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The Thai Economy: Structural Changes and Challenges Ahead

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A Short Political History

Over the last century, several of vested-interest groups have been taking part in the political life in Thailand. However, the king and his royal family have been the central of political agenda while the military, the civilian bureaucracy have played a significant role in shaping Thai politics. Apart from that political parties have been involved from time to time since 1932. It is very true that in the traditional system from *Sukothai* to Coup d' etat in 1932, the king was clearly the center of political life to the greater extent that the king held extensive power. Moreover, he took responsible for the administrative, judicial, military, religions and cultural life of the country. He also appointed center and provincial officials, issued edits on a variety of subjects, made a decision on legal issues, oversaw preparations for war, protected the Buddish faith and provided generous support for the arts which was essential for any king of Thailand. Furthermore, many Thai monarchs represented leading intellectuals-and poets and others for instance, king Mongkut (1851-1867) and king Chulalongkorn (1868-1910) were considered to preserve Thailand's independence from the west in an era of colonial expansion.

*Faculty of Economics, Thammasat University, The shorten version was published in Anis Chowdhury and Iyanatul Islam (eds.) *Handbook on the Northeast and Southeast Asian Economies* (Cheltenham: Edward Elgar, 2007), pp. 129-148.

Under the *Sakdina* regime which had survived for centuries, the Thai monarchy was unable to preserve its great power in the twentieth century. By the 1920s, the storm of change in the political system was emerging among military officers, civilian officials and students who had studied abroad in particular in France. The coups of June 24, 1932 were seen as the end of absolute monarchy and the Provincial Constitution of June 27, 1937 was drafted and enacted. The critical period took place on the March 2, 1935 when king Prajadhipok abdicated the throne. The throne was vacant between 1946 and 1950. After that king Bhumibol Adulyadej returned to Bangkok in 1950 and was very popular with the Thai people. Since then King Phumipol has become the most popular king in Thailand.

Modern Thai politics can be traced back when King Chulalongkorn initiated the reform programme. The modern western style had been implemented such as education, railways, public health and police, etc. Since the war of 1932, Thai politics has been opened to new groups of people, mainly bureaucrats which were originated from the great reform by King Chulalongkorn. This bureaucracy was the major source of employment for educated Thai and became the main source of power in Thai politics for decades. Some observers regard the Thai bureaucracy as a social system with its own values. (Wilson, 1983). Over 1932 to early 1973, Thai politics was a matter of competition between bureaucratic cliques for the benefit of government. There is no doubt that the most powerful group of bureaucracy in Thailand was the army which was well organized and well established had come out on top of competition. Some political writers term this period as a semi-democratic era.

In fact, Thailand has applied a bicameral system since 1932 with a constitutional monarchy. Although King Bhumibol Adulyadej had ensured a degree of political continuity, there have been 17 military coups (the last in 1991) since 1932. Genuine civilian government was restored in 1973, but over the following decades, administrations were always short-lived and unstable. The critical change occurred in January 2001, when the newly formed Thai Rak Thai (Thai loves Thai) –TRT party under the leadership of a former policeman and telecommunication tycoon, Thaksin Shinawatra, won a resounding victory in the general election. The fact should be kept in mind is that Thaksin's government became the first administration to complete a four-year term. Furthermore, in the 2005 election, the Thai Rak Thai party won the general election unprecedentedly and could form a single party government. This new government represents a new era of Thai politics to the extent that the parliamentary regime is controlled by the dominant political force. This fact can be explained by looking at table 1. Thai Rak Thai won

377 seats in the lower house which enables it to govern alone while over the last decades a government coalition had been the case.

Table 1
Parliamentary Forces

(Number of seats in House of Representatives won in February 2005 election)

Political Parties	Total	Constituency	Party list ^a
Thai Rak Thai (TRT)	377	310	67
Democrat Party (DP)	96	70	26
Chart Thai (CT)	25	18	7
Mahachon	2	2	0

Source : Election Commission

Note : ^a elected by proportional representation

2. Economic Progress and Structural Changes

2.1 Economic growth was almost zero over 1855-1950

Although the country had severely been hit by the crisis in 1997, the second half of the twentieth century was exceptionally successful in Thai economy. The case of Thailand is interesting to the extent that before 1950, the Thai economy had been stagnated for at least 100 years. (1855-1949). The growth rate of per capita income over this period averaged just 0.2 percent per year (Manarungsan, 1989). However, over 1987-1996, the Thai economy growth rate turned out to be the fastest growing economy in the world. And then the economic crisis broke out in 1997 and made the economy stagnated. Now the economy is recovering slowly.

This excellent performance has started since 1950 as we just mentioned above very little growth had been made over the period 1870-1950. The question raises had been made over the period 1870-1950. The question raises is why the sudden change happened. Some might argue that Thailand had never been colonized her economy was in fact not different from colonial economy. Ingram (1971) and Feeny (1982) suggest that Thailand remained *de jure* independent, but her economy *de facto* was similar to colonial economy. The stagnation over the long period can be partly explained in terms of lacking investment incentives. Feeny (1982) goes further by arguing that the Thai elites chose to use all scarce resource to invest in railways instead of putting money in irrigation projects which should have improved productivity in agricultural sector, especially in rice production. The second explanation lies in the fact that Thai *Sakdina* did not create any institution to nurture entrepreneurial class.

Most entrepreneurs working in Thailand at that time came from Europe and China. Chinese merchants were very active in the Thai economy in all aspects of life, largely because the Thai *Sakdina* was always confronted with the shortage of skilled and unskilled labour. Furthermore, these Chinese traders and unskilled workers migrated to Thailand to earn money and then send this remittance back to mainland China. As pointed out rightly by Ingram (1971), the amount of this money sent back to China was quite substantial and rendered the Thai economy stagnant in terms of capital accumulation. The third explanation is concerned with the unequal treaty that the British Empire set up for Thailand since 1855, the so-called Bowring treaty was signed by both parties. This unequal treaty turned the Thai economy into the regional colonial economy prohibited the high import duties (maximum 3% of import and export) which domestic industry could not have been created. The cheap import product substituted local industrial product easily, while the country was severely weakened by limited government revenue from the trade tax. Therefore, infrastructure could not be built. The shortage of skilled and unskilled labour made the elite consent to import Chinese workers to work in public activities. During the Second World War, the European trading house had been closed down, local Chinese merchants were cut off from the mainland after the Communist party took the power in 1949. This critical event rendered the Chinese entrepreneurial class willing to invest their capital in Thailand.

2.2 The Thai Miracle?

Since 1950, the Thai economy has shifted from being rag to rich. This miracle did occur over 1950-1996 if economic growth has been counted. Nevertheless, it is better to understand economic growth in such a long period, we must divide this miracle into five sub periods.¹

- I. 1950-1973, which is the period that Thai economy got its foundation right by investing in physical infrastructure which made economic growth high and stable subsequently?
- II. 1974-1985, which is the period of macroeconomic uncertainty, hardship and difficult economic adjustment.
- III. 1986-1996, which is the decade of extraordinary high economic growth?
- IV. 1997-2000, which is time of economic crisis
- V. 2000-2004, which is the period of recovering and challenging

¹ Siamwala (1999) and Jitsuchon (2002) also agree to divide the Thai economic growth into 5 sub periods.

However, the recent work of Warr (2005) proposed in a different period of economic growth in Thailand. He suggests that economic miracle growth in Thailand might be divided into 4 sub periods as follows:

- I. 1951-1986 (Phase I) Pre-boom
- II. 1987-1996 (Phase II) Boom
- III. 1997-1998 (Phase III) Crisis
- IV. 1999-2003 (Phase IV) Post-Crisis

No matter how economic growth is classified, the substance of economic growth lies in the sources of growth instead. In general, between 1950 to 2000, the average annual growth rate of real GDP was 6.6 percent. (see Table2 and Figure 1) However, if we extend the period of economic growth to 2003, the average annual growth rate reduced to 6.2 percent (see Table3).

Table 2
Main Economic Indicators, 1950-1999

	1950-59	1960-69	1970-79	1980-89	1990-96	1997-99
Growth rate real GDP	5.4	8.0	7.1	7.3	8.5	-2.4
Savings /GDP ratio	11.5	20.6	21.8	25.1	34.1	31.0
Investment/GDP ratio	13.6	20.8	23.8	28.6	40.7	24.3
Inflation rate	5.1	2.2	8.0	5.8	5.1	4.7

Source: Ingram (1971:222); data from NESDB and Bank of Thailand.

Table 3
Thailand Rates of Growth of GDP and GDP per capita, 1951-2003

Period	Real GDP growth	Real GDP growth per capita
1951-1986 (Phase I) Pre-boom	6.5	3.9
1987-1996 (Phase II) Boom	9.2	8.0
1997-1998 (Phase III) Crisis	-6.1	-7.1
1999-2003 (Phase IV) Post-Crisis	4.0	3.3
Whole period 1951 to 2003	6.2	4.2

Source: Bank of Thailand : data for 1951 to 1980; and National Economic and Social Development Board: data from 1987 quoted from Warr (2005)

This persistence huge economic growth drew much attention that results in a large number of books and article. Some writers went further by putting the Thailand as the fifth tiger (Muscat, 1998, Krongkaew, 1999).² However, the Thai miracle came to an end July 1997 when the baht had to be devalued and the fixed adjusted exchange rate to be changed into a floating exchange rate.

2.3 Source of growth : quantitative

The most popular to measure economic growth originated from two papers by Young (1994, 1995) which led to a hotly debate about the sources of growth in East Asia. These two papers was used to Krugman (1994) to suggest that East Asia miracle was not real, but its rapid growth was attributable to a rapid accumulation of capital goods. The Newly industrial countries which included in this study were Taiwan, Hong Kong, Korea and Singapore. What Young intended to prove is that total factor productivity (TFP) growth rendered only a small contribution to total growth. In particular, Singapore, TFP growth had been calculated around zero. The contribution of TFP to growth in East Asian countries over the period of 1960-85 varied from 2.5 percent in Hong Kong to 0.1 percent in Singapore. The conclusion suggests that the East Asian miracle growth is mainly due to the rapid growth of inputs only, namely (1) population growth (2) the quality of labour increasing as a result of high investment in education (3) high rates of saving have enabled a rapid accumulation of capital. While the contributions of technical progress and efficiency in production has been limited.

Sarel (1997) analyses growth in Asian countries and estimates TFP growth. The result suggests that TFP growth ranges from 2.23 percent for Singapore to -0.78 percent for the Philippines. Her result for Singapore at 1.15 percent is of course higher than that of Young (1995). As mentioned earlier, the point raised by Young (1995) and Krugman (1994) is quite essential to the point that the East Asian miracle is not sustainable. Growth is mainly based on factor accumulation or capital investment instead of drastic improving in technical efficiency which will go into diminishing returns. Table 4 summarizes the findings of growth accounting studies for Thailand. The most serious study done by Tinakorn and Sussangkarn (1996; 1998) which concentrates on growth of total output, while Sarel Studies growth of output per capita, Young (1994) and Collins and Bosworth (1996) concentrate on growth of output per worker. The sources of growth are capital accumulation, increase in labour employment, and increase in quality of the labour input and TFP growth which is the residual. The fact is clear that Thailand ranked second with respect to the contribution made by TFP growth per worker over the period 1970-85. There is little doubt that capital accumulation

² Bell et.al (1998) Dixon (1999) Jansen (1997) Kunio (1994) Phongpaichit and Baker (1995;1998) Rigg (1995) Unger (1998) Warr (1993) and Warr and Nidhiprabha (1996).

mainly contributed to economic growth. In the East Asian, capital accumulation accounted for the lion share of growth contributions rising to as high as about 80% over 1991-1995.

The rapid accumulation of capital in particular capital goods can be seen very clearly from Table 2, the investment ratio sharply increased from a very low level in the 1950s to very high levels in the late 1980s and 1990s. Over 1990-96, investment ratio increased to 40.7 while in the 1950s it stood as 13.6. In the same token, in the 1950s to 1990s saving ratio jumped from 11.5 to 34.1 in the 1990-96. Nevertheless, in the 1950s to 1970s, savings were dominated by household savings, since the middle of the 1980s corporate savings have played a significant role.

Table 4 Growth Accounting for Thailand

Study	Period	Growth Concept	Growth Rate	Capital Accumulation	Labour Input	Quality of Labour	TFP Growth
Young (1994)	1970-85	Output per worker	3.7		1.8		1.9
Collins and Bosworth (1996)	1960-94	Output per work	5.0	2.7		0.4	1.8
Sarel (1997)	1979-96	Output per capita	5.24	2.13	1.09	-	2.03
Tinakorn and Sussangkarn (1996)	1978-90	Output	7.6	2.9	2.0	1.5	1.2
Tinakorn and Sussangkarn (1998)	1981-95	Output	8.12	5.04	0.96	0.84	1.27

Source: Quoted from Jansen (2004)

According to Tinakorn and Sussangkarn (1996; 1998), the overall growths can be decomposed into those contributed by increasing in input use and by increasing in total factor productivity of TFP. Table 5 indicates that the contributions owing to labour became rapidly superseded by increasing in quality. Increase in 4.4% (25.1-20.7) was made possible over 1980-1990 (21.3-13.1). It is quite impressive that over 1991-1995, quality of labour increased to 16.7%. What is striking is that the growth of TFP was increasing at very rate at 31.3 over 1986-1990, but it was almost negligible in the later period of 1991-1995. (See Table 5).

In sum, the economic growth miracle in Thailand can be simply explained by the fact that the import of capital goods helped improving producing process, instead of increasing

technical change. Therefore total factor productivity was exhaustive over 1991-1995 before the crisis broke out in 1997.

Table 5 Sources of Growth by Sectors, 1981-1995 (percentages)

	Land	Capital	Labor		TFP	
			Unadjusted	Quality Adjusted	Unadjusted	Quality Adjusted
1981-1985	2.9	62.2	20.7	25.1	14.1	9.7
Agriculture	4.0	11.7	21.6	41.8	62.7	42.5
Industry		86.2	28.0	42.7	-14.2	-28.9
Manufacturing		68.3	31.9	57.1	-0.2	-25.5
Services		74.9	34.0	52.3	-8.8	-27.2
1986-1995	-0.3	61.6	9.3	21.4	29.4	17.3
Agriculture	-0.9	90.6	-7.1	-4.2	17.4	14.5
Industry		64.1	27.3	36.5	8.6	-0.5
Manufacturing		59.4	28.1	37.1	12.5	3.5
Services		65.7	24.6	33.0	9.7	1.3
Of which:1986-1990	-0.2	47.6	13.1	21.3	39.6	31.3
Agriculture	-0.9	59.3	23.3	35.6	18.3	6.0
Industry		49.0	24.3	26.6	26.7	24.4
Manufacturing		47.6	27.0	26.0	25.4	26.4
Services		52.1	18.9	32.6	29.0	15.3
Of which:1991-1995	-0.5	78.6	4.8	21.5	17.1	0.4
Agriculture	-0.8	117.3	-33.2	-38.3	16.7	21.8
Industry		84.5	31.5	49.9	-15.9	-34.4
Manufacturing		75.6	29.7	52.4	-5.3	-28.0
Services		82.3	31.7	33.5	-14.0	-15.8

Source: calculated from Tinakorn and Sussangkarn (1998), table 8,13,14,15,16.

Quoted from Jitsuchon (2002)

2.4 Source of growth: qualitative

It is argued that over the last fifty years, the Thai economy growth was very impressive, except for the short period of economic crisis in 1997-1998, most of the time economic growth not only grew at 6.6% per annum, but the economy was also stable with low inflation rate (see Table 2 and Figure 1 and 3) How could the economy manager to boost economic growth like this? As argued elsewhere by Siamwalla (1996) Sussangkarn (1992) and Jitsuchon (2002) that socio economic and political factors play some role in this matter.

Openness

The Thai economy was opened almost the time could be dated back to the middle of nineteenth century under the Bowring treaty. Before the Bowring treaty, all international trade was conducted by the clique of the royals and his associates, the Bowring treaty dismantled this monopoly at once. With a central of Southeast Asian, Thailand benefits from its location advantage since its location surrounds by many major international trade. Furthermore, most rulers, be they the monarchs or subsequent democratic governments after encourage international trades to be active since income from taxation could be used to invest in public utilities. Since 1950, the economy has been opened to foreign investors, the nationalistic sentiment which was dominated over 1932-1949 was completely abandoned by General Sant. Thanarat. Since then the more or less, the Thai economy has been strict to the so-called *laissez-faire* policy.

Culture

In East Asian countries, culture is believed to have played some role in shaping people mentality and thinking. In particular, Confucian ethics which pays more attention to achieve in the present life then on the afterlife. Furthermore, this Confucianism renders these East Asian people aware of getting higher education and of working hard. In particular, external threat helped the authoritarian government to strong then nationalistic feelings since World War II, especially in South Korea and Taiwan. In Thailand, Buddhism is the national religion which makes Thai people cope with to external change. (Girling, 1981, Klausner, 1987, Mulder, 1979, Potter, 1976). The Thai culture is quite open to compromise with other nationals and not difficult to assimilate with different culture. Sussangkarn (1992) rightly suggests that friendship is the key to understand this high economic growth in Thailand over the last fifty years. Thai people seem to be very tolerant, compromising and prefer to avoid any escalated conflicts. Rigid dogmatic beliefs have been rarely found. Furthermore, according to her a long history, friendship with foreigners has been recognized. Never being colonized, ordinary Thais are quite friendly to foreigners and usually treat them equally.

Stability

There is little doubt that economic statistically plays a significant role in promoting growth. Since 1950 to 1996, economic stability in Thailand was quite stable in terms of low inflation and low unemployment rate. It is quite surprising that frequent military coup d' etat have not generated the same pernicious effect on growth similar to those in some Latin American countries. Political instability did not translate into economic stability. Most civilian governments were in office in a very short period of time (see table 6). As pointed out rightly by Feng (2003) government change as the result of a coup d' etat does not have to

instill political uncertainty into the economy, largely because either the overthrown government or the coup leaders share the same commitment to a market economy. The monarchy in Thailand as a old traditional institution enables to keep national conflicts low. Therefore, a country with many coups d' etat is still capable of managing growth quite well if its fundamental principles of macroeconomic remain intact. The fact is clear that from 1932 to 2001, Thailand had 25 governments. Over this period, 10 coups were successful, 16 coups were failure. The average life span of a Thai government was 24 months from March 1975 to November 1997. The shortest government was under Suchinda government and the longest 100 months was under Prem (see table 6).

Table 6
Government Changes in Thailand

Prime minister	In office	Duration (months)	Means of Selection
Manopokon	1/1932-6/1933	12	Coup
Phahon	6/1933-9/1938	63	Parliament ^a
Phibun	12/1938-8/1944	68	Parliament
Khung ^b	8/1944-8/1945	12+2+4	Parliament
Thawi	8/1945-8/1945	0.5	Interim
Seni	9/1945-1/1946	4	Interim
Pridi	3/1946-8/1946	4	Parliament
Thawan	8/1946-11/1947	15	Parliament
Phibun (2)	4/1948-9/1957	114	Coup
Phot	9/1957-12/1957	3	Interim
Sarit ^c	2/1959-12/1963	58	Coup
Thanom	12/1963-10/1973	10+118	Succession
Sanya	10/1973-2/1975	16	Interim
Khukrit ^d	3/1975-1/1976	10	Parliament
Seni (2)	4/1976-10/1976	7	Parliament
Thanin	10/1976-10/1977	12	Coup
Kriangsak	11/1977-2/1980	28	Coup
Prem	3/1980-8/1988	100	Parliament
Chatchai	8/1988-2/1991	30	Parliament
Anand ^e	2/1991-2/1992	12+3	Interim
Suchinda	3/1992-5/1992	2	Coup ^f
Chuan	9/1992-6/1995	33	Parliament

Banharn	7/1995-11/1996	16	Parliament
Chavalit	11/1996-11/1997	12	Parliament
Chuan (2)	11/1997-2/2001	39	Parliament

- a. Parliament was restored through a coup.
- b. Khung was again prime minister from January to March 1946 and from November 1947 to April 1948.
- c. Thanom was prime minister for 10 months while Sarit was treated for cirrhosis in the United States.
- d. Seni was prime minister for about 20 days before Khudrit.
- e. Anan was again prime minister from June to September 1992.
- f. Suchinda was chosen by Parliament but his selection was the result of a coup.

Source: Ockey 1996, 345-360, 347, and my observation since the Banharn

Government

The explanation before this high economic growth with stability can be attributed to sound macroeconomic management in both fiscal and monetary policies. One crucial factor underlies this fact is that Thai politicians over 1950-1996 did not interfere much in macroeconomic policies. Politicians tended to be passive when it came to manage board macroeconomic policies. Difficult jobs were given to the hands of technocrats from Ministry of Finance and Bank of Thailand. (Christensen et. al, 1993). This high stability in macroeconomic gives rise to good economic climate so that investors feel secure to invest and accumulate capitals. Compared to Latin American countries, coups d' etats in Thailand has a negative impact in growth, but its damaging effect was quite minimal.

Inflation

As mentioned earlier, price stability in Thailand over the last fifty years has been remarkable, except from particular years in the early and late of 1970s when the first and second oil shock took place in the world. Imported inflation was the main cause of the high inflation in Thailand (see table 7). Only 1973-74 and 1980-81 that inflation rate stood more than two digits. Most of the time, inflation rate was kept in a very low rate. How could it happen? The strongest macroeconomic stability in price is attributed to two factors. One explanation argues that the real exchange rate was effectively controlled and well managed by the Bank of Thailand under the fixed exchange rate regime. Thailand stands out as an economy whose real exchange rate was low and stable continuously from 1950s to the middle of the 1990s. This can be made possible, mainly because Thailand chose to use outward-

oriented strategy, although few capital intensive industries were heavily protected under a high wall of tariffs. Other explanation lies in the fact that Thailand has been producing food enough to feed their own people and exporting to the world market. Rice is the main stable good which the price of rice has always been insulated from the world market price by using various policies since World War II. This wage good has been kept low and stable over the last fifty years and these results in the strongest price stability in Thailand (Christensen et.al., 1993; Siamwalla et al 1989). However, the stable price stability has had to be compensated with budget deficits since 1950. After 1950, the Thai government always managed expenditure policy over revenue received, as a consequence this budget deficit was often financed by public external debt (see Ingram 1971; Warr and Nidhiprabha, 1996; Jansen 1997) Total external debt jumped from 16.6 % of GNP to 51.3% in 2004. (see table7). Total debt service ratio used to be at the highest level standing of 27.4 in 1985 though its level was reveled off after 1987 but then it jumped to more than 20% in 1998 after the economic crisis broke out. However, this total debt service ratio has been declined to a manageable level at 8.4T% in 2004.

Table 7 Macroeconomic Summary, 1970-91*(percent growth rate, unless otherwise indicated)*

<i>Year</i>	<i>Real GDP</i>	<i>Exports</i>	<i>Imports</i>	<i>Terms of trade (export/import unit value) (percent)</i>	<i>Inflation (percent)</i>	<i>Current Account Balance/GDP (percent)</i>	<i>Real money supply (M1)</i>	<i>Total debt GNP (percent)</i>	<i>Total debt Service/exports (percent)</i>	<i>Exchange Rate (baht/ U.S.dollar)</i>
1970	7.4	0.3	4.0	100.0	0.8	-3.8	9.7	16.6	17.1	20.8
1971	4.6	10.7	1.2	101.0	0.4	-2.5	11.0	17.2	18.9	20.8
1972	5.4	26.6	13.8	111.0	4.8	-0.6	17.7	16.8	17.4	20.8
1973	9.1	33.2	36.1	155.0	15.6	-0.5	17.9	14.3	15.3	20.4
1974	4.1	44.9	49.2	130.0	24.3	-0.7	13.0	13.2	14.8	20.0
1975	5.0	-7.8	3.8	116.0	5.3	-4.1	11.0	15.5	15.1	20.0
1976	8.9	24.9	12.2	107.0	4.2	-2.7	12.4	13.1	12.8	20.0
1977	9.8	14.9	30.3	101.0	7.1	-5.7	9.0	14.8	16.7	20.0
1978	9.3	21.7	15.9	102.0	8.4	-1.5	17.1	18.5	17.4	20.3
1979	5.9	29.4	38.4	105.0	9.9	-7.7	17.0	20.2	19.1	20.4
1980	6.2	27.0	23.2	100.0	19.7	-6.2	13.8	25.7	14.5	20.5
1981	5.2	14.1	14.3	87.0	12.7	-7.1	6.5	31.0	14.4	21.8
1982	4.8	6.0	-+9.6	79.0	5.2	-2.7	12.0	34.2	16.0	23.0
1983	7.1	-4.6	20.1	85.0	3.8	-7.3	10.3	35.0	19.1	23.0
1984	6.3	14.1	3.8	83.0	0.9	-5.1	5.4	36.4	21.5	23.6
1985	3.0	-2.7	-8.8	100.7	2.5	-3.9	0.2	45.6	27.4	27.2
1986	4.6	23.9	1.1	112.4	1.9	0.7	13.2	42.9	24.7	26.3
1987	9.7	31.8	41.5	111.3	2.4	-0.6	22.8	40.0	19.8	25.7
1988	13.3	37.1	48.9	109.2	3.9	-2.4	18.5	34.4	15.0	25.3
1989	12.4	25.2	27.3	105.0	5.3	-3.3	19.7	31.6	12.9	25.7
1990	10.0	15.1	29.8	102.0	5.9	-8.3	16.8	34.8	10.8	25.6
1991	8.2	23.6	15.6	100.9	5.7	-7.5	2.4	38.8	10.6	25.5
1992	8.1	13.8	6.1	101.6	4.1	-5.5	19.7	39.8	11.3	25.4
1993	8.4	13.4	12.3	102.3	3.4	-4.9	10.1	42.3	11.2	25.3
1994	9.0	22.1	18.4	103.3	5.0	-5.4	20.1	45.7	11.7	25.2
1995	9.3	24.8	31.9	100.0	5.8	-7.9	17.1	61.0	11.4	24.9
1996	5.9	-1.9	0.6	98.0	5.9	-7.9	12.7	61.1	12.3	25.3
1997	-1.4	3.8	-13.4	102.3	5.6	-2.0	1.8	74.4	15.7	31.4
1998	-10.5	-6.8	-33.8	93.1	8.1	12.7	-2.0	97.3	21.4	41.4
1999	4.4	7.4	16.9	94.4	0.3	10.2	10.6	79.8	19.4	37.8
2000	4.6	19.5	31.3	85.9	1.6	7.6	9.8	79.7	15.4	40.2
2001	1.8	-7.1	-3.0	77.8	1.6	5.4	8.3	67.5	20.8	44.5
2002	4.9	4.8	4.6	76.7	0.7	5.5	12.3	59.5	19.6	43.0
2003	6.9	18.2	17.4	77.2	2.7	5.6	27.4	51.8	16.0	41.5
2004	6.1	23.0	27.0	78.8	3.6	4.3	12.0	51.3	8.4	40.3

Source: All data from Bank of Thailand, Thailand's Macro Economic Key Indicators, http://www.bot.or.th/bothomepage/index/index_e.asp, except:

* Real Money Supply (M1), from CEIC database>Thailand Monetary>Table TH.KA03: Monetary Supply and Demand Deposits.

* Terms of trade: Bank of Thailand> Table50: Trade Indices and Terms of Trade.

* Total Debt/GNP(%): Calculated from: Thailand's Macro Economic Key Indicators 1993-2003 and GNP from National Economic and Social development Board

Compared to other developing countries, recent budget deficit of Thailand was not so desperate if moderate economic growth has been taken into account. Economic growth increased at 5-6% per annum over 1987-2004 indicating that economic growth has turned out to be normal since 2002 which is the last year that budget deficit was reeled at -1.4% (see table 10). Nevertheless, one thing that we cannot tell is that relationship between budget deficit and economic recovery is unclear. What we can conclude so far is that the recovering of Thai economy might be attributable to external environment in other Asian countries. What must economists in Thailand are concerned is that the new government under the leadership of Taksin is continuously applying non-budget deficits as the main strategy under neo populist policy. In 2004, non-budget deficit was 3,900 million bath and there is a tendency that this deficit will be broaden under the neo populist policy³

What seems to be the case of Thai economy is that balance of payments does not cause any negative impact on growth and stability, but the main concern is based on the persistent deficit in current account. According to recent data, most of the time current account balance of Thailand was deficit ranking from 3.8% of GDP to the highest at -7.9% of GDP in 1995-1996. (see Table 7) One might be skeptical whether this perennial deficit has had an impact on economic growth or other macroeconomic goals. Furthermore correlation between the terms of trade and current account deficit is also blurred. However, one can notice that since 1990, the terms of trade had been deteriorated that partly might have led to the speculation attack on Thai baht in the early 1977 due to the fact export growth in 1996 was negative at the first time in many years.

³ Non-budget policy is meant that all the expenditure proposed does not need to be scrutinized by parliament. It can be implemented directly by the incumbent government.

Table 10
Budget deficit of Thailand
Compared to other countries

	1987- 1996	2000	2001	2002	2003	2004
Budget deficit/GDP(%)		-2.1	-2.2	-1.4	0.3	0.1
Thai Economic growth (%)	9.5	4.8	2.2	5.3	0.9	0.1
Economic growth in developing countries ^{1/}	7.8	6.5	5.8	6.5	8.1	8.2
Numbers of developing countries that economic growth exceeds China including China	1	15	15	7	6	9
Numbers of developing countries that economic growth exceeds china excluding China	0	14	14	6	5	8
Number of developing countries that economic growth increase less than Thailand	20	9	9	18	19	16

Source: IMF, World Economic Outlook, April 2005.

Table 10
Budget Deficit in Non-Budgetary Balance

Unit: millions of Baht

	1997	1998	1999	2000	2001	2002	2003	2004
Deficit in Non- budgetary balance	13.0	-4.2	-34.4	-1.8	9.8	1.8	7.6	-3.9

Source: Bank of Thailand

2.5 Structural charges in Thai economy : A Critical Review of Growth and Structural
Changer of Manufacturing Sectors

Thailand, again like other developing countries, has undergone dramatic economic changes during the late twentieth century and its economic expansion has many features in common with the East Asian NIEs, in particular in manufactured exports, but other features differ from the general pattern. The point that will raise rests on structural change and economic growth between the 1960s and the early 1990s.

It is worth noting that a transformation in Thailand's economy and society was prevalent in the post war period. A prominent feature of macroeconomic performance of the Thai economy is its steady and stable growth into the post-war period. The evidence suggests that the GDP growth rate neither became negative after 1960 nor fell drastically even in the world-wide recession of the early 1980s. Further, the country has embarked on high and sustained growth without severe inflation except during the oil shocks of the 1970s which caused deterioration in its balance of payments and resulted in increased external indebtedness and domestic inflation. Compared to other LDCs, Thailand has not only ranked very high in terms of the pace of economic development over the three last decades, but also performed very well during the downturn of the world economy (see Oshima, 1993; Ranis and Mahmood, 1992). Its real GDP growth at an average of 4 per cent in the 1950s, 8.2 per cent in the 1960s, 7.2 per cent in the 1970s and more or less 6 per cent in the 1980s. In fact, over the past few decades, Thai economic growth has been quite good, with rates more satisfactory than any targeted variables. The impressive high economic growth between 1960 and 1980 at an average 6 per cent per annum was, of course, not unintentional. However, due to poor agricultural performance and the oil price increases, the GDP growth rate in Thailand dropped enormously from 9.4 per cent in 1973 to 5.4 per cent in 1974. Moreover, facing a second oil price shock in 1979⁴ combined with a weak agricultural performance, the Thai economy slowed down significantly. (see Table 7)

Hence, the rate of growth dropped again from 10.1 per cent in 1978 to 6.5 per cent in 1979. It is rather surprising, in spite of the two oil price shocks, that a highly impressive growth was still achieved with an average rate of 8.5 per cent from 1975 to 1978. Average growth rate declined to 5 per cent per annum between 1980 and 1985. It should, however, be noted that Thailand's economy has been dynamic⁵ and satisfactory compared to Latin American countries or other developing countries adversely affected by the world crisis in the

⁴ The fact is that over 90 per cent of Thailand petroleum products, demand is supplied by imports. This made Thailand vulnerable to the oil price rise in 1973 and 1979. Although Thailand was hurt by the first oil price increase, the cost of imported was approximately offset by increased prices for rice exports in 1973-1974.

⁵ Some Thai economists working at Thailand Development Research Institute observe that the composition of manufactured exports since the mid-1980s indicates that the Thai external sector become more dynamic. (See Akrasanee and Wattananukit, 1990).

early 1980s (see Huges and Singh, 1991), especially some Asian countries e.g., the Philippines (see Oshima, 1993; Ranis and Mahmood, 1992; Yoshihara, 1995). The growth rate further accelerated for the four years (1987-1990) and has recorded approximately 10 per cent per annum since the late 1980s. At present, Thailand is cited as one of the fastest growing countries. The role of the agricultural sector which has been the main contributor to GDP in Thai economic history has been steadily declining and in fact, between 1970 and 1990 growth rates in agriculture were about 4 per cent per annum. It was estimated to be the lowest between 1986 and 1990 and it is interesting to note that the growth rate in the agricultural sector became unexpectedly negative in 1987 and 1990. In contrast, the growth of the manufacturing sectors has been more impressive. By 1980, manufacturing sectors in both the import-substituting and local manufacturing sectors became the largest contributors to the economy and indeed this *transformation* can be understood from post war tendency of the state intervention to heavily tax the staple primary crop, in rice, in the form of export premiums or rice premiums. This very important taxation has substantially affected most Thai farmers for longer than anyone can image (see Siamwalla, 1975; Thanapornpun, 1985). It was indeed negative protection for Thai farmers who have provided cheap food and labour for the manufacturing sector in Bangkok which is supposedly caused by the urban “bias excessive” pursuit of ISS. Rice is certainly a wage good in the sense that labour spends most of its wage income on rice⁶ The heavy rice taxation was first imposed when great Britain demanded that Thailand pay her war indemnity in rice and the Thai Rice Office was urgently established to ensure its obligations were fulfilled. Later, the Thai government intention to collect an *extra profit* from a multiple exchange rate led to *rice premiums* becoming an important source of government revenue between 1955 to the early 1960s (see Ingram, 1971).

In short, between the 1950s and 1990s, the major structural changes in the economic structure gradually took place. The agricultural share has been considerably declining instead of being important to the growth of the economy. The share of agriculture in value added declined from 24.8 per cent in 1975 to only 16.0 per cent in 1989. With impressive growth rates, the manufacturing sector experienced some structural changes over two decades (1960-1980). Import substituting industries in food processing (Food, Beverages, Tobacco, and Snuff) did succeed in the early 1960s to 1970s, but food processing as a single major

⁶ The price of rice was always kept down to less than border price of the world market price via export tax on rice and other quantitative restrictions, for instance, export ban, quota, etc. In this way, rice premium not just became the main revenue, but indeed Thai farmers from gaining in business. This legacy of rice policy in Thailand suggests that government almost never lets the price work, but keeps the price down in order to force the wage rate to be low. (See Siamwalla, 1975).

contributor to the value added of manufacturing declined from 34.6 per cent in 1960 to 20.1 per cent in 1978. In addition, several new manufactured products emerged, for instance, tapioca processing, canned food, animal feed, dairy products, etc., while textiles, paper and paper products, rubber products and chemical products became more important. The structure of the manufacturing sectors was slightly changed in 1985 when food products no longer dominated the sector.⁷ By 1985, the shares of food products, textiles, wearing apparel, beverages, transport equipment, tobacco, non metallic mineral products and petroleum products were 15.4, 14.9, 11.4, 8.1, 7.4, 5.6, 6.0, and 4.1 per cent, respectively.

Nevertheless, the agricultural growth rate in Thailand has performed well compared to other lower middle income countries. However, this has been made possible by expanding cultivated areas at the expense of national forest land. This issue will be discussed at length later. Thailand did not participate in the Green Revolution by adopting high-yield rice varieties such as IR.-8 (Setboonsarng and Evenson, 1991). *Moreover, Thailand has typically expanded cultivated areas as a source of agricultural growth stemming from the resource endowment of the nation, abundant land itself which permitted the Thai farmer to expand land frontiers instead of improving productivity.* Land productivity (yield per rai; one rai = 0.16 hectares or 0.4 acres) has been very low and stable, while labour productivity (output per farmer) has increased significantly (see James, et al., 1987; Timmer, 1991; Watanabe, 1992). The resource rich case, land abundance, can smoothly tolerate the slow maturation of land productivity because its primary sector (rice sector) is able to generate adequate rents and as a result, the greater part of economic rents is extracted from clearing fertile forest land. (See table 11)

2.6 Structural Changes in International Trade

The Thai economy was impulsively incorporated into the world system in the 1850s (Ingram, 1971). It should be stressed that she has been able to become a major rice exporter since then. Rice is not just the main export foreign earnings, but also a staple good. In terms

⁷ Import substitution can be divided into two stages. The first 'easy' stage, non-durable goods are produced, with respect to standardised technology in the product cycle, limited economies of scale, substantial demand at low income levels, low capital requirements, etc. for instance, textiles, shoes, cement, tires, processed food and beer). The stage is labour-intensive manufactured goods in nature. The second 'difficult' stage, consumer durable goods, capital goods are produced. Hence, most LDCs often pass the first stage, because production most likely ties in the prevailing comparative advantage to the extent that most LCDs are labour-abundant. The second stage of ISS concerning economies of scale, foreign resources, expertise, high technological capabilities and development of monopolistic controls are difficult for developing countries to overcome. (See Chen, 1989; Pomfret, 1991).

of cultivated areas, it accounted for around 95 per cent of all crops in the 1960s. No less than 50 per cent of the total value of exports was attributed to rice, and four major crops, rice, rubber, tin and teak comprised 83.1 per cent of the total. Manufactured goods were found to be negligible in 1950 (see Falkus, 1991; Ingram, 1971).

Over the 1960s and 1970s, the structure of international trade considerably changed. Diversification began dramatically in the early 1970s, both within the agricultural sector into a wide range of crops, and out of agriculture into manufacturing and trade in services. In the first half of the 1970s, Thailand was severely hurt by the first oil shock. Fortunately, being a major exporter of primary commodities whose prices increased steeply between 1972 and 1974 as a result of the world wide drought, the Thai economy still performed soundly. Thereafter, the economy promptly recovered in the second half of the 1970s through a surge in infrastructure investment and a rapid expansion of manufactured exports. In the early 1970s, Thai bureaucrats started promoting export-oriented industries. A larger number of import substituting industries began to become exhaustible to the small domestic market, but the problem Thai technocrats were confronted with was how to cope with an increase in imported inputs, materials and capital goods which showed no sign of declining. They began to realize that high protection tariffs and other incentives received by import competing industries might have been in vain.

In the 1970s, manufactured exports began expanding considerably and its share of merchandise exports rose dramatically from 2.4 per cent in 1961 to 10 per cent in 1971 and 35.8 per cent in 1981. Export growth was remarkably high at the rate of 15.2 per cent per annum. In addition, the turning point in the Thai economy in terms of economic growth and international trade appears to have occurred in the mid 1980s when evidence suggests that manufactured exports *surpassed* the traditional agricultural products (rice, rubber, maize, sugarcane and tapioca) in value for the first time. Mainstream economists both in Thailand and international institutions such as the World Bank, International Developing Economies (IDE) and The Overseas Economic Co operation Fund of Japan (OECF) concede that Thailand's excellent manufactured exports have been able to push strongly into the world market (see Sussangkarn, 1990; 1992; OECF, 1991). Manufactured exports grew at an average 35.7 per cent per annum between 1985 and 1990. Once again, this past trend was thoroughly contradictory to the world economy which was still embarking on the prolonged recession in the advanced economies (Huges and Singh, 1991; Sigh, 1992). Nevertheless, it is interesting to note that the principal composition of manufactured exports were textiles and garments, canned foods and canned fish, gems and jewelry and integrated circuits. Exports of Thai manufactured products as mentioned before can be classified into two broad categories:

(i) natural resource-based and (ii) labour-intensive manufactured goods (Jansen, 1989; Santikarn Kaosa-ard, 1992). These manufactured exports became the new rising stars.⁸

Table 11
Economic Growth in Thailand (%)

Period	1957- 1973 I	1974- 1985 II	1980- 1996 III	1997- 2001 IV	2002- 2003 V
GDP					
Agriculture	5.0	3.7	3.1	2.1	4.9
Non-agriculture	9.6	7.4	11.8	0.7	7.6
Industry	9.7	7.1	12.3	2.0	8.6
Service	8.3	3.7	8.3	-1.7	4.4
Total	7.8	4.7	9.2	-0.1	6.1
Share of GDP					
Agriculture	24.5	17.7	12.3	10.1	10.1
Non-agriculture	25.3	33.8	45.5	51.0	53.2
Industry	14.7	22.0	29.6	35.2	37.3
Service	50.2	48.5	42.2	38.9	36.7
Total	100.0	100.0	100.0	100.0	100.0

Source: NESDB

If one considers the other side of the coin; imports are not just less impressive, but also seem to induce more imbalanced industrialization. In the two decades (1960-1980), import-substituting industries took effect in the first stage (consumer goods), but seemed to fail in the second stage as usual (consumer durable goods, intermediate goods and capital goods). The evidence shows that in the two decades a major composition of imports fell into a few categories, notably raw materials (including petroleum), capital goods and chemical goods. It is plausible to conclude that *import dependence* has not been reduced and industrialization through import-substitution has not yet deepened the manufacturing sector (Jansen, 1989; Santikarn Kaosa-ard, 1992; UNIDO, 1992). *Although Thailand has had a high*

⁸ For Thai policy-makers' perception, these are sunrise, but in fact become sunset in Japan and the East Asian NIEs. Exports of labor-intensive manufactures, especially, textile and clothing are encountering increasing protectionism in industrial markets. The Multi-Fiber Arrangement (MFA) provides an effective restriction for developed countries to reduce textile products from developing countries. (See Anderson, 1992; Suphachalasai, 1992).

growth rate of manufactured exports in an export-led growth period since the mid-1980s, the growth rate in imports has still surpassed exports in terms of value. This suggests that Thailand might have tried to exploit *import-substitute-then-export (ISTE)* strategies in manufacturing (see Taylor, 1993). Current accounts compared to GDP increased from 7.9 per cent in 1989 to 12.4 per cent in 1990.⁹ This was of course the first unsatisfactory record. The prolonged deficit of current accounts was attributed to rapidly rising imports of capital goods, intermediate goods and raw materials. In other words, this fact confirms that *import dependence* had not been declining, but continuing with the implication that the second import substitution stage has at best been insignificant in Thai manufacturing sectors. It is also clear that international trade has played a vivid role in the modern Thai industrialization process since the 1980s, but the legacy of ISS can still be noticed in some industries, e.g., iron and steel and automobile industries (see Siriprichai, 1991).

3. Trade Policies for Industrialization

Why the Thai Elite started with Import-Substitution Strategy?

Thailand started with development strategy (industrialization strategy) lagging behind other developing countries with similar levels of income, for instance, the Philippines (see Oshima, 1987; 1993; Tambunlertchai, 1987). We do not really know for what factors were responsible, but the fact is that Thailand has overtaken the Philippines since the 1980s (see Ranis and Mahmood, 1992; Yoshihara, 1995). However, patterns of industrial development in Thailand can be grouped into four phases: (i) the initial import substitution period (1961-1971), (ii) export promotion (1972-1976), (iii) the Big Push (1972-1982), and (iv) the transformation into manufacturing export led growth (1983-present).¹⁰

It is not crystal clear why industrialization strategy in Thailand began via import substitution.¹¹ After the Second World War to the 1950s, there were very small manufacturing plants situated in Bangkok, mostly concerned with rice and timber activities. In general, it is known that the Thai government encouraged ISS in order to fulfill at least three broad objectives which have never been specified (i) to reduce Thailand's dependence on imports of

⁹ The current account deficit was 5.2 billion baht in 1970 (3.5 per cent of GDP) 42.4 billions in 1980 (6.4 per cent of GDP). This prolonged deficit can be understood from the fact that the need to import capital goods and other primary and intermediate inputs was necessary for economic development.

¹⁰ See Santikarn Kaosa-ard and Israngkura (1988) regarding how to separate into four periods in details. It should be realised that this breakdown of at period is roughly based on policy designs, not by effectiveness. In fact, these are not mutually exclusive. The past experience of Japan and South Korea was relevant. (See Chen, 1989; Ocean, 1985).

¹¹ Such a strategy often includes overvalued exchange rate system, import controls, high tariffs and quantitative restriction on imports. All measures need to discriminate against or anti-biased exports.

foreign goods, (ii) to raise the level of income through increasing the value-added and (iii) to save foreign exchange import expenditure. Notwithstanding, we do not know what exactly the real motive behind pursuing ISS was, but the Thai government was undoubtedly eager to adopt import substitution development strategy. One very simple answer might have been concerned with the *unbalanced* economic development strategy during the 1950s (see Hirschman, 1958). The label ‘inward-looking strategy’ was remarkably popular among elites in LDCs, despite a wide range of historical legacy, culture, natural resources endowment and size, etc. Many Latin American countries and some newly independent nations such as India, Pakistan, The People’s Republic of China, Egypt and Israel were consciously adopting inward-looking strategy. It is understandable that these developing countries, choosing ISS for industrialization based on domestic markets, were threatened by *export pessimism* after the experience of the great depression in the 1930s, which probably convinced many LDCs governments of the dangers and uncontrolled risks of international trade and market mechanism.

The notion of a labour surplus model of Arthur Lewis and Hirschman’s unbalanced growth strategy might also have influenced Thai elites. In the early 1950s, the Thai rural sector was painted as being very remote and full of under employed and misguided labour. The evidence of population growth and a plentiful labour supply seemed to support this myth. The population of Thailand in 1960 was 26.3 million, increasing to 36.1 million in 1970, 46.7 million in 1980 and 56.1 million in 1990.¹² In view of the annual population growth rate of 3.0 per cent during 1947-1960 period, it made sense to follow the *dualistic* model of Lewis¹³ (Lewis, 1954) and the *unbalanced growth* model of Hirschman (Hirschman, 1958). Import-substitution strategy matched the prevailing circumstances in the Thai rural economy. If the country had established modern industrial plants, it would have become richer and progressive like the developed countries. Moreover, not only would scarce foreign exchange have been saved, but increased employment might also have been achieved. Import substitution could have helped the poor to find jobs in a modern industrial sector instead of being unemployed and underemployed in poor rural areas and finally poverty would have been reduced.

¹² Experts in demography find that Thailand has successful reduced fertility and mortality rates as well as rapid decline in the rate of population since the early 1970s. This trend supports the notion that Thailand has undergone a demographic transition in the extent that the population growth rate has reduced from 3 per cent per annum in 1960 to a mere 1.7 per cent in 1988.

¹³ A case study of Thailand found that Marshall Sarit had ever read one book of Arthur Lewis, whilst he went to the US for operation in the early 1960.

During the import-substitution period, the Thai government was strongly biased against the agricultural sector, while it tyrannical protected and created a number of incentives for promoted industrial firms (mostly big foreign firms in Bangkok). Export tax was in turn imposed on agricultural products, rice,¹⁴ rubber, logs and wood. Manufacturing sectors were not subject to taxes and highly protected by quantitative restrictions. It is probable that a heavy tax on the Thai agricultural sector might have forced it to engage only in resource-based activities using static comparative advantage.¹⁵ In addition, tariffs and other trade policies of ISS, implemented by BOI's granting and providing tax concessions on imported machinery, equipment, raw materials and other imported intermediate inputs to the promoted or preferred industries were the case. There can be no doubt that the high degree of distortions and bias during the ISS period, contrary to expectations, did not lead to efficient allocation of resources in those promoted firms (see Bhagwati, 1988).

According to Tambunlertchai (1987), Thai policy makers began to be aware of the adverse effects of import-substitution strategy relying heavily on imported inputs, for instance, in capital goods. This suggests that resources were transferred to the promoted firms through the provision of relatively cheap machinery and intermediates, mostly capital and inputs from other companies from abroad to local assemblies. It makes sense for the foreign promoted firms to tend to use more capital inputs, but less labour inputs as a whole in the production line. Furthermore, it should be realized that the ISS regime has not only arisen in the context of exchange rate *overvaluation*, but has also been conducted within *the framework of quantitative allocation systems* by state bureaucrats.¹⁶ This is prone to result in rent-seeking activities, Directly Unproductive Activities DUPs and corruption in the sense that resources might be diverted from productive to unproductive activities (see Bhagwati, 1988; Krueger, 1974; Siriprachai, 1993). Moreover, the high degree and chaotic pattern of ISS inexorably encouraged the dissipation of entrepreneurial energies and real resources. As a consequence, import-substitution strategy seemed neither to reach governmental objectives, nor match the state of factor markets, namely cheap labour supply in Thailand from the 1950s to the 1980s. The *unbalanced growth* industrialization strategy of land-abundance until the 1970s and labour abundance until the late 1980s, paradoxically, had been emphasizing the

¹⁴ The export tax on rice conditionally ceased in 1986 because of the sluggish price of rice in the world market.

¹⁵ It is plausible that heavy tax on rice might hinder any progress in the Thai agricultural sector. This is, partly, an answer to why Thai farmers prefer to extend cultivated land instead of intensifying the cultivated methods.

¹⁶ Under administrative systems in LDCs, bureaucratic allocation can grant favours, premier, and economic rents to particular individuals or groups. Moreover, strongly bureaucratic controls like in Thailand.

development of industries involving the use of scarce 'capital'. This raises the question; why was the case and how did it come about?¹⁷ Moreover, import-substitution strategy even failed to create *forward and backward linkages* in industrial sectors. Capital intensive industrialization is meant to use more machinery but whether it will raise labour productivity or not is inconclusive. However, Siamwalla and Setboonsarng (1989) comment on the role of BOI in promoting industrial firms as follows:

The importance of BOI lies not so much in the granting of promotional privileges...in the form of tax holidays, exemptions from taxes on imports of machinery and raw materials and the like...but in its role as a forum where private business can legitimately submit requests to the government for these privileges. The government in a sense, become involved in the private sector decisions, having been involved, it also has become responsible for the survival of the enterprises. BOI's importance for the analyst lies therefore, not so much in the privileges that it grants, but as an indicator of the trust of government policies. As the guiding philosophy of BOI in the 1960s was import substitution, protection of industry became the norm...Industries were promoted, most agro industries in Thailand (like rice milling and rubber processing which are small and medium scale) cannot gain access to BOI promotional privileges. Such policies show a clear, albeit implicit, bias against agriculture (Siamwalla and Setboonsarng, 1989).

However, Thai technocrats (mostly in the National Economic and Social Development Board NESDB), introducing export promotion strategy to stimulate manufactured exports in the early 1970s as part of the Third National Economic and Social development Plan (1972-1976), specified the promotion of manufactured exports as the main industrial strategy.¹⁸ The central question that emerges is why did Thai policy-makers change industrial strategy in the opposite direction at the beginning on the 1970s, a time was known as a *downturn* of the world economy? Once again, how is it to be explained? One of the plausible reasons is that Thai policy-makers highly appreciated the 'miracle' experience of the East Asian NIEs in achieving high economic growth through the adoption of outward-looking industrialization-Eos (see Tambunlertchai, 1987). This assessment might be right when we look at some official documents written by high ranking policy makers in NESDB. Others indicate that the World Bank and the IMF seemed to have indorsed Thailand's export promotion strategy. However, it is likely that both factors partly caused it to turn-round in its path towards developmental strategy. Both international financial institutions routinely put

¹⁷ See Gustav F. Papanek (1985) in details.

¹⁸ The stated objectives in this plan were to correct the balance of payments problems and to increase overall employment through policy measures to promote exports and adjust the import structure.

forward the idea of abandoning ISS to developing countries including Thailand.¹⁹ The World Bank suggested that Thailand should adopt ISS in the late 1950s, but in the early 1970s, in sharp contrast, supported EOS instead. Thus, Thailand was urged to pursue export promotion strategy.

The fact that the export promotion period (1972-1976) did not succeed was evident. Import substitution policy did not merely prevail, but was also advocated through tariff policy and other quantitative restrictions which were under the control of the Ministry of Finance. The 1974 revision was, of course, import liberalizing policy, but was followed by increased protection in the 1978 revision. However, under the 1977 revision of the Industrial Promotion Act, BOI was still empowered to provide a large number of privileges to preferred firms; (i) exemptions, or reductions up to 50 per cent of import duties and business taxes on imported machinery, as well as business taxes on domestically produced machinery, (ii) reductions up to 90 per cent of import duties and business taxes on both imported materials and domestic materials, (iii) exemptions from corporate income taxes for 3-8 years, with the carry-forward of losses for up to five years after the period of exemptions, (iv) exclusion from taxable income of fees for goodwill, copyright and other rights for a period of five years after income is derived from the promoted activity; and (v) exclusion from taxable income of dividends derived from the promoted activity during the period of tax holiday. Furthermore, this amendment gave BOI power to levy a special *import surcharge* to help out the promoted firms. The example above is just a small part of the incentive system provided to encourage foreign companies to invest in Thailand. The penalty to foreign firms violating the rules was seldom applied. This is contrary to the East Asian experience.

In fact, in 1972, the investment promotion law was replaced by the National Executive Council Announcement No.227 which was, in substance, intended to give rise to greater incentives for export industries. *Exemption from export duties and business taxes for export products of promoted firms was included. In addition, imported material inputs and imported products to be re-exported were exempted from import duties and business taxes when the income was derived from export activities.* Promoted firms were permitted a 2 per cent deduction on the increases of income over the previous year for income tax purposes.

It should also be noted that BOI had considerable discretionary authority to determine the list of activities or/and firms eligible for promotion privileges. The 1972 investment law and the 1977 revision of the Industrial Promotion Act empowered BOI to grant and provide

¹⁹ The proposition of the World Bank and the IMF is that the inappropriate strategies of ISS; excessive regulation of private enterprises leading to resource misallocation, rent-seeking and corruption should be retreated.

privileges to promoted firms.²⁰ In the early 1970s, Thai technocrats started to realize that serious problems confronting them were (i) inefficiency of some import-competing industries as a result of high wall protection from tariffs and heavy reliance on imported capital goods and intermediate products, (ii) limited employment absorptive capacity and (iii) heavy concentration of manufacturing activities in Bangkok and the surrounding provinces.²¹ In addition, the Third national Plan specified poverty problems created by rapid industrialization. It emphasized increasing income disparity between households in different regions, between residents in rural and urban areas and rising trade and current account deficits which were symptomatic of inadequate domestic savings to finance rapidly growing investment.

As mentioned before, there are several serious problems of industrialization in Thailand; concentration of manufacturing in the Bangkok area, failure to reach the second import substitution strategy and low generating employment of manufacturing sectors. The Fourth Plan (1977-1982) made reference to these crucial problems which can rarely be resolved over night.

Although the government had made more attempts to promote exports of manufactured goods by revising the investment promotion law in 1972 and again in 1977, the structure of incentive provided by the law still favored the import-substitution industry and was at best biased against the agricultural sector. Investigations suggest that during the 1970s the expansion of manufactured exports partly contributed to economic growth, but, in contrast, many studies have shown that between 1967 and 1978 the source of growth was certainly from domestic demand.²²

The large scale industrial development plan 'The Eastern Seaboard Development Program' (ESDP) was initiated in the early 1980s. The discovery of natural gas in the Gulf of Thailand made this Big Push possible.²³ The stated objectives were impressive to the extent that there were several advantages regarding (i) raw materials and labour supplies from the northeast, (ii) direct access to the Gulf of Thailand, (iii) the deep sea port at Sattahip, (iv)

²⁰ The Prime Minister is as the chairman of BOI and the Ministry of Industry is as the vice chairman.

²¹ The gains from import substitution industrialisation have hardly been distributed evenly throughout all regions. Most firms have been concentrated in Bangkok. Over 75 per cent of total value added of the manufacturing sector derived from this primate city.

²² Import substitution had a significant contribution during 1966-1972, declined during 1972-1975 and became negative during 1975-1978. It should be stressed that the role of export demand began to substitute. Export demand increased from 6.5 per cent during 1966-1972 to 8.5 per cent during 1972-1978 and jumped to 28.2 per cent during 1975-1978. (See Meesook, et.al.,1988).

²³ The initial forecast of investments of this completed project investment was about 4 billion US dollar. (in constant 1981).

road and communications infrastructure. Furthermore, the large scale industrial development was to serve as a center for resource-based industries, particularly those utilizing natural gas. Natural gas was expected to be used as a base for the petrochemicals complex and fertilizer plants.²⁴ In fact, such huge projects were carried on by the NESDB which was supposed to evaluate and monitor rather than to implement the projects. However, projects remained on ice owing to financial constraints and skepticism as to the economic viability of some projects. Most sub-projects were delayed, reduced or diverted from the plan.²⁵ The episode of declining oil prices mostly turned off this Pig Push project.

4. Export-Led Growth Industrialisation: The First Attempt Failed, Will the Next Succeed?

There was a perception that the Thai economic growth in the late 1980s was enhanced by rapidly increasing manufactured exports or in other words, it was brought about by export-led growth *per se* (see Akrasanee and Wattanukit, 1990; Jansen, 1989; Robinson, et al., 1991; Santikarn Kaosa-ard, 1992). I shall argue in this section that hidden behind the screen of this impressive growth lay unintended acute developments. The Fifth Plan (1983-1986) and the Sixth Plan (1987-1991) were probably responsible for the impressive growth. The former put forward restructuring of local industries to encourage competitiveness in production, whilst emphasizing export production and industrial rationalization, the strategic importance of the machinery industry and agro-industries. The Thai state seems to have had a notion of NAIC (Newly Agro-Industrialized Country) in the short-run and NIE in the medium or long-run. The latter plan paid more attention to increasing efficiency in management and utilization of resources as well as enhancing international competitiveness and alleviating poverty in rural areas.

It is interesting to examine the development path in the early 1980s compared to export led growth from the mid-1980s to the early 1990s. The 1980s was a period of contrast for Thailand. In fact, the world economy was in crisis, namely, the slow-down in industrial countries, and most Third World countries were subjected to a series of historically

²⁴ The petrochemical complex includes plants to process ethane and propane into ethylene which will, of course, supply the inputs for a number of downstream chemical plants. Meanwhile the fertiliser plant will produce urea and compound fertilisers from methane gas.

²⁵ It is highly likely that if the Big Push project had been completely implemented, Thailand would have been awfully indebted like countries in Latin America.

unprecedented external shocks at the beginning on the 1980s.²⁶ The persistent current accounts deficits and rapidly increasing foreign debt were certainly major problems and it is not an exaggeration to state that the Thai government represented by the Bank of Thailand had to go to the IMF and the World Bank for balance of payments support and adjustment assistance (Thanapornpun, 1990). As mentioned before, the unfavorable terms of trade led to the largest trade deficit the country had experienced since the Second World War; the deficit rose from 5.8 in 1978 to 9.8 per cent of GDP in 1983. The prices of rice and other traditional crops were dramatically declining and the Thai government and public enterprises had been heavily burdened with accumulated debts since the 1970s. However, Thai technocrats are renowned for adopting very conservative monetary policies, as evidenced by their ability to maintain a fixed nominal exchange rate of the baht against the dollar for a period as long as twenty-six years (1955-1981).²⁷

Export promotion, first implemented in the early 1970s appeared to be ineffective in promoting manufactured exports. *The main obstacle came not only from high protection in import-substitution which was biased against exports,²⁸ but also from the overvalued exchange rate. In fact, the rise of the dollar value in 1981 and the deterioration in the balance of payments inevitably encouraged speculation that the baht should be devalued.* It was quite impossible to keep the nominal exchange rate stable while the dollar was sinking. Finally on July 15, 1981, the baht was devalued by 8.7 per cent and the daily fixing method was abolished. The Thai government had to devalue again on November 2, 1984, so the baht was set at 27 baht per dollar.²⁹ It should be made clear that the value of the baht had been increasing with the dollar value since 1981 which of course made the baht overvalued compared with other important currencies such as the British pound and German mark (Meesook, et. al., 1988). *It is not surprising that the overvaluation was harmful to export*

²⁶ Reduced growth of economic activities in industrial countries not only depressed Third World manufacturing exports, but also led to a sharp fall in commodity prices. Some studies indicate that it brought commodity prices to their lowest level in the post-war period. (See Singh, 1992).

²⁷ The Bank of Thailand is responsible for maintaining foreign exchanges and monetary policies. This conservative guidance comes from the legacy of the British adviser in the late 19th century.

²⁸ Wiboonchutikul and others (1991) found that average tariff rates, nominal rates of protection (NRP) and effective rates of protection (ERP) for three industries' group: export-oriented, import substitution and other industries, effective rates of protection has been biased against export-oriented industries. However, this study, using partial equilibrium analysis might be misleading. (See Devarajan and Sussangkarn, 1992 for discussion on general equilibrium analysis with imperfect substitutes).

²⁹ The baht was set at 21 baht per dollar during 1955-1981. (prior to May 12, 1981). In fact, in May 12, 1981, the Bank of Thailand devalued the baht 1.1 per cent to 21 baht per dollar and in July 15, 1981, 23 baht per dollar.

promoting trade strategy (see Bhagwati, 1990). As raised by Meesook, et al. (1988), the most important factor causing the Thai authority to devalue emerged from import taxes which gave rise to protected firms. It is strongly evident that the overvalued exchange rate was *biased* against export producers, especially of primary commodities such as rice farmers. In fact before May, 1981, the Bank of Thailand had been reluctant to devalue the baht, albeit the significant appreciation of the real exchange rate, since in the Thai context devaluation was not just politically sensitive, but to be avoided if there were a choice. It is noteworthy that export-oriented industrialization has effectively occurred since the mid 1980s, in accordance with major changes in the world economic environment. In particular, after the Plaza Accord of September 1985 (see Shinohara, 1989), the currencies of the Asian NIEs, except Hong Kong, appreciated vis-à-vis the US dollar which was substantial against the Deutsche mark, and became more so against the Yen. This immensely benefited the Thai economy to the extent that export promotion policies became effective due to the devaluation of the baht against the US dollar. The simple explanation is that the Thai baht was closely tied to the dollar which meant that there was a substantial depreciation to the baht against the average currency of Thailand's trading partners. Hence, the year 1985 was to be *a turning point* for the Thai economy. The external environment became better, for instance, interest rates and oil prices declined, while the price of traditional commodity exports began to recover. Demand for Thai exports quickly picked up after the two devaluations in 1981 and 1984, jumping to 20.7 per cent in 1986, 28.8 per cent in 1987 and 33.9 per cent in 1988. The international setting, namely currency realignment leading to the fall of the value of the US dollar and the rise of the Yen immediately benefited Thailand's economy and Japanese manufacturers began to relocate their production base in Thailand. Moreover, Thai macroeconomic performance has also been impressive by any international standards (see Ranis, 1991; Ranis and Mahmood, 1992; World Bank, 1988-1993).

Recently, Thailand was considered to be one of the most attractive investment location in Southeast Asia with many advantages both in economic and non-economic factors. The country has had a very high economic growth without much inflation, unstable exchange rates or political turmoil (Mackie, 1988). Furthermore, the private-enterprise economy, positive attitude towards foreigners and increasingly export-oriented strategy has partly induced foreign investors to relocate industrial plants in Thailand. In particular, Thailand is a more attractive country for Japanese firms as a place for investment in Southeast Asia because of abundant, cheap and hard-working labour (see Ichikawa, Cusumano and Polenske, 1991). *In addition, the Thai government via BOI allows a large number of privileges such as exemptions and tax policies allowing foreign firms to remit most of their profits back to their countries (Thongpakde, 1991). Thai people seem to be friendly to Japanese investors. Most of the above reasons are frequently cited for Thailand's popularity.*

It should be noted that the two devaluations in the 1980s not only lent support to export sectors, but also helped to attract foreign investment. The massive influx of foreign direct investment from Japan and the East Asian NIEs to Thailand since the mid 1980s has centered more on labour-intensive and resource-based industries. It is paradoxical for the Thai economy to the extent that on the one hand Thailand has to emancipate surplus labour in the rural area which is known to be very poor and undeveloped, and on the hand it prefers new and modern technological know-how from abroad. One can confirm this assertion from the list of firms promoted by BOI in recent decades.

Surprisingly, economic growth in 1985 and 1986 decelerated to 3.5 per cent and 4.5 per cent, respectively, but the Thai economy recovered more rapidly with the growth rate reaching 9.5 per cent in 1987, 13.2 per cent in 1988 and 11.6 per cent in 1990 compared with the Philippines which is a geographic neighbor (see Yoshihara, 1995). This striking contrast in economic growth suggests that Thailand was more successful in maintaining macroeconomic stability with moderate growth during the downturn period; 1973-1986 (see Ranis, 1991; Ranis and Mahmood, 1992).

In short, that the Thai economy came through with high economic growth and manufactured exports after the mid-1980s was associated with both external and internal factors as mentioned above. It should be noted that during the three consecutive years (1986-1988), foreign direct investment increased by 67 per cent in 1986, 360 per cent in 1987 and 140 per cent in 1988. Notably, in 1987, Japanese investment approved by BOI exceeded the cumulative investment in Thailand since the 1960s. *The large inflow of foreign direct investment was of course alleged to be the main contributor to the country's economic recovery which led in turn to the current investment boom and brought about further export-oriented industrialization* (see OECF, 1991; Yoshida, 1990). Among foreign investors, Japan has definitely dominated in value while Taiwan comes next. It becomes somewhat evident that Japanese foreign firms relied heavily on both *natural resource-based and labour-intensive industries*; electrical appliances, electronics, transportation equipment, metal products, textile, agricultural and fishery products, etc. However, three quarters of the applications to BOI for receiving privileges were in export-oriented industries with export ratios ranging from 80 per cent to 100 per cent. Taiwanese investments concentrated on labour-intensive, light manufacturing and some agro-industries for export; sports goods, toys, shoes, bags, plastics, frozen shrimp, etc. It is important to realize that industrial relocation from Japan and the East Asian NIEs to Thailand was undertaken for at least two main reasons. The first was concerned with the strong Yen, while the second partly related to the changes in comparative advantages in those countries. There was a clear trend showing that Asian NIEs began to lose their comparative advantage in domestic production with labour intensive manufactured products, such as textiles and clothing industries, to other countries

having low wage labour and abundant natural resources in what are classified as sun-set industries.

Manufacturing industry was the leading sector of the Thai economy in the 1980s, surpassing the agricultural sector in terms of production in 1984 and in terms of exports in 1986. There is therefore a tendency for Thai policy-makers to claim that Thailand will become the 'Fifth-Tiger' of Asian NIEs in the coming decade (see Falkus, 1992; Muscat, 1994; Warr, 1993).

Constraints will be discussed so as to challenge this 'perception' in the context of *quality* of export-oriented industrialization since the mid-1980s. I shall pick up a few fundamental problems confronting the economic development process in Thailand; economic growth, employment structure, human capital, infrastructure and income distribution. The main question raised is whether Thailand will be able to *catch up* with the East Asian NIEs in the coming decade. A case study of Thailand might serve as a lesson for other developing countries.

5. Export-Oriented Industrialization with Land and Labour-Abundance and Weak State: What Problems Has Thailand Had to Cope With?

High Economic Growth: What Factors Contributed to It?

Most recent studies support the idea that increased manufactured exports and foreign direct investment are the main contributors to high economic growth. Export sectors have come to play a vital role in the expansion of the Thai economy (see OECF, 1991; Jansen, 1989). The growth rate of Thai exports has far exceeded that of world exports since 1984. It is also often cited that the economy of Thailand demonstrates a pattern of export-driven economic growth or, in other words, export-led growth like the East Asian NIEs. The main composition of Thai manufactured exports, in particular resource-based manufactured exports, rested on both low wage and abundant natural resources which did not follow the East Asian NIEs' experience. Furthermore, there was an attempt to link Thai high economic growth to the *laissez-faire* policy to the extent that private-enterprise has been seen as a driving force behind rapid industrialization in the last three decades. Some social scientists claim that it is due to the *magic of the market place* (see McVey, 1992). Much of this literature is firmly grounded in the neo-classical tradition and has identified market-oriented strategies. I shall argue that the hypothesis advanced by some neo-liberal economists, that the success of the East Asian NIEs is due to the *insignificant* role of the state, is simply incorrect and misinterpreted (see Amsden, 1989; Grabowski, 1994; Gunnarsson, 1991; Wade, 1990). However, this perpetuates a wholly one-sided process of the role of the strong which must be also interpreted with caution.

In the case of Thailand, many recent studies have also revealed that exports of manufactured goods constituted between 40 and 60 per cent of the increase in GNP from 1984 to 1987. However, this impressive record became threatened abruptly, the contribution of exports to growth declining from 28.8 per cent in 1989 to only 11 per cent in 1990 (see Santikarn Kaosa-ard, 1992). It simply implies that Thai manufactured exports have not matured. According to one empirical study, if we disaggregate sources of growth on the demand side into three categories; domestic demand, import substitution and export demand, domestic demand between 1960 to 1970 contributed 89.1 per cent to economic growth, with 11.4 per cent stemming from export demand and the rest -0.6 from import substitution. However, it is argued that international trade has played a decisive role in the transformation of Thai economy since the mid-1980s. During 1985-1988, export demand contributed enormously to economic growth with 45.3 per cent, albeit 78.1 per cent from domestic demand. The rest was negative at 23.4 per cent due to import substitution (Jansen, 1989). Certainly, Thai export-oriented industrialization relies very much on labour-abundance and natural resources, but does without a technological breakthrough, capital accumulation or human capital formation (see Dahlman and Brimble, 1990; UNIDO, 1992). An obvious problem regarding high economic growth is the failure to account accurately for resource depletion, severe deforestation and environment degradation, for instance, pollution (see Brander, 1992; Siriprachai, 1995a). If economic growth in Thailand has subtracted resource depletion and other serious damages to the environment, economic growth would have been lower. One important reason for the high economic growth during 1960-1986 was closely related to the taxation on rice, the main staple good. *The Thai government kept the price of rice and consequently the cost of living of industrial workers and urban dwellers low through heavy export taxes on rice. Thailand is not just a typical dualistic economy, but exports the wage good; rice.* This policy temporarily ceased in 1986. One empirical study points out that import-substitution strategy associated with high protection through the overvalued exchange rate was notably against primary exports, whilst promoted manufacturing firms reaped the economic gains at the expense of the rural poor (see Siamwalla and Setboonsarng, 1989). The question is whether high economic growth rate after the mid-1980s might have been explained by the *demographic transition*. To some extent the fact that higher income leads to lower birth rates as found by Brander and Dowrick (1991) might be the case. Fertility declines precede income growth gains or in other words, income growth has a negative effect on fertility (see Brander and Dowrick, 1991). Turning back to environmental problems, if nothing can be done to control pollution from the industrial sector, the environment will become unbearable. The recent study of the Thailand Development Research Institute-TDRI indicates that the quantity of hazardous waste produced is expected to reach 6 million tons by the year 2001 compared to 1.1 million tons in 1986. Most of this waste is generated directly

by the manufacturing sector. Furthermore, a number of recurring serious accidents supports an assertion that Thai bureaucrat is too incompetent to cope with problems emerging from the industrialization process.

To stress my point, a high economic growth in the Thai economy from the 1950s to the 1980s might have come about as a result of two conditions; high population growth and damage to the environmental resource, namely deforestation. The agricultural sector was deployed to generate economic growth and revenue to feed industrialists in the city until the 1970s. The continuous growth of this sector with scanty technological progress lends support to the notion that Thai farmers were heavily squeezed by the Thai state. The surprising feature of agricultural growth was that Thailand was probably the only country in Asia where cultivated land per agricultural worker actually increased until 1977 (see Siamwalla, 1991). The simple answer lies in the fact that land abundance enabled Thai farmers to expand land ownership from the 1940s to the late 1970s without a break. This also means that agriculture has been able to absorb large amounts of labour, namely seasonal labour. A fact which accounts for Thailand still having a larger proportion of its labour force in this sector than other Asian countries with a similar income level. What is certain is that the availability of land has given Thailand a strong comparative advantage in agriculture. However, since the 1980s when the state abolished forest concessions, this natural advantage has been eroded. The monsoon season also significantly affects the labour force in Thailand, especially in the peak season when more labour is required. In a long slack season, hundreds of thousands of agricultural workers have to seek jobs in the city or other places far from their home.

It is apparent that high economic growth from the 1950s to the 1970s was responsible for rapid deforestation in Thailand which has now turned into a major national problem. Ninety million rai of forest were denuded between 1960 and 1990 at the average of three million rai per year. Less than 28 per cent of the country (about 90 million rai) is now under forest cover (see Panayoutou and Parasuk, 1990; Panayoutou and Sungsuwan, 1989). As a result, Thailand ranks as one of the most rapid deforestation countries in the post-war period with forest cover declining from 50 per cent of land area in the early 1960s to approximately 20 per cent in the mid-1980s. This was lowered to 15 per cent in 1986 according to unofficial estimates. Not surprisingly, deforestation proceeded so rapidly that by 1968 Thailand became a net importer of wood. The conclusion that can be drawn is that high economic growth can be attained as in recent decades, stemming from an increase in the area under cultivation at the expense of forest areas, in particular in the uplands. Commercial or cash crops like rice, cassava, maize, jute kenaf and sugarcane are responsible for high economic growth and rapid deforestation. My point is certainly not a refusal of foreign exchange earnings from selling agricultural products if productivity in agriculture has been increasing over time. The

expansion of cultivated areas without a corresponding increase in productivity is irrational to say the least.

One factor which have resulted in deforestation in Thailand is concerned with *property rights* in land. Although illegal logging by people with political connections is commonly accepted as important, titled land has been more significant than other factors. General patterns encouraging deforestation include illegal encroachment by landless and small farmers actually clearing land the expectation that they would then revive title to the newly cleared land (see Siamwalla, 1991; Siriprachai, 1995a). the *soft state* in the context of Gunnar Myrdal might fit the case of Thailand. According to North (1990), it implies that a third party, namely the *relatively autonomous state* is required, however the Thai state appears too weak to enforce the law of the land and secure property rights which can only be done by political and judicial organizations that effectively and impartially enforce contracts across space and time. However, property rights in land in Thailand have been very insecure and chaotic. Some Thai scholars claim that because Thailand has never enacted a genuine land tax, the necessity for a systematic land title is redundant.

As mentioned before, until the 1970s the agricultural sector still contributed a greater part to the state in terms of economic growth, employment and foreign exchange. There is no doubt the Thai state might have benefited from exporting more primary products to the world market, even though the total productivity of this sector increased at a decreasing rate or nearly stagnated. The point should be made that productivity in agriculture would keep on increasing if property rights in land were not ill-defined and effectively enforced by a strong state. The simple link is that land can be used at length as collateral for institutional investors only if there is a proper title.

6. Imbalanced Structure in Employment: Manufacturing Versus Agriculture.

Mainstream development economists now stand out and firmly support the superiority of a trade strategy of export promotion vis-à-vis import substitution. The rapid rate of economic growth in the East Asian NIEs during the last two decades has frequently been cited as a classical example of export-led growth. In fact, there is no clear-cut evidence to support this and there is in fact a large number of studies invalidating this thesis (see Adelman, 1985; Evans, 1990; Grabowski, 1994; Gunnarsson, 1985; Milner, 1990; Oshima, 1993; Singh, 1992). However, The World Bank does not cease to sell this idea to developing countries no matter what endowment, historical legacy, cultural or institutions factors they might have. It is claimed that export oriented strategy is powerful enough to increase per capita income, saving ratios, investment ratios, total factor productivity, employment, real wages, a more equitable distribution of income, etc. In addition, incremental capital-output

will decline, while better adjustment to external shocks can be reached (see Balassa, 1980; Bhagwati, 1988; Donges, 1976; Little, et al., 1970).

In fact, A major problem confronting Thai industrialization lies in the fact that the employment share of manufacturing industry did not accompany the production share of that industry. Surprisingly, between the 1950s to the early 1990s manufacturing industry could contribute 26 per cent of GDP (in 1990), albeit employing only about 10 per cent of the labour force. It can be concluded that *this weak labour absorptive capacity* has become a serious obstacle to progress in agricultural modernization and has resulted in the accumulation of urban poor who migrate from rural to find jobs in Bangkok. The formal sector is not easily entered with a low level of skill so that the last resort is always in the informal sector. Nevertheless, one unintended outcome stemming from this dualistic model (unbalanced growth strategy) is unquestionably over-urbanization. There can be no doubt that the boundaries of Bangkok have expanded over time and its ratio of population living in *slum areas* remains very high among developing countries. The fact that the urban informal sector is composed of street vendors, peddlers, repairmen, shop assistants, domestic servants and day workers in construction, etc. is apparent. The ease of entry and need for only low skills make this sector more and more attractive. As pointed out in many studies, low productivity and low wages in the urban informal sector in Bangkok push down the real wage in this primate city. The rural-urban migration in Thailand is crucial for many farmers to seek jobs in the slack season and this earning becomes more significant over time (Oshima, 1993; Siriprachai, 1985b). The migration of the agricultural labour force has not ceased, because although the price of agricultural products has been declining since the 1980s, the Thai governments have been unable to insulate their domestic markets from international price fluctuations.

The agricultural sector, employing almost 64 per cent of the labour force, produced less than 13 per cent of GDP (in 1990). This paradox implies that there is a very low level of productivity in the agricultural sector (see Ezki, 1990). Judging from any standard textbook in economic development, it is neither possible to regard Thailand as being a newly industrializing economy, nor can it be said that Thailand has achieved economic development. A common characteristic of the industrialization process can be measured by the proportion of the working population engaged in manufacturing. An addition the secondary industry shows an increasing trend which was confirmed in a classic study by the late Simon Kuznets. He also suggests that the gap of productivity per head will be narrow over the passage of time. Nevertheless, the imbalance of Thailand's structure of employment and the structure of production leads notably to a widening of the income differential between agricultural and manufacturing sectors. There is nothing wrong with rural agricultural workers moving to cities, particularly to a metropolitan area like Bangkok, but the industrial sector has not been

successful in absorbing the labour force migrating out of the agricultural sector. In addition, industrial wages have been artificially kept at a lower level by the low food price policy. It is also evident that a rapid increase in the rate of industrialization in production was simply not accompanied by a concurrent increase in the rate of industrialization in employment (see Watanabe, 1992). The shares of the industrial and the manufacturing sectors in GDP have increased with rapid economic growth, but the share of the agricultural sector in GDP has been

Table 12
Population

(m; % change year on year in brackets)

	2000	2001	2002	2003	2004 ^a
Total (m)	61.88	62.31	62.80	63.08	63.35
Population growth rate	(0.40)	(0.70)	(0.80)	(0.45)	(0.43)
Population by age					
Under 15 years	15.95	15.88	15.78	15.69	15.75
% of total population	25.78	25.49	25.13	24.87	24.86
Over 15 years	45.93	46.43	47.02	47.39	47.60

^a Preliminary.

Source: Bank of Thailand.

Table 13
Labour force

(m; % change year on year in brackets)

	2000	2001	2002	2003	2004 ^a
Employed	31.29	32.10	33.06	33.84	34.73
Agricultural	13.83	13.61	14.04	13.88	13.63
Non-agricultural	17.46	18.49	19.02	19.96	21.09
Unemployed	1.19	1.12	0.82	0.75	0.74
Seasonal inactive labour force	0.74	0.59	0.38	0.31	0.25
Total labour force	33.22	33.81	34.26	34.90	35.72
Unemployment rate ^b	3.6	3.3	2.4	2.2	2.1

^a Preliminary. ^b Percentage of labour force.

Source: Bank of Thailand.

declining continuously in Thailand. The progress made in shifting the labour force out of agriculture into industrial jobs has been very slow moving. As the evidence of the past has

always shown us, this imbalance might not be exclusively remedied by either import-substitution or export-oriented strategy. The main cause partly emerges from the fact that Thailand is a *land-abundant country* (see Siamwalla, 1991). Two theories might be fruitful in explaining this imbalanced industrialization process. One is known as the *resource curse thesis* (see Auty, 1994). The other is the so-called *developmental state* (see Grabowski, 1994; Gunnasson and Lundahl, 1994; Johnson, 1982; Kohli, 1994; Lee, 1993; Leftwich, 1995; Soon, 1994; Wade, 1990;1993). Both theories can be bound up into one in the Thai context. It is true that Thailand began to pursue industrialization with a large amount of *unused land and abundant labour* due to rapid population growth since the Second World War (see Siamwalla, 1991; Siriprachai, 1995a). This starting point is as different (as chalk from cheese) when compared to the East Asian NIEs, namely Japan, South Korea and Taiwan. The natural resource advantage arising from *plentiful forestland* is moderated by the degree of population pressure on resources and the Malthusian ghost never appears in the Thai context. In fact, many parts of Asia have long faced an acute scarcity of land, but this does not apply in the case of Thailand. It is also true that it was in a better position than other countries to cope with the high rate of population growth being experienced throughout the developing countries. Without such a population pressure as in the European countries in the nineteenth century or the East Asian NIEs in the twentieth century, the Thai state could actively provide a large number of incentives to foreign firms under the import substitution policy without attempting to monitor them seriously. While the resource-based agricultural sector is treated as a useful source of cheap food and labour to support the protected industrial sector in Bangkok, it might be concluded at this time that an initial condition of abundant land seems to make the Thai state predatory, but not developmental (Siriprachai, 1995b).

The experience of European countries provides some invaluable lessons in the 18th century. A tremendous stream of migrants from the rural to the city areas successively changed a *feudal* mode of production to a capitalist one. Furthermore, the industrial sector was able to absorb this surplus labour, while technological progress in the agricultural sector gave rise to a high productivity in land and labour. As a consequence, the modern sector could be more quickly developed when the capitalist economy expanded and modern machines clearly required more labour. It is argued that this pattern has been taking place in the East Asian NIEs since the 1960s (Oshima, 1978; 1993).

Turning back to Thailand, the *industrial policy* which aimed at emulating the success of industrial countries has been less than successful. What makes the resource curse thesis relevant is abundance of land. To a certain extent in which one can learn from David Ricardo's classical example in the 18th century to some extent which resource wealth (fertile land) often resulted in rent-seeking activities as the vested-interest (landlord) tried to capture a share of the resource made available by god. In the Thai context, it is linked to logging and

cash crops which are thought to have resulted in environmental problems and diseconomies to traditional agriculture. The ease of generating exports from natural resources, which resulted in logging and extensive cultivation, partly reduced the drive of the Thai government to develop labour-intensive and knowledge-intensive manufactured exports from the 1950s to the 1980s. However, it may be too simple to impark on the stages of economic development in developing countries by using only resource endowment as a prerequisite. This thesis is old and interesting, but it is certainly not sufficient to understand the whole story.

The *industrial policy* of the East Asian NIEs has been known to be powerful and effective in building up the capacity of the nation in both physical and human capital (Dore, 1986, Johnson, 1986; Vestal, 1993). The question is why other developing countries often fail. One simple answer is effective state intervention in previously backward countries like Japan, South Korea and Taiwan, and presumably that these states are *benevolent*. However, what conditions brought about the *benign* states is the more difficult question to answer. It rests heavily on institutional and historical settings in which are difficult to replicate the experience of NIEs, but can be learned, in particular the interaction between the state and the civil society.

A degree of autonomy of the state from the dominant class or class fractions made the targeted policy possible and effective because of its insulation against vested interests. It is also worth to nothing that one of the proper policies is the *acquisition of technological capacities*, which the East Asian NIEs could master and adapt new and modern technological know-how from the west, accompanied by high wall barriers to protect infant industries for a certain period.

In the case of Thailand, the state seems to have been impotent. The entrenchment of powerful urban industrialists and other rent-seeking groups, import-competing, export-oriented industries and bureaucrats have had a major role to play in the mechanism of extracting and transferring economic surplus from the agricultural sector. Unfortunately, the abundance of unused land (resource wealth) permitted the Thai state to avoid reforming at the grass-root level. *The ruling class in Bangkok has rarely been threatened by any social unrest among the lower classes since the mid-nineteenth century.* Hence, the Thai state does not seem to fit the characteristics of a developmental state in which the state becomes *strong* and *paternalistic*. But it is, of course, *a kind of bureaucratic polity* and *kleptocracy* in which the state is entirely controlled and governed by state bureaucrats without any accountability to the civil society (see Christensen and Siamwalla, 1993; Riggs, 1966; Siriprachai, 1995b; Thanapornpun, 1990). I shall argue that *external threats* facing both South Korea and Taiwan did help in making the state (the nation) strong. While Japan, during the early years of the Meiji restoration, also faced the possibility of colonization from a western power. These real external threats might have helped to turn predatory to developmental states (see Grabowski,

1994; Gunnarsson and Lundahl, 1994; Kohli, 1994). Nationalism worked to build up the nation state as happened in the mercantilist era from the sixteenth to the eighteenth centuries in Europe. The power of nationalistic policy in the East Asian NIEs was the case to the extent that any kinds of state decisions were intended to modernize the nation. Hence, it ensured the co-operation of its population.

Moreover, the superior economic performance of the East Asian NIEs does not in fact lie in the general superiority of export-oriented industrialization strategy over import substitution or of market-oriented policies over state intervention. Rather, it is the competent state directing the accumulation process in the direction required by capitalist developmental states made possible by historical and international economic environment contexts which might not have been repeated elsewhere (Jenkins, 1991). Ample human capital, huge foreign aid and privileged access to the US and Japanese markets made the South Korean and Taiwanese miracle possible. In reality, the East Asian NIEs (South Korea and Taiwan) appear not to have landed classes or landlords. Who were effectively destroyed in the colonial period by the Japanese empire (see Kohli, 1994). International factors partly contributed to the high relative autonomy of the state in the East Asian NIEs to the extent that the states are able to control financial system, particularly in South Korea, in which the state has power to manipulate the banking systems that is an essential factor in the relatively backward country's catching up with the west (the key factor of success in Gerschenkron's typology). This made a German bank type institution famous for providing long-term finance to nurture infant industries in the 19th century (Berend and Ránki, 1982). It was this kind of development bank which functioned well in Germany, Japan and South Korea. In addition, the perceived external threat to South Korea and Taiwan from North Korea and the People's Republic of China has rendered them effective in building up their countries and creating nationalism. *Once again, such a threat does not seem to exist in Thailand. In other words the specific historical experiences and international circumstances of the East Asian states have significantly contributed to a much more relative autonomy of the states than Southeast Asian states like Thailand (Kohli, 1994, Leftwich, 1995, McGuire, 1994; McVey, 1992).*

It is often forgotten that the agricultural sector in the East Asian NIEs underwent a dramatic period of agricultural improvement prior to import-substitution industrialization (see Grabowski, 1994, Gunnarsson, 1985, Kohli, 1994; Oshima, 1993). Those countries experienced success in raising productivity to high levels in agriculture, even though the natural constraint did not allow the countries to expand land frontiers. In other words, agricultural modernization often comes about in heavily populated countries of which Thailand is not one. The most important task of the poor-resource countries was to promote technological progress in a new variety characterized by high fertilizer use and high yields which partly took place due to land reform in the colonial period (see grabowski, 1994, Kohli,

1994). It could take place to the extent that significant investments were heavily made in irrigation and drainage facilities. More important is that farmers' groups were well organized to disseminate new knowledge. The case of Thai agriculture is a turn around. Its productivity in land (output per unit of cultivated area) ceased to increase in the 1970s when the forests were no longer available. Expensive fertilizers and scarce machinery have partly resulted in expanding cultivated area. Prior to the 1970s, there was no significant shortage of land. Therefore, an increased agricultural productivity in Thailand has rarely been attributed to the increase in land productivity. That may explain why the resource curse thesis (resource wealth) might be right in the Thai context. It can be concluded that there was little fear that the rural population was being increasingly polarized into haves and have-nots, landed and landless (see James, et al., 1987).

In short, *Thai* industrial policy is quite different from that of the East Asian NIEs which stems from an institutional setting characterized by a hard state and strong government discipline over the private sector as Johnson (1982) pointed out in his seminal work on Japan:

The government will give greatest precedence to industrial policy, that is , to a concern with the structure of domestic industry and, with promoting the structure that enhances the nation's international competitiveness. The very existence of an industrial policy implies a strategic, or goal-oriented approach to economy (Johnson, 1982).

Such a setting falls short in Thailand. This leads one to be cautious whether Thailand is able to emulate the industrial policy in the East Asian NIEs.

Specifically, for strong export growth to *coexist* with protection of imports requires conditions that are quite hard to come across in many countries. As clearly pointed out by Thomas, et al. (1991) in the case of South Korea, the state controls investment in local production of luxury and other conspicuous consumer goods whose imports are intensely restricted, while rent-seeking and lobbying are also under control. *Besides, the strong state of South Korea not only suppresses unions, but also penalizes executives of companies who misuse their privilege. We are unable to find this in the Thai state.* The very short period of Prime Minister Sarit Thanarat (1958-1962) may have been regarded as bringing Thailand closer to the South Korea type of state. It is obvious that the Thai economy has been successful in expanding *manufactured goods* to the world markets since the 1980s despite not being a developmental state but the Thai manufacturers have found *export niches* in the developed market, namely the US and Europe. We still need to find more empirical evidence why authoritarian or autocratic regimes in the East Asian NIEs (except Hong Kong) succeed when democratic or semi-democratic regimes fail. Why did the East Asian NIEs seem to keep the system *free of rent seeking*, as argued by Chang (1994) and Evans (1989; 1992; 1995), that has undermined other countries like Thailand. One convincing reason is that authoritarian leaders in the East Asian NIEs can override interest group demands by fiat (see

Haggard and Webb, 1993). *Hence, the institutional factor in the East Asian NIEs matters rather more than what kinds of development strategies they adopted.* Furthermore, because of their ability to stay in power longer, many crucial economic reforms such as infant industries and trade liberalization can be brought about by the benevolent élites without obstruction from vested-interests. Once again most revisionists maintain that the most striking aspects of the East Asian experience is that the hard state and strong government discipline are responsible for the success story, but we are never sure that it is the final answer (see Rodrick, 1993, 1994). As mentioned above, the East Asian NIEs have been successful in export-oriented industrialization by using the sea of quantitative restrictions and export subsidies, but this experience is hard but we are never sure that it is the final answer (see Rodick, 1993, 1994). As mentioned above, the East Asian NIEs have been successful in export-oriented industrialization by using the sea of quantitative restrictions and export subsidies, but this experience is hard to replicate (see Kim, 1993, Lee, 1993, Leftwich, 1993, McGuire, 1994, Soon, 1994, Wade, 1993). The team researchers of the World Bank might have been right to say that.

The East Asian countries were successful in using protective import policies by avoiding exchange rate overvaluation and offsetting the anti export bias of import protection, their approach would be difficult to replicate in today's world economy. South Korea's approach during the 1960s and 1970s included export subsidies, which other countries would countervail today, and on vigorous government intervention to suppress rent seeking activities viewed as incompatible with export growth (Thomas, et al., 1991).

The greater difference between the East Asian NIEs and Thailand might rest on the latter making use of taxation and other incentives through BOI. On the basis of the experience of many developing countries including Thailand, these are seen to breed corruption and rent-seeking activities and they also severely affect the quality and equity in the tax system. The incentive system was expected to fail owing to the fact that it only provided a *one-way privilege* (see Thomas, et al., 1991). Moreover, there was no such a built in rewarding system that could be used to penalize those firms with poor performance or failure to meet any economic criteria. This encouraged foreign firms to import machines and equipment which were originally designed to be labour-saving, reflecting the situation of scarce labour in the developed countries. This led Thai industrialization to contribute to high economic growth with insignificant technological content and weak absorptive labour. In contrast, Japan, South Korea and Taiwan are prominent in high labour absorptive capacity of industrialization. In the Japanese case it could be seen as a *proto-type* of the developmental state in terms of technology transfer and foreign investment during the 1950s. The Japanese state exercised its power to channel foreign technologies into targeted key industries set by

the Ministry of International trade and Industry MITI as well as to ensure favorable contract terms for Japanese firms. A foreign investment law was set up to empower the state to ensure that most technology transfer contracts must have benefited her economy. It is no wonder that, between the 1950s and 1970s, Japanese industries were so successful in accumulating and adapting modern technology from imports. Hence, the role of the state in enhancing technological capability through technology transfer was essential for strengthening the Japanese economy.

In sum, Sussangkarn (1990; 1992) points out rightly that such an uneven development in production between agricultural and industrial sectors is a crucial cause of the worsening phenomena of income distribution in Thailand. It may be concluded that neither import substitution in the manufacturing sector nor the degree of outward orientation performed well in the condition of labour abundance between the 1950s to 1980s.

6.1 Human Capital Development

It is very obvious that most of the population living in rural areas do not see much need for extensive schooling because it does not seem to bring commensurate material rewards at once. Rural households see no need for higher education since it takes time. The evidence suggests that Thailand succeeds in providing primary education, but fails with secondary enrolment. It becomes clear that Thailand lags behind other countries in the region and has the worst secondary enrolment ratios in Asia (see Sussangkarn, 1990; 1992). It is undoubtedly dismal to the extent that the low skilled abundant labour is probably a key issue in human resource bottlenecks no matter what development strategies are pursued. As recently projected by the Thailand Development Research Institute, by the year 2000, 70 per cent of Thailand's work force will have only primary education or less (6 years in 1991), if 100 per cent of all primary school leavers continue into secondary school and the rate is maintained in 1992. This will leave Thailand without a development path and a comparative advantage only in cheap labour.

It has been argued that *export-oriented industrialization, to be effective in the development process, often requires active and strong government intervention in human capital development*. Those countries which have succeeded in achieving high rates of growth and an expansion of exports not only have rather controlled economies, but also a large, highly educated labour force in which has often been cited as a matter of ethics, namely Confucianism (see Oshima, 1993). It is doubtful whether Thailand is capable of catching up with the East Asian NIEs under the existing condition that by the year 2000, at most three quarters of the working age population will have had only six years of education. Having high ratios of secondary enrolment to working-age population is a sufficient condition not just to bring Thailand ahead, but to guarantee sustainable development.

The very successful late industrialization in European countries in the late nineteenth century e.g., Sweden, suggests that the higher education level of the populace thoroughly contributed to fostering modern economic growth and helped the country's ability to exploit the potential of science and technological know-how (see Jörberg, 1965; 1972; 1991). This is of greater importance in terms of *social capacity* as invented by Moses Abramovitz. It even enables a country to make use of advanced technology and acquire it in the first place, and as a result, the country's ability to make use of technology can indirectly promote its country to reach its potential for productivity growth (Abramovitz, 1989). When the industrialization process starts, the size of the labour force that work as small farmers and unskilled workers becomes smaller compared to those working as office managers, professionals, white-collar workers and skilled workers. The role of the state is, of course, essential in investing more resources in formal and vocational education, and it is absolutely essential for all to have literacy and innumeracy. Indeed, children in Thailand unconditionally need to be better equipped through education. In the modern world, a basic level of scientific and vocational knowledge becomes enormously crucial and this difficult task is expected to be carried out by the Thai state by the turn of century. I wish to argue that Thai economic development over the last century seems to have had little *social capacity* to the extent that the technical competence of the people appears very weak (see Brimble and Dahlman, 1989; Siriprachai, 1985a UNIDO, 1992). This is linked to the absence of a *targeted industrial policy* which is closely related to levels of general education in the secondary school and the vocational level. In general, there is a positively strong relationship between the secondary school enrolment rate and the anticipated degree of industrialization. But the share of the population with training in technical subjects seems to be insufficient in Thailand and there is an acute shortage of engineers and other technical manpower. No doubt the technical competence of the labour force is fundamental in the sense that complicated and delicate machinery cannot be used to good advantage unless managers or workers can command technical knowledge (see Abramovitz, 1989)

Not surprisingly, education received the most attention among East Asian NIEs which outspent other developing countries of a similar income level. This is considered to be one aspect of the developmental state in which education was oriented towards the technical field (for instance, engineering) and it was certain that a competent bureaucracy was required to carry out this social goal. Furthermore, it is argued that *Confucian social values* was partly responsible for the success of the East Asian NIEs, while *Islamic and Hindu social values* might have been less conducive to modern economic growth (Oshima, 1993). It is also evident that government jobs are well paid and carry prestige. In sharp contrast, the Thai bureaucracy is low paid and full of corruption.

6.2 Infrastructure

The sudden high rate of economic growth has created a demand for infrastructure. An immediate problem of the Thai government is to ease the bottleneck of poor infrastructure; electric power, telephones, transportation, ports, airports, water work, etc. Most mainstream economists in Thailand usually lend support to improving an inadequate infrastructure. My argument, while not entirely opposed to the removal of this real physical constraint, draws attention to a more important infrastructure that is *a legal system* which allows the effective implementation of private contract as well as contracts between the private sector and the state (see Stiglitz, 1992). In the case of Thailand, the role of the state is not merely ambiguous, but also very vague (Siriprachai, 1995b). In some economic sectors, for instance, the state can enforce the law and maintain political stability, but in many cases, the state is too weak to protect private property rights, or even public property. An indisputable case is the deforestation and evere pollution from chemical toxic waste in recent years with which the Thai bureaucracy has not been able to take issue. The main task of the Thai government is to reform the legal system so as to create *immunity* and *avoid rent-seeking activities* and to enforce procedures effectively (see Sathirathai, 1987; Siriprachai, 1990; 1993). It is widely believed that the Thai society is typically full of rent-seeking activities and corruption, which will make the country weak in the long run, as long as most productive agents, for instance, talented bureaucrats, are engaged in these activities (see Pecorino, 1992).

To stress my point, we must consider the Thai economy link with Thai politics which is a major drawback of contemporary Thai society. The politics and cultural factors undeniable determine economic policy. In general elections, the process of allocating governmentally created *rights to rents* has been used to generate campaign funds for the political party in power. A very fragmented political party scenario is responsible for rent-seeking activities. The common phenomenon is that political entrepreneurs (e.g. elected politicians) notoriously tend to administer or control productive sectors.

Once again, administrative law complemented by the strong patron-client relationship in Thai society might be vital in hindering economic development. *It should be clear that Thai law concerning international trade is highly likely to be manipulated by political entrepreneurs and state bureaucrats. There is a consensus among lawyers in Thailand that Thai administrative law is adversely lacking in automatic application and transparency. Its functioning serves to endorse state officials to have full discretionary power.* The central point lies in the process of law enforcement, in particular in the case of *subordinated legislation* in which the use of discretionary power is vested exclusively in the responsibility of the bureaucrats (Sathirathai, 1987, Siriprachai, 1990; 1995b) Many young Thai lawyers also observe that *Thailand's administrative law code*, which is very short, long-lived and

lacking in details, makes the bureaucracy autonomous from legal challenges. The lack of administrative courts only consolidates this autonomy. The unlimited power over control, allocation and management of economic activities, for instance; export quota allocation of cassava and textiles products (see Siriprachai, 1988; 1990), is delegated by the head of a political party to a minister (Siriprachai, 1988; 1990). The vote-buying (widespread first in the Northeast and later all regions) is pervasive in modern Thai politics (see Parnwell and Rigg, 1993; Samudavanija, 1989; 1992; Tamada, 1991). This in turn determines what kinds of economic policy are to be implemented by the elected politicians who are now in office as ministers. As a result of being under a long authoritarian regime since 1947, the Thai parliament as an institution has played an insignificant role in scrutinizing the activities of the bureaucracy (see Thanapornpun, 1990). This stylized fact indicates that the politicians' source of power lies in ministerial appointments (Siamwalla, 1993).

6.3 The Distribution of Income

It is commonly known that the role of the Thai government was rather concerned with its traditional functions, namely the provision of social and economic infrastructure, the maintenance of a stable economic framework, and the promotion of growth. But social welfare policy was paid less attention. *The Thai government for years has been prone to enhance economic growth and stabilize the economy for fostering industrialization via exports rather than to emphasize equal income redistribution or the achievement of special social goals.*

The past experience indicates that over the last three decades, the production of goods and services has increased faster than population. In general, great progress has been achieved in the field of primary education and health care. Life expectancy has risen, while illiteracy has clearly fallen. The quality of life has also improved. However, living standards remain low among the lower class; agricultural workers and small farmers. It is commonly asserted that absolute poverty in rural areas was declining during the 1950s to the 1970s. However, the general depression in the world commodity markets after the 1980s adversely impinged on Thai farmers at large. As a consequence, the rural poverty which tended to decline, instead started to rise after the early 1980s. Inequality has virtually risen and there is no question that the degree of inequality in Thailand is widening with the poorest engaged in the agricultural sector. The government intervention by all means is responsible for this performance as rightly observed by Timmer (1991) as follows:

Thailand did not use similar trade and pricing for key commodities in an effort to protect domestic farmers from the very low prices that occur from time to time in the world market. Although the strong performance of Thailand in terms of rising labour productivity

argues that such free-trade policies promote growth, Thailand paid a price in terms of rural poverty (Timmer, 1991).

During the period of *readjustment* in the early 1980s, the Thai government seemed to have been reluctant to implement the structural adjustment programmes fully. Development policy aimed at *alleviating poverty in the agricultural sector* and government expenditures and the tax system were instead firmly moved towards the creation of an environment suitable for *export-oriented industries* in urban areas, especially in the proximity of Bangkok and peripheries.

It is also obvious that the scale of land reform was very limited and ineffective at keeping poor farmers from becoming indebted. Previous attempts to limit private land ownership were never successful due to vested-interests but the Agricultural Land Reform Act was enacted in 1975. Recently, there was a corruption scandal associated with the land reform programme between 1993-1995 which led to the Chuan government's dissolving Parliament in May, 1995. The Thai government still strongly supported a policy of growth maximization through conservative price stabilization policy. It was evident that a concrete action effectively dealt with fixing the exchange rate between baht and dollar at 20 to 21.50 during 1955-1981 (see Siamwalla and Setboonsarng, 1989). It was also clear that the equalization of regional and personal income levels is expected to receive even lower priority than was expected in the 1980s.

It should be noted that the high or impressive growth since the 1960s has of course trickled down some benefits to the poor. Absolute poverty has declined steadily from 57 per cent in 1962-1963 to 24 per cent in 1981. (see Table 14). Income inequality has, in contrast, increased in every region, both in rural and urban areas. *It is true that a decline in the incidence of absolute poverty can be quite consistent with an unchanged or even worsening income distribution. (see Table 15)* Many recent studies on income distribution emphasize that a decline in the incidence of poverty can take place simultaneously with a worsening of income distribution. Worsening income distribution over thirty decades in Thailand has remained the case (see Huntaserinin and Jitsuchon, 1988; sussangkarn, 1992; Tinakorn, 1992;2002)

The income shares of the richest 20 per cent of households increased from 50 per cent of total household income in 1975/76 to 55 per cent in 1988/89, but declined to 43 in 1990/91, while the share of the poorest 20 per cent declined from 8 per cent to 4.5 per cent during the same period (Sussangkarn, 1992). However, the latest data shows that income share of the poorest 20 per cent increased to 8.52 per cent in 1990/91. These data should be interpreted with caution. A rising income inequality both between industrial and agricultural sector and between regions partly reflects the nature and competence of the Thai state in terms of a predatory, not benign state (Siriprachai, 1995b). It remains open to question whether rising

income inequality and low real wages in the rural areas can be resolved through *laissez-faire* policy. In addition, both import-substituting and export-oriented industrial sectors centered in Bangkok (see Santikarn Kaosa-ard, 1992; UNIDO, 1992) have not been able to absorb much labour from the rural sector. An attempt in the 1980s to restructure the Thai economy seemed to offer little stimulus to industrial labour absorption (see Ezaki, 1990; Watanabe, 1992). Nevertheless, again by the mid-1980s, commodity prices on the world market were depressing and the substantial numbers of farmers remaining in agriculture revived very low incomes. It would not be surprising if the price support programmes did not adequately raise funds to improve the general level of farm-gate prices for rice. Once again, for instance, in the case of cassava which is of great concern to the poor small farmers in the Northeast, the quota system became a source of rent-seeking and rent-dissipation (Siamwalla, 1986; Siriprachai, 1988). It is interesting to note that after 1973 the oligarchic regime under the Thanom-Prapas clique collapsed and was replaced by elected politicians. It is a *unique system* of Thai *semi-democracy or soft-authoritarian regime* (Samudavanija, 1989; 1992). One emerging phenomenon is that the members of Parliament have tried to help farmers (different crops) in their districts. That it took place is due to the ongoing political cheating. It is obvious that the elected politician made much more effort to use public funds to engage in support operations in their districts. As pointed out by Siamwalla and Setboonsarng (1991), this was undoubtedly the best way for them to obtain *patronage* money.

Table 14
Thailand: Poverty incidence, 1962 to 2002
(headcount measure, per cent of total population)

	Aggregate	Rural	Urban
1962	88.3	96.4	78.5
1969	63.1	69.6	53.7
1975	48.6	57.2	25.8
1981	35.5	43.1	15.5
1986	44.9	56.3	12.1
1988 ^b	32.6	40.3	12.6
1990	27.2	33.8	1.6
1992	23.2	29.7	6.6
1994	16.3	21.2	4.8
1996	11.4	14.9	3.0
1998	12.9	17.2	3.4
2000	14.2	21.5	3.1

2002	9.8	12.6	3.0
Poverty share 2000	100	92.6	7.4
Population share 2000	100	68.4	31.6

Source: Development Evaluation Division, National Economic and Social Development Board, Bangkok and Medhi (1993).

Notes: Poverty incidence means the number of poor within a reference population group expressed as a proportion of the total population of that group. The headcount measure of aggregate poverty incidence is the percentage of the total population whose incomes fall below a poverty line held constant over time in real terms; rural poverty is the percentage of the rural population whose incomes fall below a poverty line held constant over time in real terms, and so forth. Poverty share means the number of poor within a reference population group expressed as a proportion of the total number of poor within the whole population. Population share means the population of a reference group expressed as a proportion of the total population of that group.

The data shown are identical to the most recent data from the National Economic and Social Development Board (NESDB) for the years 1988 to 1998.³⁰ The data for the earlier years have been spliced together with this series from published sources so that the resulting series matches the NESDB series for the year 1988. The data from 1962 to 1988 are summarized in Medhi (1993). Quoted from Warr and Sarntisart (2004)

Table 15
Income Distribution of Thailand

	1975/76	1981	1986	1988	1990	1992	1994	1996	1998	2000	2002	2004
Share of income												
Quantile 1	6.05	5.45	4.47	4.53	4.23	3.98	4.16	4.27	3.89	3.89	4.10	4.20
Quantile 2	9.72	9.26	7.85	7.98	7.43	6.93	7.52	7.69	7.19	7.19	7.80	7.80
Quantile 3	14.02	13.69	12.30	12.38	11.58	10.96	11.78	11.91	11.39	11.39	12.30	12.30
Quantile 4	20.97	21.08	20.43	20.71	19.49	18.80	19.88	19.74	19.70	19.70	20.50	20.30
Quantile 5	49.24	50.52	54.98	54.40	57.26	59.43	56.66	56.39	57.77	57.77	55.20	55.20
Gini Coefficient	0.426	0.442	0.496	0.489	0.515	0.536	0.516	0.509	0.525	0.525	0.501	0.499
Q5/Q1	8.1	9.3	12.3	12.0	13.5	14.9	13.6	13.2	14.9	14.9	13.5	13.1

Source: Tinakorn (2002) for 1975/76-2000

Office of National Statistics, for 2004.

³⁰ The exception is that the published data for Municipal Areas and Sanitary Districts have been aggregated to an 'urban' category using their respective population shares in the total for urban areas (the sum of the two) as weights.

The difference between the richest and the poor in Thailand was not so high compared to some countries in Latin America; namely Brazil and Mexico between the 1950s and 1980s, but it continued to rise and became critical according to the latest data in 1990/91. The gap has still not tended to be closed. Even though the *Gini coefficient* was more or less 0.45 between the 1960s and 1980s, it rose to 0.52 in 1992. What is of greater importance is that high economic growth in recent years has given rise not to more even income distribution, but more inequality. It is argued that slices of the bigger national pie made possible by high economic growth have scarcely trickled down to the poor in rural areas. Thus, the degree of *inequality* is simply not related to the level of income per head, but rather to factors dependent on what kind of development strategy is followed. What matters is the strategy of development as rightly pointed out by Griffin (1989).

These factors include the distribution of productive assets (particularly land), the distribution of education opportunities, the employment intensity of development path and the general policy stance of government... It is possible to prevent large income disparities emerging and the income structure being wrenched apart by adopting a development strategy that places high priority on an equal distribution of agricultural land, universal access to primary and secondary education, labour-intensive methods of production and a pattern of international trade that reflected the relative availability of resources (Griffin, 1989).

The Thai government, like in most developing countries, has been biased against the agricultural sector in favour of the industrial sector. Furthermore, urban bias was apparent and most Thai governments often centered their investments in urban areas, in particular Bangkok and greater Bangkok. Although the impressive objective of eradicating poverty in rural areas was explicitly coined as a slogan of the national plan, like the year of the farmer in the early 1980s or the land reform implemented in the early 1990s, the effectiveness of these policies in alleviating poverty was still very limited. It can be said that the Thai governments have been inclined to subsidize urban workers by providing food subsidies via a cheap rice policy. In fact, rural migrants seeking jobs in the informal sector in Bangkok in the slack season also gained these benefits directly. The cost of the low rice price seems to be somewhat compensated by the fact that urban workers and consumers in the industrial and the service sectors appear to have acquired the majority of benefits from high economic growth. A low food price is often cited as necessary to keep the wage low so that it can foster the industrialization process.

The Thai family agriculture is characterized by a large number of small and fragmented farms, especially rice farms and other upland crops except sugarcane. Not being colonized by western countries during the mid-nineteenth century, Thai farmers have been saved from a plantation enclave. This explains why strong collective action among Thai

farmers is hardly thriving due to very high *transaction costs* and a *free-rider* problem (see Olson, 1965). Moreover, weak farmer associations in the forms of co-operatives prevailed; the main task of these collective groups is to act as input-buying and output-selling agents for the purpose of increasing farmers' bargaining power with middlemen. Manufacturers' associations become inclined to seek protection and subsidies from the state and most are successful at lobbying for their interests.

6.4 Quality of Life

Life Expectancy there is little doubt that life expectancy in Thailand has been substantially increasing since WWII. In 1985 it stood at 66 years at birth, but it has gradually jumped to 69 years at birth in 2002 (see table 14). This is phenomenal, largely because economic growth over the last fifty years has been growing at 6.6 per cent per annum. As a consequence, infant mortality rate per 1,000 live at births has also reduced from 40 in 1985 to 24 in 2002. On the other hand, illiteracy rate (accounting for % of people at 15+) has been declined from 10 in 1985 to 4 in 2002. This is also remarkably successful. Nevertheless, this success is quite disappointing when we take into account the high drop out rate of secondary enrollment rate. This in turn explains why economic growth in Thailand would keep it at high for quite a long time by expanding in capital good accumulation instead of improving in technical capability. Real bottleneck lies to the fact that secondary school enrollment must be improved substantially. Otherwise, productivity by importing technology from abroad cannot be realized in the long run.

7. CONCLUDING REMARKS

Thailand began its industrialization process with import substitution and later shifted to export-oriented strategy. The main problems are inequality in income distribution with a more skewed pattern, imbalanced structure of employment and production, concentration of manufacturing in Bangkok, low secondary enrolment, etc. The trend is not merely less impressive, it seems to be worsening, Export-oriented strategy is just a *trade policy*, not the equivalent of *development strategy* as such. The most serious problem lies in the role of the Thai state which practices a *laissez-faire* philosophy. The Thai state wishes that the *magic of the market* could lower income. inequality and maintain high economic growth. In fact, manufactured exports reap profits with the help of the Thai state through BOI and other protective institutions, while the agricultural sector bears the burden of industrialization. Foreign investment helps to hasten economic growth and induce the rural poor to migrate to the city. There is little doubt that Thailand appears to enjoy *high higgledy-piggledy economic growth* (see Siamwalla, 1993) beyond other developing countries in Asia, but lags behind in the real meaning of economic development.

We cannot understand the present without understanding the past. European economic history in the nineteenth century remains the most useful lesson to be learned. There is a consensus that an accelerated rate of structural change is usually loosely labeled Industrial Revolution or the beginning of Industrialization. O'Brien (1994) concedes that

Structural change refers to the fact that their accumulating stocks of capital, work forces, and technologies became discernibly less and less engaged with producing food and agrarian raw materials, or with servicing agriculture, and more involved with industry, especially manufacturing, and with the trade, transport, finance, and construction related to industry. Structural change which appears in the composition of European nation outputs, in the allocation of labour across sectors of economies, and in relation to the modernity of the machine, tools, and forms of organization utilized to produce goods and services were invariably accompanied by population growth and urbanization, the spread of literacy, the integration of markets, closer involvement in international commerce, the diffusion of advanced technology, institutional and political reforms, and several other familiar features of modern economic growth (O'Brien, 1994).

Judging from the above description of structural change, which is of course a process of industrialization, Thailand will need to institute a genuine policy reform in the years to come. At the moment, a truly democratic regime is undoubtedly needed to establish and formulate an economic and social policy which can bring about a better standard of living and make economic opportunities and income distribution more equal.

Economic development which is a historical process, is closely tied to initial conditions that are pertinent to Thailand in terms of land abundance. As a result, the Thai élites were keen to tap natural resource rents to such an extent that resources have dwindled to a critical level. It is often cited that there is a need for new technologies which will raise the agricultural and industrial sectors to a high level in order to sustain economic growth. In fact, the Thai society must also traverse a particular dynamic path, and in order to do so it needs a *benevolent* state to pave the way to a new key institution to bring about *economic growth and equity*. However, attempts to find such an institution have so far not been successful due to Thailand's historical and institutions context which appears to have hindered rather than promoted any positive substantial changes in the last fifty years.

Figure 1: Real GDP, 1970-2004

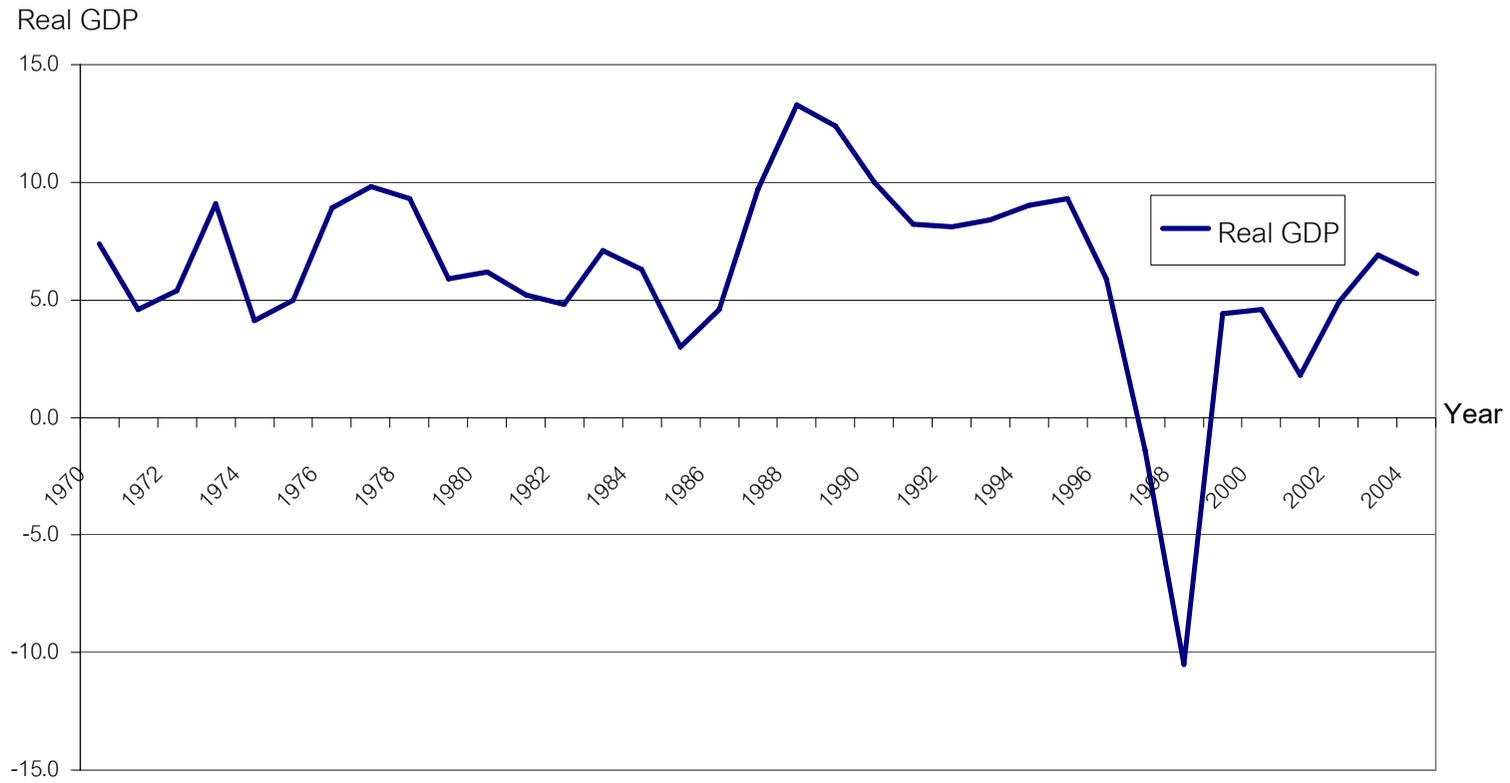


Figure 2: Terms of Trade, 1970-2004

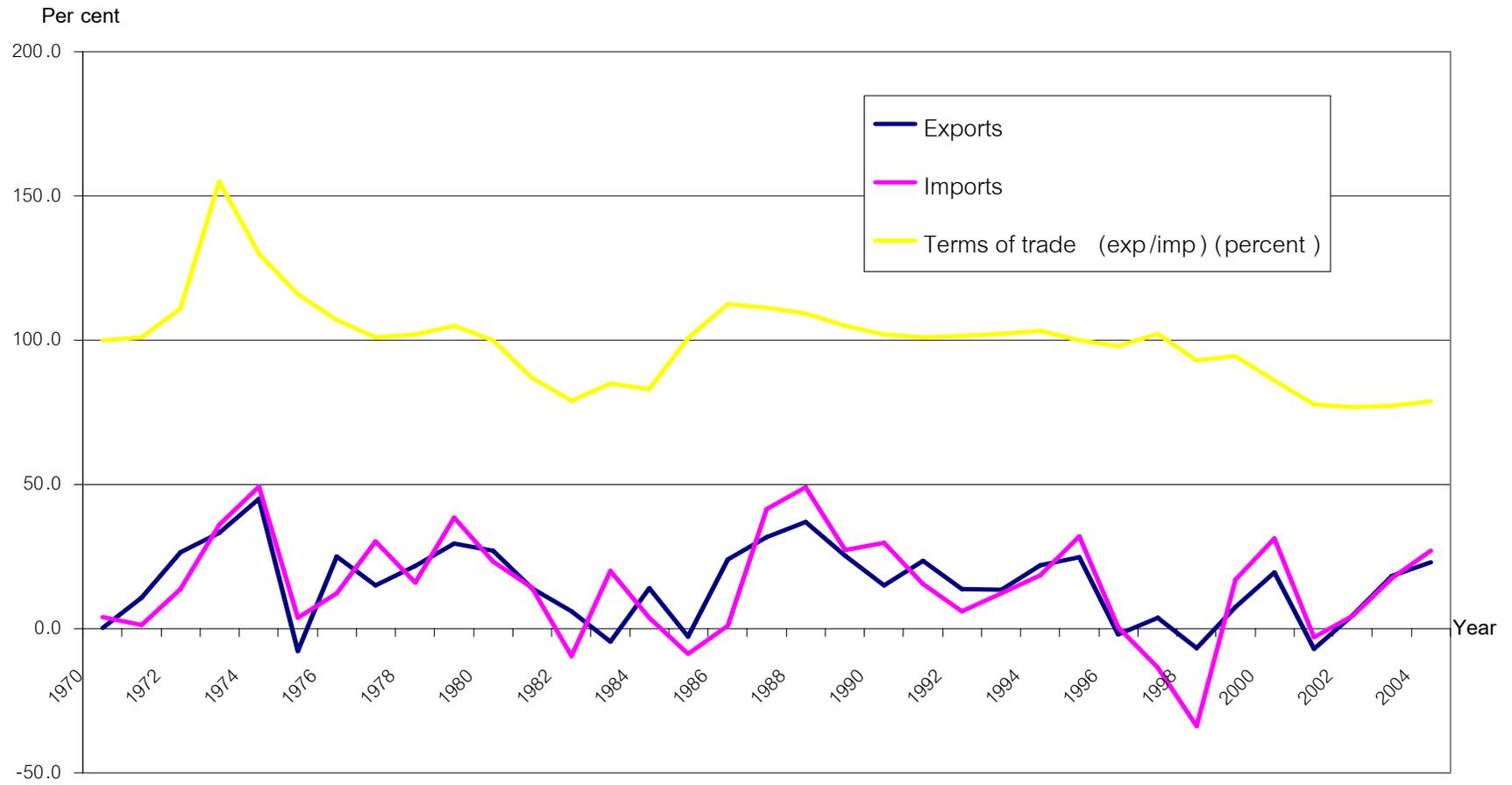


Figure 3: Inflation (percent), 1970-2004

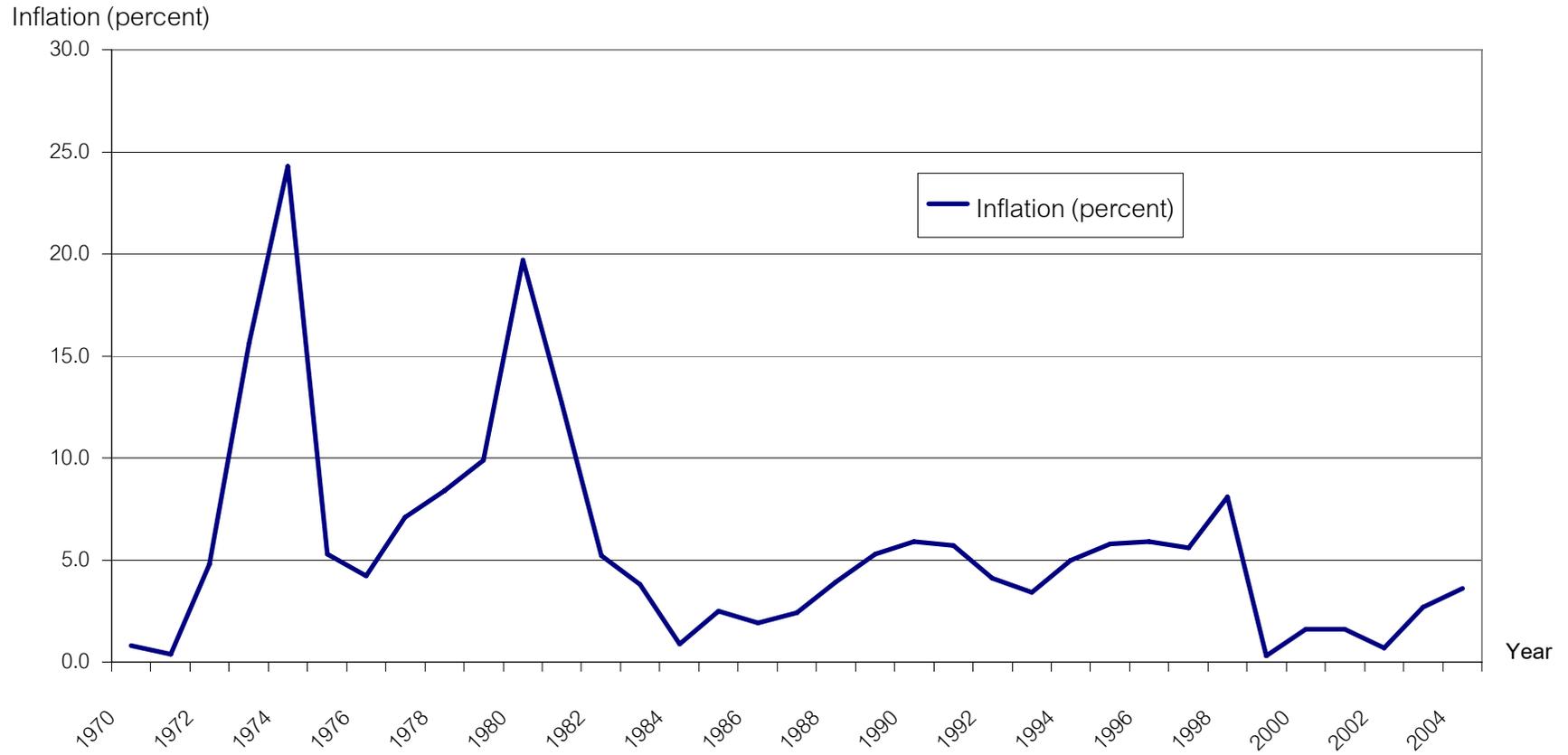


Figure 4: Current account balance/GDP (percent), 1970-2004

Current account balance /GDP

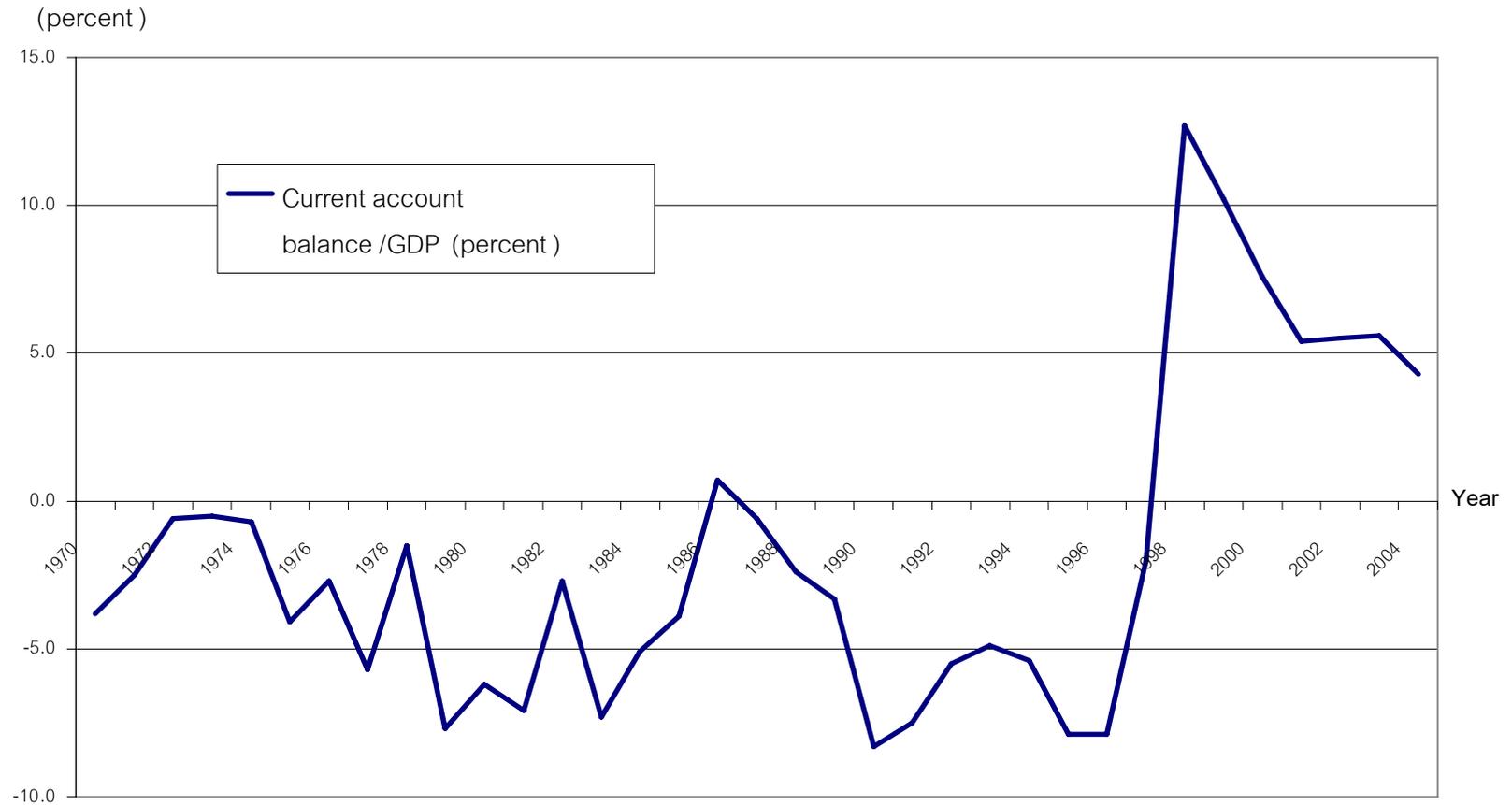


Figure 5: Money supply (M1), 1970-2004

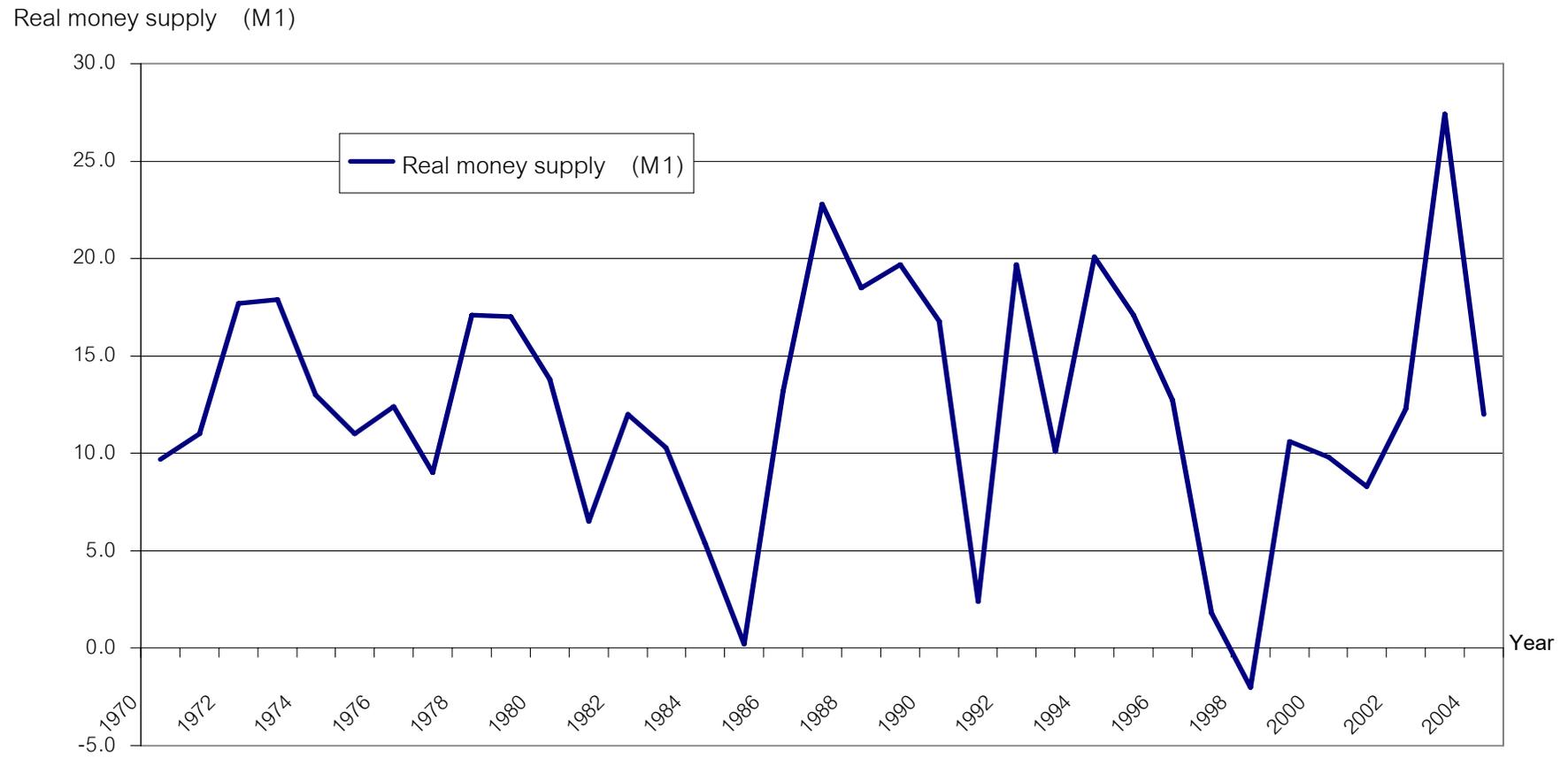


Figure 6: Total debt GNP (percent), 1970-2004

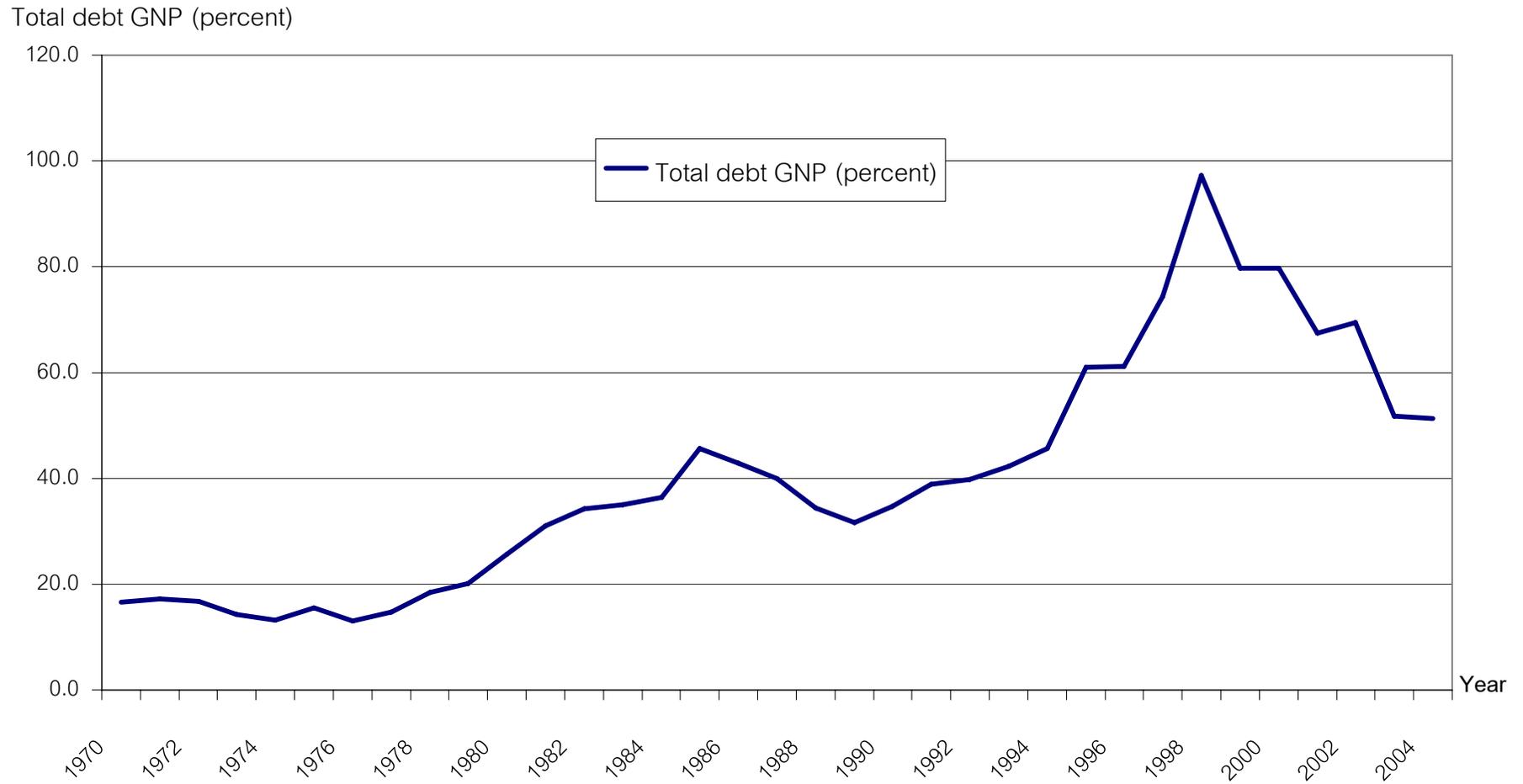


Figure 7: Total debt service/Exports (percent), 1970-2004

Total debt service/exports

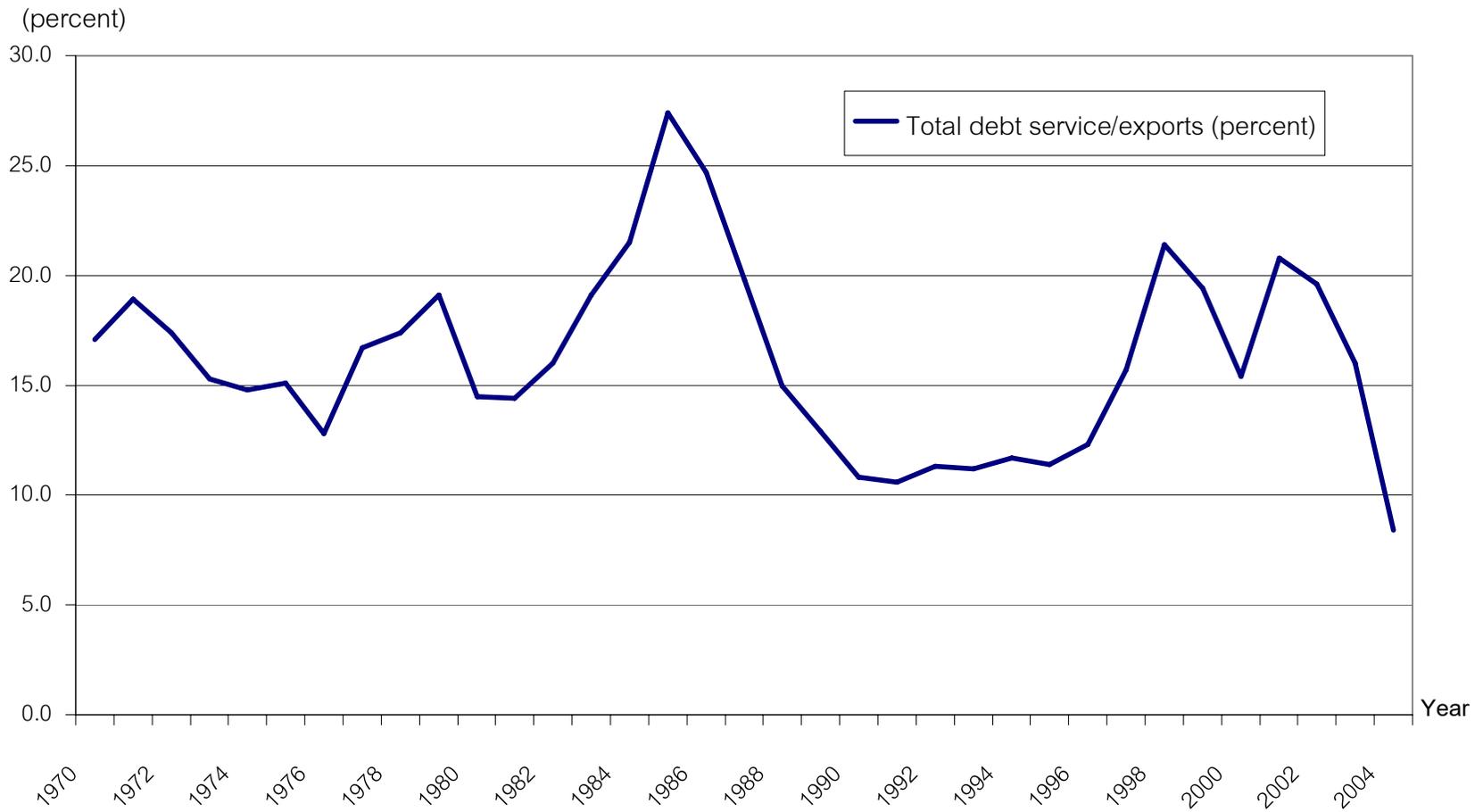


Figure 8 : Exchange Rate (Baht-US.dollar), 1990-2004

Exchange rate (baht/U.S.dollar)

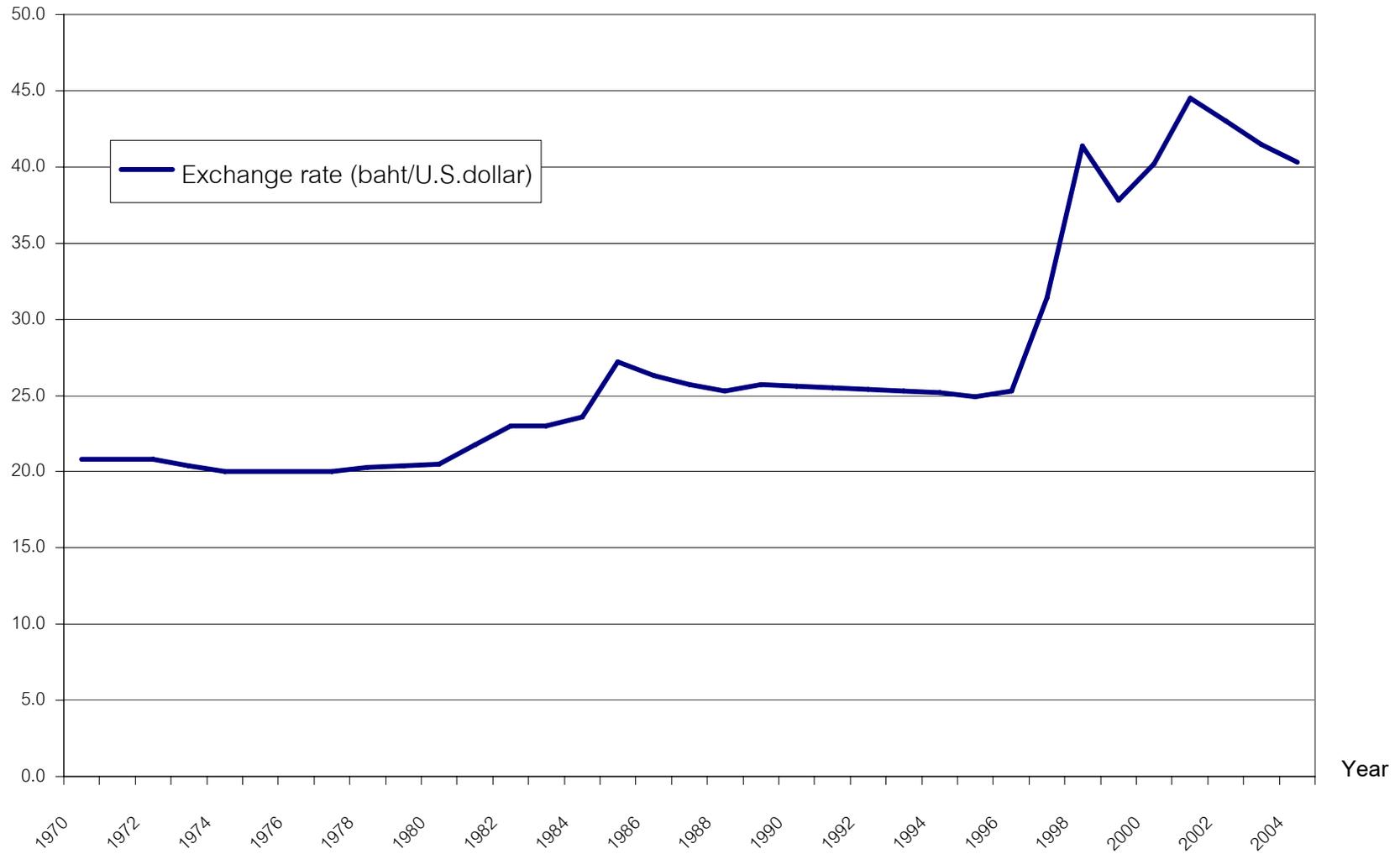


Table 16. Size, Living Standards, and Economic Structure in Thailand																					
No.	Item	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004est
ECONOMIC SIZE AND LIVING STANDARDS (units as noted)																					
1	Population, millions	51.58	52.511	53.427	54.326	55.214	55.839	56.574	57.294	58.01	58.713	59.401	60.003	60.602	61.201	61.806	62.406	62.914	63.430	63.959	64.471
2	-growth rate, %	1.86	1.8	1.74	1.68	1.63	1.13	1.32	1.27	1.25	1.21	1.17	1.01	1	0.99	0.99	0.97	0.81	0.82	0.83	0.8
3	GNP, current baht, billions	1.039	1.111	1.278	1.535	1.833	2.156	2.47	2.768	3.119	3.574	4.118	4.509	4.609	4.466	4.511	4.846	5.048	5.357	5.819	6.422
4	GDP, current baht, billions	1.056	1.133	1.3	1.56	1.857	2.184	2.507	2.831	3.165	3.629	4.186	4.611	4.733	4.626	4.637	4.923	5.134	5.446	5.930	6.550
5	GDP, 1988 baht, billions	1.191	1.257	1.377	1.56	1.75	1.945	2.112	2.283	2.471	2.693	2.942	3.115	3.073	2.750	2.872	3.008	3.074	3.238	3.460	3.975
6	-growth rate, %	4.65	5.53	9.53	13.29	12.19	11.17	8.56	8.08	8.25	8.99	9.24	5.9	-1.37	-10.51	4.45	4.75	2.17	5.33	6.87	6.2
7	Per capita GDP, 1988 baht	23095	23941	25771	28712	31694	34839	37329	39840	42595	45867	49523	51920	50702	44929	46468	48207	48854	51041	54098	56996
8	GDP, current US\$ billions	39	43	51	62	72	85	98	111	125	144	168	182	151	112	123	123	116	127	143	163
9	Per capita GDP, current US\$	-54	821	946	1135	1309	1528	1736	1945	2155	2458	2829	3032	2490	1828	1984	1967	1836	1999	2235	2526
10	GDP, current int'l \$, billions	106	116	130	152	177	203	228	254	280	314	352	384	389	356	376	398	416	445	484	520
11	Per capita GDP, current int'l \$	2.06	2.200	2.44	2.800	3.2	3.630	4.03	4.440	4.83	5.34	5.93	6.400	6.420	5.820	6.080	6.370	6.620	7.010	7.562	8.063
12	Infant mortality, per 1000 live births	40	-	37	-	-	34	-	32	-	-	29	-	27	-	-	25	24	24	-	-
13	Life expectancy at birth, years	66	-	66	-	-	69	-	70	-	-	69	-	68	-	-	69	69	69	-	-
14	Illiteracy rate, % of people 15+	10	9	9	8	8	8	7	7	7	5	6	6	5	5	5	4	-	-	-	-
15	Primary enrollment rate, %	96	-	-	-	-	99	99	97	94	91	86	87	89	93	94	95	-	-	-	-
16	Secondary enrollment rate, %	30	-	-	-	-	30	33	37	42	48	54	56	59	-	-	82	-	-	-	-
LABOR INDICATORS (units as noted)																					
17	Labor force, millions	26.638	27.403	28.740	29.614	30.340	31.750	31.223	32.182	32.240	31.816	32.175	32.324	32.780	32.460	32.719	33.224	33.813	34.262	34.902	3.238
18	Employment, millions	24.227	25.086	26.414	27.727	28.457	30.844	29.220	30.794	30.679	30.164	30.815	31.166	31.714	30.105	30.663	31.293	32.104	33.061	33.841	3.144
19	Agriculture share, %	64.1	62.51	60.67	62.68	62.33	63.95	56.07	56.2	53.03	50.32	46.7	45.36	45.14	44.53	45.02	44.20	42.4	42.47	41.02	38.13
20	Manufacturing share, %	9.35	9.58	10.19	9.42	10.44	10.16	12.52	12.77	13.62	13.89	14.95	14.92	14.64	14.17	13.94	14.86	15.35	15.28	15.66	16.63
21	Other industries share, %	26.56	27.91	29.13	27.9	27.22	25.89	31.41	31.03	33.35	35.78	38.35	39.72	40.22	41.3	41.05	40.94	42.25	42.25	43.33	45.24
22	Seasonally inactive, % of labor force	4.08	2.87	2.17	2.05	2.62	0.62	3.3	1.48	2.22	2.57	2.52	2.04	1.74	2.75	2.1	2.22	1.73	1.1	0.88	0.77
23	Open unemployment, % of labor force	4.97	5.58	5.92	4.32	3.59	2.24	3.12	2.84	2.62	2.62	1.71	1.52	1.49	4.35	4.19	3.59	3.32	2.4	2.16	-
INDUSTRY SHARES OF GDP MEASURED IN CURRENT BAHT OR 1988 BAHT (%)																					
24	Agriculture, current	15.81	15.66	15.73	16.18	15.08	12.5	12.65	12.3	8.66	9.09	9.51	9.5	9.45	10.78	9.39	9.02	9.13	9.42	10.03	9.35
25	Mining, current	2.46	1.74	1.71	1.71	1.72	1.6	1.57	1.49	1.4	1.34	1.2	1.38	1.74	1.82	1.88	2.37	2.46	2.49	2.61	2.67
26	Manufacturing, current	21.92	23.88	24.25	25.84	26.75	27.2	28.24	27.52	29.65	29.55	29.9	29.72	30.17	30.87	32.65	33.59	33.43	33.64	34.74	35.04
27	Electricity, gas & water, current	2.36	2.55	2.56	2.26	2.29	2.19	2.13	2.31	2.44	2.34	2.42	2.32	2.51	2.81	2.97	3.25	3.22	3.22	3.22	3.21
28	Construction, current	5.1	4.92	4.82	4.77	5.5	6.24	6.71	6.73	6.97	7.38	7.23	7.41	5.74	3.86	3.59	3.06	3.01	3.04	2.96	3.21
29	Trade, current	18.34	16.76	17.16	17.07	16.68	17.69	17.03	16.83	17.76	17.53	16.95	16.55	17.16	16.99	17.28	17.22	16.68	15.9	15.42	15.05
30	Transport & communication, current	7.39	7.78	7.64	7.48	7.44	7.17	7.07	7.25	7.51	7.43	7.24	7.4	7.82	7.8	8.11	8.04	8.32	8.26	7.84	7.67
31	Finance, current	3.34	3.27	3.84	4.25	4.56	5.52	5.34	6.44	6.81	7.2	7.08	7.12	6.53	5.09	3.37	2.96	2.95	3.14	3.41	3.66
32	Public administration & other, current	23.27	23.43	22.27	20.45	19.99	19.89	19.25	19.11	18.8	18.15	18.48	18.62	18.87	19.71	20.91	20.76	20.78	20.88	19.76	20.14
33	Agriculture, 1988	19.08	18.15	16.58	16.18	15.8	13.55	13.39	12.98	10.32	9.87	9.4	9.27	9.34	10.28	10.07	10.3	10.44	10.2	10.16	8.58
34	Mining, 1988	1.81	1.71	1.75	1.71	1.61	1.6	1.71	1.66	1.65	1.63	1.52	1.7	1.95	2.05	2.12	2.13	2.1	2.21	2.21	2.24
35	Manufacturing, 1988	22.51	23.43	24.82	25.84	26.72	27.81	28.62	29.47	31.64	31.81	32.58	32.79	33.72	33.59	35.98	36.43	36.15	36.66	37.9	38.74
36	Electricity, gas & water, 1988	2.26	2.38	2.29	2.26	2.41	2.41	2.45	2.5	2.53	2.57	2.69	2.63	2.82	3.13	3.09	3.24	3.38	3.4	3.33	3.37
37	Construction, 1988	4.98	4.78	4.8	4.77	5.46	5.99	6.27	6.08	6.1	6.39	6.24	6.31	4.76	3.28	2.93	2.53	2.48	2.49	2.4	2.65
38	Trade, 1988	16.57	16.48	16.69	17.07	16.97	17.38	17.17	16.59	17.42	17.5	17.56	16.9	16.62	16.11	15.96	15.79	15.25	14.73	14.32	14.24
39	Transport & communication, 1988	7.21	7.32	7.31	7.48	7.36	7.55	7.46	7.57	7.75	7.92	8.13	8.58	9.11	9.25	9.41	9.67	10.08	10.2	9.93	9.92
40	Finance, 1988	3.2	3.13	3.76	4.25	4.6	5.56	5.38	6.5	6.88	7.28	7.15	7.05	6.38	5.02	3.18	2.79	2.79	2.88	3.23	3.53
41	Public administration & other, 1988	22.37	22.61	21.99	20.45	19.06	18.16	17.55	16.65	15.71	15.03	14.73	14.77	15.3	17.28	17.27	17.11	17.33	17.21	16.52	16.73
EXPENDITURE SHARES OF GDP MEASURED IN CURRENT BAHT OR 1988 BAHT (%)																					
42	Private consumption, current	62.22	61.39	60.09	56.74	55.5	56.56	54.98	54.77	54.67	53.97	53.17	53.78	54.66	54.15	55.96	56.13	57.29	57.17	56.67	56.17
43	Government consumption, current	13.53	12.75	11.33	10.05	9.52	9.4	9.22	9.9	9.98	9.76	9.9	10.18	10.07	11.06	11.5	11.33	11.32	11.08	10.63	11.16
44	fixed investment, current	27.17	25.78	27.64	30.68	34.62	40.38	41.63	39.26	39.98	39.96	41.07	41.05	33.78	22.38	20.83	21.97	23.01	22.83	24.03	25.73
45	Private fixed investment, current	18.46	18.41	21.68	25.63	29.57	34.24	34.41	31.14	31.69	31.24	32.09	30.85	22.15	12.73	11.55	13.8	15.29	15.9	17.51	18.77
46	Inventory investment, current	1.08	0.09	0.24	1.91	0.45	0.97	1.21	0.71	0.43	0.3	1.03	0.76	-0.12	-1.93	-0.33	0.87	1.09	1.04	0.98	1.67
47	Exports of goods & services, current	23.21	25.6	28.89	33.01	34.92	34.13	35.96	36.97	37.96	38.87	41.84	39.25	48.01	58.88	58.3	66.78	65.86	64.25	65.54	69.53
48	Imports of goods & services, current	25.94	23.57	28.33	34.4	37.49	41.65	42.51	40.98	42.2	43.71	48.59	45.53	46.59	42.99	45.73	58.14	59.37	57.55	58.77	65.26
49	Statistical discrepancy, current	-1.27	-2.05	0.15	2.01	2.48	0.2	-0.5	-0.62	-0.43	0.86	1.58	0.5	0.19	-1.55	-0.53	1.07	0.8	1.18	0.93	1
50	Private consumption, 1988	60.71	59.57	59.1	56.74	56.24	57.11	55.46	55.77	55.86	55.18	54.45	54.39	54.39	53.78	53.72	53.97	55.01	54.98	54.75	54.93
51	Government consumption, 1988	12.7	11.95	10.94	10.05	9.19	8.84	8.65	8.51	8.26	8.2	7.9	8.36	8.24	9.56	9.44	9.21	9.24	8.93	8.52	8.64
52	fixed investment, 1988	28.01	26.36	28.5	30.68	33.5	39.06	40.54	40	40.38	41.26	42.02	42.47	34.21	21.29	19.72					

Table 17: Monetary and Fiscal Indicators and External Accounts in Thailand																					
No.	Item	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004est
MONETARY & FISCAL INDICATORS (price indices & deflators defined as 1988=1, other units as noted)																					
1	GDP deflator	0.887	0.902	0.944	1.000	1.061	1.122	1.177	1.24	1.281	1.348	1.423	1.48	1.540	1.683	1.615	1.636	1.67	1.682	1.714	1.783
2	-growth rate,%	2.18	1.65	4.72	5.92	6.12	5.77	5.75	4.49	3.29	5.21	5.59	4.01	4.06	9.24	-4.04	1.35	2.07	0.72	1.89	4
3	Consumer price index	0.923	0.94	0.963	1	1.054	1.116	1.179	1.229	1.27	1.333	1.411	1.493	1.576	1.704	1.709	1.736	1.764	1.776	1.808	1.857
4	-growth rate,%	2.43	1.84	2.5	3.8	5.36	5.94	5.65	4.19	3.33	4.97	5.88	5.8	5.59	8.11	0.3	1.6	1.57	0.68	1.82	2.72
5	Import price index	0.903	0.838	0.907	1.000	1.071	1.126	1.176	1.182	1.182	1.211	1.352	1.528	1.77	2.184	1.912	2.184	2.626	2.388	2.468	2.708
6	Export price index	0.838	0.862	0.923	1.000	1.029	1.051	1.086	1.103	1.114	1.144	1.235	1.368	1.655	1.859	1.648	1.714	1.865	1.673	1.74	1.956
7	GDP deflator, agriculture	0.735	0.778	0.896	1.000	1.012	1.035	1.121	1.175	1.074	1.241	1.439	1.517	1.559	1.764	1.506	1.433	1.462	1.553	1.693	1.942
8	GDP deflator, mining	1.205	0.918	0.922	1.000	1.13	1.122	1.091	1.115	1.086	1.11	1.125	1.199	1.374	1.499	1.435	1.817	1.953	1.904	2.028	0.659
9	GDP deflator, manufacturing	0.864	0.919	0.923	1.000	1.062	1.098	1.171	1.158	1.2	1.252	1.306	1.342	1.378	1.546	1.465	1.509	1.544	1.557	1.589	1.618
10	GDP deflator, electricity, gas & water	0.926	0.966	1.056	1.000	1.005	1.019	1.033	1.147	1.239	1.223	1.281	1.303	1.372	1.652	1.468	1.497	1.604	1.596	1.655	1.707
11	GDP deflator, construction	0.909	0.926	0.948	1.000	1.069	1.168	1.27	1.374	1.465	1.557	1.648	1.738	1.86	1.98	1.978	1.974	2.02	2.056	2.075	2.165
12	GDP deflator, trade	0.982	0.917	0.971	1.000	1.043	1.142	1.177	1.26	1.306	1.35	1.373	1.449	1.591	1.774	1.749	1.786	1.828	1.819	1.836	1.891
13	GDP deflator, transport & commun.	0.909	0.958	0.988	1.000	1.072	1.067	1.124	1.188	1.242	1.265	1.266	1.276	1.322	1.418	1.392	1.365	1.383	1.345	1.358	1.384
14	GDP deflator, finance	0.925	0.942	0.964	1.000	1.053	1.015	1.179	1.227	1.268	1.333	1.41	1.493	1.577	1.705	1.715	1.736	1.765	1.777	1.801	1.853
15	GDP deflator, public admin. & other	0.923	0.934	0.956	1.000	1.113	1.229	1.302	1.424	1.532	1.627	1.785	1.866	1.9	1.919	1.955	1.984	2.005	2.035	2.039	2.686
16	Yearend stock price index	0.349	0.536	0.737	1.000	2.273	1.585	1.839	2.31	4.351	3.517	3.312	2.15	0.964	0.92	1.246	0.696	0.786	0.922	1.997	1.728
17	Baht per US\$ average rate	27.156	26.299	25.723	25.294	25.702	25.586	25.517	25.4	25.32	25.15	24.915	25.343	31.364	41.359	37.814	40.112	44.432	42.96	41.485	40.222
18	Baht per US\$ yearend rate	26.65	26.13	25.07	25.24	25.69	25.29	25.28	25.52	25.54	25.09	25.19	25.61	47.247	36.691	37.47	43.268	44.222	43.152	39.58	39.2
19	Lending rate (%)	16.08	13.38	10.71	11.58	12.25	14.29	15.4	12.17	11.17	10.9	13.25	13.4	13.65	14.42	8.98	7.83	7.25	6.88	5.94	5.5
20	Narrow money (M1)/GDP %	8.13	9.13	10.18	9.52	9.41	8.95	8.87	8.82	9.36	9.55	9.28	9.19	9.06	9.55	12.4	10.68	11.29	12.18	12.93	12.49
21	Broad money (M2)/GDP %	56.18	59.36	62.2	61.3	65	70.03	73.1	74.81	79.21	77.96	79.08	80.82	91.69	102.74	104.69	102.23	102.15	98.77	98.02	94.86
22	Domestic credit/GDP,%	66.06	65.35	67.02	64.58	65.01	70.15	70.56	73.72	80.89	91.29	97.26	100.6	131.8	133.22	127.35	111.04	100.03	101.64	119.62	112.09
23	Overall fiscal surplus/GDP,%	-4.27	-3.72	-0.43	2.34	3.27	4.83	4.3	2.57	1.89	2.68	3.03	0.94	-1.5	-2.79	-3.33	-2.23	-2.4	-1.41	0.4	0.22
24	Revenue/GDP,%	15.21	14.99	15.54	16.55	17.62	18.85	18.46	18.06	18.16	18.75	18.57	18.5	17.91	15.51	15.38	15.14	15.11	16.1	17.07	17.26
25	Taxes/GDP,%	13.72	13.61	14.28	15.5	16.27	17.67	17.04	16.13	16.49	17.07	16.99	16.95	16	13.54	13.49	13.6	13.53	14.42	15.22	15.45
26	Expenditure/GDP,%	18.93	18.02	16.31	14.3	14.21	13.94	14.45	15.63	16.46	15.96	15.35	17.76	19.69	18.22	17.97	17.33	17.7	17.54	16.8	17.63
27	Other items (incl. errors)/GDP,%	-0.54	-0.69	0.34	0.1	-0.14	-0.08	0.29	0.15	0.18	-0.1	-0.19	0.2	0.27	-0.09	-0.74	-0.04	0.19	0.03	0.13	0.59
28	Central government debt/GDP,%	33.24	36.49	34.68	28.08	22.62	17.03	12.99	10.61	8.57	6.06	4.63	3.81	6.33	14.57	21.37	22.44	24.62	31.05	27.5	27.49
BALANCE OF PAYMENTS (US\$ millions, except where noted)																					
29	Current account balance	-1537	247	-366	-1654	-2498	-7281	-7571	-6303	-6.364	-8.085	-13554	-14692	-3021	14243	12428	9313	6192	7014	7953	7129
30	% of GDP	-3.95	0.57	-0.73	-2.68	-3.46	-8.53	-7.71	-5.66	-5.09	-8.07	-12.73	-10.13	7.59	5.36	5.53	5.56	5.56	4.38		
31	Good, credit	7059	8803	11595	15781	19834	22811	28232	32099	36398	44478	55447	54408	56656	52753	56775	67894	63082	66089	78083	96849
32	Goods, debit	-8391	-8415	-12019	-17856	-22750	-29561	-34221	-36260	-40694	-48204	-63415	-63897	-55084	-36515	-42762	-56193	-54539	-57008	-66909	-87217
33	Services, credit	2041	2302	3070	5658	5457	6419	7272	9288	11059	11640	14845	17007	15763	13156	14635	13868	13024	15391	15798	19153
34	Services, debit	-1815	-1852	-2406	-3569	-4505	-6309	-8040	-10368	-12469	-15396	-18804	-19585	-17355	-11998	-13583	-15460	14610	-16720	-18169	-21699
35	Income, credit	1122	1031	1098	1297	1589	2059	2254	1532	2140	2562	3801	3969	3742	3324	3092	4235	3833	3356	3015	3140
36	Income, debit	-1719	-1848	-1928	-2191	-2369	-2913	-3329	-3240	-3546	-4292	-5915	-7354	-7223	-6891	-6083	-5616	-5200	-4696	-4807	-5198
37	Unrequited transfers, net	165	225	224	236	246	213	261	646	750	1128	487	760	479	414	353	586	601	603	941	2101
38	Financial account	1538	-131	1062	3839	6599	9098	11759	9475	10500	12167	21909	19486	-12056	-14110	-11073	-10434	-3.658	-2887	-7624	
39	Direct investment, outward	-1	-1	-170	-24	-50	-140	-167	-147	-233	-493	-886	-931	-580	-130	-346	23	-344	-106	-488	
40	Direct investment, inward	163	263	352	1105	1775	2444	2014	2113	1804	1366	2068	2336	3895	7315	6103	3366	3892	953	1949	
41	Portfolio investment, outward	-	-	-	-	-	-	-	-	0	-5	-2	-41	-70	18	-2	-160	-360	-913	-937	
42	Portfolio investment, inward	895	-29	346	530	1486	-38	-81	924	5455	2486	4083	3585	4598	338	-108	-546	-525	-694	851	
43	Other investment, outward	-242	-150	141	269	-313	-164	352	104	-3265	-1027	-2738	2661	-2555	-3407	-1755	-2203	577	4135	-410	
44	Other investment, inward	722	-213	393	1960	3700	6996	9642	6479	6739	9839	19383	11876	-17344	-18243	-14964	-10914	-6897	-6263	-8590	
45	Capital account	0	0	2	0	0	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	
46	Errors and omissions	103	598	248	411	928	1419	431	-142	-230	87	-1196	-2627	-3173	-2828	33	-685	-258	1410	189	
47	Financing	-105	-714	-945	-2596	-5029	-3235	-4618	-3029	-3907	-4169	-7159	-2164	18250	2696	-1388	1806	-2276	-5537	-518	
EXTERNAL DEBT & INTERNATIONAL RESERVES (US\$ millions, except where noted)																					
48	Total debt	17555	18321	20019	21064	22850	29308	37878	43621	52107	64867	100832	108742	109276	105062	95051	79715	67511	59459	51783	50699
49	% of GDP	45.08	42.51	39.61	34.16	31.63	34.34	38.56	39.14	41.68	44.95	60.01	59.77	72.42	93.92	77.51	64.95	58.43	46.9	36.22	31.13
50	Long-term, public	10528	12023	13884	13034	11935	11258	12105	12518	14171	15535	16317	16747	24062	31428	36098	33887	28161	22918	16574	14662
51	Long-term, private	3780	3410	3175	3282	4966	7633	10382	12189	15302	20153	32117	44252	46920	45213	39414	31134	25961	24622	24305	24611
52	Short-term, private	2105	1819	1987	4076	5674	10416	15391	18914	22634	29179	52398	47743	35865	25182	16108	11632	1			

Table 18: Thailand's Merchandise Trade by Major Commodity Group

No.	Item	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004est
EXPONENTS (total exports in US\$ millions, commodity group shares of total exports in%)																					
1	Total merchandise exports	7122	8836	11659	15903.000	20058	23069	28421	32474	37167	45235	56439	55678	58283	53583	58423	68787	65113	68108	80331	97608
2	Agricultural products	45.54	44.08	36.86	34.58	33.93	28.57	26.92	26.04	21.79	20.99	19.24	19.76	18.31	18.05	17	14.41	15.34	14.64	14.06	12.83
3	Crude materials excluding fuels	10.39	8.87	8.92	9.13	7.11	5.7	4.98	4.83	4.3	4.88	5.73	5.73	4.48	3.95	3.6	4.06	3.67	4.01	5.18	5.1
4	Mineral fuels	1.39	0.79	0.73	0.77	0.74	0.83	1	0.99	1.07	0.78	0.73	1.65	2.36	1.56	1.83	3.23	2.79	2.44	2.66	3.08
5	Chemical manufactures	1.32	1.6	1.66	1.610	1.71	2.02	2.55	2.54	2.83	2.81	3.8	3.41	4.23	4.5	5.07	5.9	5.75	5.7	6.5	6.77
6	Machinery manufactures	8.95	10.87	11.92	15.720	17.53	21.96	23.97	26.45	29.67	33.3	33.63	37.84	38.32	40.81	41.92	43.64	41.98	42.68	43.81	45.46
7	General machinery	1.88	1.51	1.9	2.220	2.05	2.66	3.03	3.4	4.49	4.13	4.5	5.17	5.09	5.08	5.26	5.41	5.76	-	5.91	-
8	Office & computing machinery	0.76	0.7	1.33	3.260	5.32	6.77	6.88	7.42	7.59	9.13	10.09	12.62	12.77	15.01	14.06	12.78	12.29	-	10.52	-
9	Telecommunications machinery, etc.	0.07	0.09	0.2	0.660	2.69	4.58	5.47	5.94	5.35	6	5.37	5.44	5.71	5.77	5.13	5.84	5.39	-	6.08	-
10	Other electrical machinery	5.97	8.05	8.14	8.620	6.56	6.96	7.31	8.32	9.89	10.88	11.29	11.71	11.85	12.49	13.96	15.83	14.23	-	14.98	-
11	Road vehicles	0.2	0.22	0.32	0.920	0.85	0.96	1.05	1.02	1.7	1.9	1.28	1.4	1.93	2.41	3.38	3.61	4.23	-	5.13	-
12	Other transport equipment	0.07	0.29	0.02	0.050	0.06	0.03	0.24	0.34	0.65	1.25	1.12	1.5	0.97	0.06	0.14	0.16	0.08	-	1.39	-
13	Other manufactures	31.21	32.91	39	37.510	37.79	39.72	39.36	38.05	38.79	36.47	35.89	30.37	28.68	28.6	27.34	26.3	26.91	27.07	24.99	24.9
14	Textiles	5.84	5.84	5.56	4.760	4.02	4.04	4.01	3.97	3.76	3.74	3.52	3.46	3.53	3.33	3.14	2.87	2.92	-	2.73	-
15	Apparel	8.05	9.34	12.87	12.160	12.28	12.26	13	11.69	11.36	10.66	8.95	6.78	6.39	6.68	5.99	5.51	5.56	-	4.56	-
16	Leather products	0.73	0.83	1.15	1.030	0.91	1.07	0.93	0.93	0.92	0.92	0.84	0.96	0.92	0.78	0.73	0.65	0.65	-	0.49	-
17	Footwear	1.18	1.3	1.88	2.28	2.47	3.22	3.1	2.94	2.79	3.28	3.7	2.23	1.8	1.58	1.32	1.13	1.2	-	0.98	-
18	Wood products	0.98	0.95	1.23	0.85	0.76	0.66	0.56	0.56	0.6	0.58	0.53	0.52	0.48	0.55	0.57	0.55	0.56	-	0.47	-
19	Furniture	0.69	0.82	1.15	1.51	1.31	1.34	1.45	1.5	1.6	1.56	1.33	1.34	1.23	1.18	1.36	1.38	1.33	-	1.3	-
20	Paper products	0.28	0.4	0.46	0.31	0.25	0.21	0.2	0.22	0.24	0.37	0.61	0.36	0.68	0.99	1.04	0.96	1.02	-	1	-
21	Rubber products	0.63	0.68	0.66	0.65	0.67	0.73	0.7	0.77	0.81	0.78	0.77	0.87	0.9	1.03	1	0.99	1.14	-	1.35	-
22	Non-metallic mineral manufactures	3.99	4.31	4.77	4.18	4.14	4.67	4.19	3.65	3.86	3.62	3.3	3.43	2.7	2.16	2.43	2.38	2.47	-	2.32	-
23	Iron & steel	0.99	0.92	0.81	1.04	0.79	0.59	0.59	0.5	0.63	0.61	0.86	0.85	0.88	1.07	1.04	1.34	1	-	1.32	-
24	Non-ferrous metals	3.36	1.62	0.96	0.73	0.76	0.51	0.24	0.22	0.15	0.17	0.2	0.3	0.42	0.46	0.45	0.57	0.52	-	0.46	-
25	Metal products	0.61	0.74	0.88	0.83	1.09	1.27	1.35	1.31	1.37	1.45	1.37	1.44	1.38	1.58	1.47	1.55	1.58	-	1.66	-
26	Professional & scientific instruments	0.26	0.11	0.11	0.22	0.14	0.21	0.32	0.38	0.46	0.44	0.43	0.49	0.53	0.57	0.48	0.45	0.52	-	0.51	-
27	Photographic & optical, watches	0.48	0.53	0.42	0.51	0.76	1.12	1.37	1.53	1.22	1.34	1.34	1.46	1.33	1.32	1.09	1.18	1.29	-	1.32	-
28	Miscellaneous manufactures	3.16	4.53	6.09	6.43	7.43	7.82	7.34	7.87	9.02	7.53	8.14	5.87	5.5	5.31	5.24	4.77	5.16	-	4.53	-
29	Not classified	1.2	0.89	0.91	0.69	1.2	1.2	1.22	1.1	1.55	0.77	0.98	1.25	3.62	2.53	3.25	2.47	3.56	3.47	2.81	1.87
IMPORTS (total imports in US\$ millions, commodity group shares of total imports in%)																					
30	Total merchandise imports	9243	9139	12972	20283	25763	33371	37588	40687	46239	54437	70781	72316	62462	42370	50309	61451	62057	64645	75805	97087
31	Agricultural products	5.17	6.83	5.19	5.68	5.48	4.97	5.38	5.41	4.63	4.25	3.65	3.93	4.36	5.16	4.54	3.84	4.49	3.87	4.27	3.69
32	Crude materials excluding fuels	6.42	6.3	7.06	7.29	6.76	6.18	5.86	5.96	5.44	5.13	4.91	4.5	4.28	4.28	4.07	4.16	4.08	4.86	4.05	4.53
33	Mineral fuels	22.74	13.54	13.39	7.72	9.15	9.33	9.31	8.28	7.53	6.87	6.84	8.85	9.35	8.21	9.7	12.38	12.13	11.56	11.96	11.79
34	Chemical manufactures	13.5	15.41	14.41	12.54	11.34	10.25	9.42	10.38	10	10.19	10.21	9.4	9.67	11.14	10.91	10.72	10.41	10.37	10.82	10.53
35	Machinery manufactures	27.75	30.45	31.08	39.31	37.24	41.04	39.59	41.83	44.92	46.83	47.4	47.12	46.95	43.66	43.1	44.50	45.1	45.3	43.45	44.6
36	General machinery	12.01	10.78	12.17	14.38	15.6	17.53	18.37	15.95	17.19	16.34	16.62	16.99	15.21	12.63	9.35	10.3	11.08	-	11.68	-
37	Office & computing machinery	2.09	2.86	3.2	4.59	4.01	3.34	3.46	3.98	3.79	4.39	4.21	4.33	5.3	5.11	5.1	6.22	6.29	-	5.78	-
38	Telecommunications machinery, etc.	2.55	3.23	2.71	2.49	2.76	2.98	2.83	3.2	3.26	3.89	3.38	2.92	3.37	2.27	2.5	3.04	4.36	-	3.77	-
39	Other electrical machinery	4.97	8.83	8.55	8.26	7.86	8	9.07	9.77	10.9	12.65	13.43	13.84	16.07	20.66	19.36	21.14	17.77	-	16.73	-
40	Road vehicles	4.07	4.02	4.95	6.08	6.38	6.94	5.35	6.1	7.53	7.43	7.4	6.7	3.69	1.23	2.59	3.22	3.22	-	4.03	-
41	Other transport equipment	2.07	0.73	0.5	3.5	0.63	2.25	0.51	2.83	2.26	2.13	2.36	2.33	3.31	1.77	4.19	0.67	2.38	-	1.47	-
42	Other manufactures	20.29	21.97	23.39	23.1	25.55	25.15	27.71	25.21	24.38	24.58	25.03	23.48	22.98	25.12	25.41	22.75	21.81	21.08	23.39	22.01
43	Textiles	2.47	3.44	3.82	3.01	3.13	2.69	2.66	2.97	2.82	2.5	2.17	1.95	2	2.73	2.67	2.63	2.47	-	2.15	-
44	Apparel	0.05	0.07	0.06	0.06	0.08	0.09	0.11	0.12	0.11	0.12	0.12	0.14	0.22	0.22	0.2	0.22	0.25	-	0.22	-
45	Leather products	0.12	0.19	0.22	0.28	0.42	0.55	0.57	0.7	0.63	0.6	0.45	0.4	0.44	0.59	0.59	0.46	0.47	-	0.45	-
46	Footwear	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.05	0.03	0.03	0.04	0.04	-	0.05	-
47	Wood products	0.04	0.03	0.03	0.05	0.06	0.08	0.12	0.11	0.09	0.11	0.13	0.12	0.12	0.09	0.07	0.07	0.08	-	0.1	-
48	Furniture	0.05	0.04	0.04	0.04	0.05	0.04	0.05	0.05	0.06	0.06	0.07	0.08	0.11	0.05	0.06	0.07	0.1	-	0.12	-
49	Paper products	1.42	1.35	1.4	1.05	0.9	0.94	1	1.09	1.1	1.04	1.08	0.92	0.88	0.82	0.8	0.85	0.81	-	0.81	-
50	Rubber products	0.39	0.38	0.34	0.3	0.35	0.39	0.35	0.43	0.46	0.48	0.47	0.46	0.49	0.51	0.54	0.56	0.55	-	0.57	-
51	Non-metallic mineral manufactures	1.54	2.16	2.58	1.99	3.38	4.32	6.47	2.61	2.48	2.37	2.27	2.2	1.75	1.97	2.15	2.24	2.11	-	2.21	-
52	Iron & steel	6.76	6.74	7.3	8.57	8.65	8.02	7.87	8.04	7.22	6.85	7.36	6.31	5.8	4.56	5.41	4.57	4.2	-	5.36	-
53	Non-ferrous metals	1.57	1.64	1.81	2.15	2.46	2.08	2	1.96	1.97	2.17	2.55	2.24	2.25	2.34	2.19	2.34	2.32	-	2.55	-
54	Metal products	2.09	0.84	1.87	1.96	1.91	1.95	2.16	2.38	2.53	2.83	2.98	2.94	3.28	4.96	4.99	3.27	3.13	-	3.09	-
55	Professional & scientific instruments	1.34	1.31	1.21	1.22	1.17	0.01														

Table 19: Thailand's Interaction with Partner Regions and Economies																					
No.	Item	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004est
EXPORTS (total exports in US\$ millions, partner shares of total exports in %)																					
1	Total merchandise exports	7122	8836	11659	15910.000	20058	23069	28421	32474	37167	45235	56439	55678	58283	53583	58423	68787	65113	68108	80331	97608
2	Japan	13.36	14.2	14.88	16	17.05	17.2	18.06	17.51	16.95	17.08	16.79	16.83	14.99	13.95	14.12	14.84	15.29	14.6	14.2	13.87
3	China	3.81	3.11	3.33	2.99	2.69	1.16	1.18	1.19	1.45	2.05	2.91	3.36	3.07	3.3	3.19	4.09	4.4	5.22	7.1	7.23
4	Hong Kong	4.04	3.99	4.19	4.47	3.95	4.5	4.74	4.64	5.27	5.27	5.17	5.82	5.95	5.21	5.09	5.05	5.07	5.41	5.39	5.08
5	Korea	1.85	2.75	1.32	1.600	1.49	1.71	1.62	1.64	1.24	1.26	1.42	1.82	1.71	1.16	1.56	1.85	1.89	2.05	1.98	1.89
6	Taiwan	1.62	1.58	1.48	1.820	1.57	1.62	1.66	1.9	1.99	2.17	2.4	2.55	2.73	3.23	3.49	3.51	2.94	2.89	3.22	2.7
7	Indonesia	0.61	0.65	0.53	0.530	0.8	0.67	0.75	0.87	0.54	0.97	1.44	1.73	2.13	1.89	1.66	1.94	2.09	2.46	2.83	3.25
8	Malaysia	4.99	4.3	3.32	2.970	2.91	2.49	2.41	2.59	2.8	2.43	2.75	3.62	4.3	3.31	3.63	4.1	4.18	4.16	4.83	5.46
9	Philippines	0.75	0.33	0.61	0.370	0.51	0.73	0.37	0.48	0.53	0.49	0.73	1.13	1.19	1.41	1.58	1.57	1.78	1.87	2.02	1.92
10	Singapore	7.94	8.87	9	7.690	7.13	7.35	8.22	8.69	11.99	13.63	14.03	12.12	11.04	8.79	8.68	8.75	8.12	8.15	7.31	7.2
11	Vietnam	0	0.03	0.04	0.030	0.08	0.08	0.08	0.24	0.31	0.56	0.83	1.04	0.94	1.1	0.98	1.23	1.22	1.39	1.58	1.91
12	Industrial Europe	20.88	23.44	24.34	23.090	21.44	24.02	22.98	21.69	18.49	16.61	16.07	16.91	17.1	19.43	17.89	16.76	17.27	15.8	15.94	14.83
13	Canada	1.22	1.37	1.47	1.790	1.49	1.33	1.39	1.37	1.39	1.26	1.09	1.08	1.1	1.15	1.2	1.13	1.21	1.18	1.17	1.09
14	United States	19.67	18.1	18.6	20.110	21.71	22.71	21.35	22.49	21.54	21.04	17.86	18.01	19.64	22.68	21.67	21.41	20.35	19.82	17.02	15.9
15	Australia	1.74	1.79	1.85	1.870	1.86	1.62	1.63	1.62	1.38	1.42	1.38	1.51	1.64	1.82	2.25	2.35	2.09	2.41	2.7	2.52
16	New Zealand	0.12	0.16	0.19	0.180	0.22	0.17	0.17	0.22	0.17	0.16	0.18	0.18	0.17	0.22	0.28	0.26	0.28	-	0.33	-
17	Other	17.4	15.35	14.86	14.48	15.09	12.64	13.4	12.86	13.95	13.59	14.98	12.29	12.29	11.35	12.74	11.16	11.81	-	12.39	-
IMPORTS (total imports in US\$ millions, partner shares of total imports in %)																					
18	Total merchandise imports	9243	9139	12972	20283	25763	33371	37588	40687	46239	54437	70781	72316	62462	42370	50309	61451	62057	64645	75805	97087
19	Japan	26.51	26.37	26.03	29.02	30.33	30.4	29.36	29.263	30.2	30.19	30.55	28.27	25.57	24.03	24.36	24.87	22.36	23.04	24.09	23.88
20	China	2.42	2.87	3.89	3.35	2.89	3.32	3.06	1.21	2.36	2.55	2.96	2.7	3.61	4.28	4.96	5.48	5.99	7.62	8	8.54
21	Hong Kong	1.17	1.52	1.45	1.24	1.33	1.25	2.06	4.39	1.16	1.27	1.05	1.18	1.32	1.81	1.4	1.44	1.33	1.41	1.42	1.4
22	Korea	2.02	2.37	2.4	2.77	2.89	3.13	4.24	5.52	4.21	3.63	3.5	3.71	3.57	3.54	3.51	3.52	3.42	3.91	3.84	3.81
23	Taiwan	3.1	3.62	3.74	4.16	5	5.18	4.76	0.72	5.05	5.07	4.83	4.35	4.58	5.27	4.69	4.7	4.19	4.49	4.26	4.24
24	Indonesia	0.66	0.68	0.86	0.86	1.05	0.59	0.59	3.92	1.11	0.83	0.95	1.3	1.42	2.08	2.2	2.1	2.2	2.41	2.35	2.4
25	Malaysia	5.9	4.19	3.83	2.09	2.6	3.36	3.17	0.3	3.62	4.86	4.57	4.99	4.76	5.16	4.99	5.44	4.96	5.63	5.98	5.86
26	Philippines	0.64	0.76	1.08	0.94	0.39	0.33	0.26	7.3	0.39	0.65	0.82	0.8	0.89	1.46	1.62	1.81	1.82	1.67	1.78	1.66
27	Singapore	7.46	6.56	7.8	7.44	7.68	7.42	7.95	0.2	6.42	6.31	5.88	5.53	5.04	5.65	5.93	5.54	4.59	4.49	4.31	4.43
28	Vietnam	0.01	0.02	0.02	0.05	0.18	0.28	0.31	17.42	0.18	0.07	0.06	0.09	0.3	0.55	0.46	0.54	0.53	0.37	0.44	0.46
29	Industrial Europe	17.91	18.6	18.52	18.48	17.02	18.04	17.76	1	18.14	16.71	17.68	16.63	15.52	14.16	12.95	11.55	13.77	12.01	11.1	10.47
30	Canada	1.23	1.24	1.16	1.32	1.35	1.12	0.93	11.74	0.92	0.71	0.68	0.75	0.67	0.61	0.66	0.56	0.61	0.52	0.54	
31	United States	11.4	14.36	12.49	13.56	11.28	10.8	10.62	2.24	11.64	11.84	12.02	12.5	13.9	14.28	12.78	11.87	11.58	9.57	9.47	7.63
32	Australia	1.65	1.76	1.75	1.71	1.99	1.68	1.75	0.34	2.06	1.97	1.87	1.94	2.05	2.11	1.94	1.89	2.23	2.33	2.09	2.18
33	New Zealand	0.32	0.34	0.32	0.28	0.37	0.33	0.3	11.44	0.3	0.29	0.29	0.3	0.35	0.43	0.35	0.32	0.34	-	0.28	-
34	Other	17.6	14.74	14.65	12.72	13.66	12.77	12.88		12.24	13.04	12.3	14.96	16.46	14.59	17.21	18.37	20.15	-	20.07	-
NET OFFICIAL FLOWS (ODA & OTHER OFFICIAL FLOWS) BY SOURCE PARTNER (US\$ millions)																					
35	Total official flows, net	784	553	389	-0.5	773	1108	1074	627	995	845	1768	1790	3277	5053	5386	-1245	-571	-2890	-	-
36	Japan	265	243	290	239	716	762	719	373	540	488	1143	1048	2338	4028	4467	-445	-577	-759	-	-
37	Europe DAC	126	43	52	88	84	265	271	53	185	143	343	315	328	244	99	-101	-21	-42	-	-
38	United States	-5	6	-2	5	41	40	23	42	116	254	119	210	-282	-59	-114	-90	-102	-4	-	-
39	Canada	9	18	37	46	24	52	56	43	0	18	2	1	-15	-11	-30	-24	-47	-2	-	-
40	Australia	19	16	14	19	29	27	40	1	33	37	22	21	10	9	8	14	10	6	-	-
41	New Zealand	1	1	2	2	1	1	1	-409	1	1	1	1	1	1	1	1	1	1	-	-
42	Multilateral	358	218	1	-426	-115	-35	-33	-5	121	-91	145	897	847	959	-142	169	-2086	-	-	-
43	Other	11	8	-4	-6	-6	-4	-4	-	-1	-5	-6	0	0	-6	-4	-457	-5	-3	-	-
STOCK OF FOREIGN BANK LENDING BY SOURCE PARTNER (total in US\$ millions, partner shares in %)																					
44	Total	7868	7292	8471	9397	13194	16203	22312	26184	34442	49554	68280	77635	73501	58051	46943	43245	42360	35444	39141	37716
45	Japan	45.02	52.84	59.39	57.91	64.02	54.86	55.93	55.32	54.43	59.88	57.11	50.85	47.73	41.36	33.11	29.53	26.4	25.8	22.56	24.89
46	Europe	16.6	16.55	16.47	18.23	16.4	20.17	20.84	20.99	21.63	20.73	24.15	28.95	26.12	33.79	45.19	40.36	39.72	42.94	44.51	43.06
47	United States	26.31	19.43	13.88	14.7	12.21	13.63	10.91	10.98	12.71	10.28	10.29	10.79	8.47	8.98	9.03	9.49	10.33	11.29	11.37	10.98
48	Canada	2.35	1.6	0.68	0.57	0.48	0.73	0.89	0.87	0.65	0.82	1.19	1.44	1.04	0.95	-	0.71	-	-	-	-
49	Australia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.18	0.21
50	Taiwan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.74	1.33	1.48	1.39	1.45
51	Other or not specified	9.72	9.57	9.57	8.59	6.89	10.61	11.42	11.84	10.59	8.29	7.25	7.97	16.64	14.93	12.67	18.16	22.22	18.49	20	19.41
Source and Notes																					
1-34	1985-2001, 2003 from United Nations Statistics Division (2002-2004); 2002, 2004 from Thailand, Bank of Thailand (2005c); 2004 totals estimated using growth rates for the first 11 months; 2004 shares refer to the first 11 months; for 2002 and 2004 Industrial excludes Iceland and Norway																				
35-43	Organisation for Economic Cooperation and Development (2004a)																				
44-50	Bank of International Settlements (2004); 2004 estimates are as of June																				

Table 20: Thailand's Economic Interaction with Japan (US\$ millions)

No	Item	Japan's Current Credits or Financial Assets											Japan's Current Debits or Financial Liabilities										
		1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004h1	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004h1
BALANCE OF PAYMENTS (negatives indicate payments from Japan to Thailand)																							
1	Current account	-	22487	21366	17843	11641	12452	15657	14200	15261	18346	10659	-	-11189	-11802	-11253	-9602	-10337	-11795	-11283	-11445	-12362	-7027
2	Merchandise	-	19183	17603	14009	8781	10739	12865	11054	12307	14979	8851	-	-8767	-8947	-8386	-7073	-7780	-9219	-8941	-9025	-10118	-5663
3	Services	-	1914	2075	2087	1710	1597	1892	1795	1724	1863	996	-	-2021	-2216	-2160	-2089	-2060	-2108	-1960	-2095	-2120	-1310
4	Transportation	-	617	563	588	626	587	597	566	525	588	333	-	-439	-490	-426	-328	-361	-463	-446	-458	-438	-212
5	Travel	-	41	80	81.000	55	54	56	54	59	169	137	-	-1102	-946	-922	-998	-1138	-1144	-983	-1002	-1213	-797
6	Construction	-	528	249	214.000	225	194	356	263	322	340	92	-	-115	-207	-218	-296	-192	-125	-182	-172	-212	-168
7	Royalties & license fees	-	371	473	422.000	315	313	400	444	447	618	329	-	0	-3	-5	-7	-6	-8	-23	-66	-9	-6
8	Other business services	-	354	615	706.000	400	365	412	402	323	76	60	-	-300	-417	-469	-374	-289	-290	-228	-329	-205	-112
9	Other services	-	2	96	76.000	87	84	71	65	49	72	44	-	-65	-154	-119	-86	-74	-77	-98	-68	-43	-15
10	Income	-	1343	1545	1590.000	1023	-23	769	1218	1100	1422	776	-	-200	-284	-101	-108	-198	-217	-193	-175	-33	-15
11	Employee compensation	-	35	1	3.000	0	1	0	0	1	0	0	-	-9	0	-1	0	-17	-3	0	0	-3	-3
12	Direct investment	-	267	587	636.000	266	-851	-81	461	576	1012	588	-	-2	-26	15	-28	-13	-15	-14	-20	-7	-1
13	Portfolio investment	-	150	104	160.000	54	48	46	45	51	48	40	-	-69	-39	0	0	-137	-178	-154	-141	-14	-7
14	Other investment income	-	893	853	793.000	703	780	804	713	472	361	149	-	-120	-220	-114	-80	-31	-21	-25	-15	-10	-5
15	Current transfers	-	48	143	156.000	128	139	131	132	130	82	37	-	-201	-355	-607	-332	-299	-251	-188	-150	-91	-39
16	Financial account	-	-4660	-4048	-4454.000	-2397	1329	3515	-509	3008	5260	170	-	-14072	-3451	-5663	-1356	-2410	-305	-352	261	-2339	-178
17	Direct investment	-	-936	-1338	-2039	-1684	126	-593	-1590	-524	-673	-822	-	1	10	-18	-5	10	15	-195	-134	28	0
18	Portfolio investment	-	159	-571	317	-692	-403	587	280	286	57	38	-	-14340	-3157	-5280	-1034	-1257	-777	-21	771	-2537	-319
19	Equity securities	-	0	-83	376	-34	-172	98	-65	83	6	201	-	-1	-1	-4	0	-1	-1	0	0	-2	0
20	Debt securities	-	159	-488	-59	-658	-232	488	346	204	51	-163	-	-14339	-3155	-5276	-1034	-1256	-776	-21	771	-2534	-319
21	Financial derivatives	-	-	102	107	164	133	110	96	84	47	30	-	-	-68	-90	-96	-97	-65	-137	-149	-21	-26
22	Other investment income	-	-3884	-2239	-2842	-185	1473	3410	705	3161	5829	584	-	267	-235	-274	-222	-1066	551	0	-228	189	168
23	Loans	-	-4125	-1272	-2380	40	1267	3389	793	2274	5589	478	-	139	-416	-219	13	-980	660	12	-242	85	33
24	Trade credits	-	-87	-131	-118	-118	232	99	141	238	158	-25	-	132	179	-58	-237	-85	-119	24	18	113	128
25	Currency & deposits, other	-	329	-837	-344	-107	-25	-78	-229	650	82	131	-	-4	1	2	2	-1	10	-36	-3	-9	6
MERCHANDISE BY MAJOR COMMODITY GROUP (negatives indicate payments from Japan to Thailand)																							
26	Total merchandise	14677	19730	18263	14584	9366	11284	13633	11879	13184	16040	-	-8192	-10120	-10212	-9575	-8178	-8862	-10594	-10380	-10510	-11893	-
27	Agricultural products	116	111	83	107	118	80	71	84	94	126	-	-2890	-2792	-2561	-2328	-2072	-2147	-2223	-2245	-2290	-2353	-
28	Crude materials excl. fuels	99	159	125	103	82	108	144	136	156	185	-	-776	-1143	-1058	-931	-645	-583	-666	-581	-606	-745	-
29	Mineral fuels	55	68	62	55	27	35	48	40	59	61	-	-10	-16	-20	-54	-6	-25	-87	-82	-49	-55	-
30	Chemical manufactures	1144	1589	1384	1156	947	1084	1224	1037	1133	1368	-	-187	-234	-255	-287	-287	-339	-527	-520	-453	-507	-
31	Machinery manufactures	9664	13055	12227	9287	5504	6601	8269	7215	8063	9801	-	-1965	-3031	-3318	-3222	-2855	-3269	-4193	-4085	-4159	-4905	-
32	General machinery	3928	5400	5067	3989	2044	2333	3100	2926	3129	3891	-	-444	-599	-634	-594	-507	-623	-632	-663	-653	-720	-
33	Office & computing machinery	371	421	526	401	412	413	462	401	383	408	-	-574	-1047	-1262	-1118	-869	-893	-1200	-1021	-863	-943	-
34	Telecommunications machinery, etc.	528	494	338	552	209	258	361	292	376	472	-	-420	-639	-648	-592	-535	-572	-854	-823	-818	-985	-
35	Other electrical machinery	2231	3099	3012	2626	2395	2583	3124	2555	2879	3288	-	-503	-714	-737	-849	-839	-1050	-1341	-1309	-1526	-1847	-
36	Road vehicles	2579	3625	3318	1709	411	991	1205	991	1257	1718	-	-24	-32	-37	-69	-105	-131	-166	-268	-297	-408	-
37	Other transport equipment	28	17	66	10	34	23	19	49	39	25	-	0	0	0	0	0	0	0	-1	-2	-1	-
38	Other manufactures	3444	4551	4093	3603	2434	3075	3480	2994	3269	3948	-	-2153	-2544	-2583	-2401	-1962	-2196	-2463	-2369	-2447	-2784	-
39	Textiles	208	214	199	181	159	175	184	146	175	202	-	-132	-146	-156	-172	-115	-121	-133	-124	-121	-165	-
40	Apparel	5	7	5	5	3	3	3	3	5	4	-	-421	-509	-498	-418	-321	-306	-299	-276	-244	-261	-
41	Leather products	12	12	11	9	8	9	8	8	5	5	-	-12	-13	-12	-10	-7	-8	-8	-9	-8	-10	-
42	Footwear	2	2	2	2	0	1	1	1	0	0	-	-33	-41	-38	-39	-25	-28	-31	-34	-37	-51	-
43	Wood products	8	10	14	8	3	2	3	3	3	4	-	-43	-53	-47	-38	-35	-34	-43	-44	-43	-42	-
44	Furniture	16	21	19	12	6	11	11	15	17	19	-	-364	-396	-384	-364	-268	-331	-373	-349	-329	-335	-
45	Paper products	98	110	94	79	54	79	93	96	105	109	-	-9	-11	-12	-12	-6	-8	-29	-32	-37	-40	-
46	Rubber products	138	168	150	109	66	105	113	99	112	119	-	-24	-34	-38	-50	-58	-61	-86	-94	-111	-137	-
47	Non-metallic mineral manufactures	228	359	328	228	169	218	296	172	167	165	-	-255	-271	-258	-200	-131	-167	-212	-193	-210	-223	-
48	Iron & steel	1368	1808	15421	1353	865	1137	1215	1011	1266	1584	-	-59	-75	-72	-71	-61	-59	-62	-53	-43	-50	-
49	Non-ferrous metals	198	277	252	233	175	234	276	226	248	329	-	-15	-16	-20	-50	-78	-94	-66	-49	-39	-67	-
50	Metal products	399	550	493	417	269	320	367	354	363	418	-	-144	-179	-213	-213	-189	-218	-231	-255	-288	-358	-
51	Professional & scientific instruments	302	424	388	363	200	276	353	341	349	489	-	-61	-68	-77	-89	-82	-97	-103	-96	-128	-156	-
52	Photographic & optical, watches	190	224	226	217	146	156	202	178	164	187	-	-103	-132	-176	-163	-155	-164	-198	-229	-257	-311	-
53	Miscellaneous manufactures	273	366	371	384	309	349	356	341	293	313	-	-478	-602	-580	-514	-427	-500	-554	-532	-551	-579	-
54	Not classified	155	197	289	274	254	301	396	374	409	550	-	-211	-361	-416	-351	-351	-303	-435	-498	-507	-544	-
Source and Notes																							
1-25 Japan, Bank of Japan (1997, 2004c) and Table 2.2 item 17																							
26-54 United Nations Statistics Division (2002, 2004)																							

Table 21 : Indicators for Affiliates of Japanese Multinationals in Thailand														
No.	Item	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
NUMBER OF AFFILIATES - MITI/METI Estimates														
1	All nonfinance industries	488	393	582	669	612	773	803	793	872	937	860	-	-
2	Manufacturing	312	251	389	451	406	521	546	530	573	619	584	-	-
3	Food products	21	14	32	34	33	42	43	36	44	40	40	-	-
4	Textiles & apparel	25	25	39	44	32	43	50	45	40	42	35	-	-
5	Chemicals	42	38	46	68	59	75	73	73	70	85	75	-	-
6	Ferrous basic metals	14	12	24	26	26	34	34	36	38	36	34	-	-
7	Nonferrous basic metals	11	15	20	19	10	17	20	19	23	19	18	-	-
8	General machinery	16	10	31	27	29	41	43	41	54	58	52	-	-
9	Electric machinery	67	55	69	74	71	90	96	102	106	117	103	-	-
10	Transport machinery	37	32	56	67	65	84	95	93	103	114	124	-	-
11	Precision machinery	6	2	8	7	6	4	5	4	7	10	9	-	-
12	Trade	88	65	93	90	97	118	118	115	138	154	141	-	-
13	Other industries	88	77	100	128	109	134	139	148	161	164	135	-	-
NUMBER OF AFFILIATES - Toyo Keizai Estimates														
14	All industries	820	875	911	960	1065	1191	1275	1306	1304	1306	1328	1381	1432
15	Manufacturing	459	497	516	545	618	713	764	791	795	793	807	833	855
16	Food products	44	42	43	43	47	49	51	51	54	56	55	53	50
17	Textiles & apparel	47	50	52	50	55	60	59	59	50	47	45	40	37
18	Chemicals	49	57	61	63	72	80	80	75	78	76	134	141	143
19	Ferrous basic metals	15	16	20	21	26	29	28	29	32	30	28	27	27
20	Nonferrous basic metals	27	29	26	25	26	24	27	27	32	33	24	23	27
21	General machinery	36	40	41	42	46	64	68	67	66	67	89	101	107
22	Electric machinery	77	84	86	88	100	108	116	125	126	121	129	140	141
23	Transport machinery	56	60	61	74	93	121	139	157	159	160	150	148	157
24	Automobiles & parts	44	48	48	61	81	111	128	145	148	149	146	146	155
25	Precision machinery	8	8	12	14	16	14	14	14	15	15	18	15	14
26	Trade	158	169	177	190	210	232	255	260	259	259	272	296	309
27	Finance	48	53	57	56	58	58	62	59	53	54	48	44	45
28	Other industries	155	156	161	169	179	188	194	196	197	200	201	208	223
EMPLOYMENT OF AFFILIATES - MITI/METI Estimates (thousands)														
29	All nonfinance industries	158.25	128.13	204.98	220.74	218.48	285.96	269.96	255.78	280.43	329.56	-	-	-
30	Manufacturing	141.43	114.21	187.54	202.03	186.79	246.43	241.55	229.2	252.44	298.79	-	-	-
31	Food products	7.75	6.95	11.95	10.39	10.98	13.67	13.06	8.45	11.31	11.47	-	-	-
32	Textiles & apparel	19.26	19.23	24.38	24.54	14.69	18.32	19.28	19.9	19.72	21.1	-	-	-
33	Chemicals	5.69	5.96	6.52	9.98	8.72	12.34	11.65	12.03	11.7	14.05	-	-	-
34	Ferrous basic metals	2.52	2.63	4.49	3.4	4.96	10.12	8.31	6.96	8.65	8.63	-	-	-
35	Nonferrous basic metals	2.73	2.88	5.83	8.83	2.82	7.52	7.7	8.34	13.87	13.81	-	-	-
36	General machinery	1.75	1.71	21.45	5.92	4.23	9.77	10.11	8.04	10.72	11.5	-	-	-
37	Electric machinery	56.16	32.73	51.34	67.71	72.16	89.72	91.98	96.45	97.61	113.89	-	-	-
38	Transport machinery	25.81	27.8	37.64	41.74	40.12	53.68	47.26	45.06	48.53	59.39	-	-	-
39	Precision machinery	2	0.54	5.93	3.71	3.17	-	-	-	6.81	15.86	-	-	-
40	Trade	8.66	8.04	9.44	8.71	17.66	21.96	15.43	12.8	13.54	14.19	-	-	-
41	Other industries	8.15	5.88	7.99	10.01	14.03	17.58	12.98	13.78	14.45	16.59	-	-	-
EMPLOYMENT OF AFFILIATES- Toyo Keizai Estimates (thousands)														
42	All industries	191.65	211.29	239.12	258.4	289.61	332.32	355.48	337.54	337.03	344.92	381.56	388.36	412.83
43	Manufacturing	165.69	180.92	205.15	224.41	250.09	291.79	310.11	298.9	303.86	310.44	345.34	345.58	365.89
SALES OF AFFILIATES-MITI/METI Estimates (US\$ millions)														
44	All nonfinance industries	17835	15563	29571	33929	40296	51622	35802	25893	32315	34687	33406	-	-
45	Manufacturing	9415	10650	16824	21862	23290	28374	21389	16675	21475	25436	24968	-	-
46	Food products	325	377	486	654	953	1121	1076	629	758	656	737	-	-
47	Textiles & apparel	696	780	931	1090	1061	1128	969	941	979	1075	641	-	-
48	Chemicals	771	730	818	1274	1201	1556	1309	1414	1418	1848	1649	-	-
49	Ferrous basic metals	354	253	592	853	1050	1583	1046	1101	1252	1535	1460	-	-
50	Nonferrous basic metals	346	435	618	756	497	636	469	360	619	736	653	-	-
51	General machinery	198	238	1324	681	585	1159	1017	704	973	1371	1336	-	-
52	Electric machinery	2618	2153	3051	4753	5819	7166	7433	6229	6934	8113	6639	-	-
53	Transport machinery	3251	4838	7509	10128	10223	12034	6514	4104	7001	7651	9939	-	-
54	Precision machinery	47	14	282	138	130	-	-	-	230	630	537	-	-
55	Trade	7628	4485	11512	10807	15371	20860	12660	8188	8748	7902	7043	-	-
56	Other industries	792	428	1234	1259	1635	2388	1754	1031	2092	1349	1395	-	-
Source and Notes														
1-13, 29-41	1988, 1990-1991, 1993-1994, 1996-2001 from Japan, Ministry of Economy, Trade and Industry (2001, various years); 1989, 1992, 1995 from Japan, Ministry of International Trade and Industry (1998, various years); data refer to fiscal years beginning 1 April, estimates for 2002 are preliminary, trade includes restaurants for 1991-2000													
14-28,42-43	Toyo Keizai (various years), trade includes restaurants for 1991-2000, finance includes insurance and real estate													
General														
-	Data not available, negligible, or not disclosed													
2004h1	Data for the first half of 2004													
2004est	Estimates for 2004; illustrative examples based on the assumptions described above													

References

- Abramovitz, Moses (1989). **Thinking About Growth and Other Essays: Economic Growth and Welfare.** (Cambridge: Cambridge University Press).
- Adelman, Irma (1985). "Beyond Export-Led Growth," **World Development**, Vol.12, No.3, pp.937-949.
- Ajanant, Juanjai (1987). "Trade and Structural Change in Pacific Asia," in Colin I. Bradford and William Branson. (eds.) **Trade and Structural Change in Pacific Asia.** (Chicago: University of Chicago Press).
- Akira, Suehiro (1989). **Capital Accumulation in Thailand 1855-1985.** (Tokyo: The Center for the East Asian Cultural Studies).
- Akrasane, Narongchai and Atchana Wattananukit (1990). "Changing Structure and Rising Dynamism in the Thai Economy," By Chee Yuen and Chandran Jeshurun (eds.). **Southeast Asian Affairs 1990.** (Singapore: Southeast Asian Studies).
- Alesina, Alberto, and D.Rodrik, 1994, "Distributive Politics and Economic Growth," **Quarterly Journal of Economics**, 109, pp.465-489.
- Amsden, Alice H. (1989). **Asia's Next Giant: South Korea and Late industrialization.** (New York: Oxford University Press).
- Amsden, Alice H. (1989). Asia's Next Giant: South Korea and Late Industrialization. New York: Oxford University Press.
- Anderson, Kym (ed.) (1992). **New Silk Roads: East Asia and World Textiles Markets,** (Cambridge: Cambridge University Press).
- Auty, Richard. M. (1994). "Industrial Policy Reform in Six Large Newly Industrializing Countries: The Resource curse," **World Development**, Vol.22, No.1 (January), pp. 11-26.
- Balassa, Bela A. (1980). **The Process of Industrial Development and Alternative Development Strategies,** (International Finance Section, Princeton University Press).
- Balassa, Bela A. (1991). **Economic Policies in the Pacific Area Developing Countries.** (London: Macmillan).
- Barro, Robert J., "Economic Growth in a Cross Section of Countries," Quarterly Journal of Economics 105:407-443, May 1991.
- Benabou, R., 1996, "Inequality and Growth," in Bernanke, B. and J.Rotemberg (eds.), **NBER Macro Annual 1996,** MIT Press, Cambridge, MA.
- Berend, Ivan T. and György Ránki (1982). **The European Periphery & Industrialisation 1780-1914** (Cambridge: Cambridge University Press).

- Bhagwati, J. N. (1978). **Foreign Trade Regimes and Economic Growth : Anatomy and Consequences of Exchange Control Regimes.** (New York: NBER).
- Bhagwati, J. N. (1988). "Export-Promoting Trade Strategy: Issues and Evidence," **The World Bank Research Observer**, Vol.3, No.1.
- Bhattacharya, Amarendra and Johannes Linn, Trade and Industrial Policies in the Developing Countries of East Asia, World Bank Discussion Paper No.27, 1988.
- Brander, James A. (1992). "Comparative Economic Growth: Evidence and Interpretation," **Canadian Journal of Economics**, Vol.XXV, No.4 (November), pp. 792-818.
- Brander, James A. and S. Dowrick (1991). "The Role of Fertility and Population in Economic Growth: New Result from Aggregate Cross-National Data," University of British Columbia.
- Chan, Ha-Joon (1994). **The Political Economy of Industrial Policy** (London: St.Martin's Press).
- Chantornvong, Sombat (1988). "Tocqueville's *Democracy in America* and the Third World," in Vincent Ostrom,. David Feeny, and Hartmut Picht, Rethinking Institutional Analysis and Development. San Francisco: International Center for Economic Growth: 69-99.
- Chen, Edward K. y. (1989). "Trade policy in Asia," in Seiji Naja, Miguel Urrutia, Shelley Mark and Alfredo Fuentes (eds.). **Lessons in Development : a Comparative Study of Asia and Latin America.** (San Francisco: ICS Press).
- Chitayarangsan, Rachain, y "Industrial Structure: Electronics Industry in Thailand," in Samart Chiasakul and Mikimasa Yoshida, eds., Thai Economy in the Changing Decade and Industrial Promotion Policy, Tokyo: Institute of Developing Economies, 1990.
- Christensen, S., Siamwalla, A., Vichyanond, P., 1992, "**Institutional and Political Bases of Growth-Inducing Policies in Thailand**".
- Christensen, Scott (1991). "Thailand After the Coup," Journal of Democracy 2:3 (Summer): 94-106.
- Christensen, Scott and Ammar Siamwalla (1993). "Beyond Patronage : Tasks for the Thai State," **The 1993 Year-End Conference Who Gets What and How ? : Challenges for the Future**, Pattaya, Thailand, December.
- Christensen, Scott R. (1992). "Capitalism and Democracy in Thailand," paper presented at the annual conference of the Association of Asian Studies, April 2-5, 1992, Washington D.C.
- Christensen, Scott R. (1993). "Coalitions and Collective Choice: The Politics of Institutional Change in Thai Agriculture," Ph.D. dissertation, University of Wisconsin-Madison.
- Crouch, Harold (1984). Domestic Political Structures and Regional Cooperation in Southeast Asia Singapore: Institute of Southeast Asian Studies.

- Dahlman, Carl J. and Peter Brimble (1990). "Technology Strategy and Policy for Industrial Competitiveness: A Case Study of Thailand." Washington, D.C.: World Bank (April).
- Davarajan, Shantayanan and Chalongphop Sussangkarn (1992). "Effective Rates of protection when Domestic and Foreign Goods are Imperfect Substitutes: The Case of Thailand," **Review of Economics and Statistics**, Vol. LXXIV, No.4 (November), pp.701-711.
- Deininger, Klaus, and Lyn Squire, 1996, "A New Data Set Measuring Income Inequality," **"World Bank Economic Review"**, Vol. 10, no. 3, pp. 565-591.
- Dhiravegin, Likhit (1987). Allocation for Development: The Role of the Bureau of the Budget. Bangkok: Thailand Development Research Institute.
- Dollar, David, "Exploiting the Advantages of Backwardness: The Importance of Education and Outward Orientation," mimeo., World Bank, 1992a.
- Dollar, David, "Outward-Oriented Developing Economies Really Do Grow More Rapidly: Evidence from 95 LDCs, 1976-1985," Economic Development and Cultural Change 40: 523-544, April 1992b.
- Doner, Richard F. (1991). Driving a Bargain: Japanese Firms and Automobile Industrialization in Southeast Asia. Berkeley: University of California Press.
- Doner, Richard F. (1992). "Japanese Foreign Investment and the Creation of a Pacific-Asia Region," paper presented at the NBER Conference on Japan and the U.S. in Pacific Asia, December 1992.
- Doner, Richard F. and Anek Laothamatas (1992). "The Political Economy of Structural Adjustment in Thailand," prepared for the World Bank Project on the Political Economy of Structural Adjustment in New Democracies.
- Doner, Richard F. and Daniel H. Unger, (1991). "The Politics of Finance in Thai Economic Development," paper prepared for the project on Government, Financial Systems and Economic Development: A Comparative Study of Selected Asian and Latin American countries, East – West Center, University of Hawaii, November 31-December 1, 1991.
- Doner, Richard F. and Patcharee Siroros (1992). "Technology Development and Collective Action in Southeast Asia: Notes from the Thai Case," paper presented at the Annual Meeting of the association for Asian Studies, April 2-5, 1992, Washington, D.C.
- Donges, J. (1976). "A comparative Study of Industrialisation Policies in Fifteen Semi-Industrial Countries," **Welwirtschaftliches Archive**, 112 (4), pp. 626-659.
- Dore, Ronald (1986) **Flexible Rigidities, Industrial Policy and Structural Adjustment in the Japanese Economy, 1970-1980** (London: The Athlone Press).

- Dutt, Amitava Krishna (1992). "Two Issues in the State of Development Economics," in Amitava Krishna Dutt and Kenneth P. Jameson (eds.) **New Directions in Development Economics**. (Aldershot: Edward Elgar).
- Evans, David H. (1990). "Outward Orientation: An Assessment," in Milner, C. (ed.). **Export Promotion Strategies: Theory and Evidence from Developing Countries**. (New York: Harvester Press).
- Evans, Peter (1989). "Predatory, Developmental and Other Apparatus: A Comparative Political Economy Perspective on the Third World State," **Sociological Forum**, Vol.4, No.4 (December): 561-587.
- Evans, Peter (1992). "The State as Problem and Solution: Predation, Embedded Autonomy, and Structural Change," in Stephen Haggard and Robert R. Kaufman (eds.) **The Politics of Economic Adjustment** (Princeton: Princeton University Press).
- Evans, Peter (1995). **Embedded Autonomy: States and Industrial Transformation** (Princeton: Princeton University Press).
- Evers, H.D. and T.H. Silcock (1967). "Elites and Selection," in Silcock, ed., Thailand: Social and Economic Studies in Development. Singapore: Donald Moore: 84-104.
- Ezaki, Mitsuo (1990). "Asian Prospects towards NICs," paper presented at the Second Convention of East-Asian Economic Association in Bandung, Indonesia. (August). Faculty of Economics, Thammasat University, 1996. **Puey Ungphakorn: Life and Work**.
- Falkus, Malcolm (1991). "The Economic history of Thailand," **Australian Economic History**, Vol. XXXI, No.1 (March), pp. 53-69.
- Falkus, Malcolm (1992). "Thailand Industrialisation: An Overview," paper presented at the **Conference on the Thai Making of a Fifth Tiger? Thailand's Industrialisation and its Consequences**, held at the Australian National University, December. .
- Feeny, David 1982, **The Political Economy of Productivity: Thai Agricultural Development, 1880-1975** (Vancouver: University of British Columbia).
- Feng, Yi , 2003, **Democracy, Governance and Economic Performance Theory and Evidence** (Cambridge, Ma.:The MIT Press).
- Fongsamut, Ark (1989). The Thai Cabinet System [in Thai] M.A. thesis, Faculty of Political Science, Chulalongkorn University.
- GATT (1991). **Thailand: Trade Policy Review**. (Geneva: GATT).
- Golay, Frank H., Ralph Anspach, M. Ruth Pfanner and Eliezer B. Ayal (1969). Underdevelopment and Economic Nationalism in Southeast Asia. Ithaca: Cornell University Press.
- Grabowski, Richard (1994). "The Successful Developmental State: Where Does it Come From?" **World Development**, Vol.22 (March), pp. 413-422.

- Griffin, Keith (1989). **Alternative Strategies for Economic Development** (London: Macmillan).
- Grossman, Gene M. and E. Helpman (1991). "Growth and Welfare in a Small Open Economy," in E. Helpman and A. Razin (eds.). **International Trade and Trade Policy**. (Cambridge, Mass : The MIT Press).
- Gunnarsson, Christer (1985). "Agricultural Demand-Led or Export-Led Growth in East and Southeast Asia?," in C. Gunnarsson, M.C. Hoadley and Peter Wad (eds.) **Rural Transformation in Southeast Asia**. (Lund: NASEAS).
- Gunnarsson, Christer (1991). "Dirigisme or Undistorted Free-Trade Regimes?: An Historical and Institutional Interpretation of the Taiwanese Success," paper presented at the **Arne Ryde Conference on International trade and Economic Development**. Elsinore, Denmark, June.
- Gunnarsson, Christer and Mats Lundahl (1994). "The Good, the Bad and the Wobbly: State Forms and Third World Economic Performance," paper presented at **International Colloquium on New Directions in Development Economics**, held by SAREC at Håsselby Slott, Stockholm, Sweden, March.
- Haggard, Stephan (1990). Pathways from the Periphery: The Politics of Growth in the Newly Industrializing Countries. Ithaca: Cornell University Press.
- Haggard, Stephen (1990). **Pathways from the Periphery : the Politics of Growth in the Newly Industrializing countries**. (Ithaca: Cornell university Press).
- Haggard, Stephen and Steven B. Webb (1993). "What Do We Know About The Political Economy of Economic Policy Reform," **The World Bank Research Observer**, Vol.8, No.2 (July), pp.143-168.
- Hahn, Chin Hee, and Jong-II Kim, 2000, **Sources of East Asian Growth: Some Evidence from Cross-country Studies**, paper prepared for the Global Research Project "Explaining Growth".
- Hewison, Kevin J. (1985). "The State and Capitalist Development in Thailand", in R. Higgott and R. Robinson, eds. Southeast Asia: Essays in the Political Economy of Structural Change. London: Routledge & Kegan Paul.
- Hirschman, Albert O. (1958) **The Strategy of Economic Development** (New Haven: Yale University Press).
- Hughes, Alan and Ajit Singh (1991). "The World Economy Slowdown and the Asian and Latin American Economies: A Comparative Analysis of economic Structure, Policy, and Performance," in Tariq Banuri (ed.) **Economic liberalization: No Panacea The Experiences of Latin America and Asia** (Oxford: Clarendon Press), pp. 57-99.

- Huntaserini, Suganya and Somchai jitsuchon (1988). "Thailand's Income Distribution and Poverty Profile and their Current Situation," **TDRI Year-End Conference**, Pattaya, Thailand.
- Hutaserani, Sugarya, "The Trends of Income Inequality and Poverty and a Profile of the Urban Poor in Thailand," Quarterly Review, TDRI, December 1990.
- IBRD (International Bank for Reconstruction and Development), 1959, **A Public Development Program for Thailand**, Baltimore MD, John Hopkins University Press.
- Ichikawa, Nobuko, Michael A. Cusumano and Karen R. Polenske (1991). "Japanese Investment and Influence in Thai Development ," **Technology in Society**, vol. 13, pp. 447-469.
- Ingram, James C (1971) . **Economic Change in Thailand 1850-1970**. (Stanford: Stanford University Press).
- Ingram, James C. Economic Change in Thailand 1850-1970. Stanford: Stanford University Press.
- Ingram, James, 1971, **Economic Change in Thailand 1850-1970**, Oxford University Press.
- International Bank for Reconstruction and Development (1959). A Public Development Program in Thailand. Baltimore: Johns Hopkins University Press.
- James, William., Seiji Naya and Gerald M. Meier (1989). **Asian Development: Economic Success and Policy Lessons** (Madison: University of Wisconsin Press).
- Jasen, Karel (1989). "Thailand: The Next NIC?" Institute of Social Science, The Hague (mimeo.).
- Jenkins, Rhys (1991). "The Political Economy of Industrialization: A Comparison of Latin America and East Asian NICs," **Development and Change**, Vol.22 (April), pp.197-231.
- Jitsuchon, Somchai, "Retrospects and Prospects of Thailand's Economic Development," Working Paper No.2, Economic Planning Agency, Tokyo, July 1991.
- Jitsuchon, Somchai, 1989; "**Alleviation of Rural Poverty in Thailand**," Paper prepared for ILO-ARTEP, Thailand Development Research Institute, Bangkok, December.
- Jitsuchon, Somchai, 2001, "**What is Poverty, and How to Measure it?**" paper presented at the 2001 TDRI Year-end Conference, 23-24 November 2001, Jom Tien, Pataya, Thailand.
- Jitsuchon, Somchai 2002, "Thailand's Economic Growth: A Fifty-Years Perspective (1950-2000)" Mimeograph, TDRI.
- Jitsuchon, Somchai , 2005, "Sources and Pro-Poorness of Thailand's Economic Growth," Paper presented at Senior Policy Seminar on Pro-Poor Growth and Scaling up Poverty Reduction in East Asia, May 18-19, 2005 Beijing, China,

- Johnson, Chalmers (1982). **MITI and the Japanese Miracle : The Growth of Industrial Policy, 1925-1975**. (Stanford: Stanford University Press).
- Johnson, Chalmers (1981). MITI and the Japanese Miracle: The Growth of Industrial Policy, 1925-1975. Stanford: Stanford University Press.
- Jörberg, Lennart (1965). "Structural Change and Economic Growth: Sweden in the 19th Century," **Economy and History**, Vol. VIII, pp. 3-46
- Jörberg, Lennart (1972). "Some Notes on Education in Sweden in the 19th century," *Annales Cispines D' Hisorie Sociale*.
- Jörberg, Lennart (1991). "The Diffusion of Technology and Industrial Change in Sweden during the 19th Century," in Kristina Bruland (ed.) **Technology Transfer and Scandinavian Economic Growth** (New York: Berg), pp. 185-199.
- Kakwani, N. and Pothong J., 1999, "**Impact of Economic Crisis on the Standard of Living in Thailand**," Asian Development Bank and the Development Evaluation Division, National Economic and Social Development Board.
- Kim, Hyung Kook (1994). "Between State and Market: Development Dynamics in East Asian capitalism," **Asian Perspective**, Vol. 18, No.1 (Spring-Summer): 57-88.
- Kohli, A. (1994). "Where Do High Growth Political Economies Come from? The Japanese Lineage of Korea's Developmental State," **World Development**, Vol.22, No.9 (September): 1269-1294.
- Krongkaew, M., 1999, "**The Political Economy of Growth in Developing East Asia: A Thematic Paper**", paper presented at the Third Global Development Network (GDN) conference in Prague, the Czech Republic, June 9-10.
- Krueger, Anne (1979). The Development of the Foreign Sector and Aid. Cambridge: Harvard University Press.
- Krueger, Anne O. (1974). "The Political Economy of the Rent-Seeking Society," **American Economic Review**, Vol.64, No.3, pp.291-303.
- Kuncoro, Ari, 2000, "**Macroeconomic Determinants of Economic Growth in East Asia**," paper prepared for the Global Development Network.
- Kuznets, Paul (1977). Economic Growth and Structure in the Republic of Korea. New Haven: Yale University Press.
- Lal, Deepak and Rajapatirana, Sarath (1987). "Foreign Trade Regimes and Economic Growth in Developing Countries," **The World Bank Research Observer**, Vol.2, No.2, pp. 189-216.
- Laothamatas, Anek (1992). **Business Associations and the New Political Economy of Thailand: From Bureaucratic Polity to Liberal Corporatism** (Boulder: Westview).

- Laothamatas, Anek (1992). Business Associations and the New Political Economy of Thailand: From Bureaucratic Polity to Liberal Corporatism. Boulder : Westview Press.
- Lee, Keun (1993). **New East Asian Economic Development : Interacting Capitalism and Socialism** (New York: M.E. Sharpe).
- Leff, Nathaniel H. (1979). "Entrepreneurship and Economic Development: The Problem Revisited," Journal of Economic Literature 26 (March).
- Leftwich, Adrian (1995). "Brining Politics Back In: Towards a Model of the Developmental State," **Journal of Development Studies**, Vol.31, No.3 (February): 400-427.
- Lewis, Arthur W. (1954). "Economic Development with Unlimited Supplies of Labour," **Manchester School of Economics and Social Studies**, Vol.22, pp. 139-191.
- Lim, Linda Y. C. and Pang Eng Fong (1991). **Foreign Direct Investment and Industrialisation in Malaysia, Singapore, Taiwan and Thailand**. (Paris: OECD).
- Little, I. M. D., Scitovsky, Tibor and Scott, M. F. G. (1970). **Industry and Trade in Some Developing Countries**. (London: Oxford University Press).
- Little, I.M.D., R.N. Cooper, W.M.Corden, and S. Rajapatirana, 1993, **Boom, Crisis, and Adjustment, The Macroeconomic Experience of Developing Countries**, Oxford University Press.
- Lucas, R. E. Jr. (1988). "On the Mechanics of Development," **Journal of Monetary Economics**, Vol. 22, pp. 3-42.
- Mackie, J. A. C. (1988). "Economic growth in the Asian Region : The Political Underpinnings," in Helen Hughes (ed.). **Trade and Development Achieving Industrialization in East Asia**. (Cambridge: Cambridge University Press).
- Manarangsun, Sompop (1977). "The History of Fertilizer Policies in Thailand," M.Econ. diss., Thammasat University, 1977.
- Mcguire, James W. (1994). "Development Policy and Its Determinants in East Asia and Latin America," **Journal of Public Policy**, Vol.14, No.2 (April-June) : 205-242.
- McVey, Ruth (ed.) (1992). **Southeast Asian Capitalists** (Ithaca: Cornell Southeast Asia Program).
- Meesook, Oey Astra, Pranee Tinakorn and Chayan Vaddhanaphuti (1988). "The Political Economy of Thailand's Development: Poverty, Equity and Growth, 1850-1985," Washington, D.C. World Bank.
- Meier, Gerald M. (1991). "Policy Lessons and Policy Formation," in G.M. Meier (ed.). **Politics and Policy Making in Developing Countries: Perspectives on the New Political Economy** (San Francisco: ICS Press).

- Milner, Chris (1990). "The Role of Import Liberalisation in Export Promotion," in C. Milner (ed.). **Export Promotion Strategies: Theory and Evidence from Developing Countries** (New York: Harvester Press).
- Muscat, Robert (1993). **The Fifth Tiger: A Study of Thai Development Policy** (New York: M. E. Sharpe).
- Muscat, Robert J. (forthcoming) "Political Instability and Development Disarray,". Draft manuscript.
- National Economic and Social Development Board, 2000, "Poverty and Income Distribution in 1999", in **Indicators of Well-Being and Policy Analysis Newsletter**, 4(1).
- North, Douglas C. (1990). **Institution, Institutional Change and Economic Performance**. (Cambridge: Cambridge University Press).
- O' Brien, P. K. (ed.) (1994). **The Industrial Revolution in Europe I** (Oxford: Blackwell).
- OECD (1991) "Macroeconomic Survey of Thailand," **OECD Country Economic Paper**, No.7, Tokyo, Japan.
- Olson, Mancur (1965). **The Logic of Collective Action** (Cambridge, Mass.: Harvard University Press)
- Oshima, Harry T. (1978). **Economic Growth in Monsoon Asia: A Comparative Survey** (Tokyo: University of Tokyo Press).
- Oshima, Harry T. (1993). **Strategic process in Monsoon Asia's Economic Development** (Baltimore: the Johns Hopkins University Press).
- Ozawa, Terutomo (1985). "Entrepreneurship and Technology in Economic Development," **Asian Development Bank**, Vol.3, No.2.
- Page, Sheila (1991). "The Role of Trade in the New NICs," **Journal of Development Studies**, Vol.27, No.3 (April), pp.39-46.
- Panayotou, Theodore and Chartchai Parasuk (1990)., "Land and Forest: Projecting Demand and Managing Encroachment," **Thailand Development Research Institute year-End Conference**, Research Report, No.1, December 8-9, Pattaya, Thailand.
- Papanek, Gustav F. (1985). "Industrialization Strategies in Labour-Abundant Countries," **Asian development Review**, Vol.3, No.1, pp.43-53.
- Parnwell, Michael and Janathan Rigg (1993). "The People of Isan: Missing Out an the Economic Boom?," in Dennis Dwyer and David Drakakis – Smith (eds.) **Ethnodevelopemnt : Concepts and Case Studies** (London: Longman).
- Pecorino, Paul (1992). "Rent Seeking and Growth: The Case of Growth through Human Capital Accumulation," **Canadian Journal of Economics**, Vol. XXV, No.4.
- Persson, Torsten, and Guido Tabellini, 1994, "Is Inequality Harmful for Growth," **American Economic Review**, Vol.84, pp. 600-621.

- Phongpaichit, Pasuk (1991). "The Politics of Economic Policy Reform in Thailand," presented at the seminar on the Politics of Economic Policy Reform in Southeast Asia, Asian Institute of Management, Manila, October 14-15, 1991.
- Pomfret, Richard (1991). **International Trade: An Introduction to Theory and Policy**. (Oxford: Basil Blackwell).
- Ranis, Gustav (1991). "The Political Economy of Development Policy Change," in Gerald M. Meier (ed.). **Politics and Policy Making in Developing Countries: Perspectives on the New Political Economy**. (San Francisco: ICS Press).
- Ranis, Gustav and S.A. Mahmood (1992). **The Political Economy of Development Policy Change** (Oxford: Basil Blackwell).
- Rigg, Fred W. (1966). **Thailand: The Modernization of A Bureaucratic Polity** (Honolulu: East-West Centre Press).
- Riggs, Fred G. (1966). Thailand: The Modernization of a Bureaucratic Polity, Honolulu: East-West Center Press.
- Robinson, David, Yangho Byeon and Ranjit Teja (1991). "Thailand: Adjusting to Success Current Policy Issues," **IMF Occasional Paper 85** (Washington, D.C. : IMF).
- Rodrick, Dani (1993) "Trade and Industrial Policy reform in Developing Countries: A Review of Recent Theory and Evidence," **NBER Working Paper #4417** (August).
- Rodrick, Dani (1994). "King Kong meets Godzilla: The World Bank and the East Asian Miracle," In Albert Fishlow, Catherine Gwin, Stephen Haggard, Dani Rodrick and Robert Wade **Miracle or Design? Lessons From the East Asian Experience** (Washington, D.C.: Overseas Development Council), pp. 13-53.
- Rodrick, Dani (1995). "Getting Intervention Right: How South Korea and Taiwan Grew Rich," **Economic Policy**, Number 20, April, pp. 55-97.
- Rodrik, Dani, 1998, "TFPG Controversies, Institutions and Economic Performance in East Asia," in **Institutional Foundations of Economic Development in East Asia**, Y. Hayami and M.Aoki (editors), London, Macmillan.
- Rotemberg, julio (1978). "Export Promotion as a development Strategy," **Journal of Development Economics**, Vol.26.
- Sachs, Jeffrey D. (1990). Social Conflict and Populist Policies in Latin America. San Francisco: International Center for Economic Growth, Occasional Papers No.9.
- Samudavanija, Chai-anan (1989). "Thailand: A stable semi-democracy" in Larry diamond, Juan J. Ling and Seymour Martin Lipset (eds.) **Democracy in Developing Countries** Vol.3 (Boulder: Lynne Ricmer Publishers).
- Samudavanija, Chai-anan (1992). "Industrialisation and Democracy in Thailand," paper presented at the **Conference on the Making of A Fifth Tiger? Thailand's**

- Industrialization and Its consequences**, Australian National University, December 7-9.
- Santikarn Kaosa-ard, Mingsarn (1992). "Manufacturing Growth: A Blessing for All?" , **The 1992-tDRI Year End Conference on Thailand's Economic Structure: Towards Balanced Development?** , Synthesis Report, Vol.1 (December).
- Santikarn Kaosa-ard, Mingsarn and Adis Israngkura (1988). "Industrial Policies of Thailand," in Warin Wonghanchao and Yukio Ikemoto (eds.). **Economic Development Policy in Thailand: a Historical Review**. (Tokyo: Institute of Developing Economies).
- Sathirathai, Surakiart (1987). **Laws and Regulations Concerning Natural Resources, Financial Institutions, and Export: Their Effects on Economic and Social Development**. (Bangkok: Thailand Development Research Institute).
- Sathirathai, Surakiart (1987). Laws and Regulations Concerning Natural Resources, Financial Institutions, and Export: Their Effects on Economic and Social Development. Bangkok: Thailand Development Research Institute.
- Scott, James C. (1969). "Corruption Machine Politics and Political Changes," **American Political Science Review**, Vol.4.
- Selden, David and Tim Belton-Jones (1995). "The Political Determinants of Economic Flexibility, with Special Reference to the East Asian NICs," in Tony Killick (ed.) **The Flexible Economy: Causes and Consequences of the Adaptability of National Economies** (London: Routledge).
- Setboonsarng, Suthad and Robert E. Svenson (1991). "Technology, Infrastructure, Output Supply, and Factor Demand in Thai Agriculture," in Robert E. Svenson and Carl E. Pray (eds.) **Research and Productivity in Asian Agriculture**. (Cornell, Ithaca: Cornell University Press).
- Shinohara, M (1989). "High Yen, Overseas Direct Investment, and the Industrial Adjustments in Asia-Pacific Area," in Wolfgang Klenner (ed.). **Trends of Economic development in East Asia: Essays in Honour of Willy Kraus**. (Berlin: Springer-Verlag).
- Siamwalla, Ammar (1991). "Land Abundant Agricultural Growth and Some of Its Consequences," mimeo, Bangkok, Thailand Development Research Institute.
- Siamwalla, Ammar (1975). "A history of Rice policies in Thailand," **Food Research Institute Studies**, Vol. XIV, No.3.
- Siamwalla, Ammar (1991), "Land Abundant Agricultural Growth and Some of its Consequences", mimeo. Bangkok, Thailand Development Research Institute.
- Siamwalla, Ammar (1993). "Four Episodes of Economic Reform in Thailand," mimeo, Thailand Development Research Institute, July.

- Siamwalla, Ammar and Suthad Setboonsarng (1989). "Trade Exchange Rate, and Agricultural Pricing Policies in Thailand," Washington, D.C.: The World Bank.
- Siamwalla, Ammar and Suthad Setboonsarng (1989). Trade Exchange Rate, and Agricultural Pricing Policies in Thailand. Washington, D.C.: World Bank.
- Siamwalla, Ammar, 1999, "The Thai Economy: Fifty Years of Expansion," in A. Siamwalla (editor). **Thailand's Boom and Bust**, Thailand Development Research Institute.
- Siamwalla, Ammar, 2000, "**Market and Economic Growth in Thailand**," paper prepared for the Global Development Network.
- Siamwalla, Ammar, 2001, "**Picking up the Pieces: Bank and Corporate Restructuring in Post-1997 Thailand**," paper presented at the Sub regional Seminar on Financial and Corporate Sectors Restructuring in East and South East Asia, Seoul, Korea, 30 May- 1 June 2001.
- Sibunruang, Atchaka and Somsak Tambunlertchai, "Foreign Direct Investment in Thailand," TDRI, August 1986.
- Sibunruang, Atchaka, "Industrial Development Policies in Thailand," mimeo., World Bank, September 1986.
- Silcock, T.H. (1967). "Money and Banking," in Silcock, ed., Thailand: Social and Economic Studies in Development. Singapore: Donald Moore, 1967-: 170-205.
- Singh, Ajit (1992). "The Actual Crisis of Economic Development in the 1980s: An Alternative Policy Perspective for the Future," in A.K. Dutt and K.P. Jameson (eds.). **New Directions in Development Economics**. (Aldershot: Edward Elgar).
- Siriprachai, Somboon (1985a). "A preliminary Note of International Technology Transfer to Thailand," Thai Khadi Research Institute, Thammasat University, mimeo, (in Thai).
- Siriprachai, Somboon (1985b). "Migrants from Rural to Bangkok Metropolitan: A survey of Knowledge," research report submitted to Thai Khadi Research Institute, Thammasat University, September (in Thai).
- Siriprachai, Somboon (1988). "VER and Thai Government Policy Implementation: A Special case of Cassava Trade Between the European Community and Thailand, 1982-1987," Master Thesis, Faculty of Economics, Thammasat University (May) (in Thai).
- Siriprachai, Somboon (1990). "Thai Law and International trade Sectors: A Case Study of Rice and Cassava Exports," Research report submitted to Faculty of Economics, Thammasat University (February) (in Thai).
- Siriprachai, Somboon (1991). "Three Decades' Development in the Thai automobile Industry: Dream Never Comes True," **Warasan Setthasat Thammasat**, Vol.9, No.4 (December) : 23-64 (in Thai).

- Siriprachai, Somboon (1993). **Rent-seeking Activities: A survey of Recent Issues**. Lund Papers in Economic History, No.28, Department of Economic history, Lund University, Sweden.
- Siriprachai, Somboon (1995a). "Population Growth, Fertility Decline and Deforestation in Thailand, 1850-1990," In Christer Gunnarsson and Mason Hoadley (eds.) **Village in the Transformation in Rural Southeast Asia** (London: Curzon Press for NIAS), forthcoming.
- Siriprachai, Somboon (1995b) "Industrialisation and Inequality in Thailand," in Ingela Plamgren, Nild Fold, Johannes D. Schmidt and Jacques Hersh (eds.). **Emerging Classes and Growing Inequalities in Southeast Asia** (forthcoming).
- Skinner, G. William (1957). Chinese Society in Thailand: An Analytical History. Ithaca: Cornell University Press.
- Soon, Cho (1994). "Government and Market in Economic Development," **Asian Development Review**, Vol.12, No.2, pp.144-165.
- Stigler, George (1971). "The Theory of Economic Regulation," Bell Journal of Economics and Management Science 2:3: 3-21.
- Stiglitz, Joseph E. (1992). "Alternative Tactics and Strategies for Economic Development," in A.K. Dutt and K.P. Jameson (eds.). **New Directions in Development Economics** (Aldershot: Edward Elgar).
- Suehiro, Akira, 1989, **Capital accumulation in Thailand: 1855-1985**, The Centre for East Asian Cultural Studies.
- Summers, Robert and Alan Heston, "A New Set of International Comparisons of Real Product and Price Level Estimates for 130 Countries, 1950-1985," Review of Income and Wealth 34:1-25, 1988.
- Supavud Saicheua and Thanomsri Fongarunrung, 2000, "**Economic Crisis and its Impacts on the Financial Sector**," a paper presented at the 2000 Symposium on Thailand under New Economic Order, organized by the Faculty of Economics, Thammasat University, 4 May, 2000.
- Suphachalasai, Suphat (1992). "Thailand's Growth in Textile and Clothing Exports," in Kym Anderson (ed.). **New Silk Roads: East Asia and World Textile Markets** (Cambridge: Cambridge University Press).
- Sussangkarn, Chalongsob (1990). "Thailand," in **Human Resource Policy and Economic Development: Selected Country Studies**. (Manila: Asian Development Bank).
- Sussangkarn, Chalongsob (1992). "Towards Balanced Development: Sectoral, Spatial and other Dimensions." in **The 1992 Year-end Conference Thailand's Economic Structure: Towards Balanced Development?**, December, 12-13.

- Sussangkarn, Chalongphob, 1992, **Towards Balanced Development: Sectoral, Spatial And Other Dimensions**, A synthesis report for the 1992 TDRI Year-end Conference, Jom Tian Pattaya.
- Tamada, Yoshifumi (1991). "Ittiphon and Amnat: An Informal Aspects of Thai Politics," **Southeast Asian Studies**, Vol.28, pp.455-466.
- Tambunlertchai, Somsak (1987). "Development of the Manufacturing Sector in Thailand," paper presented at **The International Conference on Thai Studies**, Australian National University, Canberra (December).
- Taylor, Lance (1993). "Stabilization, Adjustment, and Reform," in Lance Taylor (ed.) **The Rocky Road to Reform: Adjustment, Income Distribution, and Growth in the Developing World** (Cambridge, Mass: The MIT Press), pp. 39-94.
- Thanamai, Patcharee (1985) "Patterns of Industrial Policymaking in Thailand: Japanese Multinationals and Domestic Actors in the Automobile and Electrical Appliance Industries," Ph.D. diss., University of Wisconsin-Madison.
- Thanapornpun, Rangsun (1990). The Process of Economic Policy Making in Thailand: Historical Analysis of Political Economy, 1932-1987 [in Thai]. Bangkok: Social Science Association.
- Thanapornpun, Rungsan (1985). "The Economics of Rice Premium: Limits of Knowledge," report submitted to **Thai Khadi Research Institute**, Thammasat University, June. (in Thai).
- Thanapornpun, Rungsan 1990). **The Process of Economic Policy Making in Thailand: Historical Analysis of political Economy, 1932-1987** (in Thai). (Bangkok; Social Science Association).
- Thomas, Vinod, et al., (1991). **Best Practices in Trade Policy Reform** (Oxford; Oxford University Press published for the World Bank).
- Thongpakde, Nattuphong (1991). "Investment policy in Thailand," in Taiwan-Thailand Investment Seminar, Taipei (August).
- Timmer, C. Peter (ed.) (1991). **Agriculture, the State, Growth and Employment and Poverty** (Ithaca: Cornell University Press).
- Tinakorn, Pranee (1992). "Industrialization and Welfare: How Poverty and Income Distribution Are Affected," paper presented at the **Conference on the Making of A Fifth Tiger? Thailand's Industrialization and Its Consequences**, December, Australian National University.
- Tinnakorn, Pranee, and Chalongphob Sussangkarn, 1996, **Productivity Growth in Thailand**, Thailand development Research Monograph No.15.
- Tinnakorn, Pranee, and Chalongphob Sussngkarn, 1998, **Total Factor Productivity Growth in Thailand; 1980-1995**, Thailand Research Development Institute.

- Unger, Daniel (1990). "Big Little Japan," paper presented at the Eight Annual Conference of the defense Academic Research Support Program.
- UNIDO (1992). **Thailand : Coping with the Strains of success** (Oxford: Basil Blackwell).
- Vestal, James E. (1993). **Planning for Change : Industrial Policy and Japanese Economic Development, 1945-1990** (Oxford: Clarendon Press).
- Vichyanond, Pakorn, 2000, **Financial Reforms in Thailand**, Thailand Development Research Institute.
- Wade, Robert (1990). **Governing the Market : Economic Theory and the role of Government in East Asian Industrialization**. (Princeton: Princeton University press).
- Wade, Robert (1990). Governing the Market: Economic Theory and the Role of Government in East Asian Industrialization. Princeton: Princeton University Press.
- Wade, Robert (1993). "Taiwan and South Korea as Challenges to Economics and Politics and Political Science," **Comparative Politics**, Vol.25, No.2 (January):147-167.
- Warr, P, 1993, **The Thai Economy in Transition**, Cambridge University.
- Warr, P. and B. Nidhiprabha, 1996, **Thailand's Macroeconomic Miracle**, The World Bank, Washington D.C.
- Warr, Peter (ed.) (1993). **The Thai Economy in Transition** (Cambridge: Cambridge University Press).
- Warr, Peter (ed) (2005) **Thailand: Beyond Asian Crisis** (London: Routledge)
- Wiboonchutikul, Paitoon, R. Chintayarangsan and N. Thongpakdi (1989). "Trade in manufactured Goods and Mineral Products," Background Paper No.4, **The 1989-TDRI Year-End Conference, Thailand Development Research Institute**, Pattaya, Thailand.
- Wiboonchutikula, Paitoon, "Total Factor Productivity Growth of Manufacturing Industries in Thailand," in TDRI, Productivity Changes and International Competitiveness of Thai Industries, 1987.
- World Bank (1959). **A public Development Program for Thailand**. (Baltimore, M.D.: John Hopkins University Press).
- World Bank (1988). "Thailand: Country Economic Memorandum: Building on the Recent Success-A Policy Framework," Washington, D.C. World Bank, November.
- World Bank (1993). **The East Asian Economics: Economic Growth and Public Policy** (Oxford: Oxford University Press for the World Bank).
- World Bank, 2000, **Thailand Public Finance in Transition**, by the Poverty Reduction and Economic Management Unit, East Asia and Pacific Region.
- World Bank, Thailand Financial Sector Study, Report No.8403-TH, May 1990.

- Xuto, Somsakdi (1987). Civil Servants at the Administrative Level [in Thai] Bangkok: Public Policy Studies Project, Social Science Association of Thailand.
- Yoshida, Mikimasa (1990). "Foreign direct Investment in Thailand," in Samart Chisakul and Mikimasa Yoshida (eds.). **Thai Economy in the Changing Decade and Industrial Promotion Policy** (Tokyo: Institute of Developing Economies).
- Yoshihara, Kunio (1995). **The Nation and Economic Growth : The Philippines and Thailand** (Kuala Lumpur: Oxford University Press).
- Young, Alwyn, 1995, "The Tyranny of Numbers: Confronting the Statistical Realities of the East Asian Growth Experience," **Quarterly Journal of Economics**, 110, pp. 641-680.
- Collins, S.M. and B. P. Bosworth (1996) "Economic Growth in East Asia: Accumulation versus Assimilation," in Brookings Papers on Economic Activity, Vol.2, pp. 135-203.
- James, William., Seiji Naya and Gerald M. Meier (1989). **Asian Development: Economic Success and Policy Lessons** (Madison: University of Wisconsin Press).
- Jasen, Karel (1989). "Thailand: The Next NIC?" Institute of Social Science, The Hague (mimeo.).
- Jasen, Karel (1997) **External Finance in Thailand's Development: An Interpretation of Thailand's Growth Boom** (London: Macmillan).
- Jasen, Karel (2004) "Thailand: The Making of A Miracle?" **Development and Change**, Vol. 32, pp. 343-370.
- Jitsuchon, Somchai , (2005), "Sources and Pro-Poorness of Thailand's Economic Growth," Paper presented at Senior Policy Seminar on Pro-Poor Growth and Scaling up Poverty Reduction in East Asia, May 18-19, 2005 Beijing, China,
- Krongkaew, Medhi ., (1993) "Poverty and Income Distribution, " in Peter Warr (ed.) *The Thai Economy in Transition*, (Cambridge: Cambridge University Press). Krueger, Anne (1979). The Development of the Foreign Sector and Aid. Cambridge: Harvard University Press.
- Manarangsun, Sompop (1989). "Economic Development of Thailand, 1850-1950: Responses to Challenges of the World Economy," PhD Dissertation, Groningen University.
- National Economic and Social Development Board, (2000), "Poverty and Income Distribution in 1999", in **Indicators of Well-Being and Policy Analysis Newsletter**, 4(1).
- Ockey, James (1996) "Thailand Society and Patterns of Leadership," *Asian Survey*, Vol. 36, pp. 345-360.
- Sarel. M. (1997) "Growth and Productivity in Asian Countries," **IMF Working Paper No.97/97** (Washington, DC: IMF).

- Taylor, Lance (1993). "Stabilization, Adjustment, and Reform," in Lance Taylor (ed.) **The Rocky Road to Reform: Adjustment, Income Distribution, and Growth in the Developing World** (Cambridge, Mass: The MIT Press), pp. 39-94.
- Tinakorn, Pranee (1992). "Industrialization and Welfare: How Poverty and Income Distribution Are Affected," paper presented at the **Conference on the Making of A Fifth Tiger? Thailand's Industrialization and Its Consequences**, December, Australian National University.
- Tinnakorn, Pranee, and Chalongphob Sussangkarn, (1996), **Productivity Growth in Thailand**, Thailand development Research Monograph No.15.
- Tinnakorn, Pranee, and Chalongphob Sussngkarn, (1998), **Total Factor Productivity Growth in Thailand; 1980-1995**, Thailand Research Development Institute.
- Watanabe, Toshiro (1992) **Asia: Its Growth and Agony** (Honolulu: The East West Centre).
- Wilson, Constance M. (1983) **Thailand: A Handbook of Historical Statistics** (Boston, Mass.: G.K. Hall).
- Young, Alwyn, (1995), "The Tyranny of Numbers: Confronting the Statistical Realities of the East Asian Growth Experience," **Quarterly Journal of Economics**, 110, pp. 641-680.