

occasional paper
on
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Singapore's External Debt

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SINGAPORE'S EXTERNAL DEBT

INTRODUCTION

1 A key factor that causes the severity of the Asian currency crisis is the external debt of those countries affected by the crisis. Prior to the crisis, the failure of market participants to closely monitor the external debt of these countries greatly reduced their ability to make realistic assessment of these countries' economic fundamentals. They were further hindered by the lack of timely, reliable and comprehensive data on these countries' external debt, especially private external debt.

2 The crisis highlighted the importance of statistics on external debt. The Singapore Department of Statistics (DOS) has accordingly invested considerable efforts to improve the compilation of statistics on Singapore's external debt. This paper discusses the issues and methodology of compiling Singapore's external debt statistics, and presents the best available estimates of Singapore's gross external debt position.

DEFINITION OF EXTERNAL DEBT

3 The DOS defines Singapore's external debt as overseas loans drawn by our corporate, government and household sectors, but excludes the banking sector. Debt securities and trade credits are also excluded.

4 This definition of external debt takes into consideration Singapore's underlying economic realities, and best reflects our debt exposure to non-residents.

Loans

5 Loans are financial assets created through the lending of funds by a creditor (lender) to a debtor (borrower) and are not represented by negotiable securities, e.g. bonds and treasury bills. They include bank overdraft, financial leases, mortgages, trust receipts (i.e. financing granted by banks to importers), trade bills discounted (acquired) by banks. The latter two are commonly known as trade-related credits.

Banking Sector

6 Singapore is a major international financial centre, which is host to a large number of global banks. Their Singapore branches operate as intermediaries for their head offices to channel loan funds to the region. These funds are in the form of interbank loans.

7 For example, total overseas interbank loans of our domestic banking units (DBUs) were \$95 billion as at end-97, while that for Asian currency units (ACUs) were US\$333 billion. The inclusion of banks' overseas loans in the computation of Singapore's external debt will therefore exaggerate the extent of Singapore's financial liabilities to non-residents, and misrepresent the underlying economic reality.

Debt Securities

8 Debt securities give the holder a fixed or variable money income over a period of time. Unlike loans, debt securities are negotiable. Common examples of debt securities are bonds, debentures and treasury bills.

9 Similar to equity securities, debt securities are viewed as a form of investment. The investors can trade the securities in the market and have to bear the gain or loss from trading these securities.

Trade Credits

10 Trade credits are direct extension of credit by suppliers and buyers for goods and services transactions and advance payments for work that is in progress. They should be distinguished from trade-related credits described in para 5.

11 As Singapore is a major international trading centre, we will have a large amount of trade credit liabilities at any point of time as a result of traders' routine credit cycles. Therefore the inclusion of trade credits into our external debt position will exaggerate the extent of our debt obligations.

12 Both debt securities and trade credits are discussed as secondary forms of external debt in this paper.

PUBLIC EXTERNAL DEBT

13 Loans drawn by the government are public external debt. Otherwise they are private external debt.

14 In the early years, Singapore had a significant amount of public external debt. They were mainly used to finance infrastructure development. Since then, the need for external financing by our government has diminished as we continue to enjoy budget surpluses. Singapore's public external debt was \$937 million in 1980 (Table 1). It declined steadily to \$68 million in 1990, and \$5 million in 1994. Singapore has no public external debt since 1995.

TABLE 1 PUBLIC EXTERNAL DEBT

million	End-80	End-90	End-93	End-94	End-95
Public Sector External Debt	937	68	12	5	0

Source : Accountant-General's Department and Monetary Authority of Singapore

PRIVATE EXTERNAL DEBT

15 With little or no public external debt, Singapore's total external debt can be attributed almost entirely to private external debt. While data on public external debt are easily available from administrative records, the compilation of private external debt is more challenging and requires considerably more resources.

16 Data on private external debt can be obtained from either creditor-based or debtor-based sources, or a combination of the two. For creditor-based sources, data have to be obtained from foreign creditors. This requires a substantial amount of international co-ordination and co-operation, which can only be carried out by major international agencies. In debtor-based sources, data are typically collected from surveys of enterprises. The collection process is resource-intensive for both respondents and compilers. In general, creditor-based data sources are more reliable as they involve a smaller number of data providers.

17 In the past, DOS relied on the *Study on Financial Structure of Companies* (FSC) to collect data on private external debt. The FSC is an annual exercise that collects statutory accounts from Singapore companies. Data on overseas loans of companies are extracted from the statutory accounts. However, this approach has a serious limitation in that most companies do not identify their overseas loans in the statutory accounts.

18 To improve our estimates of Singapore's external debt, DOS has identified and developed other alternative sources of data. They include both external and internal sources.

External Sources

19 Four major international agencies compile data on external debt: (a) the World Bank; (b) the IMF; (c) the OECD; and the Bank for International Settlements (BIS).

World Bank

20 The World Bank, as a major creditor, maintains a record of the external debt of its member countries. The data are reported by member countries to the World Bank's Debtor Reporting System and supplemented by the World Bank's own internal database. The debtor reporting system covers long-term debt only. Estimates of short-term debt are made by the staff of World Bank based on the best available information.

21 The main limitations of the World Bank data are its time lag of one year and under-coverage of short-term debt. As Singapore is not a major debtor country, the World Bank does not maintain any information on Singapore's external debt.

IMF

22 The IMF has no systematic procedure for collecting data on external debt. It depends largely on the balance of payments/international investment position to arrive at estimates of external debt. However, as most countries, including Singapore, do not yet compile international investment positions, the IMF does not have complete information on countries' external debt positions.

OECD

23 The OECD collects data through its creditor reporting system and Development Assistance Committee (DAC) systems. They are supplemented by data from BIS, IMF and the World Bank. The OECD's creditor reporting system and the World Bank's debtor reporting system are largely complementary. For example, their coverage is identical for debt owed by public sector borrowers and private sector borrowers with public sector guarantees to OECD member countries.

24 Based on OECD's estimates, Singapore's external debt was US\$10.1 billion in 1996 (Table 2). Bank claims, which include loans, debt securities and trade-related credits, were US\$7.5 billion. Non-bank trade credits were US\$2.5 billion. OECD's estimates of trade credits are derived from data reported by export credit guarantee agencies and official export-financing institutions in OECD member countries. The data cover only guaranteed trade credits. Other claims include official and multilateral aids. They are negligible in our case.

TABLE 2 OECD'S ESTIMATES OF SINGAPORE'S EXTERNAL DEBT

	US\$ million	
	1995	1996
Total	8,395	10,103
Bank Claims	4,883	7,503
Non-Bank Trade Credits	3,405	2,491
Other Claims	106	108

Source : OECD, *External Debt Statistics*, 1997.

25 OECD's estimates overstate our external debt by trade credits and debt securities. The coverage of some components is limited to OECD member countries. Therefore it does not correctly reflect our external debt position.

BIS

26 The BIS compiles quarterly statistics on international banking activities from 24 economies (18 industrialized countries and 6 offshore banking centers including Singapore). The data are collected and reported by the central banks of these economies. The BIS data show the aggregate international asset and liability positions of banks in BIS reporting economies against individual countries. On the asset side, the total amount of loans granted by banks in BIS reporting economies to individual countries is available. The definition of loans here is consistent with para 3.

27 The BIS data therefore cover overseas loans of our corporate and household sectors from banks in the 24 reporting economies¹. The data exclude trade credits, debt securities as well as interbank loans. The BIS data are very timely with time lag of only about 5 months. It is the best available external source of data for assessing the extent of Singapore's external debt. Table 3 shows that as at end-97, Singapore external bank loans from the BIS reporting economies amounted to \$11.2 billion (or US\$6.8 billion).

TABLE 3 BIS DATA ON SINGAPORE, 1993-97

	End-93	End-94	End-95	End-96	End-97
Loans of Singapore (US\$ million)	3,544	3,546	4,893	5,279	6,822
Loans of Singapore (S\$ million)	5,662	5,195	6,921	7,393	11,242

Source : Bank for International Settlements

¹ Since we have little or no public external debt, we assume that the BIS data do not contain any loans to our government.

28 However, the coverage of BIS data is limited to loans extended by banks in the 24 reporting economies. It does not cover loans provided by the non-bank sector, as well as loans extended by other economies. The BIS does not also release geographical and sectoral breakdown of these loans. To compile more complete estimates of our external debt, it is necessary to supplement the BIS data with another data source.

Internal Source

- Survey of Debt Transactions (SDT)

29 DOS launched the *Survey of Debt Transactions* (SDT) in 1997. The survey approaches Singapore companies for data on their overseas loans, as well as debt securities and trade credits. Geographical and sectoral distribution of these debts are collected.

30 The SDT extends the coverage of the BIS data by:

- (a) including loans from banks in non-BIS reporting economies; and
- (b) including loans from all foreign non-bank entities.

31 SDT's definition of loans does not include bills acquired by foreign banks as it is not possible for the debtors, which are usually local importers, to identify them. It also excludes the household sector, as it is not possible for us to identify households with overseas debts.

32 The first survey covers 3,064 companies with foreign direct investment and assets greater than \$5 million. These companies were selected as they have greater likelihood of having external debt. Data from the SDT, which will be an annual survey, are available with a time lag of about a year. The coverage of the SDT will be progressively extended when more indicators are available to identify companies with external debts.

33 As at end-96, total loans from banks in non-BIS reporting economies was \$597 million, while loans from all foreign non-bank entities amounted to \$2.9 billion (Table 4).

TABLE 4 ADDITIONAL FOREIGN LOANS OF
SINGAPORE COMPANIES, 1995-96

	\$ million	
	End-95	End-96
Loans from banks in non-BIS reporting countries	434	597
Loans from all foreign non-bank entities	2,446	2,937

Source : Survey of Debt Transaction

SINGAPORE'S TOTAL EXTERNAL DEBT

34 Table 5 presents estimates of our gross external debt position in recent years. The estimates are derived from combining public external debt in Table 1, BIS data in Table 3 and SDT data in Table 4. The BIS data are the primary source of data for compiling our external debt, as it is a creditor-based data and hence, is more timely and reliable. However, its incomplete coverage needs to be supplemented by data from the SDT. For those years in which SDT data are not available, we have assumed that growth rates were the same as the 1995-96 growth rate.

TABLE 5 SINGAPORE'S TOTAL EXTERNAL DEBT

	End-93	End-94	End-95	End-96	End-97
Total External Debt (S\$ million)	7,693	7,586	9,801	10,927	15,631
Per Cent Change	-	-1.4	29.2	11.5	43.1
Total External Debt (US\$ million)	4,784	5,178	6,929	7,802	9,485
Per Cent Change	-	8.2	33.8	12.6	21.6
Debt/GNP (Per Cent)	8.2	6.9	8.0	8.2	10.6
Debt/(Domestic) Exports (Per Cent)	10.2	8.6	10.0	10.5	14.5

Source: Compiled with data from Bank for International Settlements and Department of Statistics' Survey of Debt Transaction

35 These estimates suggest a fairly rapid increase in our external debt since 1995, with the largest increase in 1997. The substantial increase in our external debt from \$10.9 billion in 1996 to \$15.6 billion in 1997 could be attributed partly to the depreciation of the Singapore dollar against major world currencies in the latter half of the year. The increase in US\$ terms is more moderate. More than two-thirds of these debts could be attributed to bank loans from the BIS reporting economies.

DEBT SUSTAINABILITY

36 Two measures of external debt sustainability are generally used by analysts: the ratio of external debt to gross national product (GNP), and the ratio of external debt to exports. The first ratio measures the ability of an economy to repay her external debt from the income earned by its residents. The second ratio measures the availability of foreign currency to service external debts, as exports are the main source of foreign exchange earnings.

37 Despite the significant increase in our external debt since end-95, our external debt remains very modest on the basis of these two measures. Our debt/GNP ratio was between 6.9 to 11 per cent from 1993 to 1997, while our debt/exports ratio was between 8.6 to 15 per cent during the same period (Table 5). These ratios were substantially lower than those of other countries in the region (Table 6).

TABLE 6 EXTERNAL DEBT SUSTAINABILITY RATIOS
OF SELECTED COUNTRIES

	End-93	End-94	End-95	per cent End-96
External Debt/GNP				
Indonesia	58.9	57.4	56.9	59.9
Malaysia	38.7	36.9	42.6	42.1
Philippines	64.1	59.3	51.5	47.3
Thailand	37.1	43.1	34.9	50.3
External Debt/Exports				
Indonesia	211.9	195.8	202.9	222.2
Malaysia	43.5	37.7	40.8	42.4
Philippines	187.0	160.6	121.8	97.6
Thailand	93.0	103.1	76.6	120.5

Source : World Bank, *World Debt Tables*

38 Among these, Indonesia's ratios were the highest, although they have remained relatively stable in recent years. Thailand experienced the strongest growth in foreign debt, with its debt/GNP ratio rising sharply from 37 per cent in 1993 to 50 per cent in 1996. On the other hand, the ratios for Philippines have declined substantially. Reflecting its heavy dependence on domestic financing, Malaysia's external debt ratios were the lowest of the four countries. External debt sustainability ratios for these four countries correlate highly with the degree of severity experienced by them in the current financial crisis.

SECTORAL AND GEOGRAPHICAL DISTRIBUTION OF EXTERNAL DEBT

39 The SDT data provide additional analytical information not available from the BIS data. The sectoral distribution of Singapore companies that has overseas loans shows that most of them are from the commerce and financial sectors (Table 7), which generally have greater needs for short-term financing.

TABLE 7 SECTORAL BREAKDOWN OF
FOREIGN LOANS, 1995-96

	per cent	
	End-95	End-96
Manufacturing	7.8	12.8
Commerce	43.7	31.4
Transport	20.4	14.9
Financial ¹	24.2	37.6
Real Estate and Business Services	3.9	3.3

¹ exclude banks

Source : Survey of Debt Transactions

40 Our top creditor countries in 1996 were the United Kingdom and Japan. The only developing countries among our top creditors were Indonesia and Malaysia (Table 8). A substantial proportion of these loans was provided to companies with direct investment interest from the creditor country. For example, as at end-96, 71 per cent of the loans from Japan were granted to companies with Japanese direct investment. For Indonesia, the share was even higher at 90 per cent. Thus, a significant amount of our private external debt is related to foreign direct investment.

TABLE 8 TOP CREDITORS, 1995-96

	Amount of loans (\$ million)		Share of loans to companies with direct investment from creditor country (per cent)	
	End-95	End-96	End-95	End-96
United Kingdom	1,021	1,374	51.3	36.8
Japan	1,569	1,305	74.5	70.8
Belgium	419	524	0.0	0.0
Sweden	489	402	77.9	83.8
Australia	398	392	7.0	4.1
Hong Kong	289	271	68.5	59.0
Indonesia	151	230	79.5	90.0
Malaysia	115	117	15.7	15.4
France	82	89	11.0	6.7
Germany	46	85	93.5	62.4
Total	5,044	6,231	51.8	37.7

Source : Survey of Debt Transaction

SECONDARY FORMS OF EXTERNAL DEBT

41 The SDT also collects information on secondary forms of debt such as debt securities and trade credits (Table 9). Debt securities issued to foreigners were relatively small, amounting to only \$385 million as at end-96. This reflects the fact that financing through debt securities is not popular among Singapore companies.

42 Trade credits owed by Singapore companies to foreigners amounted to \$26 billion, which were less than the \$29 billion worth of trade credits extended by Singapore companies to foreign companies. Trade credits extended by foreign holding companies to their Singapore subsidiaries were \$7.9 billion larger than those extended by Singapore companies to their foreign holding companies. Trade credits are therefore an important form of financing provided by foreign companies to their Singapore subsidiaries.

TABLE 9 SECONDARY FORMS OF
EXTERNAL DEBT, 1995-96

	\$ million	
	End-95	End-96
Debt securities	351	385
Trade Credits due to Overseas Creditors	26,997	26,390
Foreign Holding Companies	13,602	15,054
Other Companies	13,395	11,336
Trade Credits due from Overseas Debtors	27,385	29,373
Foreign Holding Companies	6,372	7,137
Other Companies	21,013	22,236

Source : Survey of Debt Transaction

CONCLUSION

43 Singapore's external debt is defined as overseas loans drawn by our corporate, government and household sectors, but excludes the banking sector. Debt securities and trade credits are not included. This definition of external debt best reflects our debt exposure to non-residents.

44 Singapore has no public external debt. The most reliable external source of private external debt is the BIS. Estimate of private external debt from the BIS data is supplemented with data from DOS' *Survey of Debt Transactions* (SDT), which not only extends the coverage of the BIS data but collects additional information on secondary forms of debts, including trade credits. Singapore is a net creditor in trade credits. The coverage of the SDT will be extended in future surveys.

45 Private external debt has increased recently. But the level of our external debt has remained modest. Our debt/GNP and debt/exports ratios from end-93 to end-96 were substantially lower than those of other countries in the region. Our low level of external debt is a reflection of our healthy current account surpluses, while the current account deficits of other regional countries in recent years have led to their accumulation of external debt. Our relatively low external debt, which is entirely due to private external debt, explains our relative stability in the current financial crisis.

46 The Asian financial crisis has drawn attention to the importance of external debt statistics. However, the compilation of external debt statistics, especially private external debt, poses tremendous challenges to compilers of official statistics. Creditor-based data are more reliable and timely, but require international co-operation and co-ordination which can only be carried out by major international agencies. The BIS will be working with the IMF to extend the scope and coverage of its international banking data. DOS will continue to collect debtor-based data through the SDT to supplement creditor-based data compiled by international agencies.

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