

Chapter I

Macroeconomic Overview and Debt Problems

In the first half of this chapter, we have attempted to provide a macroeconomic overview with examples, to make it easy to understand for persons who are not specialists in economics. Readers may notice that it is oversimplified, but we tried to put a priority on simple expression for easy understanding. In the second half, we will look at debt problems. This is an area that has not received a lot of attention.

Introduction

— Explanation of Vocabulary Employed

Here we would like to offer simple explanations

of some of the terms we will use in this report. First of all, the term **currency crisis** refers to situation where a currency falls despite the best efforts of the government concerned as well as where it is ultimately successful in maintaining the value of the currency, but at great cost. As Table 1 shows, real currency values dropped by approximately 40% in South Korea, Thailand, and Malaysia, and almost 70% in Indonesia.

However, the title of this report contains the words “economic crisis”, not “currency crisis”. This is because the problem is now greater than one of maintaining currency values – whole economies are in a critical state, with rapid falls in economic growth and collapsing financial systems.

Table 1 Real Effective Exchange Rate

1990=100, Monthly average

	Indonesia	Korea	Malaysia	Philippines	Thailand
Jan-97	106.7	88.6	115.8	119.7	109.0
Feb-97	108.8	89.0	118.4	121.3	109.6
Mar-97	108.9	86.2	119.2	120.6	109.9
Apr-97	108.6	87.0	118.6	118.2	110.0
May-97	106.1	86.0	118.0	115.6	108.9
Jun-97	106.0	85.7	116.7	116.5	107.6
Jul-97	104.1	86.7	115.6	110.5	93.3
Aug-97	97.3	87.6	110.6	106.7	93.2
Sep-97	90.5	86.7	101.0	98.6	85.4
Oct-97	77.0	85.4	92.6	94.3	84.4
Nov-97	83.2	77.8	91.6	95.4	80.1
Dec-97	62.4	58.6	84.9	90.9	72.4
Jan-98	34.3	54.3	74.5	83.5	62.3
Feb-98	40.8	57.3	84.5	88.4	70.5
Mar-98	40.7	62.8	86.3	91.6	79.1
Apr-98	50.0	67.5	86.6	93.9	83.1
May-98	41.5	66.6	84.2	90.6	84.2
Jun-98	33.2	68.0	83.3	89.5	78.7
Jul-98	34.8	73.1	80.6	86.7	81.5
Aug-98	43.2	72.1	80.0	84.7	85.8
Depreciation (%)*	68.7	36.6	36.2	28.3	42.1

Source: JP Morgan (<http://www.jpmorgan.com>)

* Percentage of depreciation of real effective exchange rate between rate of Jun. 1997 and the lowest one since then.

** Real effective exchange rate is calculated by weighted average of a basket of representative foreign currencies (=effective), and includes an adjustment inflation (=real).

The term **financial crisis** is employed frequently. This refers to a situation where, due to failures of financial institutions such as banks, a country's entire financial system becomes dysfunctional. We would like to point out that it differs conceptually from a currency crisis.

Less frequently seen is the term **balance of payments crisis**. This refers to a situation where current account deficits reach an unsustainable level, bringing into question a country's ability to pay. Similarly, **debt crisis** refers to a situation where a country has difficulty making interest payments or the principal in terms of its international debt.

Finally, the term **moral hazard** has recently seen frequent use in Japan. However, a literal translation into Japanese produces the phrase "lack of morality", which is bound to mislead. The term "moral hazard" is not an ethical term pointing to a fall in people's morals. It refers to a situation where, for example, people who have fire insurance tend to give less notice to fire prevention than those without fire insurance policies. In finance, it can refer to the fact that the existence of deposit insurance leads to a lack of interest in the soundness of the management of individual banks. In such cases, **the source of the problem is systemic or contractual defects, potentially leading to problematic acts such as failure to exercise due care.** (In particular, insurance and guarantees are frequently to blame.)

1. Macroeconomic Overview

1-1. GDP

Let us start by considering **GDP (Gross Domestic Product)**. GDP is the total value added created in a country over the course of a year. It measures the total production (net of intermediate inputs) of the economy overall.

In order to simplify matters, let us here compare an entire nation to one individual. GDP is like a person's total yearly income. For over 10 years, the countries of Asia had experienced large yearly gains and during these periods, GDP growth rates of over 10% had often been witnessed. In the middle of 1997, however, growth suddenly stopped, and 1998 turned negative.

The situation is so serious because the fall has been so large. Table 2 shows changes in the **economic growth rate (GDP growth rate)**. **The situation in Indonesia is extremely serious**, where it seems that negative growth in 1998 could be in the area of 15%. **Next come South Korea and Thailand**, with negative growth in the area of 5-10%. These countries have all made requests for IMF assistance. However, **even among countries that have not requested IMF assistance**, economies have worsened dramatically. The worsening circumstances of Malaysia and Hong Kong are striking. Neither will be able to escape negative growth

Table 2 Growth rate of GDP

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*	1Q	2Q
Taiwan	5.0	11.6	12.7	7.8	8.2	5.4	7.6	6.8	6.3	6.5	6.0	5.7	6.8	5.3	5.9	-
Hong Kong, China	0.4	10.8	13.0	8.0	2.6	3.4	5.1	6.3	6.1	5.4	3.9	5.0	5.2	-4.0	-2.8	-5
Singapore	-1.6	2.3	9.7	11.6	9.6	9.0	7.0	24.0	10.4	10.5	8.7	6.9	7.8	0.5-1.5	6.1	1.6
Indonesia	2.5	5.9	4.9	-	9.1	9.0	8.9	7.2	7.3	7.5	8.2	8.0	4.6	-13.7	-8.5	-16.5
Malaysia	-1.1	1.2	5.4	8.9	9.0	9.7	8.6	7.8	8.3	9.2	9.5	8.6	7.8	-2.9	-2.8	-6.8
Thailand	4.6	5.5	9.5	13.3	12.2	11.2	8.6	8.1	8.4	8.9	8.8	5.5	-0.4	-7.0	-	-
Korea	47.3	11.6	11.5	11.3	6.4	9.5	9.1	5.1	5.8	8.6	8.9	7.1	5.5	-7.0	-3.8	-6.6
Philippines	-7.3	3.4	4.3	6.8	6.2	3.0	-0.6	0.3	2.1	4.4	4.8	5.7	5.1	1.0	1.6	-1.2
China	16.2	8.9	11.6	11.3	4.1	3.8	9.2	14.2	13.5	12.7	10.5	9.5	8.8	8.0	7.2	6.8
Japan	5.0	2.6	4.1	6.2	4.7	4.8	3.8	1.0	0.3	0.6	1.5	3.9	0.9	-1.8	-5.3	-3.3

Sources: ADB, *Key Indicators of Developing Countries*, Vol. XXIX, 1998, IMF, *International Financial Statistics*, Aug. 1998.

* Estimation from Governments and Central Banks announcements

in 1998. Singapore too is on the brink of negative growth, drawn in by the worsening economies of its neighbors. Even the Philippines, said to be relatively unscathed, is in fact in a precarious state, having also suffered from a decelerating American economy.

1-2. External Debt (Borrowing)

When a person suffers a cut in salary, he can cope by drawing down on savings if he has any. In the case of a country, the equivalent of savings is **external lending**. However, in most Asian countries **external borrowing** has been higher than lending. It is natural that the countries in the growth stage tend to have expenditures greater than income, in the same way as a person in youth.

Although some of this borrowing goes to consumption, large sums go to investment for the future. These countries have used large borrowings not for consumption but for investment. As the Table 3 shows, they have an **extremely high rate of investment** (investment per GDP). Indonesia, with the lowest rate, still has a rate of over 30%, and some of the other countries have a rate of over 40%. These figures truly stand out in international comparisons.

However, since the onset of the currency crisis some critics have charged that **inefficient investment** was being made. In other words, money was borrowed to invest in a project thought to have promise, but which in fact was not promising, and indeed proved to be worthless.

1-3. Balance of Payments

Let us see how debt (external borrowing) is incurred. For individuals, if yearly expenditures are greater than yearly income, one's personal balance sheet goes into the red, and debts rise. So as the **current account deficit**, and **external borrowing rises**.

For an individual, to say that their expenditures are greater than their income, and that their debts are rising, is merely to say the same thing in two different ways. In the case of a country as well, **the flip side of a current account deficit is a capital account surplus**. If a country has a capital account surplus, it means that funds in the amount of that surplus are flowing into the country. As such

Table 3 Gross Capital Formation per GDP (%)

	Indonesia	Malaysia	Thailand	Korea
1990	36.1	32.4	40.4	37.1
1991	35.5	36.4	41.6	38.4
1992	35.8	34.3	39.3	36.6
1993	29.5	38.3	39.5	36.0
1994	31.1	40.1	40.0	35.7
1995	31.9	43.0	41.1	36.6
1996	30.8	42.2	41.1	36.9
1997	31.6	42.4	35.6	35.0

Sources: IMF, *International Financial Statistics*, Aug. 1998, Bank Negara Malaysia, *Monthly Statistical Bulletin*, Jun. 1998.

the term **capital inflow** is sometimes used in this case. In Table 4, which shows changes in the balance of payments, you will note that current account deficits, largely without exception, correspond to capital account surpluses.

In the case of an individual, they may borrow to the extent of their yearly shortfall, but usually no more. Whereas this was not unusual in the case of the Asian economies. Country borrows more than its shortfall, and the inflow of capital greater than the yearly deficit remains on hand. This becomes **foreign exchange reserves**.

Foreign exchange reserves are not simply excess funds. Particularly for countries with a fixed exchange rate system, they are essential for foreign exchange interventions. However, caution is necessary in cases such of those of the Asian economies in question **whose foreign exchange reserves were growing despite a current account deficit. Capital inflows may have been greater than necessary.**

Looking at those providing capital on the other hand, it may be said that they lent excessively. It may also be said that the currency crisis was occasioned because these funds were suddenly pulled out. Thus, it becomes necessary to explain why the outlook of foreign investors changed so suddenly which we will discuss in Chapter 2.

1-4. The "Asian Miracle"

Until the currency crisis happened, the Asian economies had an extremely high growth over an

Table 4-1 Balance of Payment

Indonesia

(Mil. of US\$)

	Export	Import	Trade Balance	Good, Service Balance	Goods, Service and Income Balance	Current Balance	Capital Account Balance
1990	26,807	21,455	5,352	1,784	-3,406	-2,988	4,495
1991	29,635	24,834	4,801	1,059	-4,522	-4,260	5,697
1992	33,796	26,774	7,022	2,313	-3,351	-2,780	6,129
1993	36,607	28,376	8,231	2,344	-2,643	-2,106	5,632
1994	40,223	32,322	7,901	1,282	-3,411	-2,792	3,839
1995	47,454	40,921	6,533	-1,538	-7,412	-6,431	10,259
1996	50,188	44,240	5,948	-2,592	-8,600	-7,663	10,847
1997	56,297	46,207	10,090	481	-5,850	-4,816	1,422
1-5/1998	21,902	15,120	6,782	-	-	-	-

Korea

(Mil. of US\$)

	Export	Import	Trade Balance	Good, Service Balance	Goods, Service and Income Balance	Current Balance	Capital Account Balance
1990	63,659	66,109	-2,450	-3,065	-3,152	-2,003	2,896
1991	70,541	77,344	-6,803	-8,956	-9,120	-8,317	6,741
1992	76,199	77,954	-1,755	-4,639	-5,035	-3,943	6,994
1993	82,089	79,771	2,319	192	-199	990	3,216
1994	94,964	97,824	-2,860	-4,661	-5,147	-3,867	10,732
1995	124,632	129,076	-4,444	-7,423	-8,725	-8,508	17,273
1996	129,968	144,933	-14,965	-21,144	-22,960	-23,006	23,924
1997	138,619	141,798	-3,179	-6,379	-8,834	8,167	-9,195
1998*	132,000	95,500	36,500	-	-	-	-

* Values for 1998 are estimates.

Thailand

(Mil. of US\$)

	Export	Import	Trade Balance	Good, Service Balance	Goods, Service and Income Balance	Current Balance	Capital Account Balance
1990	22,811	29,561	-6,751	-6,641	-7,494	-7,281	9,098
1991	28,233	34,223	-5,989	-6,757	-7,833	-7,572	11,760
1992	32,101	36,262	-4,161	-5,241	-6,949	-6,304	9,475
1993	36,399	40,696	-4,297	-5,707	-7,113	-6,364	10,500
1994	44,479	48,206	-3,726	-7,482	-9,213	-8,086	12,167
1995	55,449	63,417	-7,969	-11,927	-14,041	-13,554	21,909
1996	54,410	63,899	-9,488	-12,066	-15,452	-14,692	19,487
1997	56,665	55,101	1,564	209	-3,367	-2,917	-15,441
1-8/1998	35,980	28,520	7,460	-	-	-	-

Table 4-2 Balance of Payment (Continued)

Malaysia

(Mil. of US\$)

	Export	Import	Trade Balance	Good, Service Balance	Goods, Service and Income Balance	Current Balance	Capital Account Balance
1990	28,806	26,280	2,525	900	-972	-870	1,784
1991	33,712	33,321	391	-1,799	-4,271	-4,183	5,621
1992	39,823	36,673	3,150	804	-2,339	-2,167	8,746
1993	46,238	43,201	3,037	-68	-3,278	-2,991	10,805
1994	56,897	55,320	1,577	-1,155	-4,750	-4,520	1,288
1995	72,053	72,153	-100	-3,274	-7,510	-7,362	7,422
1996	76,763	72,727	4,036	-3,703	-	-4,870	9,477
1997	77,750	73,809	3,941	-3,449	-	-4,763	1,591
1-5/1998	28,991	24,034	4,958	-	-	-	-

Philippines

(Mil. of US\$)

	Export	Import	Trade Balance	Good, Service Balance	Goods, Service and Income Balance	Current Balance	Capital Account Balance
1990	8,186	12,206	-4,020	-2,537	-3,409	-2,695	2,057
1991	8,840	12,051	-3,211	-1,361	-1,861	-1,034	2,927
1992	9,824	14,519	-4,695	-2,261	-1,816	-1,000	3,208
1993	11,375	17,597	-6,222	-4,639	-3,715	-3,016	3,267
1994	13,483	21,333	-7,850	-5,736	-3,886	-2,950	5,120
1995	17,447	26,391	-8,944	-6,522	-2,860	-1,980	5,309
1996	20,543	31,885	-11,342	-7,824	-4,542	-3,953	11,277
1997	25,228	36,355	-11,127	-10,112	-5,383	-4,303	6,396
1-7/1998	16,407	17,843	-1,436	-	-	-	-

Sources: IMF, *International Financial Statistics*, Aug. 1998 and announcements of Governments and Central Banks.**Table 5 Foreign Reserves**

(Mil. of US\$)

	Indonesia	Malaysia	Thailand	Korea	Philippines
1990	8,657	10,659	14,258	24,448	2,036
1991	10,358	11,717	18,393	24,520	4,436
1992	11,482	18,025	21,184	30,133	5,335
1993	12,474	28,183	25,440	36,566	5,934
1994	13,322	26,339	30,280	46,702	7,125
1995	14,907	24,698	36,939	60,610	7,757
1996	19,396	27,892	38,645	67,294	11,747
1997	17,487	-	26,897	53,893	8,714

Sources: ADB, *Key Indicators of Developing Asian and Pacific Countries*, Vol. XXIX, 1998.

extended period of time. One reason why this was referred to as a “miracle” was that growth continued for so long without triggering inflation. Normally, when economic growth continues for a certain amount of time, demand outstrips supply, raising inflation. When inflation rises, the central bank is forced to take tightening measures. The economy then enters an adjustment phase. Although this is the normal economic cycle¹, the Asian economies appeared in general to **maintain a high growth rate while keeping inflation low**. We have already seen their growth rates, and Table 6 shows changes in the rate of inflation. Rates for Indonesia and the Philippines seem relatively high, but even here they seldom surpass 10%. The other countries have inflation rates as low as the advanced nations.

Why was this “Asian Miracle” possible? Of course it was due in part to careful macroeconomic management on the part of governments and central banks. However, the greatest factor was the stimulus of free international movements of goods and money (capital). In the sustained high growth Asian economies, demand was greater than supply. If their economies had been closed (i.e., if there had not been trade) demand-pull inflation would be the expected result. However, if trade in goods is open to the outside (i.e., free trade), then a shortage of supply can be filled by imports. However, this alone is not enough to explain the reason.

For example, in its high growth phase, Japan also adopted the free trade system. With continued economic expansion, supply shortages could be filled through a current account deficit for a while. However, sooner or later, it became necessary to rein in the economy (due to foreign exchange constraints as the expression “foreign exchange reserve ceiling” makes clear). In contrast, in the Asian economies, foreign exchange reserves grew despite current account deficits. The major difference between the Japanese case and Asian Miracle was capital account liberalization (i.e., the liberalization of capital flows). In the Japanese case, although it participated in free trade, capital account liberalization was incomplete.² As such, ultimately Japan was unable to escape from the limits imposed by domestic supply.³

Let us make a simple summary of the above. (1) **Liberating the flow of goods is called free trade, and liberating the flow of capital is called capital account liberalization.** Ultimately, the flow of goods and capital are **two sides of the same coin.** (2) **Because Asian countries, particularly the ASEAN economies, were quite far along in terms of both kinds of liberalization, they were able to achieve rapid growth without inflation, by running a current account deficit (inflow of goods) alongside a capital account surplus (inflow of money).**

Table 6 Changes in Consumer Price Index

	Indonesia	Korea	Malaysia	Philippines	Thailand
1984	10.46	2.31	3.90	50.34	0.86
1985	4.73	2.46	0.35	23.10	2.43
1986	5.83	2.75	0.74	0.75	1.84
1987	9.28	3.05	0.29	3.79	2.50
1988	8.04	7.15	2.56	8.76	3.80
1989	6.42	5.70	2.81	12.21	5.36
1990	7.81	8.58	2.62	14.14	5.98
1991	9.41	9.30	4.36	18.71	5.73
1992	7.53	6.24	4.77	8.92	4.07
1993	12.53	4.77	3.54	7.59	3.37
1994	9.64	6.22	3.72	9.06	5.04
1995	8.98	4.50	5.30	8.09	5.80
1996	6.63	4.92	3.49	8.41	5.81
1997	11.60	4.44	2.66	5.05	5.61

Source: IMF, *International Financial Statistics*, Aug. 1998.

* The rate of increase over previous years.

1-5. Currency Crisis

Currency crisis seems simple to understand if we see its phenomenon only. Capital starts to flow out of a country or region, and as a result, currency values experience a great fall. Because as described above the Asian economies achieved such growth through capital inflows, it is natural that the effects were extremely great when the direction turned and capital started to flow out. As Table 1 shows, real currency values fell by as much as (approximately) 40% in South Korea, Thailand and Malaysia, and almost 70% in Indonesia. It is very difficult, however, to find the cause – or better to say, to find what did wrong to cause this currency crisis. In simple terms, we can mention internal factors and external factors as reasons of currency crisis. In terms of external factors, we might mention problems with international financial markets. These will be addressed in Chapter 2.

In terms of internal factors, supply side, demand side, and government policy failures are among those given. Let us take a brief look at each below.

(1) Supply Side Problems

There is the argument that lack of improvements in technology and productivity in Asia caused the currency crisis. Also as a supply side problem, it can be pointed that investment might not be efficient. In this regard, at the start of the currency crisis Prof. Paul Krugman's famous 1994 article, "The Myth of Asia's Miracle"⁴ was seen by some as prophetic. However, as Prof. Krugman himself recently says, his prediction was that rapid growth would eventually come to an end, not that there would be a currency crisis. Although there may definitely have been supply side problems, it is rather difficult to tie this to the currency crisis.

(2) Demand Side Problems

Some point out that currency crisis occurred because there was unsound or excessive demand which didn't last long. Simply put, a bubble economy. In this view, moral hazard by financial institutions played a large role. It might be said that at root, both of borrowers and lenders were **undervaluing risk**.

(3) Government Failures

In the early stages of the currency crisis, Thailand and South Korea made doomed attempts to support their currencies, which used up foreign exchange reserves. Moreover, financial supervision was lax, with excessive flows of capital from abroad allowed (or encouraged). It has been pointed out that a fixation on the nominal exchange rate invited an appreciation of real exchange rate, among other criticisms. However, as mentioned above, it must be recognized that the inflation rate was well managed. There is also the view that the problem was not one of policy directly but of **insider capitalism (or "crony capitalism")**. This implicates both the government and the private sector. Corruption and nepotism are also seen as a problem by some.

There is no clear conclusion to these arguments on the reasons of currency crisis. Some emphasize certain factors and others do other factors. What makes matters confusing is that each of the factors was definitely involved. For example, if one emphasizes the supply side problems, it is easy to construct an argument that "here is the essence of the currency crisis" merely by gathering evidence that these problems existed. In the same way, it is possible to make an argument for problems at financial institutions forming the core of the currency crises, by focusing on their problems.

However, this is like a group of people describing a dice, with one person facing a particular side saying "It has one dot," and another person looking at another side insisting that "It has six dots on it."

It is essential to consider the relative importance of each factor, and to see the interrelationships between them. At this point the question to ask are what matters are most urgent, and which ones can be addressed more slowly, and sorting them accordingly. From the point of view of finding which recovery measures are most effective, it is constructive to order them by importance. However, if we look at events so far, it appears that responses have been based on rather one-sided views.

1-6. Problems with Original Responses and the Structure of this Report

In the early stages of the currency crisis, if

anything, it was internal factors that were emphasized. In particular, bubble economies were seen as the greatest problem. There also was an emphasis on failures in government policy and banking supervision, and on crony capitalism. Stringent tightening policies were adopted that can only be described as punitive, but these caused a sudden worsening of economies, which lead to the overturning of governments in many countries either through elections or riots. In this regard, the most dramatic events were in Indonesia. An engaging analysis of these is provided in Chapter 5. These may have contributed to the recent criticism of the IMF heard everywhere, some of which appear excessive. In Chapter 4 we will reconsider the role of the IMF.

However, economic discipline has not ended. In particular, restructuring of financial sector continues. We will consider the problems with these policies in Chapter 3 and with international financial markets as an external factor in Chapter 2. A comprehensive evaluation will be given in the concluding chapter subsequent to the analysis spread through this report. Most of our proposals are contained in Chapter 4 and the concluding chapter.

In the following part of this chapter, we would like to look at a subject that requires detached examination first and foremost. This is grasping the **current situation and outlook for debt**. Tackling domestic structural problems (financial problems, crony capitalism, etc.) would be important irrespective of a currency crisis. A direct cause of the currency crisis has been doubts about external payment capacity. In this area there has already been rapid improvement in the current account in many Asian countries. It is strange that international institutions and international investors appear to be ignoring this fact. Let us examine the external debt and current account situation in the following section.

2. Balance of Payments and Debt Problems

2-1. State of Debt

First let us see the extent of borrowing. Table 7 shows that it is \$138.0 billion for Indonesia, \$90.2 billion for Thailand, \$150.8 billion for South Korea, and \$42.3 billion for Malaysia. However, the Indonesian and South Korean economies differ in size, so although their external debt is on a similar scale,

Table 7 External Debt

(Mil. of US\$)

	Total Debt		
		Private Debt	
Indonesia	138,018	83,930*	1st Q 1998
Malaysia	42,300	26,000**	1st Q 1998
Thailand	90,161	63,168*	1st Q 1998
Korea	150,770	119,770**	Aug-98

Sources: Bank of Thailand, Bank Negara Malaysia, Bank Indonesia, Ministry of Finance and Economy of Korea.

* Governments' authorized amount.

** Short-term debts and long-term debts excluded public sector.

their seriousness differs. Therefore, it is helpful to see the debt-to-GDP ratio: relative size of debts by comparing them with GDP. The levels of this ratio before the currency crisis are shown in Table 8-1. For ASEAN economies, they were roughly in the 40% to 60% range. These ratios were not at all large. In the case of South of Korea, it was only a little over 20%.

Difficulty with these indicators arises when exchange rates fall deeply against the dollar, as they have for the Asian economies in question, and GDP expressed in dollars shrinks rapidly. This causes a great change in the debt-to-GDP ratios.⁵

Next let us turn to debt-to-export ratios. Since most debt is denominated in foreign currency, the funds for repayment of principal and interest ultimately are foreign currency receipts from exports. It is thus useful to compare the two. In terms of this measure, we can say that apart from Indonesia, none of the countries had a problem. There is no

Table 8-1 Debt-GNP Ratio

(%)

	1991	1992	1993	1994	1995	1996
Indonesia	64.9	66.2	58.7	63.3	64.6	59.7
Malaysia	38.3	36.8	43.8	43.6	42.5	42.1
Philippines	70.5	60.7	64.9	60.8	51.8	47.3
Thailand	39.0	38.3	43.1	46.8	50.4	50.3
Korea	-	-	20.0	22.6	22.2	23.4

Sources: World Bank, *Global Development Finance*, 1998.

ADB, *Key Indicators of Developing Asian and Pacific Countries*, Vol.XXIX, 1998.

* Debt GNP Ratio is substituted for Debt GDP Ratio in this report.

strict basis for these standards, but one standard for a heavily-indebted country is a country with a debt-to-export ratio of 220% or more. By this measure, Indonesia is (was) a borderline case.

Table 8-2 Debt-Export Ratio (%)

	1991	1992	1993	1994	1995	1996
Indonesia	237.4	230.2	212.6	231.8	234.1	221.4
Malaysia	43.2	43.1	47.8	42.7	40.0	42.4
Philippines	219.4	187.1	187.3	163.4	118.5	97.6
Thailand	99.9	97.4	106.2	111.7	112.2	120.5
Korea	46.7	48.4	67.0	73.9	65.9	71.1

Sources: Same as for Table 8-1.

In practice, debt repayment takes place over a number of years. Every year, the amount of principal to be repaid, and the amount of interest to be paid must be calculated (sum of both are called debt service). The proportion of debt service taken up by the amount of exports is very important. This is called the debt-service ratio (debt service/exports). Here too there are no absolute standards, but a value of over 30% for this measure is considered dangerous. Of the ASEAN nations, Indonesia was just at this level, but was somehow managing. For the other countries, the level of indebtedness is not a problem by this measure either.

Table 8-3 Debt-Service Ratio (%)

	1991	1992	1993	1994	1995	1996
Indonesia	34.3	32.6	33.6	30.7	30.9	36.9
Malaysia	7.4	9.1	8.4	9.0	7.0	8.2
Philippines	23.0	24.4	25.6	18.9	16.0	13.7
Thailand	13.0	13.8	13.7	13.5	11.6	11.5
Korea	7.1	7.6	9.4	7.2	4.8	-

Sources: Same as for Table 8-1.

Judging from the above three measures, before the currency crises, the external debt situation of the Asian economies other than Indonesia was not at all bad. **Only Indonesia could be said to be at the borderline, but it may be said to have stopped just short of that line.**

Let us now consider the situation after the currency crisis. Simply put, in a way it has worsened, and in a way it has improved. The situation has improved in the sense that **the balance of trade has rapidly changed to a substantial**

surplus. This can be used to repay debts. The situation has worsened in the sense that **refinancing debt has become more difficult.** In the period leading up to the currency crisis, there was no problem in borrowing despite current account deficits. Actually, new borrowing was greater than repayments. At present, however, there is little prospect for new borrowing other than public funds. Here the question should be cast; **can the balance of payments be improved enough to service the debt without relying on new borrowing?** To answer this, let us now discuss ability to service debt.

2-2. Ability to Service Debt and Repay

To see how much principal and interest must be paid, let us consider past performance. Table 9 shows amounts paid on both principal and interest over a six-year period. In order to judge the relative size of the amounts, these payments are set against total borrowing in ratio form in Table 10.

We can notice from this table that: (1) The values are somewhat dispersed depending on the country and time, but payments on the principal are in the area of **5-15% of total borrowing.** (2) The values for interest payments are less dispersed, and are in the **vicinity of 5%.**

To first explain interest payments, the calculation here means the average interest rate for one country's total debt. Thus it is clear that **the average interest rate on the debt is a stable rate of approximately 5%.**

Payments on principal are not difficult to understand either. For example, if the amount of principal to be repaid is 10% of outstanding debt, and new borrowing is set at zero, it means that all the principal will be repaid in 10 years. In fact, there is new borrowing every year, and so the actual calculation is not that simple⁶, but imagining the worst case scenario, where there is zero inflow of new capital, it is a useful way of seeing how much must be repaid. One point that should be made here is that for repaying principal there are various ways of making arrangements more flexible, such as rescheduling (changing the repayment date or other particulars). For example, if the repayment period is extended from 10 to 20 years, the ratio of principal to be repaid to total debt outstanding can be lowered from 10 to 5%.

Table 9 Total amount of External Debt and Debt Service

(Mil. of US\$)

		1991	1992	1993	1994	1995	1996
Indonesia	Principal Payment	6,871	7,944	9,138	8,951	10,197	14,812
	Interest Payment	4,621	4,513	4,951	5,316	6,219	6,647
	Total debt	79,548	88,002	89,172	107,824	124,398	129,033
Malaysia	Principal Payment	1,839	3,102	3,422	4,785	4,455	5,827
	Interest Payment	1,080	1,108	1,171	1,415	1,566	1,830
	Total debt	17,080	20,018	26,149	29,294	34,333	39,777
Thailand	Principal Payment	2,262	3,198	4,253	5,166	4,404	4,309
	Interest Payment	2,649	2,706	2,548	2,774	4,204	4,343
	Total debt	37,705	41,812	52,668	65,522	83,166	90,824
Philippines	Principal Payment	1,774	2,791	2,766	2,515	3,008	3,514
	Interest Payment	1,625	1,510	2,141	2,117	2,329	2,265
	Total debt	32,451	32,999	35,931	40,000	39,446	41,214

Sources: World Bank, *Global Development Finance*, 1998.

* Korea is excluded in this table because she is not reported in "Global Development Finance" by World Bank for developing Countries.

Table 10 Debt service per Total External Debt

(%)

		1991	1992	1993	1994	1995	1996
Indonesia	Principal Payment	8.6	9.0	10.2	8.3	8.2	11.5
	Interest Payment	5.8	5.1	5.6	4.9	5.0	5.2
Malaysia	Principal Payment	10.8	15.5	13.1	16.3	13.0	14.6
	Interest Payment	6.3	5.5	4.5	4.8	4.6	4.6
Thailand	Principal Payment	6.0	7.6	8.1	7.9	5.3	4.7
	Interest Payment	6.0	7.6	8.1	7.9	5.3	4.7
Philippines	Principal Payment	5.5	8.5	7.7	6.3	7.6	8.5
	Interest Payment	5.0	4.6	6.0	5.3	5.9	5.5

Sources: World Bank, *Global Development Finance*, 1998.

Let us see what the real requirements are by looking at actual figures.

Roughly speaking, the outstanding debt of South Korea is \$150 billion, of Thailand \$90 billion, and of Malaysia, \$40 billion. Let us see in categories of 5%, 10%, and 15% of these totals. Table 11 shows the results of these simple calculations. The first columns show outstanding debt, and the rows head of columns the repayment percentages thereof. For example, if we look at the second row, 5% repayment of \$150 billion is \$7.5 billion, and 10% is \$15 billion.

The 5% column shows the amounts required if the aim is to pay interest alone. This would mean payments of \$7.5 billion per year in the case of South Korea and Indonesia, \$4.5 billion for Malay-

sia, and \$2 billion for Malaysia. The 10% column shows repayment of 5% of principal per year, which together with yearly interest payments of 5%, means that payments of 10% per year are required. Naturally, the figures in this column are double those in the 5% column.

Next let us consider what will be used to make payments, or in other words, how ability to repay should be calculated. We cannot simply use the balance of trade. It does not contain many current transactions (such as tourism, transport, remittances by workers overseas, etc.) However, the current account is not suitable either. This is because the current account already contains interest payments on external debt. A handy method is using the trade and service account surplus. Here we use the fig-

Table 11 Simulation of Debt Service (Bil of US\$)

Debt Balance	5%	10%	15%	
150	7.5	15	22.5	Korea-Indonesia
90	4.5	9	13.5	Thailand
40	2	4	6	Malaysia
	Interest only	Payment for 20 years	Payment for 10 years	

Source: authors calculation.

ures of balance of trade, as the most recent figures of trade and service account is not available now. This is certainly not a perfect measure, but it is good enough to serve as rough guide (see Table 4).

Thailand:

From January to August in 1998, Thailand had already shifted to a \$7.5 billion trade surplus. A simple extrapolation gives a yearly surplus of \$11.2 billion. This is more than enough for the 10% scenario in our earlier repayment calculations.

Malaysia:

From January to May in 1998, Malaysia had already shifted to a \$5 billion trade surplus. Using the same calculation as for Thailand produces a yearly surplus of \$12 billion. This is more than twice what is needed for the 15% scenario in our repayment calculations.

Indonesia:

The same calculation produces a yearly surplus of \$16 billion for Indonesia. This meets the 10% scenario.

South Korea:

A trade surplus of \$36.5 billion is expected this year. This comes to a quarter of the outstanding debt figure, and we do not have to do any calculating to see that there is absolutely no repayment problem.

This analysis shows that Malaysia does not have a problem, and if Thailand and Indonesia take appropriate measures, such as rescheduling and refinancing, neither does it. Far from being insufficient, South Korea's surplus may be too large.

Due to insufficient data, we were only able to use balance of trade figures. However, when more detailed balance of payment data becomes available, more accurate projections will be possible. Also another convenient measure can be used; the margin of surplus on the current account. As men-

tioned earlier, the current account includes interest payments. This fact can be put to use and the amount of principal requiring repayment compared directly with the surplus on the current account. If the latter is higher, then it means it is possible to repay the debt without any new capital inflows.

If only 5% of the principal is being repaid (figures in brackets are in case of 10% payment), the relevant benchmarks are current account surpluses of \$7.5 billion (\$15 billion) for Indonesia and South Korea, \$4.5 billion (\$9 billion) for Thailand and \$2 billion (\$4 billion) for Malaysia. If the 10% figures in brackets are fulfilled, then it can be said that there is no need for concern about ability to repay. If only 5% can be repaid, then it is somewhat of a problem, but still a situation that can be dealt with through appropriate measures (rescheduling and/or new financing). If we consider the extreme case where no payments are being made on principal - i.e. only interest payments, the current account does not have to be any higher than zero. This is the absolute lower limit⁷.

2-3. Outstanding Problems

(1) Private Debt Problems

The above analysis simply looks at the overall picture, and does not consider the difference of debtors. If the problem were only with a public external debt, that would be fine, but problems remain in the private debt.

With public debt, there is a fair amount of freedom to respond to difficulties by lowering the amount of principal to be repaid per year by rescheduling over a suitable period. (Naturally this can only be effective in combination with measures to improve the current account and the will to repay.)

With private debt however, there can be a variety of different borrowing and lending bodies, and there is no guarantee that appropriate negotiations can be arranged. One of the noteworthy aspects of the current crisis is the quantity of private debt involved. Indonesia is a particularly serious case. As we will see in Chapter 3, the prospects of a resolution of the private external debt problem are uncertain. As Table 12 shows, although they are different in extent, the countries other than Indone-

sia also face similar problems. As we will see in Chapter 4, international institutions such as the IMF have to play an important role as intermediaries in negotiations involving this kind of private debt.

(2) The Improvement in the Balance of Trade is Mostly Due to Reductions in Imports

A second problem is that the balance of trade has improved too much. An important point is that it has been brought about by a dramatic fall in imports. In many of the countries, imports have experienced a sharp fall of more than 30% over the previous year. However, approximately 40% of Asian exports are to other Asian countries (intra-regional trade). Between four⁸ ASEAN countries, the proportion is approximately 35% percent. As such, if one country's imports are falling, another country's exports are falling in tandem. That is one reason why exports fail to rise despite exchange rate devaluations. It is necessary to increase both exports and imports (and through exports increas-

ing more than imports) improving the balance of trade.

(3) The Situation in Indonesia is Particularly Serious, and Requires Special Treatment

Even before the crisis, Indonesia's debt indicators were barely acceptable. Indonesia has been in a special category since the crisis as well. It is necessary to think of separate measures to respond. For example, using the simple calculations we have employed thus far, Indonesia's balance of trade has shown a trend toward remarkable improvement. However, those familiar with local conditions say that **even though the balance of trade is improving, the debt situation is not. The reason is that many import/export firms settle trade through Singaporean banks.** For this reason, foreign currency earnings through an improved balance of trade **do not pass through the government.** (This illustrates the necessity of foreign exchange control. For a discussion of this topic see Chapter 4.)

Table 12 Items of External Debt

(%)

Indonesia	1991	1992	1993	1994	1995	1996
Long-term Debt	81.8	79.5	79.8	82.0	79.1	75.0
Public sector	65.2	61.0	64.1	59.3	52.5	46.6
Private sector	16.6	18.5	15.7	22.7	26.6	28.4
Short-term Debt	18.0	20.5	20.2	18.0	20.9	25.0

Malaysia	1991	1992	1993	1994	1995	1996
Long-term Debt	87.9	81.8	73.4	78.9	78.8	72.2
Public sector	73.4	61.8	51.0	46.6	46.7	39.0
Private sector	14.4	20.0	21.9	32.3	32.1	32.7
Short-term Debt	12.1	18.2	26.6	21.1	21.2	27.8

Philippines	1991	1992	1993	1994	1995	1996
Long-term Debt	81.4	80.7	82.6	83.1	84.8	79.7
Public sector	77.2	77.6	76.0	75.7	75.8	67.8
Private sector	4.2	3.1	6.2	7.4	9.0	11.9
Short-term Debt	15.2	15.9	14.0	14.3	13.4	19.3

Thailand	1991	1992	1993	1994	1995	1996
Long-term Debt	66.9	64.8	57.0	55.0	50.6	58.6
Public sector	35.1	31.8	28.0	24.7	20.4	18.8
Private sector	31.7	32.9	29.1	30.8	30.2	39.8
Short-term Debt	33.1	35.2	43.0	44.5	49.4	41.4

Sources: World Bank, *Global Development Finance*, 1998.

Serious discussion is also necessary on some form of debt reduction. However, this is by no means easy to do. If someone's debts are reduced, there is the substantial risk that other borrowers who can in fact repay will clamor for reductions, and that collection will become unworkable. (this is one major reason why the private debt problem is so serious.) A proper framework and firm leadership are necessary.

Notes:

1. When an economy is growing, demand expands along with supply. Demand expands rather easily, but it is not so simple in the case of supply. As such, there is a tendency for supply to be insufficient. When supply is insufficient, the possibility of inflation naturally exists. Moreover, the faster an economy grows, the more difficult the central bank's task of following changes in supply and demand, adjusting the money supply so as not to invite inflation.
2. For example, until the revision of the foreign exchange law in April 1998, foreign exchange transactions had to be carried out only through banks. In addition, individuals were forbidden from settling accounts in foreign currencies.
3. However this sort of relationship in practice becomes obscured by the buffer of foreign exchange reserves.
4. *Foreign Affairs*, November/December 1994
5. In the IMF Annual Report released in September 1998, mid-year debt-to-GDP ratios were estimated 72.5% for Thailand, 162.7% for Indonesia, and 51.5% for South Korea. The degree of deterioration is remarkable in Indonesia's case, but as expected, levels for Thailand and South Korea can in no way said to be high.
6. To be even more specific, the amount to be paid on principal each year depends on whether the method of calculation used is the principal and interest averaging method or the principal averaging method. Since the aim is merely to produce a rough measure, we have used the conceptually simpler principal averaging method.
7. Does this not mean that the outstanding debt is not falling? Such a criticism is possible. However, neither is the debt rising. This buys time for economic growth to recover, and for GDP and exports to grow. This improves debt indicators, solving the debt problem over time. This may be the only path Indonesia can take.
8. Indonesia, Malaysia, Thailand, and the Philippines.

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