreadsheets and prepared for publication and further analytical work. There is very close cooperation between the South African Reserve Bank and the government agencies in sharing information on external debt. The information is on time and accurate.

2.1 Plans for improvement

- Revision of overall debt measurement system to comply with the various dissemination standards.
- Improvement of the overall coordination with the quarterly financial flows to enable quarterly reconciliation with the financial accounts in the balance of payments.
- Implementation of a system to enable a quarterly debt survey, with a one quarter lag.

- Improvement of the accuracy of data through better cooperation with respondents regarding the accuracy and timeliness of data submissions.
- The computer-based debt reporting system is being upgraded to address future dissemination needs and to carry out various external debt analyses such as automatically calculated debt ratios and indicators.
- The categories under the private sector could be refined to include smaller sectoral categories, for instance non-bank financial institutions, non-financial corporations and other private households and non-profit institutions serving households.

2.2 Continued shortcomings

- No measurement of interest payments on a loan-by-loan basis; only repayments are measured on this basis.
- No measurement of accrued interest.
- No information on the use of derivatives for external debt purposes.

2.3 Obstacles to progress

- Problems with respondents who are unable or unwilling to furnish information that is of vital importance to the accurate compilation of the balance of payments.
- Time constraints for putting proper systems into place to measure data accurately.
- Training people to really understand how financial markets function and how to put that specific knowledge to work in BOP compilation.

External debt statistics of Thailand

Chalalai Jiwasukapimat,⁵⁰ Bank of Thailand

1. Compilation methodology

1.1 Data definition and coverage

The Bank of Thailand (BOT) is responsible for compiling and disseminating the country's overall external debt statistics.

External debt refers to the remaining outstanding portion of liabilities (excluding equity) which residents of an economy have to non-residents. External debt also covers all contracted obligations, both with and without interest payments, in which debtors agree to repay the principal amount to the non-resident creditors. The scope of external debt covers all types of liabilities, regardless of currency denomination and types of debt instrument. The maturity of external debt is classified by original maturity as follows:

- Long-term external debt refers to external debt with original maturity of more than one year.
- Short-term external debt refers to external debt with original maturity of less than or equal to one year.

1.2 Components of external debt

Classification by type of instrument:

- Loans refer to financial obligations based on contracts between the lender and borrower, including loans from the IMF.
- Debt securities cover those issued either domestically or abroad which are held by non-residents.
- Trade credits cover credits that are directly extended by non-resident suppliers to local importers. Major components are oil credit, supplier's credit and open account.

Classification by sector of debtor:

- Public sector external debt refers to external debt that the public sector borrows from non-resident creditors. This includes central government debt (contracted under the name of the Royal Thai government), state enterprise debt, government-guaranteed private sector debt, and the Bank of Thailand's debt.

Government debt covers that of ministries, departments and bureaus that are formed by and under the management of the central government.

State enterprise debt covers government organisations, business entities whose issued shares of more than 50% are held by the government.

Bank of Thailand debt covers borrowing under the Economic Rehabilitation Program, standby credit provided by the IMF, the Export and Import Bank of Japan, and other countries' central banks.

⁵⁰ The views expressed are those of the author.

- Private sector debt refers to external debt which the private sector borrows from non-resident creditors. This includes external debt borrowed by the banking sector and non-bank corporates.

Bank debt covers that of commercial banks, the International Banking Facilities, the Industrial Finance Corporation of Thailand (only the non-government-guaranteed portion), the Export and Import Bank of Thailand (only the items other than loans and debt securities), as well as finance companies with a foreign exchange licence.

Non-bank debt covers non-bank private corporates not classified under banks, for instance finance companies, private enterprises involved in trade and manufacturing, and individuals.

1.3 Data collection

Public sector external debt:

- The data are collected from loan contracts as well as the reports on disbursements and repayments. The main sources of data are the Ministry of Finance, state enterprises and the Bank of Thailand.

Private sector external debt:

- The data on bank debt are obtained from the daily foreign currency position reported by authorised agents, such as commercial banks, licensed finance companies and International Banking Facilities, on their monthly foreign exchange transaction report. Daily FX positions are to be reported to the Bank of Thailand within three working days. A seven-day lag is allowed for the monthly report.
- The data on non-bank debt prior to the financial crisis in 1997 were obtained from reports on foreign exchange transactions which authorised agents submitted to the Bank of Thailand on a daily basis. However, this international transaction reporting system (ITRS) only covered transactions which involved a foreign exchange conversion. It was incapable of capturing some channels of external borrowing such as loans not brought into the country, the portion of which seems to have become more significant over time. Hence, in 1998, the Bank of Thailand conducted a corporate survey to complement the data on external debt of the non-bank sector. The quarterly survey began in the year 2000 with a reporting lag of about one quarter. As for trade credits, data are derived from the reports on import payments (FT. 2 form) and reports from oil companies.

When the most recent quarterly survey data are not yet available, flow data from foreign exchange transaction reports are used to approximate the monthly movement of external debt outstanding. These figures are replaced by the quarterly survey results upon completion of the survey data processing. Therefore, time series on non-bank debt are only available in the form of quarterly and annual data.

1.4 Data compilation

- External debt data are compiled according to the guidelines of the IMF *Balance of payments manual* (5th edition) and the “Grey Book” *Guide on external debt*. The data are reported in US dollars using the end-of-period New York closing midrate for exchange rate conversion.
- The maturity breakdown of external debt disseminated to the public is broken down into short-term and long-term debt based on original maturity. The breakdown by remaining maturity is only available for internal use.

2. Dissemination of external debt data

The Bank of Thailand disseminates external debt statistics on a quarterly and annual basis. As long as quarterly figures are not yet available, monthly estimates are posted. Monthly data are published with a two-month lag while the quarterly and annual data are lagged by one quarter.

Data are disseminated as an academic service to the general public and may be downloaded from the Bank of Thailand website (www.bot.or.th) free of charge. Users may choose to view the data in html-format or download the whole series as an Excel file for further use. The Bank of Thailand posts a “schedule of release” on its website so as to inform users of the release in advance and allow them to obtain the data as soon as they are made available. Users may also submit questions on the data via e-mail addresses of service managers which appear on the web page. Data in hardcopy are also available to subscribers in the Bank of Thailand’s monthly *Economic and Financial Statistics Bulletin*.

3. Problems and weaknesses

Problems and weaknesses of external debt data collection and compilation exist in the following areas.

- Data on debt securities are recorded according to their face value as reported by the data source, while the new external debt guide suggests that market value be used.
- Adjustments for “bond buyback” operations have added difficulties to the data compilation. Bond buyback is defined as residents’ repurchases (through the secondary market) of bonds originally issued abroad and purchased by non-residents. So far, these transactions have fluctuated very much over time, making it difficult to come up with a good estimate of external debt for a month ahead.
- Baht-denominated external debt of the banking sector is not yet included due to the limitation of the data source.
- Transactions of International Banking Facilities with non-residents are excluded from the banking sector’s external debt. The reason is that these transactions are ultimately viewed as transactions between non-residents, with no direct effect on the real economy in Thailand.
- Non-bank external debt data rely primarily on a corporate debt survey; there are a number of problems associated with conducting this survey. In the first place, the response rate is not as high as expected since the survey is run on a voluntary basis. Normally, only 15-20% of respondents return the survey questionnaire in time. Hence, the Bank of Thailand’s Survey Division expends considerable effort in following up on late respondents so as to raise the number of responses to an acceptable level. The Bank of Thailand also periodically holds workshops with respondents in order to create a better understanding of the concepts of external debt as well as the need to conduct a corporate debt survey. Once the quarterly survey results are made available, there is a problem of reconciling the survey data with the ITRS data, due to the fact that the two data sources are of different periodicity.

4. Improvements to external debt statistics

- The Bank of Thailand plans to follow more closely the recommendations of the new external debt guide by disseminating an instrument breakdown as well as data on short-term debt according to remaining maturities in the future. In addition, the Bank of Thailand will make an effort to improve the valuation of debt securities by seeking a way to obtain information on market values.
- The Bank of Thailand will try to move towards a more survey-based data collection system. As a next step it plans to extend its corporate survey to trade credits instead of relying on transaction data from the ITRS system.
- The Bank of Thailand plans to take into account the transactions of International Banking Facilities with non-residents. It is planned to publish the data as a memorandum item in order to provide users with additional information which might assist them in assessing the Thai economy.

5. Usefulness of BIS and Joint BIS-IMF-OECD-World Bank external debt statistics

The BIS external debt data as well as the Joint BIS-IMF-OECD-World Bank external debt statistics collected on the creditor side are very useful, especially for those countries that do not have sufficient information regarding their private external debt. The statistics from the creditor side not only help close gaps in case of missing information, but they can also be used to validate the data from the debtor side. The Bank of Thailand compares its own figures with those of the joint external debt statistics on a regular basis, especially regarding the items of “debt securities issued abroad” and “total claims on banks”. So far, the figures, especially the latter, have more or less coincided with each other.

However, the BIS data only cover liabilities to those banks which are participating in the BIS international banking statistics while debtor data tend to be more comprehensive in line with the new external debt guide and the IMF *Balance of payments manual*. Differences regarding compilation purposes, concepts and coverage make it difficult to reconcile the creditor and debtor data on external debt. Therefore, users and analysts using BIS creditor data must thoroughly understand the compilation methodology so as to avoid misinterpretation of external debt data for any given country.

6. Comparison of creditor and debtor data on short-term external debt

The Bank of Thailand disseminates external debt time series on a quarterly basis. Data are classified by sector of debtor and by original maturity (short-term and long-term). The external debt statistics cover all types of borrowings incurred with commercial banks, multilateral and bilateral creditors, other financial institutions, affiliated companies, as well as trade credits and issuance of debt securities. BIS data, on the contrary, have much less coverage, with only liabilities to commercial banks in reporting countries (19 countries in 1998, 20 countries in 1999, and 23 countries in 2000) included. Therefore, it is not possible to directly compare BIS and Bank of Thailand external debt data with each other. Bank of Thailand figures need to be adjusted to be in accordance with the BIS concept of maturity and type of creditor.

Thailand’s short-term debt (according to remaining maturity) includes loans and deposits, debt securities and non-bank trade credits. Loans and deposits are further broken down into bank loans, multilateral and bilateral loans and other loans. Among these subcategories, “bank loans” seemed to be the only item that is comparable to the BIS data.

Evidently, the Bank of Thailand’s data are also higher than the BIS adjusted consolidated banking data, but with a declining trend. More specifically, the gap of USD 6.5 billion for 1998 data declined to USD 1.8 and 2.5 billion in the years 1999 and 2000, respectively. These differences may largely be explained by different country coverage. For instance, commercial banks’ external borrowings owed to bank creditors outside the BIS reporting area were as high as USD 4.1 billion in 1998, but declined to USD 2.1 and USD 1.8 billion in 1999 and 2000, respectively. This amount was equivalent to approximately 20% of the entire borrowings.

The new *External debt statistics: guide for compilers and users*

John Motala,⁵¹ International Monetary Fund

1. Introduction

The need for comprehensive, comparable and reliable information on external debt to inform policymakers, financial markets and other users has long been recognised. This was once again reinforced by the international financial crises in the 1990s. Because they carry obligations to make future payments, external debt liabilities have the potential to create circumstances that render an economy vulnerable to solvency and liquidity problems.

To a considerable extent, the traditional focus of external debt statistics has been on borrowing from banks and government sources, often by the public sector. However, the growth during the 1990s of cross-border private sector capital flows, the exposure of the private sector to foreign borrowing, the widespread issuance of debt securities and the use of financial derivatives and similar instruments has necessitated a wider scope of external debt analysis. In other words, in addition to the traditional focus, a need has arisen to monitor the cross-border financial borrowing activities of the non-bank private sector, including external borrowing by all sectors of the economy in the form of debt securities.

The new *External debt statistics: guide for compilers and users* (the Guide) responds to the concerns of markets and policymakers for better external debt statistics to help assess external vulnerabilities at a time when increasing international capital flows are resulting in greater interdependence of markets. Its purpose is to provide comprehensive guidance for the measurement and presentation of external debt statistics. It also provides advice on the compilation of these data and on their analytical use. The intention is to contribute to both an improvement in, and a greater understanding of, external debt statistics.

The production of the Guide has been jointly undertaken by the Bank for International Settlements (BIS), the Commonwealth Secretariat, the European Central Bank (ECB), Eurostat, the International Monetary Fund (IMF), the Paris Club Secretariat, the Organisation for Economic Co-operation and Development (OECD), the United Nations Conference on Trade and Development (UNCTAD) and the World Bank under the auspices of the Inter-Agency Task Force on Finance Statistics (TFFS), which is chaired by the IMF.

The production of the Guide also involved consultation with compilers and users in IMF member countries both through a series of regional seminars conducted in 2000-02 (see Table 1), and through written comments on a draft that was posted on the Fund's website in March 2001. The target audience for the seminars is the managers and senior compilers in the countries subscribing to the IMF's Special Data Dissemination Standard (SDDS), given that the SDDS transition period for the external debt data category ends on 31 March 2003.

2. What is external debt?

The Guide defines gross external debt as, at any given time, the outstanding amount of those actual current, and not contingent, liabilities 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 by residents of an economy.

⁵¹ The views expressed are those of the author. This note is based on a paper presented by Robert Heath, IMF, at UNCTAD's Third Inter-Regional Debt Management Conference.

For a liability to be included in external debt it must exist and be outstanding. Commitments to provide economic value in the future cannot establish debt liabilities until items change ownership, services are rendered or income accrues; for instance, amounts yet to be disbursed under a loan or export credit commitment are not to be included in the gross external debt position.

From the viewpoint of the national accounts, the definition of external debt is such that it includes all financial liabilities recognised by the System of National Accounts 1993 as financial instruments that are owed to non-residents, except for shares and other equity, and financial derivatives.

Table 1
Regional seminars on external debt statistics

Venue	Dates	No of participants
Singapore (IMF-Singapore Regional Training Institute)	21-24 March 2000	29
Austria (Joint Vienna Institute)	28 August - 1 September 2000	27
Mexico (Center for Latin American Monetary Studies)	5-9 March 2001	42
South Africa (South African Reserve Bank)	7-11 May 2001	39
United States (IMF)	24 May 2001	12
Germany (ECB)	31 May - 1 June 2001	31
Bahrain (Bahrain Monetary Agency)	10-14 February 2002	28

3. Core concepts

For the debt liability to qualify as external debt, it must be owed by a resident to a non-resident. Residence is determined by where the debtor and creditor have their centres of economic interest, typically where they are ordinarily located, and not by their nationality. 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.

External debt data are to be compiled on the accrual basis; that is, transactions are recognised when economic value is created, transformed, exchanged transferred or extinguished. The Guide recommends that interest costs accrue continuously on debt instruments, so matching the cost of capital with the provision of capital. Traditionally, debt recording systems have not recorded as external debt interest costs that have accrued and are not yet payable.

The most appropriate exchange rate to be used for conversion of external debt (and assets) denominated in foreign currencies into the unit of account is the market (spot) rate prevailing on the reference date to which the position relates.

The Guide recommends that debt instruments are valued at the reference date at nominal value and, for traded debt instruments, at market value as well. The nominal value of a debt instrument is a measure of value from the viewpoint of the debtor because at any moment in time it is the amount that the debtor owes to the creditor. This value is typically established by reference to the terms of a contract between the debtor and creditor, and is frequently used to construct debt ratios. 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.

4. Presentation of external debt statistics

In the Guide, institutional units, and the instruments in which they transact, are grouped into categories so as to enhance the analytical usefulness of the data. Institutional units are grouped into institutional sectors, and financial instruments are classified by their nature into instrument categories. The institutional sector breakdown groups institutional units with common economic objectives and functions: general government, monetary authorities, banks and "other sectors". These are consistent with the sectors in the fifth edition of the IMF's *Balance of payments manual* (BPM5). In the Guide, "other sectors" is further disaggregated into non-bank financial corporations, non-financial corporations, households and non-profit institutions serving households.

For countries in which there is a particular interest in public sector debt, the Guide additionally provides a presentation of external debt on a public and publicly guaranteed external debt basis (public sector-based approach). Such a presentation also includes non-guaranteed private sector external debt. As the concepts for its measurement remain consistent throughout the Guide, the gross external debt position for the whole economy - depending on whether traded debt instruments are valued at nominal or market value - should be the same regardless of whether data are presented by institutional sector or on a public and publicly guaranteed basis.

Intercompany lending between entities in a direct investment relationship is separately presented because the nature of the relationship between debtor and creditor is different to that for other debt, and this affects economic behaviour.

Regarding maturity, the Guide employs the traditional distinction between long- and short-term maturity, based on the formal criterion of original maturity. Long-term is defined as debt with an original maturity of more than one year or with no stated maturity. Short-term, which includes currency, is debt repayable on demand or with an original maturity of one year or less. The Guide also recommends disclosure of a debt service schedule which provides proxies for data on a remaining maturity basis.

Regarding instruments, the Guide defines debt securities, loans, currency and deposits, trade credit and other debt liabilities. Arrears are separately identified because such information is of particular analytical interest to those involved in external debt analysis, as the existence of arrears indicates the extent to which an economy has been unable to meet its external obligations.

To enhance analytical usefulness, various memoranda data series might be presented along with the presentation of the gross external debt position, including on financial derivatives and debt securities issued by residents that involve reverse security transactions between residents and non-residents. These are all instruments not captured in the gross external debt position, but which potentially could render an economy vulnerable to solvency and, particularly, liquidity risks.

5. External debt and data dissemination standards

With respect to the external debt data category, the IMF's Special Data Dissemination Standard (SDDS) prescribes the dissemination of quarterly data with a one quarter lag, covering four sectors (general government, the monetary authorities, the banking sector, other sectors). Furthermore, the data are to be disaggregated by maturity - short- and long-term - and provided on an original maturity basis and by instrument, as set out in the BPM5. The transition period for countries to meet this prescription ends on 31 March 2003. This means that end-June 2003 data need to be disseminated by end-September 2003.

The SDDS encourages countries to disseminate supplementary information on future debt service payments, in which the principal and interest components are separately identified, twice yearly for the first four quarters and the following two semesters ahead, with a lag of one quarter. The data should also be broken down by sector - general government, monetary authorities, the banking sector and other sectors. The dissemination of a domestic/foreign currency breakdown of external debt with quarterly periodicity and timeliness is also encouraged.

With regard to the General Data Dissemination System (GDDS), the core data category for external debt includes public and publicly guaranteed debt, and the associated debt service schedule. Recommended good practice would be that the stock data, broken down by maturity, be disseminated with quarterly periodicity and timeliness of one or two quarters after the reference date. In addition, the associated debt service schedules should be disseminated twice yearly, within three to six months after the reference period, and with data for four quarters and two half-years ahead. Data on non-guaranteed private debt and debt service schedules, with annual periodicity, are encouraged data categories to be disseminated within six to nine months after the reference period.

6. Other measures of external debt

Data compiled and presented using the concepts described above provide comprehensive coverage and an informed picture of the gross external debt position for the whole economy and/or the public sector. However, such data do not provide a complete picture of emerging vulnerabilities to solvency and liquidity risk; for instance, the currency and interest rate composition of external debt liabilities, and the pattern of future payments, might all be potential sources of vulnerability. To assist in compiling additional data series of analytical use in understanding the gross external debt position, the Guide provides further guidance.

The important need for data on debt maturity profiles and currency breakdowns has been highlighted in international forums and, together with improving coverage of private sector debt liabilities, helped motivate the preparation of the Guide. Thus, the Guide provides conceptual guidance, and presentation tables, for data series such as the debt service schedule, the currency composition of debt and other series known from experience to be of analytical use, such as on a remaining maturity basis. The Guide also explains the concept of net external debt - that is, a comparison of the stock of external debt with holdings of external financial assets of similar instrument type - and incorporates financial derivative positions into external debt analysis. Presentational tables are provided that are flexible frameworks to be used by countries in the long-term development of their external debt statistics.

7. Other material in the Guide

An overview is provided of methods of compiling external debt, along with specific advice on compiling government and public sector external debt data; bank and "other sector" external debt data; and data on traded securities. Case studies of country experience in respect to the compilation of external debt statistics are also included.

The analytical use of external debt data is explained, helping both compilers to place their work in context and users to interpret the range of information that can be available.

International agencies undertake considerable work in this field. The external debt data available from the BIS, IMF, OECD and World Bank are described and compared, and the debt monitoring systems of the Commonwealth Secretariat and UNCTAD explained. Technical assistance activities in external debt statistics, and related macroeconomic statistics, of the international agencies involved in the production of the Guide are laid out.

There are five appendices. The first provides detailed definitions and classifications of specific financial instruments and transactions. The second discusses reverse security transactions and how they should be recorded in the gross external debt position. The third provides a glossary of external debt terms, while the fourth describes the relationship between the national accounts and the international investment position. The fifth appendix explains the Heavily Indebted Poor Countries Initiative.

8. Conclusion

The Guide is intended to be of value to compilers and users of external debt statistics by providing clear and consistent guidance on the measurement and presentation, as well as the use, of external debt statistics. The Fund will continue to undertake seminars and other activities to support external debt statistics compilation work.