

Chapter 6

Macroeconomic Management and the Development Process: The Southeast Asian Perspective

Bhanupong Nidhiprabha

The Southeast Asian countries shared the success of achieving high economic growth rates with price stability and external balances between 1990 and 1995. However, their success began to fade away rapidly in 1997. This chapter attempts to explain the relevance of macroeconomic management in contributing to the success in the economic development process in past decades and to analyse the causes of the failure at present.

The chapter begins with a brief presentation of the characteristics of economic growth in Southeast Asia between 1981 and 1985. It then discusses the stylized facts of their development pattern, which are linked with macroeconomic management, where the roles of foreign direct investment, public investment in human capital, and the monetary and fiscal policies are the main focuses. The reasons for the recent disappointing performance of the economies in terms of decelerating growth rate and plunging exchange rates are examined and the contagion effect of the currency crisis is analysed. Finally the conclusion ponders lessons for African countries.

Southeast Asian Growth Characteristics: 1991–1995

High economic growth rates in the last decade were the hallmark of countries in this region, but there are some differences in the pattern of growth and in the trade-off between growth and price stability. These differences can be related to macroeconomic policy management. Between 1991 and 1995, GDP in Singapore, Malaysia and Thailand expanded by 8.5 per cent on average, while the Indonesian economy grew by 7.8 per cent. During the same period, the Philippine economy began to recover from recession and was able to register a 2.2 per cent growth rate (Table 6.1). Although the countries in this group have some differences in terms of country sizes, resource endowments, number of population, social and political structure, they were able to manage their economies to achieve rapid growth with internal and external stability.

Table 6.1 Selected aspects of economic development in Southeast Asia

Country	Per capita nominal GDP (US\$)	Population (million)	Annual average GDP growth rate	Savings rate (% of GDP)	Investment rate (% of GDP)	Budgetary balance/GDP (%)	Average annual inflation rates
	1996	1997	1991–95	1995	1995	1991–95	1991–95
Indonesia	1,147	200	7.8	35.8	37.8	-0.3	8.9
Malaysia	4,637	21.2	8.6	37.2	40.6	-0.3	4.1
Philippines	1,197	71.5	2.2	14.7	22.3	-0.6	10.5
Singapore	30,564	3.1	8.5	52	33.2	4.7	2.6
Thailand	3,058	60.8	8.5	36.5	43.1	2.9	4.8

Source: Economic and Social Survey of Asia and the Pacific 1997, United Nations (Table 11.1, 22).

Singapore's high growth rate was associated with a low inflation rate of 2.6 per cent, while in Thailand and Malaysia, with comparable growth rates, the cost of high growth in terms of price stability loss was about 2 percentage points higher than in Singapore. High inflation rates in Indonesia and the Philippines were associated with lower growth rates. The inflation rate in the Philippines was almost 6 percentage points higher than that of Thailand and its growth rate was 6 percentage points lower than Thailand's average GDP growth. The important question is whether the Philippines would have had higher economic growth had it been able to reduce inflation. Compared with the Philippines, Indonesia was more resilient in terms of the ability to sustain high growth rate of 7.8 per cent, despite the high inflation rate of almost 9 per cent. The cost of the trade-off between growth and inflation in Malaysia and Thailand was lower than Indonesia's. Both countries experienced high growth with lower inflation.

In general, there seems to be a negative relationship between growth and inflation in the region. During the period 1990–1995, there were no external shocks from commodity and oil prices. The rising price level was mainly due to demand expansion. The different trade-off relationships between economic growth and inflation seem to be related to the differences in economic structure and the macroeconomic policy applied in these Southeast Asian countries.

The rapid growth generated rising standard of living as well as increased ability to save. Thus Thailand and Malaysia were able to save more than 40 per cent of their GDP, while the saving ratio in the Philippines was only 14.7 per cent of GDP, due to the lower growth rate. Indonesia, with a per capita income similar to the Philippines, was able to raise the saving rate to 36 per cent, because of high growth of real GDP. The very fact that per capita income in Singapore was almost 10 times higher than that in Thailand explains Singapore's very high saving ratio of 52 per cent in 1995, despite the same rate of economic expansion with other

countries in the region. Figure 6.1 illustrates the rising trend of saving ratios in Singapore, which was contributed by forced savings of the private sector, through provident funds. The high saving ratios in other countries levelled off after 1990. It is noted that for the case of Thailand, the household saving rate declined during that period, while the public sector's savings increased due to budget surplus. The Thai government budget surplus was sufficiently large enough to offset the decline in private saving, thereby maintaining high total saving rate. Financial liberalization was carried out in Thailand in the early 1990s. It is possible that the relaxation of households' liquidity constraints after financial deregulation can lead to consumption booms, as was observed by Bayoumi (1993) for the case of the United Kingdom. Speight and White (1995) also found that liquidity constraints are a pervasive feature of developing country consumption behaviours. Financial liberalization that is taking place in developing countries therefore may contribute to the consumption booms and lead to undesirable effects in the development process.

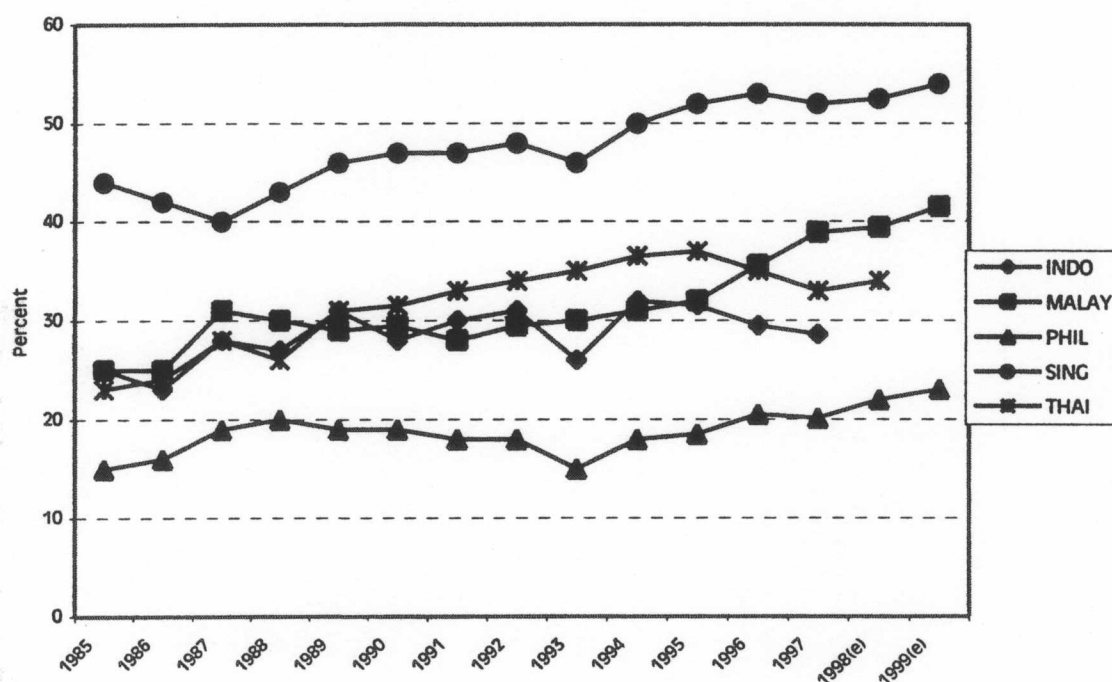


Figure 6.1 High savings rate in Southeast Asian economies

Capital formation requires financing from domestic savings and foreign savings. Thailand's capital expenditure was the highest among the countries in the group (Table 6.1) in terms of investment to GDP ratio. The rapid capital accumulation was made possible by foreign savings. Malaysia, to a lesser extent, was also dependent on foreign capital flows for domestic investment. Indonesia

was able to finance its rapid capital formation by relying mainly on its high domestic savings, thereby relying less on foreign savings. In the case of the Philippines, investment was constrained by the low level of domestic savings. Singapore is the only country in the region that has surplus in the current account; its high saving rate far exceeded the investment rate in 1995. It is noted that while the growth of some other countries' in the region was driven mainly by both investment and exports, Singapore's recent rapid growth was due more to the contribution of export expansion than due to domestic investment booms.

With rapid economic expansion, the Southeast Asian governments were able to control their fiscal deficits. In the cases of Singapore and Thailand, fiscal balances showed surplus at 4.7 per cent and 2.9 per cent of GDP between 1991 and 1995 (Table 6.1). The budget deficits in the remaining countries were less than 1 per cent of GDP. With high economic growth and low inflation, fiscal imbalances were unlikely to complicate the management of external imbalances.

Southeast Asian Development Patterns

Between 1980 and 1995 there was a substantial change in the output structure in Southeast Asian countries. The share of agriculture in total output declined sharply in these countries, except for the Philippines, where there was a marginal decline from 23.5 to 21.5 per cent in GDP (Table 6.2). The rapidly rising share of industry output was evident in Indonesia, Malaysia and Thailand. The share of industrial output in Thailand and Indonesia rose from 30 per cent in 1980 to 42 per cent in 1995, while Malaysia's share of industrial output increased from 36 per cent to 47 per cent during the same period. In contrast, the relative importance of industrial output declined in Singapore and the Philippines as a result of a rising share of output from the service sector in both countries to 63 and 43 per cent, respectively.

Because of the rising importance of the industrial sector, the growth momentum of the Southeast Asian countries has been dictated by the growth of industrial output rather than agricultural output as it was in the early 1960s. This changing pattern of output has become a stylized fact in the development process. GDP growth rates of these countries in the period 1991–1995 were consistently higher than in the period between 1981 and 1990 (Table 6.2). For example, Indonesia was able to raise the average growth rate from 5.7 per cent between 1981 and 1990 to 7.8 per cent during the period 1991–1995. Malaysia's growth rate increased from 6 to 8.6 per cent during the corresponding period. Thailand, Singapore and the Philippines also experienced higher growth rates in the early 1990s than in the 1980s. The reason behind this rapid growth is the expansion in exports of manufacturing products, made possible by outward-oriented development policies that reduced the bias against external trade.

It should be noted that export structures of these countries are also changing: the share of manufacturing output in total exports has been increasing at the expense of the share of agricultural exports. The changing structure of exports

reflects the changing degree of comparative advantage. Capital formation concentrated mainly in the manufacturing sector, thereby raising the productivity of industrial workers higher than those in the agricultural sector. The rise in real wages in the urban sector attracted unskilled labour from rural areas to the industrial sector. The structure of employment also changed from the last decade: a rising share of industrial workers in total employment at the expense of the share of labour in the agricultural sector. This—another stylized fact in the development process—is clearly demonstrated in Table 6.2. A high income country such as Malaysia has only 18 per cent of the labour force working in the agricultural sector, while in Indonesia almost 50 per cent of the labour force are so employed. The share of agricultural labour in Thailand and the Philippines was still 42 per cent or more in 1994. The wage pressure on the industrial sector in these three countries was not as severe as in Malaysia and Singapore, because they have relatively more abundant

Table 6.2 Growth and structure of real GDP (%)

Country	Average Annual growth rate of real		Sectoral share of gross domestic product				Sectoral share of economically active population			Sectoral productivity (ratio to overall average product)				
	GDP		Agriculture		Industry		Services		Agriculture		Industry		Services	
	1981-90	1990-95	1980	1995	1980	1995	1980	1995	1995	1995	1995	1995	1995	1995
Indonesia	5.7	7.8	30.7	16.1	31	41.9	38.4	42	54.9	14.1	31.1	0.29	2.97	1.35
Malaysia	6	8.6	22.9	13.5	35.8	47.4	41.3	39.1	18	35.6	46.3	0.75	1.33	0.84
Philippines	1.8	2.2	23.5	21.5	40.5	35.5	36	43	44.7	15.8	39.5	0.48	2.25	1.09
Singapore	7.4	8.5	1.1	0.2	38.8	36.9	60	62.9	0.3	32.7	67	0.67	1.13	0.94
Thailand	7.9	8.5	20.2	10.8	30.1	42.4	49.7	46.8	41.6	23.7	34.7	0.26	1.79	1.35

Source: Economic and Social Survey of Asia and the Pacific 1997, United Nations (Table 11.2).

labour supply from the agricultural sector. The percentage share of agricultural labour in these five countries has the same rank as the number of population shown in Table 6.1. Countries with relatively abundant labour supply would have a higher share of agricultural employment.

The low wage rate in the agricultural sector is caused by low productivity. One can calculate sectoral productivity relative to the average product of each country by simply dividing the sectoral share of output by the sectoral share of employment. Table 6.2 demonstrates that the average product of agricultural labour in Indonesia, the Philippines and Thailand was lower than the national average product (since the ratio is less than unity), but these countries' labour productivity in industrial sector was substantially higher than the average product for all sectors. It is argued here that the high growth rates experienced by these countries were the result of the rapid expansion of output in the industrial sector, which can be explained by both quality and quantity of labour forces employed in

this sector. In other words, the Southeast Asian economy grew rapidly not only because of the increase in factor inputs, but also because of the increased productivity of labour.

Macroeconomic Management

This section we addresses the question of what kind of macroeconomic management led to high growth rate with stability between the 1980s and 1995. First we discuss the nature of the internal and external balances of the Southeast Asian nations. The role of foreign direct investment in building up export capacity of industrial sector is emphasized, while the role of public spending on education is discussed in terms of the process of human capital investment. The monetary and fiscal policies applied in various countries are compared.

Internal and External Balances

Between 1981 and 1990, the problem of widening resource gaps for the Southeast Asian countries was not serious. Thailand was the only country in the group that experienced a shortage of domestic savings. Between 1991 and 1995, however, domestic saving in Malaysia, Philippines and Thailand, albeit high, was not sufficient to finance domestic investment. Heavy reliance on foreign savings was made in the Philippines and Thailand, whose resource gaps widened considerably to 7.4 and 5.3 per cent, respectively (Table 6.3). To maintain high growth rate of GDP, the process of capital formation must not be disrupted. One of the key ingredients for growth in these countries is the ability to attract foreign capital flows to maintain a high investment rate.

Table 6.3 exhibits the prudent fiscal policy adopted by these countries across the board. In the 1980s, most countries, except Singapore, ran a budget deficit. During the period 1981–1990, Malaysia's budget deficit amounted to 8.2 per cent of GDP, but this was reduced to 0.3 per cent of GDP in the early 1990s. The increasing degree of fiscal prudence can be observed for all countries between 1991 and 1995. All countries in Table 6.3 were able to reduce the size of the fiscal deficit relative to GDP. In the case of Thailand, the reduction in government spending led to a budget surplus of almost 3 per cent of GDP between 1991 and 1995. Singapore even experienced an increased budget surplus from 1.2 to 4.7 per cent of GDP.

The rising per capita permanent income in the last 15 years in these countries implies that the ability to save has increased enormously. The income elasticity for demand for broad money is greater than unity, suggesting that the demand for financial savings at commercial banks would rise more rapidly than income level. As Table 6.3 indicates, the ratio of M2/GDP increased sharply for all countries from 1981 to 1995. The rising degree of financial deepening as measured by the ratio of M2/GDP can be observed in Figure 6.2. From 1985 to 1995, the financial deepening process took place rapidly in all countries. The high M2/GDP of Singapore was surpassed only by Malaysia in 1995. This is not surprising, since in a

highly developed financial market like Singapore, means of financial savings are not limited to bank deposits. It has been argued that a high degree of financial deepening is a prerequisite for growth, since the availability of financial savings would reduce financial constraints for domestic investment. Empirical evidence from 71 developing countries from the 1960s and 1980s indicates that financial intermediation promotes growth and its contribution to growth is as significant as export expansion and capital formation (Odedokun, 1996). The macroeconomic management that leads to a positive real interest rate would contribute to high level of financial intermediation, which in turn promotes growth by ensuring the availability of credit to finance investment.

Table 6.3 Macroeconomic indicators of balance and stability

Country	Resource gap ^a		Budgetary balance/GDP ^b		Average annual M2/GDP		Inter-est rates ^c	Ex-change rates ^d	Average annual inflation rates ^e	
	1981–90	1991–95	1981–90	1991–95	1981–90	1991–95	1991–95	1986–95	1981–90	1991–95
Indonesia	1.7	1.2	-3.0	-0.3	25.2	44.4	13.5 ^f	-2.75	8.6	8.9
Malaysia	2.6	-1.3	-8.2	-0.3	67.2	83.6	2.9	-2.3	3.3	4.0
Philippines	0.5	-7.4	-3.1	-0.6	30.0	41.8	1.2	1.1	14.7	10.5
Singapore	1.7	13.3	1.2	4.7	77.0	89.7	1.2	2.4	2.3	2.6
Thailand	-2.9	-5.3	-2.1	2.9	55.8	77.1	4.4	-0.6	4.5	4.8

- Notes: a. Resource gap is defined as gross domestic savings/GDP minus gross domestic investment/GDP
 b. Budgetary balance/GDP of Indonesia and Malaysia excludes grants
 c. Real interest rate on time deposits of 12 months
 d. Refers to trend growth rate of real effective exchange rate
 e. Refers to changes in consumer price index
 f. 1991–1992

Source: Economic and Social Survey of Asia and the Pacific 1997, United Nations (Table 11.3: 46).

Since all real interest rates on time deposits of 12 months in Southeast Asian countries were positive (Table 6.3), there has been no disincentive for savings. And despite high inflation rates in Indonesia and the Philippines, both countries still maintained positive real interest rates between 1991 and 1995, resulting in the increasing degree of financial deepening in Indonesia, as measured by M2/GDP, from 25 per cent between 1981 and 1990 to 44 per cent in the first half of the 1990s.

flows into the Philippines and Vietnam between 1984 and 1989 was not large enough to enable these two countries to catch up with their neighbours.

Table 6.4 Foreign direct investment inflows, 1984–1995

Country	Average		Share (%)		1990	1991	1992	1993	1994	1995
	1984–89	1990–95	1984–89	1990–95						
Indonesia	406	2,161	91	15.2	1,093	1,482	1,777	2,004	2,109	4,500
Malaysia	798	4,453	17.9	31.3	2,333	3,998	5,183	5,006	4,398	5,800
Philippines	326	881	7.3	6.2	530	544	228	1,025	1,457	1,500
Singapore	2,239	4,785	50.3	33.7	5,575	4,879	2,351	5,016	5,588	5,308
Thailand	676	1,873	15.2	13.2	2,444	2,014	2,116	1,726	640	2,300
Vietnam	2	58	0.0	0.4	16	32	24	25	100	150
China	2,282	19,635	-	-	3,487	4,366	11,156	27,515	33,787	37,500

Source: Economic and Social Survey of Asia and the Pacific 1997, United Nations (Table IV. 5, p. 148).

Real wage rates in the region have been rising, because the Southeast Asian countries have entered that stage of development where the era of unlimited supply of labour has long gone. Countries with relatively more abundant supplies of labour became more attractive to foreign investors than the Southeast Asian countries. By 1992, the amount of foreign direct investment into China had nearly equalled the combined amount of the total direct investment flows into Southeast Asian countries (Table 6.4). The positive effect of foreign direct investment on the balance of payments leads to accumulated international reserves in host countries, which is likely to have a strong impact on the stability of their currencies.

Foreign direct investment is also a vehicle for technology transfer for multinational corporations to developing countries. Firms in developed countries may relocate their plants to the area where cheap labour is available, as predicted by the product cycle hypothesis. Countries that receive huge amounts of foreign direct investment would be able to pull labour from the agricultural sector faster than countries that receive low levels of foreign direct investment. Thailand, Indonesia and the Philippines received smaller amounts of foreign direct investment than Singapore and Malaysia, leaving the substantial difference in sectoral productivity between agriculture and industrial sectors (Table 6.2). On the other hand, the productivity gap was much smaller in the case of Singapore and Malaysia. Since real income depends on labour productivity, as long as productivity differentials among sectors remain high, economic development would not lead to an improvement in income distribution.

Human Capital Investment

Government can improve income distribution by raising public spending on education. As a result, the achievement of high economic growth can be realized without sacrificing equity. In a recent study by Jha (1996), there is evidence supporting the view that secondary schooling can improve income distribution in

developing countries by raising the income share of the lowest 40 per cent of the population at the expense of those in the top 20 per cent. If social unrest is detrimental to the process of economic development by creating risks and uncertainty, public spending on education can indirectly reduce social tensions from income inequality. Education budgets can be regarded as public investment in human capital so as to smoothen the transformation of a traditional agricultural sector to a modern industrial sector.

Growth can be indirectly enhanced by public investment in human capital. In various cross-economy studies such as Lucas (1988), King and Levine (1993), and Levine and Zervos (1996), the secondary school enrolment rate was included, among other explanatory variables such as financial development proxy, in the regression explaining growth differentials among developing countries. Empirical evidence suggests that growth can be affected by investment in human capital in the long run by raising the marginal productivity of labour.

Table 6.5 indicates that although the 1995 adult literacy rate of countries in the region is quite high, the secondary school enrolment rates in Thailand and Vietnam were substantially below those in neighbouring countries. Shortages of skilled labour have become more serious as Thailand cannot compete in international markets for unskilled labour intensive products from countries at the lower development ladder, nor can Thailand push forward to replace the markets that once belonged to Asian tiger countries that have graduated to exporting more advanced technology intensive products. Malaysia and the Philippines would have no difficulty in forging ahead with exporting skilled labour intensive products. The slowdown in the Thai economy can be regarded as a structural problem, since there would be a substantial time lag before Thailand can reap the benefits from the investment in human capital.

Table 6.5 Gross enrolment ratios and adult literacy rates

Country	Year	Enrolment ratios				Adult Literacy rate (1995)
		Primary	Secondary	Tertiary	All level (1993)	
Indonesia	1992	114	43	10	61	84
Malaysia	1993	93	59	-	61	83
Philippines	1993	111	79	26	77	95
Singapore	1991	107	68	-	68	91
Thailand	1992	98	37	19	54	94
Vietnam	1993	111	35	2	51	94

Source: Economic and Social Survey of Asia and the Pacific 1997, United Nations (Table 11.8, p. 78).

The share of Thailand's education spending in GDP was 3.8 per cent in 1985; this declined to 2.9 per cent in 1990, probably due to the failure of the

government to understand the importance of the role of human capital in the process of economic development. Nevertheless, the education spending share in 1995 rose to 3.1 per cent of GDP (Table 6.6). Countries at a higher development ladder such as Malaysia and Singapore have put great emphasis on the role of government in providing education. Especially in Malaysia, government spending on education was more than 5 per cent of GDP on the average. It should be noted that the Malaysian government budget allocated to education was always higher than defence spending. With a strong commitment to human capital development throughout the last decades, Malaysia and Singapore have achieved a higher standard of education than other countries in the region, giving rise to the comparative advantage in producing high value added products and skilled labour intensive products for export.

Table 6.6 Government expenditure on defence and education

	1985	1990	1995
<i>Defence/GDP:</i>			
Indonesia	2.238	1.279	0.991 ^a
Malaysia	5.042	4.266	4.162
Philippines	1.330	2.164	1.962 ^a
Singapore	6.107	4.818	4.235 ^a
Thailand	4.430	2.750	2.41
<i>Education/GDP:</i>			
Indonesia	2.199	1.725	1.603 ^a
Malaysia	5.603	5.789	4.962
Philippines	2.254	3.317	2.931 ^a
Singapore	5.866	4.063	4.233
Thailand	3.820	2.884	3.145

Note: a. 1993.

Sources: Asian Development Bank, Government Finance Statistics Yearbook, and office of the National Economic and Social Development Board, Thailand.

In 1985, the allocated budget for defence in Thailand was 4.4 per cent of GDP, whereas the education budget represented only 3.8 per cent of GDP. Nevertheless, my feeling of the subject is that, given the total budget, if the government spends more on defence, they would have less to spend on education and other social expenditures. The latter might contribute to higher marginal social benefit than additional dollar on defence spending. The trade-off between education and defence spending was less pronounced in Malaysia and Singapore, but there seems to be such trade-off in Indonesia and the Philippines. The share of Southeast Asian governments' defence spending in GDP has been declining since 1985 (Table 6.6). With the increase in international cooperation of the countries in the Southeast Asian region, there has been less political tension and there is a lesser need to build up military capability to defend national territories. Indonesia has the lowest share of defence spending in the region, yet managed to further reduce the relative size of the defence budget in 1995. Singapore's share of defence

spending declined from 6.1 per cent of GDP in 1985 to 4.2 per cent in 1993. Thailand has made a remarkable reduction in defence spending, from 4.4 per cent in 1985 to 2.4 per cent in 1995.

Singapore has the highest level of defence spending (relative to GDP) among the Southeast Asian countries, while Indonesia has the lowest. It seems that higher-income countries would tend to have higher military expenditures than lower-income countries. Malaysia, with the second highest per capita income, also has the second highest military expenditure. Thailand and the Philippines are also in descending order in terms of per capita income and in terms of defence spending. From Table 6.6, we may conclude that perhaps defence spending is a luxury good for Southeast Asian countries. This observation is quite in contrast to recent findings by Wall (1996), who studied 65 developing countries between 1984 and 1988 and concluded that the share of military spending would decrease with a rising level of GDP.

As argued by Knight et al. (1996), since military spending is economically unproductive and distorts resource allocation, an increase in military spending has an unambiguously negative and large direct impact on economic growth. There is also an indirect impact on growth through its negative impact on productive investment. A sustained long-run growth through higher capacity output can be obtained by military spending cuts by all countries in the region. There are other policy implementation measures that are not directly related to macroeconomic management, but the following contribute to rapid economic development: the market friendly policy, which implies less intervention by government in the market mechanism, and the reduction in trade barriers, which implies a lesser degree of protection and a higher efficiency in consumption and production.

Monetary and Fiscal Policy

As mentioned earlier, Southeast Asian governments are fiscally conservative and prudent. More importantly, when they ran budget deficits, the deficits were not financed by printing money. The claims on government by the Philippine central bank increased only 3.4 per cent in 1990 and by 2.6 per cent in 1995 (Table 6.7). Other countries relied less on borrowing from their central banks. Thailand's, budget deficit, for example, was financed by selling government bonds to commercial banks and the private sector. In effect, these governments switched from inflationary means of deficit financing through borrowing from the central bank or using treasury cash balances to non-inflationary means of deficit financing. When the budget was in surplus, the governments reduced their debts with the central banks rather than using the available budget for extra public consumption and investment. Therefore the Southeast Asian countries did not regard the surplus in the budget as an increase in permanent income; rather, they treated the surplus as transitory income. This approach has an advantage since engaging in large public investment projects may lead to inefficiency and to the possibility of using money to finance the projects during the period of experiencing a shortfall in tax revenues.

Table 6.7 Fiscal and monetary indicators

	Claims on governments and other public entities annual per cent growth		Money and quasi money annual per cent growth		Private investment per cent of gross domestic fixed investment		Credit to private sector per cent of GDP		Seigniorage per cent of GDP	Spread over LIBOR (lending rate minus percentage points)	
	1990	1995	1990	1995	1980	1995	1990	1995	1993-95	1990	1995
Indonesia	-6.7	-	44.6	-	56.5	76.0	8.8	-	-	8.2	13
Malaysia	-1.2	-0.6	10.6	20.0	62.5	65.1	49.9	129.5	3.9	-1.1	1.6
Philippines	-3.4	2.6	22.5	24.2	68.9	80.1	42.2	45.0	1.4	15.8	8.7
Singapore	-4.9	-8.1	20.0	8.5	-	-	81.0	106.7	1.1	-0.9	0.4
Thailand	-4.0	-2.9	26.7	17.0	68.1	77.1	41.7	139.9	1.4	8.2	9.7

Source: World Development Indicators 1997, World Bank.

Thailand adopted this approach even though its budget was in surplus between 1988 and 1996. In 1997 when the Thai economy slowed down, tax revenues fell sharply and the government had difficulty balancing the budget. Public investment was the first item to be cut. In other words, fiscal flexibility must exist so that fiscal policy can be applied to changing conditions. Thailand experienced large budget deficit after 1976. While tax revenue continued its increasing trend throughout the 1980s, government spending increased faster, causing a considerable deficit as a share of GDP. This deficit did not fuel inflation because the Thai government avoided selling bonds to the Bank of Thailand. Commercial banks absorbed the larger part of the government bonds; was a requirement for commercial banks that wanted to open new branches that they must satisfy the condition of holding at least 16 per cent of their deposits as government bonds. Consequently, inflation in Thailand was moderate during the period of budget deficit.

The flexibility of fiscal policy is illustrated clearly in Figure 6.3. To reduce the deficit, government spending (as a ratio to GDP) fell sharply between 1985 and 1990; capital and defence spending were reduced substantially, producing a turnaround in the fiscal position from deficit to surplus by 1988. The ability to phase out or postpone public investment and to reduce the defence budget is crucial to the success of a sound fiscal policy. Unfortunately, fiscal discipline can only be implemented by political will, or perhaps with the conditions imposed by international lending agencies such as the World Bank or the International Monetary Fund (IMF).

The change in monetary base as a percentage of GDP, or the seigniorage, is shown in Table 6.7. Both the Philippines and Thailand's seigniorage amounted to only 1.4 per cent of GDP between 1993 and 1995. The governments in Southeast Asia do not use inflation tax as a means to raise tax revenue. It is possible that the revenue from issuing seigniorage can be low, for the demand for money might be sensitive to the inflation rate.

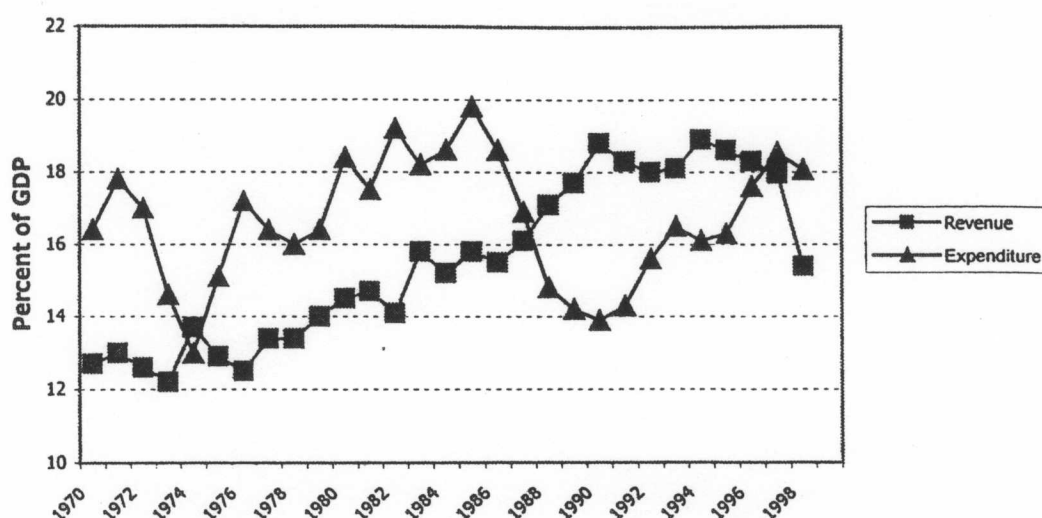


Figure 6.3 Thailand's fiscal flexibility

With low inflation, these Southeast Asian countries can enhance savings by promoting incentives for the accumulation of financial assets. In Malaysia and the Philippines M2 grew by 20 and 24 per cent, respectively. Thailand's growth rate of M2 slowed down from 26.7 per cent in 1990 to 17 per cent in 1995. The fact that the demand for money rose more rapidly than nominal income suggests that the velocity of money must have been declining over time. As a result, the declining velocity would mitigate the inflationary impact of capital inflows. The surplus budget of the Thai government helped decelerate the growth of the monetary base (Mbase) during the period of rapidly increasing international reserves (Figure 6.4). Since the net claims on government (NCG) by the central bank continuously declined they offset the rise in net foreign assets (NFA), despite the fact that the Bank of Thailand still provided credits to the financial sector (CF).

Thus fiscal prudence can reduce the pressure from massive capital inflows during economic booms. The capital inflows to Southeast Asian economies were partly due to borrowing from the private sector. In the case of Thailand, the spread of the commercial banks' lending rates over the LIBOR was substantial, reaching 8.2 per cent in 1990 and 9.7 per cent in 1995. The large spread, coupled with a minimal foreign exchange risk, induced excessive foreign borrowings from the private sector in Thailand.

Bank credit as a percentage of GDP rose from 41.7 per cent in 1990 to 140 per cent in 1995 (Table 6.7). With the availability of bank credit, the share of private investment as a percentage of total investment in Thailand rose from 68 to 77 per cent. In the Philippines, the share of private investment in total capital formation was even higher, at 80 per cent in 1995; the interest spread was 8.7 per cent in 1995. Although the interest spread in Malaysia was low, bank credit amounted to almost 130 per cent in 1995, a substantial increase from 50 per cent in 1990. Indonesia's

share of private investment in total investment also increased between 1990 and 1995, reaching the high level of 76 per cent in 1995.

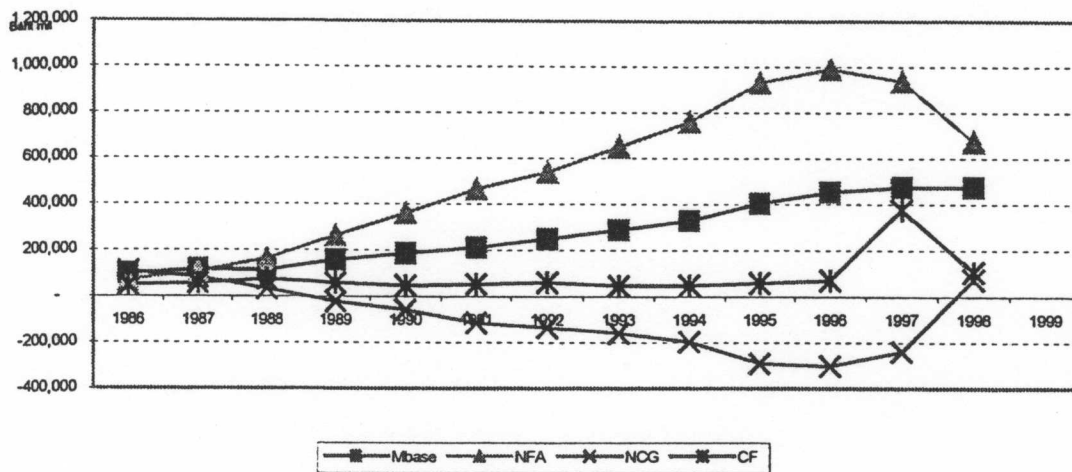


Figure 6.4 Changes in Thailand's monetary base components

It appears that the Southeast Asian countries undertake measures to stimulate private investment and try to reduce the role of public investment. Khan and Kumar (1997), using data from 95 developing countries over the period 1970–1990, found evidence supporting the view that private investment has a higher productivity than public investment. They also found that the difference in the impact of growth between public and private investment is most apparent in Latin America and Asia, but much less pronounced in Africa. However, Ram (1996) found contradictory evidence from 53 developing countries, suggesting that public investment may be more productive than private investment. In the case of Southeast Asian countries, public investment projects can have a positive impact on growth if they complement private investment. On the other hand, the impact on growth should be considered in both the quantity and the quality of investment. A rapid increase in private investment in the wrong sector may stimulate only short-run growth, while high quality public investment may contribute to growth in the long run.

What Went Wrong?

Thailand has accumulated foreign debt rapidly since the early 1990s, most of it created by the private sector. Foreign debts in 1995 doubled from the level in 1990, which more than tripled the foreign debt level in 1980. The size of Thailand's foreign debt was enormous, compared with other countries shown in Table 6.8. In 1990, the amount of foreign debt in Thailand was still below that in Indonesia and

the Philippines. The Indonesian foreign debt in 1990 was four times higher than the debt level in Malaysia, and twice as large as the level in the Philippines.

In the case of Thailand, these external debts were created by both private corporations and local commercial banks that took advantage of low levels of international interest rates. With the rather stable exchange rate, the cost of foreign borrowing seemed to be cheap because there was no foreign exchange risk, as long as the baht was still pegged to the US dollar. This was the reason large parts of foreign borrowings were not hedged against future exchange rate depreciations. Thai commercial banks' foreign borrowing began to rise rapidly in 1993 during the boom period and the size of their banks' foreign liabilities began to exceed the level of monetary base in 1994. As Figure 6.5 shows, the ratio of commercial banks' borrowings relative to the monetary base (the foreign liability relative to the monetary base kept rising until 1995. It became impossible for the Bank of Thailand to sterilize the capital inflows. The open market operation measure was limited by the small size of the government bonds, due to the continued budget surplus of the Thai government. The Bank of Thailand also issued bonds, but the amount was insignificant compared with the level of capital inflows. Besides, the cost of sterilization is high as long as the Bank of Thailand has to pay high interest rates on the BOT bonds. Furthermore, the sterilization process may not work in the long run where capital mobility is high due to capital control liberalization.

Table 6.8 also reveals that Thailand's external debt consists of a relatively high ratio of short-term loans with the ratio rising from 42 per cent in 1980 to 47.6 per cent in 1995. Malaysia and Indonesia had a less liquid debt structure; their short/long-term debt ratio was around 27 per cent. Nevertheless, the increasing trend of reliance on short-term financing was seen in all three countries. On the contrary, the Philippine's reliance on short-term financing has been declining, judging from the ratio of short/long-term financing, which fell from 85.7 per cent in 1980 to only 15.8 per cent in 1995. Mismatching of maturity between borrowing and lending would create severe liquidity shortage if the short-term borrowings cannot be rolled over.

Some of these short-term foreign borrowings were extended to speculation in the property sector and the stock market during the boom period from 1990 to 1995. Because the Bank of Thailand has limited capacity to supervise financial institutions and because prudent financial regulations are lacking, bank credit grew rapidly and was allocated to speculative, unproductive and inefficient sectors. These sectors' performances are pro-cyclical and highly sensitive to business cycles. Since 1988, inflation in Thailand has been higher than that in the United States. As a result, the US consumer price index relative to the Thai price index (PUSTH) continued its declining trend (Figure 6.5). The large inflows of foreign borrowings led to rising price levels of non-traded goods. With the fixed nominal exchange rate between the baht and the dollar, the real exchange rate appreciated, causing a loss in the competitiveness of the Thai exports.

by overhyped economy, the Bank of Thailand set the maximum credit expansion, which constrained domestic investment. Thus both exports and investment, which had been Thailand's growth driving forces in the past, were not functioning. In 1997, the amount of foreign debt outstanding in the Philippines rose to \$12.6 billion, while that in Malaysia declined to \$2.9 billion. Both Thailand and

of the Exchequer), foreign borrowing by the private sector to finance the current account deficit reflects rational investment decisions made by private individuals. Therefore it should pose no problems as long as the public sector does not run a budget deficit. In Thailand, however, private firms tend to over borrow since they cannot anticipate foreign exchange risk and, as well, Thai commercial banks anticipate that the government may bail them out when they face difficulty. Moreover, if those foreign debts have short maturity, the private sectors would have trouble securing funds when hot money comes and goes rapidly once unfavourable news hits the markets. For example, Moody's Investor Service downgraded Thai commercial banks' ratings by one step, with the result that the cost of obtaining additional funds from abroad may be raised 50 basis points—if they can still obtain the loans.

Table 6.9 Recent macroeconomic indicators

Country	Per cent change on year earlier			International reserves (billion US\$)		Interest rate Short-term per cent p.a.
	GDP 1997	Inflation 1997	Currency units per US\$ (22 Oct 1997)	1997	1996	
Indonesia	+8.0*	+6.9 Sep	-36.65	19.3 Aug	15.50	30.50
Malaysia	+8.4Q2	+2.3 Sep	-26.18	26.1 Feb	23.10	8.60
Philippines	+5.7Q2	+5.3 Sep	-24.86	10.0 May	8.00	12.63
Singapore	+7.8Q2	+2.3 Aug	-10.13	80.7 Jun	72.20	3.89
Thailand	+6.7*	+7.0 Sep	-34.45	25.0 Aug	38.30	16.00

*Figures are for 1996.

Source: *The Economist*, 25–31 October 1997.

Because of the slowdown in economic growth, rising non-performing loans and political instability, the baht was under a massive attack by speculators on 14–15 May 1997. The Bank of Thailand tried to defend the baht exchange rate by selling dollars in the forward markets in Singapore and Hong Kong. Singapore also intervened to defend the baht. The interest rate was raised to prevent speculation in domestic markets (Figure 6.6), while the Bank of Thailand also controlled the outflows of baht so that speculators in the forward markets would be able to close their positions when the forward contract matured. In effect, the Bank of Thailand created a two-tier system for the exchange rate between the onshore and offshore markets. Consequently, the exchange rate between domestic and offshore markets can be widely different, depending on the availability of the two currencies. On 2 July 1997 Thailand yielded to market pressure and let the baht float; the Bank of Thailand had come to the important realization that they could not successfully defend the baht. The level of international reserves fell from \$38.3 billion in August 1996 to only \$25 billion in August 1997 (Table 6.9). The baht floating was a de facto devaluation, carried out when the financial sector was beset by non-performing loans and large foreign debts. After the float, the baht/dollar exchange

rate tended to converge. Nevertheless, disparity is apparent when expectations of the two markets change with the arrival of good and bad news from Thailand.

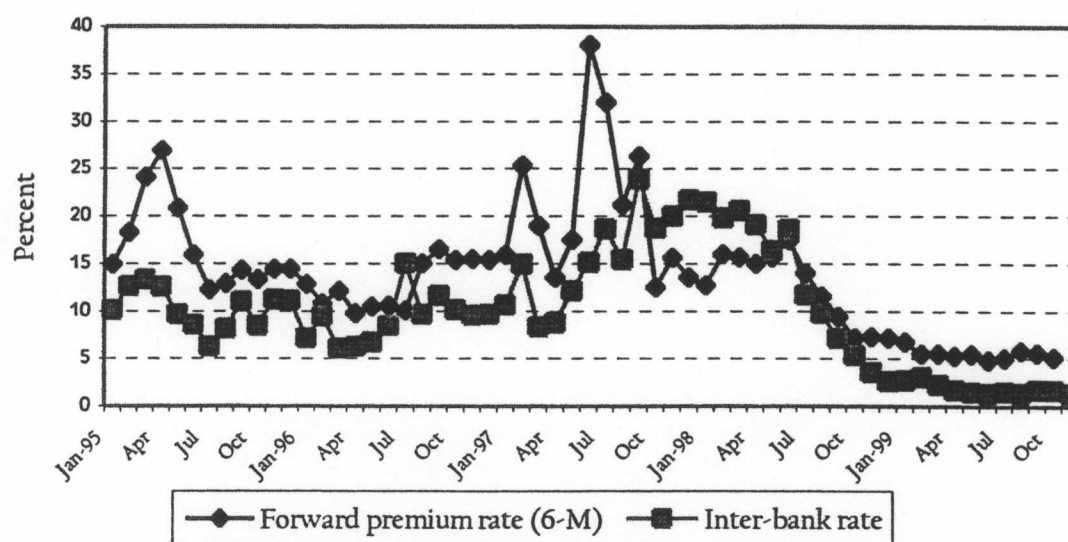


Figure 6.6 Thailand: Inter-bank rate and forward premium (6-month)

The existence of a large volume of debt relative to GDP in Thailand prolonged the economic recovery period. The short-term interest rate went up to 16 per cent in October 1997, while the year-on-year inflation rate rose to 7 per cent in September. The impact of devaluation on the price level is not fully felt due to lag adjustments and some price controls.

To make matters worse, the government has no credibility left in launching any economic measures to address the problem. A gasoline tax increase was abandoned after two days in effect because the government could not resist the pressure from the public. The Thai prime minister assured the country in a televised address on 30 June, 1997 that there would be no devaluation; the announcement of a managed float of the baht came only two days later. Credibility is the key to the success of economic policy and can significantly increase its effectiveness. Before floating the baht, the exchange rate between the baht and the US dollar was extremely stable; confidence about the exchange rate stability helped reduce uncertainties and risk in international trade. When the fixed exchange rate is abolished, volatility sets in especially when there is no credibility to anchor the exchange rate. Thai corporations rushed to protect themselves by buying dollars in the forward markets, while some Thai exporters were not willing to bring in dollars after receiving payments, anticipating a further depreciation of the baht. Because of the capital flight, Thailand experienced a deficit in the balance of payments in 1997, the first time since 1984, the year Thailand devalued the baht by 14.7 per cent. Four months after the float, the baht had depreciated by 34.5 percent from the exchange rate of 22 October 1996 (Table 6.9) and was heading toward the psychological barrier of 40 baht to the dollar.

The Contagion Effect

When the baht was under severe attack on 14 May 1997, the Philippines felt the pressure. The central bank of the Philippines raised the overnight interest rate by 1.75 per cent to 13 per cent to deter speculators. When Thailand's finance minister, who opposed devaluation, resigned on 19 June, the Philippines was also affected; the central bank had to raise the short-term interest rate to 15 per cent. When the baht was on the managed floating system on 2 July, it effectively depreciated by 20 per cent to a record low of 28.8 baht per US dollar. The central bank of the Philippines was forced to intervene heavily to prop up the peso, while the overnight lending rate was raised to 24 per cent on 3 July.

Five days later Malaysia's Bank Negara intervened aggressively to defend the ringgit. The move was a success since the ringgit reached a high of 2.51 against the US dollar after a low level of 2.524 on 8 July. The Philippines allowed the peso to move in a wider band against the dollar on 11 July and asked for an extension of the IMF's external fund facility. Indonesia also widened its rupiah trading band from 8 per cent to 12 per cent on the same day when its currency started to be affected. The IMF offered the Philippines \$1.1 billion in financial support under the fast track regulation drawn up after the 1995 Mexican crisis. On 24 July, the ringgit dropped sharply to a three-year low of 2.653 to the dollar. Within one month after Thailand's de facto devaluation, other currencies in the region were affected. It was reported that Hong Kong spent US\$1 billion on an intervention to defend the HK dollar during a period of two hours on an unspecified day in July.

The rupiah came under pressure again on 13 August, when it hit a historical low of 2,682 to the dollar. The central bank intervened heavily to rescue the rupiah to 2,655. Finally on 14 August, Indonesia abolished its system of a managed float through a band, plunging the rupiah to 2,7555. On 20 August, the IMF approved the bailout package of \$17.2 billion to Thailand. The ringgit continued to depreciate, breaking through the 3.0 ringgit to the dollar barrier on 4 September. The ringgit fell further in October, when the market was wary about tighter control on foreign exchange transactions. Indonesia also asked the IMF for financial assistance. On 14 October, Vietnam was not able to resist market pressure and widened the trading band of the dong from 5 per cent to 10 per cent either side of the daily official rate.

By 22 October, the Southeast Asian currencies had depreciated substantially against the US dollar. Thailand (-34.5 per cent) and Indonesia (-36.7 per cent) were the most severely affected, followed by Malaysia (-26.2 per cent) and the Philippines (-24.9 per cent). Singapore, with its more robust growth rate and \$80 billion in international reserves, was the least affected in the region. The Singapore dollar fell by 10 per cent from the level in the same period a year earlier. Singapore's short-term interest rate still remained below 4 per cent, but other countries such as Indonesia, Thailand, and the Philippines had to resort to high interest rate policies to prevent currency speculation. The short-term interest rate in Indonesia and Thailand increased to 30 per cent and 16 per cent respectively. As long as the exchange rate remains volatile, a central bank would not be willing to inject

liquidity into the market to drive down interest rates, but maintaining high interest rate for a long time would result in a slowdown in domestic spending and can lead to a severe contraction after devaluation.

Before the baht float, the stability of Southeast Asian currencies seemed to be the order of the day. After 2 July, the volatility of the exchange rates against the US dollar has been more pronounced. As can be seen from Table 6.10, by using daily data from 130 observations from 1 January to 1 July 1997, the size of the standard deviation relative to the mean value of all currencies except the baht was rather small, less than 1 per cent. The coefficient of variation of the baht exchange rate against the US dollar was among the highest, but its standard deviation represents only 2.4 per cent of its mean. All countries in the region adhered to the principle of exchange rate stability as an important macroeconomic objective.

Table 6.10 Stability and volatility of Southeast Asian currencies against the US\$

	1 Jan - 1 Jul 1997					2 Jul - 17 Oct 1997				
	Baht	Peso	Ringgit	Rupiah	Sing dollar	Baht	Peso	Ringgit	Rupiah	Sing dollar
Mean	25.64	26.35	2.50	2405.26	1.43	33.24	30.83	2.86	2892.56	1.50
Maximum	26.13	26.39	2.53	2444.00	1.45	37.30	35.80	3.37	3692.50	1.56
Minimum	23.15	26.28	2.47	2361.48	1.40	28.65	26.38	2.49	2431.00	1.43
SD.	0.628	0.025	0.016	24.882	0.013	2.512	2.604	0.250	376.214	0.036
CV-SD/Mean	0.024	0.001	0.006	0.010	0.009	0.076	0.084	0.087	0.130	0.024
Jacques-Bera	139.23	9.10	10.21	9.72	9.07	5.83	3.83	4.67	7.69	4.47
(Probability)	(0.000)	(0.011)	(0.006)	(0.008)	(0.010)	(0.054)	(0.147)	(0.097)	(0.021)	(0.107)

Source: Author's calculations.

Daily exchange rate data on each currency from 78 observations between 2 July and 17 October 1997 yielded a completely different picture, where exchange rates of all currencies had become more volatile. The rupiah became the most volatile currency, while the Singapore dollar was the least volatile. The Jacques-Bera statistics for testing the normality of exchange rate movements over the period of the study indicated that the normal distribution of all currencies could be rejected only in the first period during the first half of the year. The implication of the finding is that the Southeast Asian countries constantly intervened in currency markets to achieve a certain degree of stability with the result that the movements of the exchange rate were not distributed normally. However, the Jacques-Bera statistics from the period 2 July to 17 October were not statistically significant for all currencies, except the rupiah. Thus the movements of the baht, ringgit, Singapore dollar and peso seem to be normally distributed. The exchange rates change randomly every day according to news and events. After the baht float, governments in Southeast Asian countries intervened less frequently and let the market forces decide the daily market exchange rates.

Abrupt change in the exchange rate regimes would exert a fundamental impact on the Asian economies. If the exchange rates became more volatile, inflation rates would also fluctuate more widely. Since the welfare cost of inflation

depends on whether the inflation rate can be anticipated, fluctuations of the price level would lead to higher welfare cost of asset holders. Furthermore, cost of foreign borrowing would be high, reflecting foreign exchange risks.

The age of cheap imports of foreign capital may have ended on 2 July 1997. Domestic saving mobilization is needed to replace foreign savings so as to regain the long-term pre-shock growth path. It is expected that the Southeast Asian economies are unlikely to experience the 8 per cent growth rate enjoyed earlier in the decade. The Malaysian government introduced severe austerity measures by tightening the budget to reduce the country's current account deficit and to restore confidence in the ringgit. Similarly, the Thai government cut the fiscal budget by 100 billion baht in order to meet the IMF's lending conditionality, which required a surplus budget in 1998 by at least 1 per cent of GDP. The sharp reduction of public spending further aggravated the purchasing ability in the Thai economy and may lead to a severe recession.

The contagion effects of currency realignments can be seen in Figure 6.7. The baht devaluation on 2 July triggered the fear of speculative attacks in other countries with characteristics similar to those of the Thai economy. Countries that are susceptible to currency attacks generally have the following in common: over-valued exchange rate as a result of pegging the domestic currency to the US dollar for too long, large current account deficits, domestic investment financed by short-term external borrowings, high interest rate policies to defend currencies, and over-lending by financial sectors to real estate. Although some countries in the region (such as Singapore) do not share these characteristics with Thailand, the Singapore dollar was also hit.

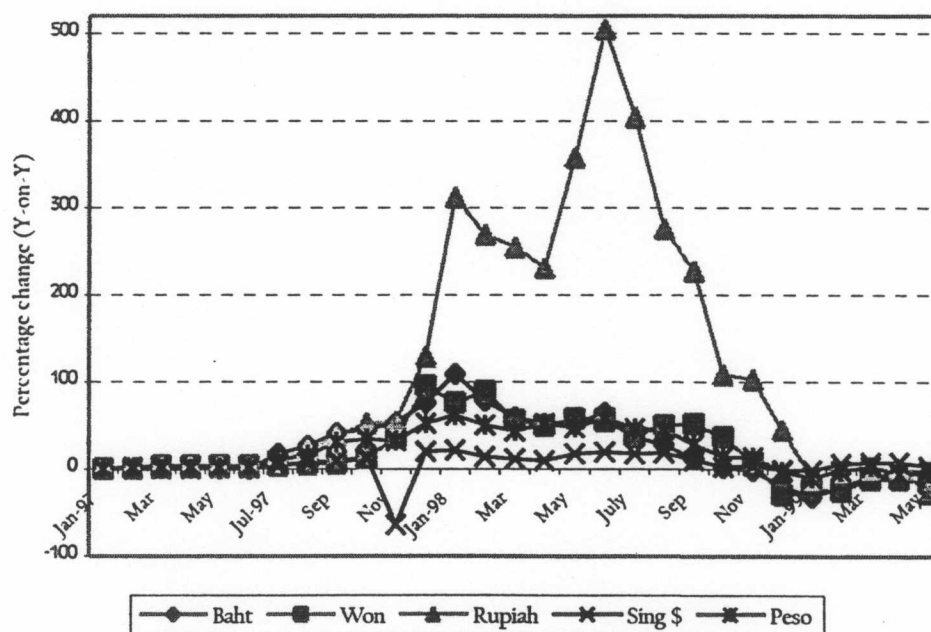


Figure 6.7 Contagion effect

Some economists advance the hypothesis of asymmetric information to explain the contagion effect: international investors do not have perfect information about countries in faraway regions and tend to view them as a group sharing similar characteristics. Moreover, since these countries have similar export structures and large volume of intra-regional trade, Thailand's devaluation would affect other countries' competitiveness if their countries do not depreciate their currencies in tandem with the baht.

A slowdown in the growth rate of one country in the region thus translates into a slowdown in imports of that country from other countries in the region. It is not surprising, therefore, to see that devaluation in one country can have a widespread contagion effect into other countries. The degree to which a country would suffer more or less depends on the responsiveness of the tradeable sector that can take advantage from currency depreciation, and the strength of the financial sector, which must be able to withstand the financial distress from enlarging non-performing loans caused by recession. Jardine Fleming International Securities estimates that non-performing loans will peak at a combined \$73 billion in Malaysia, Thailand, Indonesia and the Philippines, representing 15 per cent of outstanding loans of these countries and 13 per cent of their combined GDP. The non-performing loans in Thailand will peak in 1998 at \$27 billion (20 per cent of GDP), while Malaysia's non-performing loans will peak \$19 billion (23 per cent of GDP). In Indonesia, NPL will reach 11 per cent of GDP or \$19 billion.

Table 6.11 shows the correlation matrix of the prices of the US dollar in terms of Southeast Asian currencies in two periods: before and after the baht floating on 2 July 1997. The correlation coefficients were relatively low; the baht value has a negative correlation with the peso, the ringgit and the rupiah before 2 July. But these negative correlation coefficients changed to positive between 1 July and 20 October 1997. The coefficients also increased sharply and were approaching 0.95 for all currencies.

Table 6.11 Correlation matrix of the price of the US dollar, 1 Jan–1 Jul 1997

	Baht	Peso	Ringgit	Rupiah	Sing dollar
Baht	1.00				
Peso	-0.3777 (0.9203)	1.0000			
Ringgit	-0.4779 (0.9408)	0.5494 (0.9372)	1.0000		
Rupiah	-0.3783 (0.8948)	0.8505 (0.9005)	0.5633 (0.9377)	1.0000	
Sing dollar	0.1521 (0.9316)	0.5923 (0.8768)	0.1649 (0.9277)	0.7002 (0.9185)	1.0000

Note: Figures in parentheses indicate correlation coefficient between 2 July and 20 October 1997.

Other currencies in the region such as the ringgit and the Singapore dollar, which used to have a very low correlation coefficient of 0.16, began to move closely to each other. The correlation between the two currencies increased to 0.93. The rupiah and the peso, which previously had strong correlation of 0.85, moved even closer to each other with the higher correlation coefficient of 0.9. The correlation coefficient between the ringgit and the peso increased from 0.59 to 0.87. The increasing degree of the co-movements of the Southeast Asian currencies makes it difficult for traders and investors to diversify their risks by using different currencies and assets in their portfolio allocations.

The performance of the stock market is related to the foreign exchange market. Government attempts to prop up the existing exchange rate by raising domestic interest rates would result in a decline in stock prices. Furthermore, higher interest rates would affect stock prices by retarding economic growth and reducing corporate profits and dividends. During the economic booms before 1995, foreign investors were attracted to Southeast Asian markets and allocated more funds to the region. The stock prices were bid up and created a positive wealth effect on demand for consumption and investment. Since it is less costly to finance investment through equity than through borrowings, firms in the region took advantage of high price-earning ratios of their new shares. The booms in the stock markets gave rise to higher expectations for further asset price appreciation. Commercial banks and finance companies also extended credit to finance the purchase of assets such as real estate and stocks and pushed the asset prices up further. With the arrival of the unfavourable news of a slowdown in exports, rumours on devaluation and political uncertainty, the bubbles burst and caused a sharp decline in stock prices (Figure 6.8).

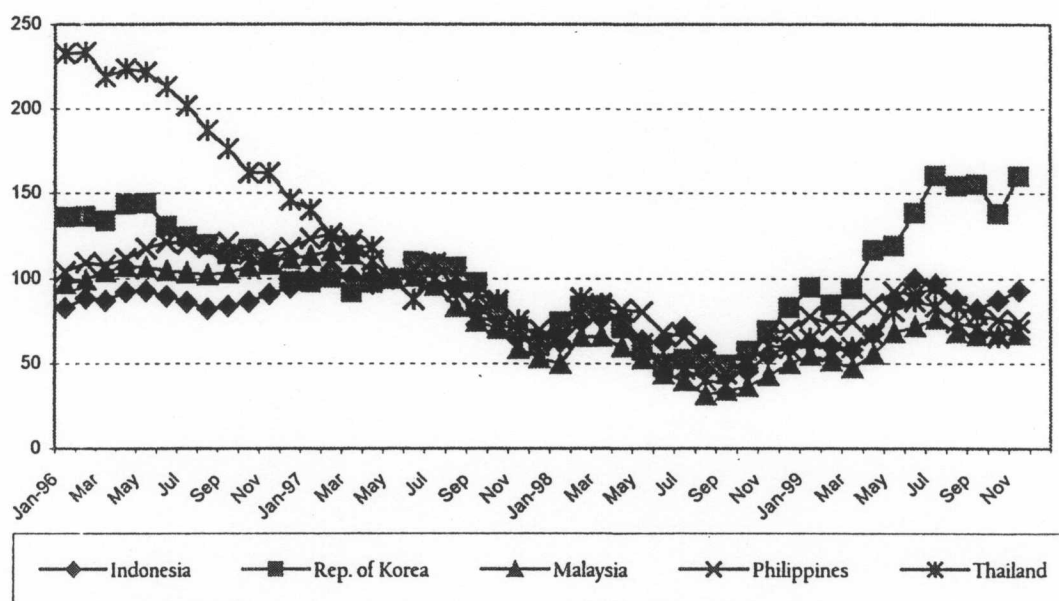


Figure 6.8 Volatility of Asian stock markets (May 1997 = 100)

The substantial fall in asset prices led to a sharp decline in wealth, causing a slump in domestic consumption. The sales of department stores in Bangkok have been falling over the last 14 months, reflecting a severe decline in wealth and a loss in consumer confidence. As Singh (1997) has argued, stock market developments in developing countries provide a poor guide to efficient investment allocation and the excessive volatility in the wake of unfavourable economic shocks may cause macroeconomic instability and reduce long-term growth.

Concluding Remarks

African countries can learn some valuable lessons from the rise and fall of Southeast Asian economies. It can be argued that macroeconomic stability was the cornerstone of the rapidly rising per capita income in Southeast Asian economies between the 1980s and the early 1990s. Successful financial liberalization requires price stability in terms of low and controllable inflation rates. Inflows of foreign direct investment, which enhance factor productivity through technology transfer, require a stable macroeconomic environment in host countries in the forms of sustainable current account deficit and stable exchange rates. The cost of external funds can be reduced by establishing exchange rate stability, since the forward premium of the exchange rate would be small. Thus macroeconomic stability facilitates rapid growth for developing countries, even if some developing countries are constrained by low level of domestic savings. Economic growth in Southeast Asia was driven mainly by rapid expansion of the industrial sector, which was stimulated by foreign direct investment. The output growth was the result of increasing both the quantity and productivity of labour.

In the past decade the Southeast Asian countries carefully implemented conservative macroeconomic policy to achieve stability in terms of the exchange rate, price levels, fiscal balances and moderate growth in money supply. Fiscal flexibility is demonstrated by the ability to trim public spending when needed. The sustained high growth path for the Southeast Asian economies was therefore related to the macroeconomic policy applied. However, sustaining high growth for too long can pose a problem. As long as the system of fixed exchange rate is not prohibiting high income growth, there is less need for the central bank to alter the exchange rate system. Nevertheless, rising tides of capital inflows would cause real exchange rate appreciation if the central bank wished to maintain exchange rate stability.

Since most central banks cannot effectively sterilize huge capital inflows in the long run, fiscal surplus must be used to mitigate the expansionary monetary base. Furthermore, excessive loan expansion of commercial banks to pro-cyclical sectors turns into non-performing loans and bad debts during an economic downturn. Once the stability of the financial system is threatened, confidence in the stability of the exchange rate or the financial reform policy package will simply collapse.

Floating the baht exchange rate should have been carried out during the period of balance of payment surplus; there would have been less pressure on the price of non-traded goods and the Thai economy could have avoided a hard landing. Since growth was viewed as the price objective of the monetary authorities, it was not surprising that they hesitated to let the baht appreciate since it would dampen export growth during the boom years.

Interest rate hikes should never be used to defend the exchange rate. The cost of defending the existing exchange rate is too high in terms of output loss. Moreover, the attempt is likely to fail in an environment of instantaneous international capital movements. When the impact of market expectations is quite strong, any deviations from the market's anticipation would cause further exchange rate depreciation. The sizes of the international reserves held by some Asian central banks are too small to protect their existing exchange rate level from voracious foreign speculators and panicked domestic corporations that have accumulated huge foreign debts.

Financial liberalization in the capital account and the banking sector should be delayed until both macroeconomic stability and prudent financial regulation and capable supervision are firmly established. Selective controls on capital inflows should be applied to make sure the inflows are persistent, less volatile and channelled to productive sectors.

Furthermore, financial deregulation may lead to a consumption boom by households as their liquidity constraints are relaxed. Timing, sequencing and the pace of the financial liberalization are crucial to the success of policy implementation. Competition among newly established financial institutions can lead to weaknesses of the entire financial system. Efficiency gains from competition may not be large enough to offset the loss in financial stability. The most urgent problem for Southeast Asian countries right now is the issue of the continued exchange rate depreciation, which is mostly related to policy credibility and public confidence in the financial system.

Foreign debts in Thailand and Indonesia have been created by the private sector. Since the exchange rate depreciation, the ratios of foreign debt to GDP in both countries are now comparable with those in African countries. At the same time, the ratios of market capitalization to GDP in Southeast Asian countries have declined sharply as a result of the stock market crashes. One of the important lessons learned is that high growth financed by short-term capital flows, such as portfolio investment and short-term foreign borrowings, is not sustainable and the benefits from financial liberalization may be elusive, unless the institutional developments are accompanied by strong supervision and prudential banking regulations.

A strong and independent central bank is necessary to create effective monetary policy. In general, the central banks in developing countries are assigned various policy objectives. The duty of defending the exchange rate can be a goal that is incompatible with conducting monetary policy to stabilize a financially opened economy. Fearing that bank runs may be intensified into a system-wide collapse of the whole financial system, the central banks have to consider whether

they should bail out some ailing banks. The lessons from the Southeast Asian countries indicate that the fear of the contagion effect of bank runs may be overestimated. The central bank should refrain from bailing out some troubled banks since taxpayers should not be the ones who have to bear the cost of mismanagement of financial institutions. Instead, bank shareholders, creditors and some depositors, in descending order, should pay the price of undertaking risky behaviours. The problem of moral hazard can then be mitigated and the central bank can focus its role on stabilizing the economy, rather than trying to save some excessive-risk-taking financial institutions. When financial crisis and currency crisis are intertwined, the economic recession will be more severe and over a prolonged period of time.

The IMF bailout packages for Thailand and Indonesia also included conditionalities on good governance. Indeed, one of the factors that contributed to the collapse of these economies was the lack of policy credibility. When transparency and accountability are established in government organizations and the central bank, when authorities are under public scrutiny, and when the rule of law prevails, the effectiveness of macroeconomic policy can be enhanced considerably as a result of the enhanced degree of policy credibility.

References

- Asian Development Bank. 1997. *Key Indicators of Developing Asian and Pacific Countries*. New York: Oxford University Press.
- Bayoumi, T. 1993. 'Financial deregulation and household savings'. *Economic Journal*, vol. 103, no. 421 (November): 1432-43.
- Jha, S.K. 1996. 'The Kuznets curve: A reassessment'. *World Development*, vol. 24, no. 4: 773-80.
- Khan, M.S. and M.S. Kumar. 1997. 'Public and private investment and the growth process in developing countries'. *Oxford Bulletin of Economics and Statistics*, vol. 59, no. 1: 69-88.
- King, R. and R. Levine. 1993. 'Finance and growth: Schumpeter might be right'. *Quarterly Journal of Economics*, August: 717-37.
- Knight, M., N. Loayza and O. Villanueva. 1996. 'The peace dividend: Military spending cuts and economic growth'. *IMF Staff Papers*, vol. 43, no. 1: 1-37.
- Levine, R. and S. Zervos. 1996. 'Stock market and long run growth'. *The World Bank Economic Review*, vol. 10, no. 3: 33-339.
- Lucas, R.E. 1988. 'On the mechanics of economic development'. *Journal of Monetary Economics*, vol. 22, no. 1 (July): 3-42.
- Odedokun, M.O. 1996. 'Alternative econometric approaches for analysing the role of the financial sector in economic growth: Time-series evidence from LDCs'. *Journal of Development Economics*, vol. 50: 119-46.
- Ogaki, M., J. Ostry and M. Reinhart. 1996. 'Saving behaviors in low and middle-income developing countries'. *IMF Staff Papers*, vol. 43, no. 1 (March): 38-71.
- Ram, Rati. 1996. 'Productivity of public and private investment in developing countries: A broad international perspective'. *World Development*, vol. 24, no. 8: 1373-78.

- Singh, Ajit. 1997. 'Financial liberalization, stock markets, and economic development'. *Economic Journal*, vol. 107 (May): 771–82.
- Speight, A.E. and M.J. White. 1995. 'Private consumption, public consumption and liquidity constraints in developing countries: Some empirical evidence'. *Applied Economics*, vol. 27: 925–33.
- United Nations. 1997. *Economic and Social Survey of Asia and the Pacific*. New York.
- Wall, Howard J. 1996. 'Is a military really a luxury good? An international panel study of LDCs'. *Applied Economics*, vol. 28: 41–44.
- World Bank. 1997. *World Development Indicators*.