

Chapter 4: Changing Economic Structures of the Asian Economies

Chapter 4: Changing Economic Structures of the Asian Economies	
4.1	Selected Structural Parameters of the Asian Economies 4
4.2	Rate of Growth of GDP 32
4.3	Savings/GDP and Investment/ GDP Ratios..... 40
4.4	The Role of Money: Money Supply as a percent of GDP and the Rate of Inflation..... 52
4.5	The Government Sector 65
4.6	The Foreign Sector: Current Account Balance 81
4.7	Some Concluding Remarks..... 88

List of Tables

Table 4.1:	Sectoral Shares of GDP of the AE-22, 1970-2005: Japan, Korea, China, India	8
Table 4.2:	Sectoral Shares of GDP of the AE-22, 1970-2005: Indonesia, the Philippines, Thailand, Malaysia, Singapore, Brunei, Vietnam, Cambodia, Laos, and Myanmar	10
Table 4.3:	Sectoral Shares of GDP of the AE-22, 1970-2005: Chinese Taipei and Mongolia.....	12
Table 4.4:	Sectoral Shares of GDP of the AE-22, 1970-2005: Pakistan, Bangladesh, Sri Lanka, Bhutan, Nepal, and the Maldives.....	13
Table 4.5:	Sectoral Shares of Value Added as a Percentage of GDP, 1970-1979: China, Japan, Korea, and India.....	15
Table 4.6:	Sectoral Shares of Value Added as a Percentage of GDP, 1980-1989: China, Japan, Korea, and India.....	16
Table 4.7:	Sectoral Shares of Value Added as a Percentage of GDP, 1990-2005: China, Japan, Korea, and India.....	17
Table 4.8:	Sectoral Shares of Value Added as a Percentage of GDP, 1970-1979: Myanmar, Laos, Cambodia, Vietnam, and Brunei	20
Table 4.9:	Sectoral Shares of Value Added as a Percentage of GDP, 1980-1989: Myanmar, Laos, Cambodia, Vietnam, and Brunei	21
Table 4.10:	Sectoral Shares of Value Added as a Percentage of GDP, 1990-2005: Myanmar, Laos, Cambodia, Vietnam, and Brunei	22
Table 4.11:	Sectoral Shares of Value Added as a Percentage of GDP, 1970-1979: Singapore, Malaysia, Thailand, Philippines, and Indonesia	23
Table 4.12:	Sectoral Shares of Value Added as a Percentage of GDP, 1980-1989: Singapore, Malaysia, Thailand, Philippines, and Indonesia	23
Table 4.13:	Sectoral Shares of Value Added as a Percentage of GDP, 1990-2005: Singapore, Malaysia, Thailand, Philippines, and Indonesia	24
Table 4.14:	Sectoral Shares of Value Added as a Percentage of GDP, 1970-1979: Chinese Taipei and Mongolia.....	26
Table 4.15:	Sectoral Shares of Value Added as a Percentage of GDP, 1980-1989: Chinese Taipei and Mongolia.....	26

Table 4.16: Sectoral Shares of Value Added as a Percentage of GDP, 1990-2005: Chinese Taipei and Mongolia	27
Table 4.17: Sectoral Shares of Value Added as a Percentage of GDP, 1970-1979: Pakistan, Maldives, Sri Lanka, Bangladesh, Bhutan, and Nepal	29
Table 4.18: Sectoral Shares of Value Added as a Percentage of GDP, 1980-1989: Pakistan, Maldives, Sri Lanka, Bangladesh, Bhutan, and Nepal	29
Table 4.19: Sectoral Shares of Value Added as a Percentage of GDP, 1990-2005: Pakistan, Maldives, Sri Lanka, Bangladesh, Bhutan, and Nepal	31
Table 4.20: Annual Average Rate of Growth of GDP, 1970-2005: China, Japan, Korea, and India	34
Table 4.21: Annual Average Rate of Growth of GDP, 1970-2005: Myanmar, Laos, Cambodia, Vietnam, Brunei, Singapore, Malaysia, Thailand, Philippines, and Indonesia	35
Table 4.22: Annual Average Rate of Growth of GDP, 1970-2005: Chinese Taipei and Mongolia	35
Table 4.23: Annual Average Rate of Growth of GDP, 1970-2005: Pakistan, Maldives, Sri Lanka, Bangladesh, Bhutan, and Nepal	35
Table 4.24: Savings and Investment as a Percentage of GDP, 1970-1979: China, Japan, Korea, and India	42
Table 4.25: Savings and Investment as a Percentage of GDP, 1980-1989: China, Japan, Korea, and India	43
Table 4.26: Savings and Investment as a Percentage of GDP, 1990-2005: China, Japan, Korea, and India	44
Table 4.27: Savings and Investment as a Percentage of GDP, 1970-1979: Myanmar, Laos, Cambodia, Vietnam, Brunei, Singapore, Malaysia, Thailand, Philippines, and Indonesia	45
Table 4.28: Savings and Investment as a Percentage of GDP, 1980-1989: Myanmar, Laos, Cambodia, Vietnam, Brunei, Singapore, Malaysia, Thailand, Philippines, and Indonesia	46
Table 4.29: Savings and Investment as a Percentage of GDP, 1990-2005: Myanmar, Laos, Cambodia, Vietnam, Brunei, Singapore, Malaysia, Thailand, Philippines, and Indonesia	47
Table 4.30: Savings and Investment as a Percentage of GDP, 1970-1979: Chinese Taipei and Mongolia	48
Table 4.31: Savings and Investment as a Percentage of GDP, 1980-1989: Chinese Taipei and Mongolia	48
Table 4.32: Savings and Investment as a Percentage of GDP, 1990-2005: Chinese Taipei and Mongolia	49
Table 4.33: Savings and Investment as a Percentage of GDP, 1970-1979: Pakistan, Maldives, Sri Lanka, Bangladesh, Bhutan, and Nepal	50
Table 4.34: Savings and Investment as a Percentage of GDP, 1980-1989: Pakistan, Maldives, Sri Lanka, Bangladesh, Bhutan, and Nepal	50
Table 4.35: Savings and Investment as a Percentage of GDP, 1990-2005: Pakistan, Maldives, Sri Lanka, Bangladesh, Bhutan, and Nepal	51
Table 4.36: Money (M2) as a Percentage of GDP, 1970-2005: China, Japan, Korea, and India	54

Table 4.37: Money (M2) as a Percentage of GDP, 1970-2005: Myanmar, Laos, Cambodia, Vietnam, and Brunei.....	55
Table 4.38 Money (M2) as a Percentage of GDP, 1970-2005: Singapore, Malaysia, Thailand, Philippines, and Indonesia.....	56
Table 4.39: Money (M2) as a Percentage of GDP, 1970-2005: Chinese Taipei and Mongolia.....	57
Table 4.40: Money (M2) as a Percentage of GDP, 1970-2005: Pakistan, Maldives, Sri Lanka, Bangladesh, Bhutan, and Nepal.....	58
Table 4.41: Annual Change in Inflation, 1970-2005: China, Japan, Korea, and India.....	61
Table 4.42: Annual Change in Inflation, 1970-2005: Myanmar, Laos, Cambodia, Vietnam, and Brunei.....	62
Table 4.43: Annual Change in Inflation, 1970-2005: Singapore, Malaysia, Thailand, Philippines, and Indonesia.....	63
Table 4.44: Annual Change in Inflation, 1970-2005: Chinese Taipei and Mongolia.....	64
Table 4.45: Annual Change in Inflation, 1970-2005: Pakistan, Maldives, Sri Lanka, Bangladesh, Bhutan, and Nepal.....	65
Table 4.46: Government Consumption, Revenues and Deficits as a Percentage of GDP, 1970-1979: China, Japan, Korea, and India.....	67
Table 4.47: Government Consumption, Revenues and Deficits as a Percentage of GDP, 1980-1989: China, Japan, Korea, and India.....	68
Table 4.48: Government Consumption, Revenues and Deficits as a Percentage of GDP, 1990-2005: China, Japan, Korea, and India.....	69
Table 4.49: Government Consumption, Revenues and Deficits as a Percentage of GDP, 1970-1979: Myanmar, Laos, Cambodia, Vietnam, and Brunei.....	70
Table 4.50: Government Consumption, Revenues and Deficits as a Percentage of GDP, 1980-1989: Myanmar, Laos, Cambodia, Vietnam, and Brunei.....	71
Table 4.51: Government Consumption, Revenues and Deficits as a Percentage of GDP, 1990-2005: Myanmar, Laos, Cambodia, Vietnam, and Brunei.....	72
Table 4.52: Government Consumption, Revenues and Deficits as a Percentage of GDP, 1970-1979: Singapore, Malaysia, Thailand, Philippines, and Indonesia.....	73
Table 4.53: Government Consumption, Revenues and Deficits as a Percentage of GDP, 1980-1989: Singapore, Malaysia, Thailand, Philippines, and Indonesia.....	74
Table 4.54: Government Consumption, Revenues and Deficits as a Percentage of GDP, 1990-2005: Singapore, Malaysia, Thailand, Philippines, and Indonesia.....	75
Table 4.55: Government Consumption, Revenues and Deficits as a Percentage of GDP, 1970-1979: Chinese Taipei and Mongolia.....	76
Table 4.56: Government Consumption, Revenues and Deficits as a Percentage of GDP, 1980-1989: Chinese Taipei and Mongolia.....	76
Table 4.57: Government Consumption, Revenues and Deficits as a Percentage of GDP, 1990-2005: Chinese Taipei and Mongolia.....	77
Table 4.58: Government Consumption, Revenues and Deficits as a Percentage of GDP, 1970-1979: Pakistan, Maldives, Sri Lanka, Bangladesh, Bhutan, and Nepal.....	78
Table 4.59: Government Consumption, Revenues and Deficits as a Percentage of GDP, 1980-1989: Pakistan, Maldives, Sri Lanka, Bangladesh, Bhutan, and Nepal.....	79
Table 4.60: Government Consumption, Revenues and Deficits as a Percentage of GDP, 1990-2005: Pakistan, Maldives, Sri Lanka, Bangladesh, Bhutan, and Nepal.....	80

Table 4.61: Current Account Balance as a Percentage of GDP, 1970-2005: China, Japan, Korea, and India.....	83
Table 4.62: Current Account Balance as a Percentage of GDP, 1970-2005: Myanmar, Laos, Cambodia, Vietnam, and Brunei.....	84
Table 4.63: Current Account Balance as a Percentage of GDP, 1970-2005: Singapore, Malaysia, Thailand, Philippines, and Indonesia	85
Table 4.64: Current Account Balance as a Percentage of GDP, 1970-2005: Chinese Taipei and Mongolia.....	86
Table 4.65: Current Account Balance as a Percentage of GDP, 1970-2005: Pakistan, Maldives, Sri Lanka, Bangladesh, Bhutan, and Nepal	87

List of Figures

Figure 4.1: Rate of Growth of GDP, 1970-2006: Japan, Korea, China, and India.....	36
Figure 4.2: Rate of Growth of GDP, 1970-2006: Indonesia, Philippines, Thailand, Malaysia, and Singapore.....	37
Figure 4.3: Rate of Growth of GDP, 1970-2006: Brunei, Vietnam, Cambodia, Laos, and Myanmar.....	38
Figure 4.4: Rate of Growth of GDP, 1970-2006: Chinese Taipei and Mongolia.....	39
Figure 4.5: Rate of Growth of GDP, 1970-2006: Pakistan, Bangladesh, Sri Lanka, Bhutan, Nepal, and the Maldives.....	40

4.1 Selected Structural Parameters of the Asian Economies

The industrialization of the Asian economies beyond Japan has been an accomplishment. This chapter presents a study of selected parameters, pointing to the structural changes of Asia's traditional agricultural economies, as the process of their industrialization progressed over several decades of the last millennium.

The compilation of specific parameters and their presentation follow. The output of an economy originates in its three sectors, agriculture, industry and service, and the inter-sectoral shares are an indicator of the economy's

level of industrialization. The value-added by each sector as a percentage of the GDP of a given economy is another way of reviewing the situation.

Following successful industrialization, an economy's total output grows, and the rate of growth of the economy merits a review. Economic theory teaches us that the growth of an economy relates to the two basic ratios, the savings/GDP and the investment/GDP. To begin, traditional agricultural economies were savings-poor as their levels of GDP were low. The story of supplementing their domestic savings, low as they were, by inflows of savings from foreign, savings-rich economies, is an aspect of our study (see Chapter 5).

As these traditional economies grow with consequent expansion of activities in related sectors of the economy, a core necessity is to increase the money supply. Each sovereign nation-state member economy has its lawfully constituted monetary authority to undertake this responsibility. If money supply is increased without matching increases in the output of goods and services, managing the rate of inflation becomes a challenge. Hence, the rate of inflation is a critical parameter to be watched.

The survival of individual units, households or businesses, in an economy in a state of splendid isolation is not possible. A society emerges and a social contract follows: the government of the country plays its role for

the benefit of its people. The share of the output of a given economy for government expenditure, or social consumption, as an item in national income accounting, is on record. Does it spend more than the revenue it collects from its citizenry? Does the government accumulate surpluses? The balanced budget is a cherished principle. As the accumulation of annual budget deficits measures an economy's national debt, a given economy should limit its national debt or its impact will be critically negative.

We must note that each sovereign nation-state economy interacts with the rest of the world. Each economy will offer their cost-and-quality competitive products to export, so that they can import what they need, including those products not available in the domestic economy at an acceptable cost. The theory of comparative advantage has been a familiar economic dictum. The transactions of export and import close an economy's account with the rest of the world. The Current Account Balance ("CAB") limits the study to exchanges of goods and services and it is a parameter we take note of. In what follows, the two measures to evaluate the levels of industrialization, sectoral shares of GDP and sectoral shares of value-added are discussed.

Sectoral shares of GDP have been noted as a key parameter. In a pre-industrialized economy, the sectoral shares of its output of goods and

services from the agricultural sector has historically been dominant, the sectoral shares from the industrial and service sectors remaining relatively modest. The Asian economies have experienced notable structural changes with the progression of industrialization of these economies since the 1970s. In the mature industrialized economies, such as Japan, USA and certain member economies of the EU, the benchmark for the agricultural sector's share of GDP has been as low as 2 percent, with the remaining shares of output originating from the industrial and service sectors.

In Table 4.1,

Table 4.2, Table 4.3 and Table 4.4, the data of decennial sectoral shares of the member economies of the AE-22 for 1970-2000 plus 2005 are presented; they indicate that these economies have experienced necessary structural changes. In general, the AE-22 demonstrates a pattern of conformity to the hypothesized changes, and their shares of GDP from the agricultural sector follow the expected declining pattern while their shares from industrial and service sectors reveal an increasing trend. As an economy approaches the level of maturity in terms of industrialization, its service sector's share of output becomes increasingly dominant.

Table 4.1 relates to the four major economies, Japan, Korea, China and India, of the 4+10 model. From 1970 to 2005, Japan's agricultural

sector's share of GDP has come down from 6 to 2 percent, the share of the industrial sector moderated from 44 to 30 percent, while its service sector's share moved up from 50 to 68 percent. Japan is, of course, a mature industrialized economy. During the same period for Korea, a newly industrialized economy, its agriculture sector's share expectedly came down from a high of 29 percent to a low of 3 percent. Shares of its industrial and service sectors went up from 26 to 40, and 45 to 56, percent, respectively. Now a member of the OECD group, Korea has achieved the status of a mature industrialized economy. The share of the output from its service sector remains to be competitively larger.

Table 4.1: Sectoral Shares of GDP of the AE-22, 1970-2005: Japan, Korea, China, India

		1970	1980	1990	2000	2005
Japan	Agriculture	6.0	4.0	3.0	2.0	2.0
	Industry	44.0	41.0	40.0	32.0	30.0
	Service	50.0	55.0	58.0	66.0	68.0
Korea	Agriculture	29.0	16.0	9.0	5.0	3.0
	Industry	26.0	37.0	42.0	41.0	40.0
	Service	45.0	47.0	49.0	54.0	56.0
China	Agriculture	35.0	30.0	27.0	15.0	13.0
	Industry	40.0	49.0	42.0	46.0	48.0
	Service	24.0	21.0	31.0	39.0	40.0
India	Agriculture	46.0	39.0	31.0	23.0	18.0
	Industry	21.0	24.0	28.0	26.0	27.0
	Service	33.0	37.0	41.0	50.0	54.0

Source: Compilation based on data in Appendix.

Note: For rounding errors, percentages in several cases do not up to 100.

Let us now turn to China and India, the two most populous economies of the world. For the 1970-2005 period, the two economies present a profile of progressive industrialization. For both of them, the agricultural sector's shares have declined, for China from 35 in 1970 to 13 percent in 2005, and for India from 46 in 1970 to 18 percent in 2005. Shares of industrial and service sectors have moved up for both China and India. Even so, both the economies have relatively much larger shares of GDP from their respective agricultural sectors. They are Asia's two newly industrializing economies, some steps behind Japan and Korea, expectedly quickly catching up.

In Southeast Asia, Indonesia, the Philippines, Thailand, Malaysia, have crossed the benchmarks. For each of these economies, the agricultural sector's share has recorded declines from high- to - low double-digit levels, matching the performances of China and India. Malaysia's score is as low as 9 percent in 2000, but remaining at the same level in 2005. Indonesia, Thailand and Malaysia, also record progressive upturns for the output of their respective industrial sectors. The Philippines experienced extra-economic challenges and its industrial sector failed to improve its share. For the service sector, Indonesia and the Philippines did better while Thailand and Malaysia performed marginally lower. The economies of Singapore and Brunei have limited agricultural sectors and their evaluation rests on figures

for the two other sectors. Brunei is a very special economy with its enormous petroleum reserve. Singapore is predominantly a service economy, with the output of its industrial sector remaining at about of a third of the total. Overall, Singapore has earned its rank as a mature industrialized economy.

Table 4.2: Sectoral Shares of GDP of the AE-22, 1970-2005: Indonesia, the Philippines, Thailand, Malaysia, Singapore, Brunei, Vietnam, Cambodia, Laos, and Myanmar

		1970	1980	1990	2000	2005
Indonesia	Agriculture	45.0	24.0	19.0	16.0	13.0
	Industry	19.0	42.0	39.0	46.0	46.0
	Service	36.0	34.0	41.0	38.0	41.0
Philippines	Agriculture	30.0	25.0	22.0	16.0	14.0
	Industry	32.0	39.0	34.0	32.0	32.0
	Service	39.0	36.0	44.0	52.0	53.0
Thailand	Agriculture	26.0	23.0	12.0	9.0	10.0
	Industry	25.0	29.0	37.0	42.0	44.0
	Service	49.0	48.0	50.0	49.0	46.0
Malaysia	Agriculture	29.0	23.0	15.0	9.0	9.0
	Industry	27.0	41.0	42.0	51.0	52.0
	Service	43.0	36.0	43.0	40.0	40.0
Singapore	Agriculture	..	2.0	0.0	0.0	0.0
	Industry	..	38.0	35.0	35.0	34.0
	Service	..	61.0	65.0	64.0	66.0
Brunei	Agriculture	..	1.0	2.0	3.0	..
	Industry	..	85.0	55.0	48.0	..
	Service	..	15.0	43.0	49.0	..
Vietnam	Agriculture	..	..	39.0	25.0	21.0
	Industry	..	..	23.0	37.0	41.0
	Service	..	..	39.0	39.0	38.0
Cambodia	Agriculture	..	..	..	38.0	34.0
	Industry	..	..	..	23.0	27.0
	Service	..	..	..	39.0	39.0
Laos	Agriculture	..	..	61.0	53.0	45.0
	Industry	..	..	15.0	23.0	29.0
	Service	..	..	24.0	25.0	26.0
Myanmar	Agriculture	38.0	47.0	57.0	57.0	..
	Industry	14.0	13.0	11.0	10.0	..
	Service	48.0	41.0	32.0	33.0	..

Source: As in Table 4.1.

Vietnam's economy presents a picture of industrialization; it has yet to catch up the pattern of sectoral shares of the neighboring economies. Its agricultural sector continues to be dominant while its service sector has

stabilized at about two-fifths of the total GDP. Cambodia, Laos, Myanmar remain agriculture-dependent, and are yet to develop their competitive economic profiles.

In Central Asia, Chinese Taipei has also achieved the status of a mature industrialized economy while Mongolia, a resource-rich economy, is working to catch up.

Table 4.3: Sectoral Shares of GDP of the AE-22, 1970-2005: Chinese Taipei and Mongolia

		1970	1980	1990	2000	2005
Chinese Taipei	Agriculture	15.5	7.7	4.9	2.0	1.7
	Industry	34.4	43.2	40.6	27.1	23.4
	Service	50.1	49.1	54.5	70.9	74.9
Mongolia	Agriculture	..	..	15.0	29.0	22.0
	Industry	..	..	41.0	21.0	29.0
	Service	..	..	44.0	50.0	49.0

Source: As in Table 4.1.

In South Asia (Table 4.4), the Maldives present no data. The data for Pakistan, Bangladesh, Sri Lanka, Bhutan and Nepal indicate that these economies continue to be more dependent on their respective agricultural sectors, varying between 17 percent for Sri Lanka and 38 percent for Nepal in 2005. For their industrial sectors, variations range from 21 percent for Nepal and 37 percent for Bhutan in 2005. For the same year, Pakistan and Bangladesh, two larger economies in the group, record their respective

industrial sector outputs at 25 percent and 27 percent, respectively. The service sectors of Pakistan, Bangladesh and Sri Lanka merit notable scores.

Table 4.4: Sectoral Shares of GDP of the AE-22, 1970-2005: Pakistan, Bangladesh, Sri Lanka, Bhutan, Nepal, and the Maldives

		1970	1980	1990	2000	2005
Pakistan	Agriculture	37.0	30.0	26.0	26.0	22.0
	Industry	22.0	25.0	25.0	23.0	25.0
	Service	41.0	46.0	49.0	51.0	53.0
Bangladesh	Agriculture	..	32.0	30.0	26.0	20.0
	Industry	..	21.0	21.0	25.0	27.0
	Service	..	48.0	48.0	49.0	53.0
Sri Lanka	Agriculture	28.0	28.0	26.0	20.0	17.0
	Industry	24.0	30.0	26.0	27.0	26.0
	Service	48.0	43.0	48.0	53.0	57.0
Bhutan	Agriculture	..	47.0	37.0	28.0	25.0
	Industry	..	16.0	26.0	35.0	37.0
	Service	..	37.0	37.0	36.0	38.0
Nepal	Agriculture	67.0	62.0	51.0	40.0	38.0
	Industry	12.0	12.0	16.0	21.0	21.0
	Service	21.0	26.0	33.0	39.0	41.0
Maldives	Agriculture	..	..	..	..	..
	Industry	..	..	..	..	..
	Service	..	..	..	..	..

Source: As in Table 4.1.

Sectoral shares of GDP measures the quantity of sectoral outputs, while the value-added share of a sector is based on its percentage contribution to the economy's GDP. By supplementing our analysis with the value-added share of GDP, our evaluation of the performance of these economies is enriched. The annual data for 1970-2005, based on percentage of GDP, Table 4.5, Table 4.6 and Table 4.7 offer the empirical base for a

comparative evaluation. For the four major economies, China, Japan, Korea and India, the profile of industrialization is evident. Beginning with 6 percent of the value added of its GDP from the agricultural sector in the 1970s, Japan progressed to 3 percent in 1980s, and then on to 2 percent in 1990s, achieving its competitive ranking amongst the world's most industrialized economies. In 1970, Korea had a share of 29 percent value-added from its agricultural sector. Over the years it declined and in the 1990s, Korea's share of value-added from its agricultural sector as a percentage of its GDP came down to single digits, scoring as low as 3 percent in 2005. It follows that Korea has earned its rank of a mature industrialized economy.

Both China and India began with their substantive shares of value-added from their respective agricultural sectors in the 1970s. China started out the decade with a 35 percent share, reporting a low 13 percent in 2005. India's comparative achievement in this regard has been less pronounced. India's share of value-added from its agricultural sector was 46 percent of GDP in 1970, and records a share of value-added as high as 18 percent in 2005. For 1970-2005, China has maintained its share of value-added from the industrial sector between 40 percent in 1970 and 45 percent in 2005. With a modest record of 26 percent in 1970, Korea has approached a high of

40 percent in late 1980s through 2005. Japan demonstrated its industrial leadership for the time period, albeit it has experienced challenges in recent years, its share of value-added from the industrial sector moving downward from 40-plus percent to 30 percent from 2002 through 2004. The process of softening an economy is familiar. The data for the value-added from the service sectors of these economies, point to the fact that Japan plays the leadership role, with Korea following behind. For the same time period, China experienced a lag, and there is concern as to whether China's service sector can support its high rate of industrialization. India has a relatively large service sector, evident in the country's large rural economies, as well as its broad-based financial and transportation sectors.

Table 4.5: Sectoral Shares of Value Added as a Percentage of GDP, 1970-1979: China, Japan, Korea, and India

Agriculture	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
China	35	34	33	33	34	32	33	29	28	31
Japan	6	5	6	6	6	6	5	5	5	4
Korea	29	30	29	27	27	27	26	24	22	21
India	46	44	44	48	44	41	39	41	39	37

Industry	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
China	40	42	43	43	43	46	45	47	48	47
Japan	..	45	45	46	44	42	42	41	41	41
Korea	26	25	26	29	28	29	31	32	35	36
India	21	21	21	20	22	22	24	23	24	25

Services	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
China	24	24	24	24	23	22	22	23	24	21
Japan	..	49	50	48	50	53	53	54	54	55
Korea	45	45	45	44	45	44	43	43	43	43
India	33	34	34	32	34	36	37	36	37	38

Table 4.6: Sectoral Shares of Value Added as a Percentage of GDP, 1980-1989: China, Japan, Korea, and India

Agriculture	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
China	30	32	33	33	32	28	27	27	26	25
Japan	4	4	4	3	3	3	3	3	3	3
Korea	16	17	16	15	14	14	12	11	11	10
India	39	37	36	37	35	34	33	32	33	31

Industry	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
China	49	46	45	45	43	43	44	44	44	43
Japan	41	41	40	40	40	40	39	39	39	39
Korea	37	36	37	38	40	39	40	41	42	41
India	24	25	26	26	26	26	27	27	27	28

Services	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
China	21	22	22	22	25	29	29	29	30	32
Japan	55	55	56	57	57	57	58	58	58	58
Korea	47	47	47	47	47	47	48	48	47	49
India	37	37	38	38	39	40	41	41	41	41

Table 4.7: Sectoral Shares of Value Added as a Percentage of GDP, 1990-2005: China, Japan, Korea, and India

Agriculture	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
China	27	24	22	19	20	20	20	18	17	16	15	14	13	13	13	13
Japan	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Korea	9	8	8	7	7	6	6	5	5	5	5	5	4	4	4	3
India	31	32	31	31	30	28	29	28	28	25	23	23	21	21	19	18
Industry	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
China	42	42	44	47	47	47	48	48	46	46	46	45	45	46	46	48
Japan	40	39	38	37	35	34	34	34	33	33	32	31	30	30	30	..
Korea	42	43	41	42	42	42	41	41	41	40	41	39	38	39	41	40
India	28	26	27	26	27	28	27	27	27	25	26	25	26	26	27	27
Services	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
China	31	33	34	34	34	33	33	34	36	38	39	41	42	41	41	40
Japan	58	58	60	61	63	64	64	64	65	65	66	67	68	68	68	..
Korea	49	49	51	51	52	52	53	53	54	55	54	56	57	57	56	56
India	41	42	42	43	42	44	43	45	46	50	50	51	53	53	54	54

For the 10 economies in Southeast Asia, relevant data are presented in two parts, each covering five of the ten. Table 4.8, Table 4.9 and Table 4.10 relate to Myanmar, Laos, Cambodia, Vietnam and Brunei, while Table 4.11, Table 4.12 and Table 4.13 cover Singapore, Malaysia, Thailand, the Philippines and Indonesia. These groupings permit comparison between the original five ASEAN members and the five that joined later on.

For the 1970s and 1980s, the data for the five who joined the ASEAN membership later are limited. In general they are agriculture-dominant economies. Myanmar continues to be a closed economy under totalitarian military rule, leaving the economic development of Myanmar beyond evaluation. As Vietnam successfully initiated its industrial program in the mid-1980s, it presents a record of progress with its sectoral shares of GDP from the industrial and service sectors, both reaching approximately a two-fifths share of GDP. The limited data for the industrial and service sectors of the economy of Brunei for 1980s and 1990s must be noted as impressive. The ruling authorities of the island economy with its endowment of immense resources, especially petroleum, have expressed much concern against the potentially adverse social impact of the rapid rate of industrialization.

Table 4.11, Table 4.12 and Table 4.13 present the economic pictures of Singapore, Malaysia, Thailand, the Philippines and Indonesia and they are

notably different. Over 1970-2005, Singapore demonstrated its share of value-added from the service sector at about two-thirds of its GDP, varying between 61 percent in early 1980s and moving up to the high 60s by the end of the decade. Of course, Singapore records little value-added from its agricultural sector while the share of value-added from its industrial sector for the period has stabilized at about one-third of its GDP.

Malaysia has a record of progressive industrialization. The value-added from its agricultural sector declined from 29 percent in 1970 to a low 9 percent in 2005. It should be noted that historically this process of decline has been systematic. At the same time, the share of value-added from its industrial sector has consistently progressed from 27 percent to 52 percent. Malaysia's share of value-added from its service sector has also been at about two-fifths of its GDP with a temporary down-turn for 1980 and 1981. Malaysia has emerged as a notable industrializing economy in Southeast Asia, and was successful in minimizing its exposure to the Asian financial crisis of 1997-98 with its dynamic macroeconomic policy measures.

Based on the shares of value-added from the three sectors, Thailand can offer a paradigm of successful industrialization. It has come out of its serious exposure to the Asian financial crisis. The value-added from its agricultural sector declined progressively from twenty-plus percent during

the 1970s and early 1980s to a single digit in the 1990s, maintaining the trend in the years in the new millennium. The industrial sector's share of value-added was as low as 25 percent of GDP in 1970, and it has reached 40-plus percent since 1993. Thailand's service sector has value-added of about one-half of its GDP for the time period. Both the Philippines and Indonesia demonstrate a sustained dependence on their respective agricultural sectors, the value-added moving from 30 percent in 1970 to 14 percent in 2005 for the Philippines, and from 45 percent in 1970 to 13 percent in 2005 for Indonesia. For the industrial sector, the Philippines has maintained its position at about 30 percent, while for the service sector it shows some progress from mid-30 percent to low-50 percent. In 1970 Indonesia began with a fifth of its GDP from the value-added from its industrial sector while moving up to 40-plus percent in the 1990s. For the service sector, the economy of Indonesia records a parallel pattern of progress.

Table 4.8: Sectoral Shares of Value Added as a Percentage of GDP, 1970-1979: Myanmar, Laos, Cambodia, Vietnam, and Brunei

Agriculture	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Myanmar	38	38	38	39	46	47	47	45	44	46
Laos
Cambodia
Vietnam
Brunei	1	1	1	1	1	1
Industry	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Myanmar	14	14	14	13	10	11	12	13	13	12
Laos
Cambodia
Vietnam
Brunei	91	90	90	85	81	84
Services	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Myanmar	48	47	48	48	44	42	42	42	43	42
Laos
Cambodia
Vietnam
Brunei	8	9	8	14	18	15

Table 4.9: Sectoral Shares of Value Added as a Percentage of GDP, 1980-1989: Myanmar, Laos, Cambodia, Vietnam, and Brunei

Agriculture	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Myanmar	47	47	48	48	48	48	50	55	57	57
Laos	..	..	..	..	..	..	..	..	..	61
Cambodia	..	..	..	..	..	..	..	..	..	..
Vietnam	..	..	..	..	..	40	38	41	46	42
Brunei	1	1	1	1	1	1	2	2	2	2
Industry	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Myanmar	13	12	13	13	13	13	12	10	10	11
Laos	..	..	..	..	..	..	..	..	..	13
Cambodia	..	..	..	..	..	..	..	..	..	..
Vietnam	..	..	..	..	..	27	29	28	24	23
Brunei	85	82	80	77	73	72	59	60	52	53
Services	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Myanmar	41	40	40	40	39	39	38	34	33	32
Laos	..	..	..	..	..	..	..	..	..	26
Cambodia	..	..	..	..	..	..	..	..	..	..
Vietnam	..	..	..	..	..	32	33	31	30	35
Brunei	15	17	19	22	25	27	39	39	46	45

Table 4.10: Sectoral Shares of Value Added as a Percentage of GDP, 1990-2005: Myanmar, Laos, Cambodia, Vietnam, and Brunei

Agriculture	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Myanmar	57	59	61	63	63	60	59	59	59	60	57	..	..	..	..	..
Laos	61	58	62	58	58	56	53	53	53	54	53	51	50	49	47	45
Cambodia	..	..	..	46	48	50	47	46	46	43	38	37	34	34	33	34
Vietnam	39	40	34	30	27	27	28	26	26	25	25	23	23	23	22	21
Brunei	2	2	3	3	3	3	3	3	3	3	3	..	..	..	..	..
Industry	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Myanmar	11	10	9	9	9	10	10	10	10	9	10	..	..	..	..	..
Laos	15	17	18	18	18	19	21	21	22	23	23	24	25	26	27	29
Cambodia	..	..	..	13	14	15	16	17	17	19	23	24	26	27	28	27
Vietnam	23	24	27	29	29	29	30	32	32	34	37	38	38	39	40	41
Brunei	55	52	49	46	43	44	46	49	42	46	48	..	..	..	..	..
Services	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Myanmar	32	31	30	28	28	30	31	30	31	31	33	..	..	..	..	..
Laos	24	25	20	25	24	25	26	26	24	24	25	25	25	26	26	26
Cambodia	..	..	..	41	38	36	38	37	36	37	39	40	40	39	40	39
Vietnam	39	36	39	41	44	44	43	42	42	40	39	39	38	38	38	38
Brunei	43	45	48	51	54	54	52	49	55	51	49	..	..	..	..	..

Table 4.11: Sectoral Shares of Value Added as a Percentage of GDP, 1970-1979: Singapore, Malaysia, Thailand, Philippines, and Indonesia

Agriculture	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Singapore	..	..	..	..	..	2	2	2	2	2
Malaysia	29	27	27	27	31	29	28	27	26	24
Thailand	26	24	25	28	27	27	27	25	24	24
Philippines	30	30	29	31	31	30	29	29	28	27
Indonesia	45	43	38	38	31	30	30	30	28	27
Industry	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Singapore	..	..	..	..	..	33	34	34	34	36
Malaysia	27	29	30	29	34	34	35	36	38	39
Thailand	25	27	27	27	27	26	28	29	30	30
Philippines	32	32	33	34	34	35	36	36	36	37
Indonesia	19	21	25	27	34	33	34	34	36	38
Services	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Singapore	..	..	..	..	..	64	64	64	64	63
Malaysia	43	45	44	43	36	37	37	37	36	36
Thailand	49	49	47	46	46	47	46	46	46	46
Philippines	39	38	37	36	35	35	35	35	35	36
Indonesia	36	36	36	35	35	36	36	36	36	35

Table 4.12: Sectoral Shares of Value Added as a Percentage of GDP, 1980-1989: Singapore, Malaysia, Thailand, Philippines, and Indonesia

Agriculture	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Singapore	2	2	1	1	1	1	1	1	0	0
Malaysia	23	21	21	20	20	20	20	20	20	18
Thailand	23	21	19	20	18	16	16	16	16	15
Philippines	25	25	23	22	25	25	24	24	23	23
Indonesia	24	23	24	23	23	23	24	23	22	22
Industry	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Singapore	38	38	36	38	39	36	36	36	37	36
Malaysia	41	40	38	39	39	39	39	39	38	40
Thailand	29	30	30	31	32	32	33	33	35	36
Philippines	39	39	39	39	38	35	35	34	35	35
Indonesia	42	41	38	40	39	36	34	36	37	38
Services	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Singapore	61	61	62	61	60	63	63	63	62	64
Malaysia	36	38	41	41	41	42	42	42	42	42
Thailand	48	49	52	49	50	52	51	51	49	49
Philippines	36	36	38	38	37	40	41	42	42	42
Indonesia	34	35	38	37	38	41	42	40	40	40

Table 4.13: Sectoral Shares of Value Added as a Percentage of GDP, 1990-2005: Singapore, Malaysia, Thailand, Philippines, and Indonesia

Agriculture	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Singapore	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Malaysia	15	14	15	14	14	13	12	11	13	11	9	8	9	10	9	9
Thailand	12	13	12	9	9	10	10	9	11	9	9	9	9	10	10	10
Philippines	22	21	22	22	22	22	21	19	17	17	16	15	15	15	15	14
Indonesia	19	18	19	18	17	17	17	16	18	20	16	16	16	16	16	13
Industry	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Singapore	35	36	36	36	35	35	35	34	35	34	35	33	33	32	34	34
Malaysia	42	42	41	40	40	41	44	45	44	46	51	48	47	49	50	52
Thailand	37	39	38	40	41	41	41	40	40	41	42	42	42	44	43	44
Philippines	34	34	33	33	33	32	32	32	31	31	32	32	32	32	32	32
Indonesia	39	40	40	40	41	42	43	44	45	43	46	47	45	44	44	46
Services	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Singapore	65	64	64	64	65	65	65	65	65	66	64	67	67	68	66	66
Malaysia	43	44	44	46	46	46	45	44	43	43	40	44	43	42	40	40
Thailand	50	49	50	51	50	50	50	50	50	50	49	49	48	46	46	46
Philippines	44	45	45	46	45	46	47	49	52	52	52	53	53	53	53	53
Indonesia	41	41	42	42	42	41	40	40	37	37	38	38	39	40	40	41

Chinese Taipei and Mongolia belong to the regional map of Asia and the annual time series data for 1970-2005 of the sectoral shares of value-added to GDP of these two central Asian economies are presented in Table 4.14, Table 4.15 and Table 4.16. Chinese Taipei has a marginal agricultural sector and the value-added from this sector has recently been as low as 2 percent of GDP. Over time, its industrial sector has added about 40 percent of its GDP while its service sector has reached 75 percent of GDP in 2005. Mongolia's data is limited to 1980s and 1990s. For the twenty year period, the value-added from its agricultural sector has been at some one-fifth of its GDP and the share from the industrial sector has remained at about two-fifths of its GDP. About one-half of its GDP is added by its service sector.

Table 4.14: Sectoral Shares of Value Added as a Percentage of GDP, 1970-1979: Chinese Taipei and Mongolia

Agriculture	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Chinese Taipei	15	13	12	12	12	13	11	11	9	9
Mongolia	..	..	..	..	..	..	..	..	..	..
Industry	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Chinese Taipei	34	37	39	42	38	37	41	41	43	43
Mongolia	..	..	..	..	..	..	..	..	..	..
Services	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Chinese Taipei	50	50	48	46	49	50	48	48	48	48
Mongolia	..	..	..	..	..	..	..	..	..	..

Table 4.15: Sectoral Shares of Value Added as a Percentage of GDP, 1980-1989: Chinese Taipei and Mongolia

Agriculture	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Chinese Taipei	8	7	8	7	6	6	6	5	5	5
Mongolia	..	17	18	18	17	16	19	16	17	16
Industry	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Chinese Taipei	43	42	41	41	42	42	44	44	43	41
Mongolia	..	25	26	26	27	27	28	28	29	39
Services	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Chinese Taipei	49	51	51	51	51	52	50	51	52	55
Mongolia	..	58	56	55	56	56	53	55	55	46

Table 4.16: Sectoral Shares of Value Added as a Percentage of GDP, 1990-2005: Chinese Taipei and Mongolia

Agriculture	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Chinese Taipei	5	4	3	3	3	3	3	2	2	2	2	2	2	2	2	2
Mongolia	15	14	30	30	32	38	44	36	37	37	29	25	21	20	21	22
Industry	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Chinese Taipei	41	36	34	33	32	30	30	30	29	28	27	26	26	25	24	23
Mongolia	41	34	34	28	28	28	20	25	20	19	21	20	22	25	29	29
Services	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Chinese Taipei	55	61	62	63	65	66	67	68	69	70	71	72	73	74	74	75
Mongolia	44	52	36	42	39	34	36	39	43	44	50	55	58	55	50	49

We now review the economies in South Asia, Pakistan, Maldives, Sri Lanka, Bangladesh, Bhutan and Nepal in Table 4.17, Table 4.18 and Table 4.19. For Pakistan, the largest economy in the group, significant changes in its sectoral shares of value-added for 1970-2005 cannot be noted. In 1970 its agricultural sector added 37 percent to its GDP while in 2005 the share came to be 22 percent, a relatively modest decline. For its industrial sector, the figure for 1970 at 22 percent inches up to 25 percent in 2005. Pakistan's service sector value-added at 41 percent in 1970 experienced a modest increase to 53 percent in 2005. Nepal demonstrates a more progressive record of industrialization; its agricultural sector's share declined from 67 percent in 1970 to 38 percent in 2005, while the value-added from its industrial and service sectors recorded upward trends. Maldives report no data. Based on data for the 1980s and 1990s, both Bangladesh and Bhutan point to a modest trend toward industrialization.

In 2005, Pakistan, Bangladesh, Bhutan and Nepal reported their respective agricultural sectors' share of value added ranging from 22 to 38 percent of GDP; Sri Lanka's figure is as low as 17 percent. For their respective industrial sectors, the figures vary just as widely, from 21 percent for Nepal and 37 percent for Bhutan. For the service sector, the corresponding figures range between 38 percent for Bhutan and 57 percent

for Sri Lanka. In general, these economies continue to depend more on their respective agricultural sectors and their progress for industrialization lags behind the notable economic achievements made by many of their Asian neighbors.

Table 4.17: Sectoral Shares of Value Added as a Percentage of GDP, 1970-1979: Pakistan, Maldives, Sri Lanka, Bangladesh, Bhutan, and Nepal

Agriculture	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Pakistan	37	36	36	36	35	32	32	32	32	30
Maldives	..	..	..	..	..	..	..	..	..	..
Sri Lanka	28	27	26	27	33	30	29	31	30	27
Bangladesh	..	..	..	..	..	..	..	..	..	..
Bhutan	..	..	..	..	..	..	..	..	..	..
Nepal	67	68	69	67	71	72	69	64	63	64
Industry	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Pakistan	22	23	22	22	22	23	24	23	23	24
Maldives	..	..	..	..	..	..	..	..	..	..
Sri Lanka	24	25	24	25	25	26	27	29	27	28
Bangladesh	..	..	..	..	..	..	..	..	..	..
Bhutan	..	..	..	..	..	..	..	..	..	..
Nepal	12	9	9	10	9	8	9	11	12	12
Services	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Pakistan	41	41	42	42	43	45	44	45	46	46
Maldives	..	..	..	..	..	..	..	..	..	..
Sri Lanka	48	48	49	47	42	43	44	41	42	45
Bangladesh	..	..	..	..	..	..	..	..	..	..
Bhutan	..	..	..	..	..	..	..	..	..	..
Nepal	21	23	21	24	20	20	22	25	25	24

Table 4.18: Sectoral Shares of Value Added as a Percentage of GDP, 1980-1989: Pakistan, Maldives, Sri Lanka, Bangladesh, Bhutan, and Nepal

Agriculture	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Pakistan	30	31	32	30	28	29	28	26	26	27
Maldives	..	..	..	..	..	..	..	..	..	..
Sri Lanka	28	28	26	28	29	28	27	27	26	26
Bangladesh	32	32	31	31	32	33	32	32	31	30
Bhutan	47	43	43	42	44	45	43	39	40	39
Nepal	62	61	61	60	61	52	51	51	50	50
Industry	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Pakistan	25	23	22	22	23	22	23	24	24	24
Maldives	..	..	..	..	..	..	..	..	..	..
Sri Lanka	30	28	26	26	26	26	27	27	27	27
Bangladesh	21	21	21	22	21	21	22	21	21	21
Bhutan	16	23	26	28	26	23	25	30	27	28
Nepal	12	12	13	13	13	15	16	16	16	16
Services	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Pakistan	46	47	46	48	49	49	49	50	50	49
Maldives	..	..	..	..	..	..	..	..	..	..
Sri Lanka	43	44	47	45	45	46	46	46	47	48
Bangladesh	48	47	48	47	47	46	47	47	48	49
Bhutan	37	34	32	30	30	32	33	31	32	33
Nepal	26	27	26	27	26	33	33	33	34	34

Table 4.19: Sectoral Shares of Value Added as a Percentage of GDP, 1990-2005: Pakistan, Maldives, Sri Lanka, Bangladesh, Bhutan, and Nepal

Agriculture	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Pakistan	26	26	26	25	26	26	25	27	27	27	26	24	24	24	22	22
Maldives	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sri Lanka	26	27	26	25	24	23	22	22	21	21	20	20	21	19	18	17
Bangladesh	30	30	29	26	26	26	26	26	25	26	26	24	23	22	21	20
Bhutan	37	35	36	34	36	34	33	33	31	29	28	27	28	27	26	25
Nepal	51	48	45	42	42	41	40	40	39	40	40	38	39	39	39	38
Industry	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Pakistan	25	25	25	25	24	24	24	24	24	24	23	23	23	23	25	25
Maldives	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sri Lanka	26	26	26	26	26	27	26	27	28	27	27	27	26	26	27	26
Bangladesh	21	22	22	24	24	25	25	25	26	25	25	26	26	26	27	27
Bhutan	26	28	29	31	31	34	34	35	34	36	35	38	39	38	38	37
Nepal	16	18	20	21	21	22	22	22	22	21	21	21	21	21	21	21
Services	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Pakistan	49	49	49	50	50	50	50	50	49	49	51	53	53	53	53	53
Maldives	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sri Lanka	48	48	49	50	50	50	51	51	51	52	53	53	53	55	55	57
Bangladesh	48	48	48	50	50	49	49	49	49	49	49	50	51	52	52	53
Bhutan	37	37	35	36	33	32	33	32	35	35	36	35	34	35	36	38
Nepal	33	35	35	37	37	37	37	37	39	39	39	40	39	40	41	41

4.2 Rate of Growth of GDP

Following industrialization, an economy experiences capital-intensive modes of production and the basket of goods and services it produces consequently becomes larger. The outputs of the industrial and service sectors augment the output of the agricultural sector. Indeed, the modernization of the agricultural sector with the application of research-based advanced expertise contributes to an increase of the total output of the agricultural sector of a newly industrializing traditional agricultural economy. True, its sectoral share declines because contributions of the two other sectors add up to a larger aggregate of GDP.

Table 4.20, Table 4.21, Table 4.22, and Table 4.23 present a robust picture of the annual rate of growth of the AE-22. The presentation of the annual average rate of growth for 1970-79, 1980-89 and 1990-99 is followed by an average annual rate of growth for 2000-2005. The final column is a compilation of the average annual rate of growth for 1970-2005. For a mature industrialized economy, as Japan is, an annual average rate of 3.2 percent for 1970-2005 is an outstanding record. Following a high rate of growth in the 1970s, a policy of softening for Japan in the 1980s came in order. Japan did have problems in the following decade. The monetary-

fiscal policy measures eventually came to be in place, facilitating the restoration of positive economic growth.

Korea's average rate of growth for 1970-2005 at 7 percent points to the fact that Korean economy has successfully overcome the odds of the economy's savings-gap in the 1970s and also of the Asian financial crisis of 1997-98. China's record of growth at 9-plus percent a year for the 35 years is indeed an epochal event. It has been argued that China will continue to grow at that high rate for more years to come (Dutta 2006). India, with its 5.1 percent average annual rate of growth for the same time period is quite a few steps behind, even though her annual rate of growth since 1990s has witnessed an upswing, approaching 8 percent in recent years. Many of us enjoyed reading the recent account by L. Alan Winters and Shahid Yusuf (2007) and a more journalistic version by Robyn Meredith (2007). Indeed, China and India, each with a billion-plus population base and relatively large endowments of resources, warrant special rates of growth for the period.

Accepting the fact that an annual average rate of growth at 3 percent is an appropriate target rate for a mature industrialized economy, occasional bubbles apart, Japan is on its economic track. Korea, Chinese Taipei and Singapore, at average annual rates at 7-plus percent, may be in need of appropriate macroeconomic policies to soften their respective economies.

Cambodia, with an average rate of growth at 8.3 percent, is very much in a transitional stage, so is Mongolia with its average at 4.1 percent. The economies of Indonesia, Thailand, Malaysia and Vietnam, with average rates of annual growth of 6 percent for the period, present a record of industrial progress. The Philippines have suffered from political and separatist hostilities and have not enjoyed the same rate of economic growth.

Laos and Myanmar in Southeast Asia, and Pakistan, Bangladesh, Sri Lanka, Maldives and Nepal in South Asia could do better. Bhutan records a high rate of growth while the Maldives presents limited data. Be it noted that political instability continues to be a negative factor for several economies in South Asia including Pakistan, Sri Lanka, Nepal and Bangladesh. However, the competitive rates of growth of the AE-22 economies as a whole present a positive picture.

Table 4.20: Annual Average Rate of Growth of GDP, 1970-2005: China, Japan, Korea, and India

	1970-1979	1980-1989	1990-1999	2000-2005	1970-2005
China	7.5	9.8	10.0	9.2	9.1
Japan	5.2	3.8	1.4	1.7	3.2
Korea	8.2	7.8	6.2	5.2	7.0
India	2.9	5.9	5.6	6.3	5.1

Source: Compilation based on data in Appendix.

Table 4.21: Annual Average Rate of Growth of GDP, 1970-2005: Myanmar, Laos, Cambodia, Vietnam, Brunei, Singapore, Malaysia, Thailand, Philippines, and Indonesia

	1970-1979	1980-1989	1990-1999	2000-2005	1970-2005
Myanmar	4.3	2.0	6.1	9.2	5.0
Laos	n.a.	4.0	6.4	6.2	5.8
Cambodia	n.a.	n.a.	7.5	9.0	8.3
Vietnam	n.a.	4.6	7.5	7.3	6.8
Brunei	12.2	-2.3	1.6	3.0	2.3
Singapore	9.2	7.6	7.6	5.0	7.6
Malaysia	7.8	5.8	7.3	5.2	6.7
Thailand	7.3	7.4	5.2	4.8	6.3
Philippines	5.9	2.0	2.6	4.7	3.7
Indonesia	7.8	6.2	4.9	4.8	6.1

Source: Same as Table 4.20.

Table 4.22: Annual Average Rate of Growth of GDP, 1970-2005: Chinese Taipei and Mongolia

	1970-1979	1980-1989	1990-1999	2000-2005	1970-2005
Chinese Taipei	10.2	8.2	6.5	3.6	7.5
Mongolia	n.a.	5.9	2.2	4.8	4.1

Source: Same as Table 4.20.

Table 4.23: Annual Average Rate of Growth of GDP, 1970-2005: Pakistan, Maldives, Sri Lanka, Bangladesh, Bhutan, and Nepal

	1970-1979	1980-1989	1990-1999	2000-2005	1970-2005
Pakistan	4.8	7.0	4.1	4.7	5.2
Maldives	n.a.	n.a.	9.5	4.7	6.6
Sri Lanka	4.2	4.1	5.3	4.0	4.4
Bangladesh	1.7	3.2	4.8	5.3	3.6
Bhutan	n.a.	9.4	4.5	7.2	6.9
Nepal	2.5	4.1	4.7	3.5	3.7

Source: Same as Table 4.20.

Figure 4.1, Figure 4.2,

Figure 4.3,

Figure 4.4, and Figure 4.5 offer a graphic summary of the profiles of rates of growth of the AE-22 economies.

Figure 4.1: Rate of Growth of GDP, 1970-2006: Japan, Korea, China, and India

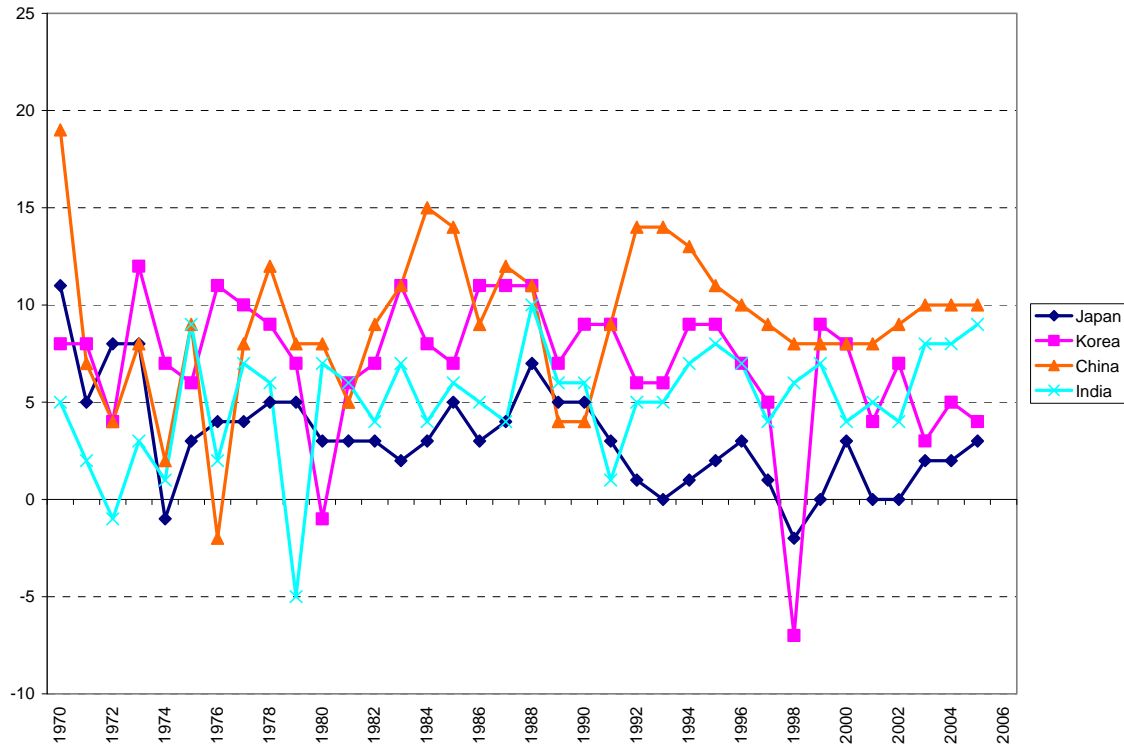


Figure 4.2: Rate of Growth of GDP, 1970-2006: Indonesia, Philippines, Thailand, Malaysia, and Singapore

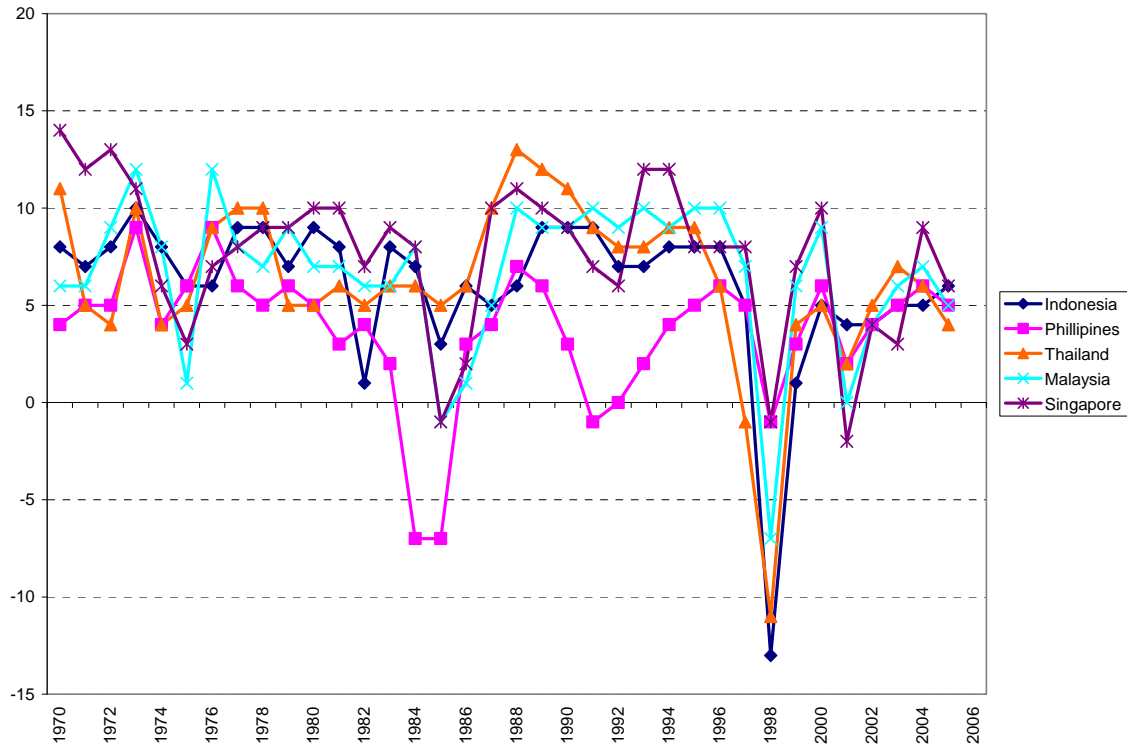


Figure 4.3: Rate of Growth of GDP, 1970-2006: Brunei, Vietnam, Cambodia, Laos, and Myanmar

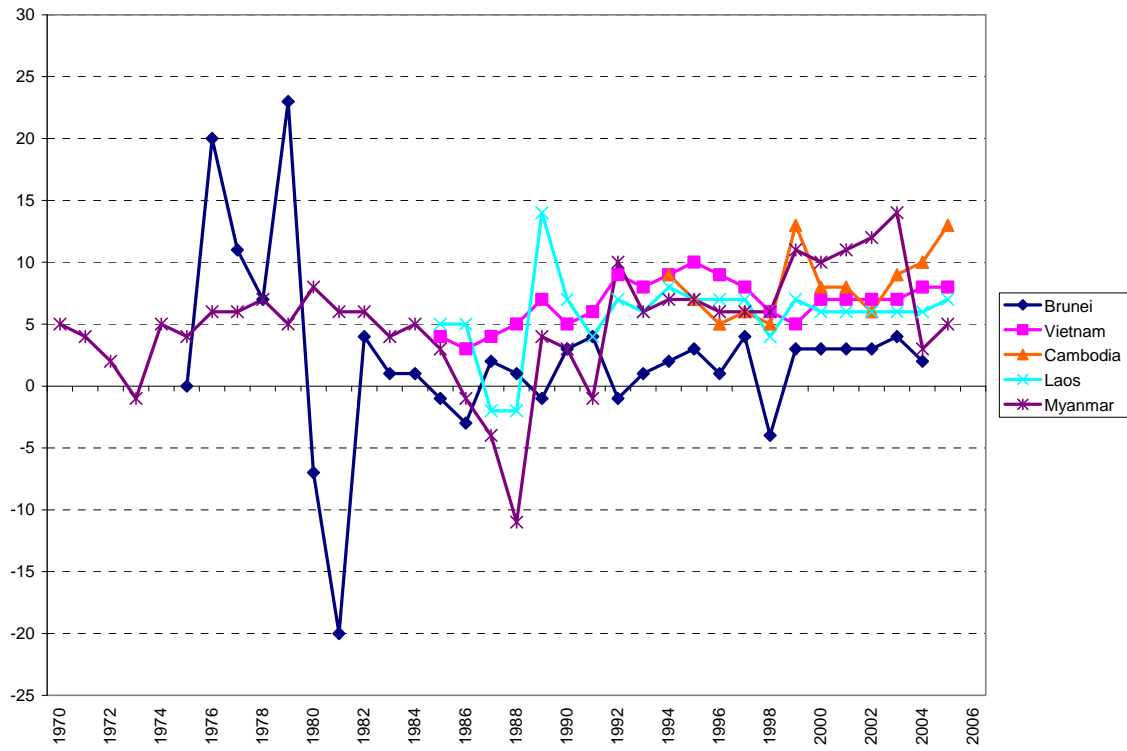


Figure 4.4: Rate of Growth of GDP, 1970-2006: Chinese Taipei and Mongolia

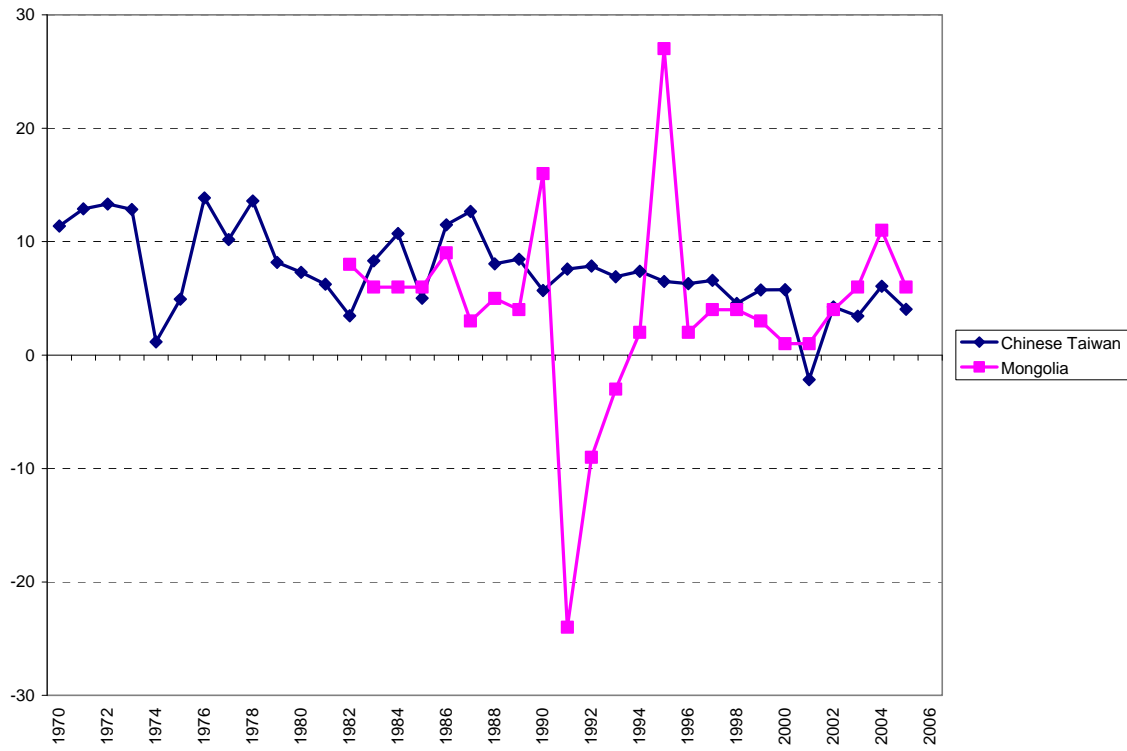
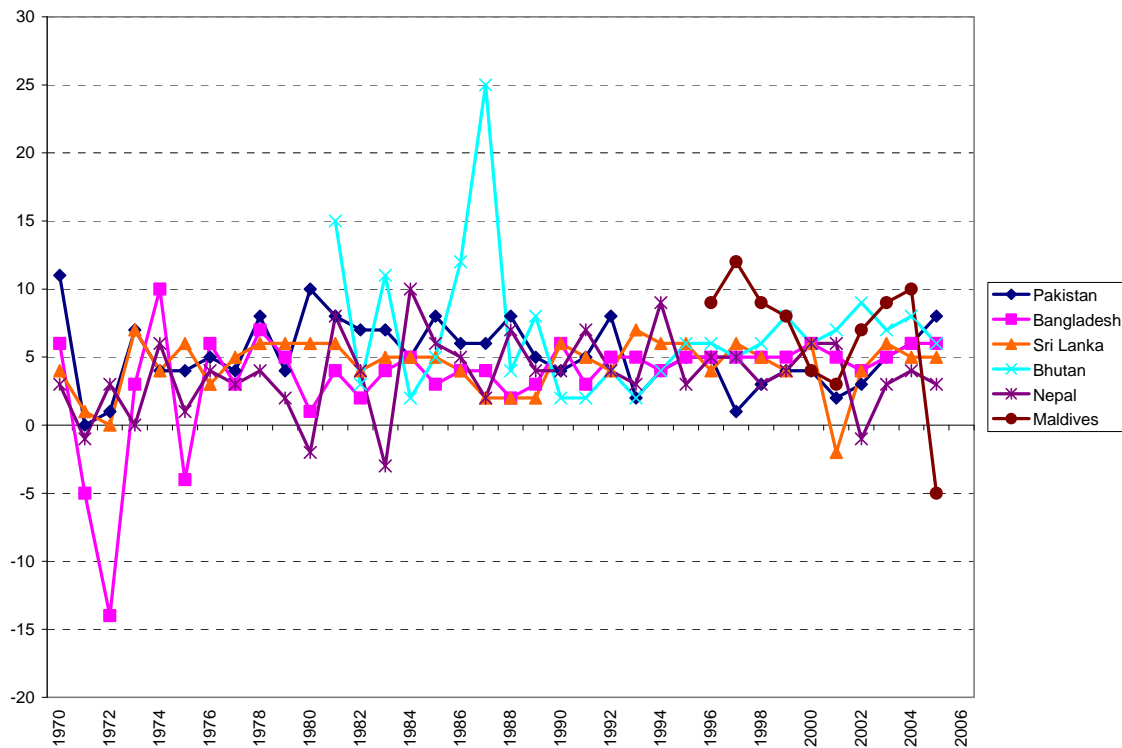


Figure 4.5: Rate of Growth of GDP, 1970-2006: Pakistan, Bangladesh, Sri Lanka, Bhutan, Nepal, and the Maldives



4.3 Savings/GDP and Investment/ GDP Ratios

The growth of an economy is conditioned by net investment, which is made possible by the availability of savings. Hence, the two ratios, savings/GDP and investment/GDP, are critical parameters. Table 4.24 through Table 4.35 present the sets of data for the 22 member economies.

China has a high rate of Savings/GDP ratio for 1970-2005, the ratio ranging between 27 and 49. True, sustained inflows of foreign direct investment became a contributing factor. It was successfully matched by

their investment/GDP ratio and a high rate of growth followed. Japan maintained a consistent pattern for the time period, corresponding to the growth rate of its GDP. In 1970s and early 1980s, Korea experienced a savings gap as its savings/GDP ratio consistently remained much lower than its investment/GDP ratio. To compensate, Korean business houses successfully negotiated loans from the overseas banks, mainly American. For the same period, India cautiously maintained equilibrium between the two ratios, though they were persistently at a lower rate. India did not welcome foreign investments, and for its policy India became known as a foreign-investment unfriendly economy. The competitively lower rate of growth of India's GDP reflects the consequence. In Southeast Asia, Singapore has a profile of its own as a result of its being the hub of financial market of the British Imperial hegemony in earlier decades. Thailand, Malaysia and Indonesia record data on the two ratios which lend to the growth profile of their respective economies. The Philippines is a special case where domestic political crisis contributed to an economic profile of limited achievements. The absence of relevant data for the other five ASEAN economies limits further analysis.

The two ratios for the Chinese Taipei point to its competitive economic standing, which was dependent upon the indigenous ability to

access availability of savings and entrepreneurial spirit. The Mongolian economy reports data only for the 1990-2005, which, of course, points to the economy's promise for the years ahead. In South Asia, inclusive of Pakistan and Bangladesh, the two largest economies in the region, the data on the two ratios support the relatively lower level of industrialization of these economies. However, economies of Bhutan and Sri Lanka merit further attention.

Table 4.24: Savings and Investment as a Percentage of GDP, 1970-1979:
China, Japan, Korea, and India

Savings	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
China	29	29	27	30	29	30	28	29	38	36
Japan	41	39	38	39	37	33	33	33	33	32
Korea	15	15	17	22	21	20	25	28	29	29
India	15	16	16	16	17	18	19	19	19	19

Investment	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
China	29	30	27	29	29	30	28	28	38	37
Japan	40	36	36	39	38	33	32	31	31	33
Korea	25	26	22	26	32	29	27	29	33	36
India	16	17	16	17	18	19	19	19	21	21

Note: Data on gross capital formation is used for investment. Data on changes in inventories is not available.

Table 4.25: Savings and Investment as a Percentage of GDP, 1980-1989:
China, Japan, Korea, and India

Savings	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
China	35	34	36	35	35	34	36	37	37	36
Japan	32	32	31	30	31	32	32	32	33	34
Korea	24	24	26	28	30	31	34	37	39	36
India	16	20	19	18	20	21	21	21	22	23

Investment	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
China	35	34	34	34	35	39	39	37	38	37
Japan	33	32	30	28	28	29	28	29	31	32
Korea	32	30	29	29	30	30	29	30	31	34
India	19	22	22	20	22	24	23	22	24	24

Note: Data on gross capital formation is used for investment. Data on changes in inventories is not available.

Table 4.26: Savings and Investment as a Percentage of GDP, 1990-2005: China, Japan, Korea, and India

Savings	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
China	40	40	40	42	44	44	42	42	41	40	38	38	40	43	46	49
Japan	34	34	33	32	30	30	29	29	28	26	27	25	24	25	25	
Korea	36	37	36	36	36	37	35	35	38	36	34	32	30	32	35	33
India	23	22	23	21	23	25	21	21	20	24	24	24	25	27	28	30

Investment	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
China	36	36	38	44	42	42	40	38	37	37	35	36	38	41	43	43
Japan	33	33	31	30	28	28	29	28	26	25	25	25	23	23	23	..
Korea	38	40	37	36	37	38	39	36	25	29	31	29	29	30	30	30
India	24	22	24	21	23	27	22	23	21	26	25	24	26	27	31	33

Note: Data on gross capital formation is used for investment. Data on changes in inventories is not available.

Table 4.27: Savings and Investment as a Percentage of GDP, 1970-1979:
Myanmar, Laos, Cambodia, Vietnam, Brunei, Singapore, Malaysia,
Thailand, Philippines, and Indonesia

Savings	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Myanmar	11	9	10	11	8	9	9	9	11	17
Laos										
Cambodia	11									
Vietnam										
Brunei										
Singapore	18	19	25	29	29	29	33	34	34	36
Malaysia	24	22	20	28	28	23	31	30	29	35
Thailand	21	21	21	26	24	22	22	21	24	21
Philippines	22	21	21	27	25	25	27	28	26	28
Indonesia	14	17	23	23	29	27	27	29	27	33

Investment	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Myanmar	14	12	12	11	10	10	10	13	18	22
Laos	..	..	..	..	..	..	..	..	..	..
Cambodia	13	..	..	..	..	..	..	..	..	..
Vietnam	..	..	..	..	..	..	..	..	..	..
Brunei	..	..	..	..	..	..	..	..	..	..
Singapore	39	41	41	39	45	40	41	36	39	43
Malaysia	20	20	21	23	28	23	21	23	24	26
Thailand	26	24	22	27	27	27	24	27	28	27
Philippines	21	21	21	22	27	31	33	31	31	33
Indonesia	16	18	22	21	20	24	24	23	24	25

Note: Data on gross capital formation is used for investment. Data on changes in inventories is not available.

Table 4.28: Savings and Investment as a Percentage of GDP, 1980-1989:
Myanmar, Laos, Cambodia, Vietnam, Brunei, Singapore, Malaysia,
Thailand, Philippines, and Indonesia

Savings	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Myanmar	18	17	13	14	12	12	10	8	11	9
Laos					3	1	3	2	-5	
Cambodia									2	3
Vietnam							4	5	7	4
Brunei										
Singapore	38	41	44	47	46	41	38	38	41	43
Malaysia	30	25	25	28	32	30	29	35	34	34
Thailand	23	23	25	23	25	26	28	28	31	33
Philippines	24	24	22	23	19	16	19	18	20	19
Indonesia	38	32	29	30	30	30	29	32	32	35

Investment	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Myanmar	21	23	22	18	15	16	13	12	13	9
Laos	..	..	..	..	6	7	7	10	14	..
Cambodia	..	..	..	..	..	..	..	..	9	11
Vietnam	..	..	..	..	..	..	14	14	18	15
Brunei	..	..	..	..	..	..	..	..	..	..
Singapore	46	46	48	48	49	43	38	38	34	35
Malaysia	27	32	34	34	30	25	23	21	24	28
Thailand	29	30	27	30	29	28	26	28	33	35
Philippines	29	27	28	30	20	14	15	17	19	22
Indonesia	24	27	28	31	27	28	30	30	29	33

Note: Data on gross capital formation is used for investment. Data on changes in inventories is not available.

Table 4.29: Savings and Investment as a Percentage of GDP, 1990-2005: Myanmar, Laos, Cambodia, Vietnam, Brunei, Singapore, Malaysia, Thailand, Philippines, and Indonesia

Savings	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Myanmar	11	14	13	12	12	13	13	11	12	13	12					
Laos																
Cambodia	2	8	7	-6	-1	-1	-4	3	-1	4	5	10	11	11	10	11
Vietnam	3	10	14	15	16	18	17	20	22	25	27	29	29	27	28	30
Brunei																
Singapore	44	46	46	46	48	50	51	51	52	49	47	42	41	44	47	49
Malaysia	34	34	37	39	40	40	43	44	49	47	47	42	42	42	44	43
Thailand	34	36	36	36	35	35	36	35	36	33	31	31	30	32	32	30
Philippines	18	17	16	16	18	15	15	14	14	19	23	16	17	11	13	10
Indonesia	32	33	33	32	32	31	30	31	27	19	33	30	27	33	28	27

Investment	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Myanmar	13	15	14	12	12	14	13	12	12	13	12	15	..	..	..	..
Laos	..	..	..	..	..	..	..	..	..	..	21	21	19	26	32	32
Cambodia	8	9	10	11	12	14	15	15	12	17	17	19	20	21	18	20
Vietnam	13	15	18	24	25	27	28	28	29	28	30	31	33	35	36	35
Brunei	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Singapore	37	35	36	38	34	34	35	39	31	32	33	26	24	16	19	19
Malaysia	32	38	35	39	41	44	41	43	27	22	27	24	24	22	23	20
Thailand	41	43	40	40	40	42	42	34	20	21	23	24	24	25	27	32
Philippines	24	20	21	24	24	22	24	25	20	19	21	19	18	17	17	15
Indonesia	31	32	30	29	31	32	31	32	17	11	22	22	21	25	23	22

Note: Data on gross capital formation is used for investment. Data on changes in inventories is not available.

Table 4.30: Savings and Investment as a Percentage of GDP, 1970-1979:
Chinese Taipei and Mongolia

Savings	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Chinese Taipei	25	29	32	34	31	27	33	33	35	34
Mongolia										
Investment	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Chinese Taipei	26	26	26	29	39	30	31	28	28	33
Mongolia	..	..	..	..	..	..	..	..	..	..

Note: Data on gross capital formation is used for investment. Data on changes in inventories is not available.

Table 4.31: Savings and Investment as a Percentage of GDP, 1980-1989:
Chinese Taipei and Mongolia

Savings	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Chinese Taipei	33	32	30	32	33	32	37	38	34	31
Mongolia		23	32	22	22	21	13	9	9	16
Investment	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Chinese Taipei	34	30	25	23	22	19	18	20	23	23
Mongolia	..	70	70	58	58	63	64	51	47	48

Note: Data on gross capital formation is used for investment. Data on changes in inventories is not available.

Table 4.32: Savings and Investment as a Percentage of GDP, 1990-2005: Chinese Taipei and Mongolia

Savings	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Chinese Taipei	28	28	27	28	27	27	26	26	26	26	25	24	25	25	25	24
Mongolia	9	3	22	12	11	31	22	34	22	23	19	17	11	19	24	28

Investment	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Chinese Taipei	22	23	25	25	25	25	23	24	25	24	23	18	17	17	21	
Mongolia	36	37	30	25	22	32	30	28	35	37	36	36	32	38	37	35

Note: Data on gross capital formation is used for investment. Data on changes in inventories is not available.

Table 4.33: Savings and Investment as a Percentage of GDP, 1970-1979:
Pakistan, Maldives, Sri Lanka, Bangladesh, Bhutan, and Nepal

Savings	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Pakistan	9	10	9	10	6	5	9	10	9	6
Maldives										
Sri Lanka	16	15	16	13	8	8	14	18	15	14
Bangladesh	7	4	-3	3	1	1	-3	6	2	2
Bhutan										
Nepal	3	4	5	5	4	10	12	13	13	12

Investment	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Pakistan	16	16	14	13	13	16	17	19	18	18
Maldives	..	..	..	..	..	..	..	..	..	..
Sri Lanka	19	17	17	14	16	16	16	14	20	26
Bangladesh	11	8	5	9	7	6	10	12	12	11
Bhutan	..	..	..	..	..	..	..	..	..	..
Nepal	6	8	7	9	9	14	15	16	18	16

Note: Data on gross capital formation is used for investment. Data on changes in inventories is not available.

Table 4.34: Savings and Investment as a Percentage of GDP, 1980-1989:
Pakistan, Maldives, Sri Lanka, Bangladesh, Bhutan, and Nepal

Savings	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Pakistan	7	8	7	8	7	6	8	11	10	11
Maldives										
Sri Lanka	11	12	12	14	20	10	12	13	12	11
Bangladesh	2	8	7	8	6	9	10	9	9	9
Bhutan	6	-1	1	5	5	7	7	23	18	25
Nepal	11	11	10	9	10	13	10	11	10	11

Investment	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Pakistan	18	19	19	19	18	18	19	19	18	19
Maldives	..	..	..	..	..	..	..	..	..	..
Sri Lanka	34	28	31	29	26	22	24	23	23	22
Bangladesh	14	18	18	17	16	16	17	16	16	17
Bhutan	31	32	34	37	37	43	40	37	40	36
Nepal	18	18	17	20	19	22	19	20	20	22

Note: Data on gross capital formation is used for investment. Data on changes in inventories is not available.

Table 4.35: Savings and Investment as a Percentage of GDP, 1990-2005: Pakistan, Maldives, Sri Lanka, Bangladesh, Bhutan, and Nepal

Savings	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Pakistan	11	17	17	15	17	16	14	13	17	14	16	16	17	18	18	12
Maldives						47	49	46	47	44	44	45	46	49	46	
Sri Lanka	14	14	15	16	15	15	15	17	19	19	17	16	14	16	16	15
Bangladesh	10	11	13	13	14	13	12	15	17	17	18	17	18	18	19	18
Bhutan	29	23	16	31	41	41	32	22	19	19	30	42	43	43	48	33
Nepal	8	10	11	14	15	15	14	14	14	14	15	15	12	12	13	12

Investment	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Pakistan	19	19	20	21	20	19	19	18	18	16	17	17	17	17	17	17
Maldives	..	..	..	..	..	31	31	33	30	34	26	28	26	27	35	35
Sri Lanka	23	23	24	26	27	26	24	24	25	27	28	22	21	22	25	26
Bangladesh	17	17	17	18	18	19	20	21	22	22	23	23	23	23	24	25
Bhutan	32	30	40	44	51	46	42	33	35	39	47	59	59	58	61	60
Nepal	18	21	21	23	22	25	27	25	25	20	24	24	24	26	26	29

Note: Data on gross capital formation is used for investment. Data on changes in inventories is not available.

4.4 The Role of Money: Money Supply as a percent of GDP and the Rate of Inflation

The role of money in a modern economy is well known and we now review the data on money supply (M2) as percent of GDP for 1970-2005 in Table 4.36, Table 4.37, Table 4.38, Table 4.39, and Table 4.40. To support the process of industrialization, Asia's newly industrializing economies added to their money supplies which was expectedly matched by the growth of the economies in real terms. If not, the consequent inflationary pressures became a challenge.

For China, the money-supply increased from 24 percent of GDP in 1978 to 151 percent in 2005, matching its growth of GDP for the period at a high rate. Even so, China became exposed to serious rates of inflation more than once. For Japan, only one mature industrialized economy of Asia, money supply increased from 85 percent of GDP in 1970 to 209 percent in 2005. Japan's monetary policy toward maintaining its rate of interest at some zero/negative rate for periods of time became a notable experiment. For Korea, the rate progressively moved up from 29 percent of GDP in 1970 to 69 percent in 2005. The data on India present a picture of much caution, and its share of money supply moved up from 21 percent in 1970 to 62 percent in 2005. One can point out that for the period India experienced

inflationary pressure, due much to its policy of absorbing all losses from its government-controlled-and- government-managed corporate entities in the public sector, in its two-sector model of five-year economic plans, in its national budget with consequent persistence of deficits. How much of its relatively conservative monetary policy was responsible for India's modest rate of growth for the time period must be independently evaluated. For Laos, Cambodia, Vietnam and Brunei, data are limited to 1990s. For Myanmar, given the fact that its money supply as a percent of GDP ranges from 24 percent in 1970 to 23 percent in 2005, the monetary policy under its military rule remains to be explored. The situations in Laos, Cambodia and Vietnam merit further critical review. Brunei's data is limited to 2000-2005, and it is modestly pro-growth. For Singapore, Malaysia and Thailand, the data for 1970-2005 lend support to growth paradigm, while the data of the Philippines and Indonesia present their respective monetary policies of growth with caution against inflationary threats.

Chinese Taipei has implemented its pro-growth monetary policy, successfully containing inflation. The monetary policy of Mongolia with its data for 1992-2005 must wait for fuller evaluation.

For Pakistan, Maldives, Sri Lanka, Bangladesh, Bhutan and Nepal, the money supply data present a mixed scenario. For Pakistan the supply varies

between a low of 31 percent in 1974 and a high of 45 percent in 2005.

Maldives report data for 1980-2005 and its monetary policy is quite cautious. Bhutan with its data for 1984 -2005, and Nepal with its data for 1970-2005 demonstrate similar caution. Bangladesh from its base of 8 percent of GDP has progressively increased its money supply to 41 percent in 2005, with support for its rate of growth.

Table 4.36: Money (M2) as a Percentage of GDP, 1970-2005: China, Japan, Korea, and India

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
China	..	..	..	..	..	..	..	..	24	27
Japan	85	108	118	118	115	120	124	128	132	138
Korea	29	29	30	31	29	27	26	27	28	28
India	21	22	23	23	22	23	26	28	31	33
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
China	33	38	40	42	44	47	55	60	59	62
Japan	140	144	152	159	162	163	169	178	181	185
Korea	29	29	32	33	32	32	32	32	33	35
India	33	33	34	34	36	38	39	40	40	40
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
China	70	77	81	85	86	89	96	106	117	126
Japan	186	186	189	195	201	207	211	217	231	241
Korea	34	34	35	36	36	36	37	39	48	56
India	40	41	42	42	43	42	42	45	46	48
	2000	2001	2002	2003	2004	2005				
China	130	133	142	150	148	151				
Japan	243	226	208	210	210	209				
Korea	64	71	72	74	71	69				
India	52	55	59	60	61	62				

Source: World Development Indicators (2006)

Table 4.37: Money (M2) as a Percentage of GDP, 1970-2005: Myanmar, Laos, Cambodia, Vietnam, and Brunei

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Myanmar	24	25	27	29	22	21	21	21	21	22
Laos	..	..	..	..	..	..	..	..	..	..
Cambodia	..	..	..	..	..	..	..	..	..	..
Vietnam	..	..	..	..	..	..	..	..	..	..
Brunei	..	..	..	..	..	..	..	..	..	..
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Myanmar	24	26	27	29	32	33	35	30	27	22
Laos	..	..	..	..	..	..	..	..	4	6
Cambodia	..	..	..	..	..	..	..	..	..	..
Vietnam	..	..	..	..	..	..	..	..	..	..
Brunei	..	..	..	..	..	..	..	..	..	..
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Myanmar	24	27	27	24	24	26	27	26	23	23
Laos	7	7	8	11	13	13	13	15	15	12
Cambodia	..	..	..	..	6	7	8	10	10	10
Vietnam	..	..	..	19	..	..	19	20	22	29
Brunei	..	..	..	..	..	..	..	..	..	..
	2000	2001	2002	2003	2004	2005				
Myanmar	27	28	24	20	22	23				
Laos	14	15	17	17	18	17				
Cambodia	12	13	15	17	18	18				
Vietnam	39	47	50	54	61	68				
Brunei	100	111	103	98	96	88				

Source: World Development Indicators (2006)

Table 4.38: Money (M2) as a Percentage of GDP, 1970-2005: Singapore, Malaysia, Thailand, Philippines, and Indonesia

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Singapore	62	59	58	55	52	56	59	59	58	58
Malaysia	35	38	41	40	47	62	60	63	66	66
Thailand	30	33	36	34	33	36	37	38	37	38
Philippines	23	22	23	21	18	18	19	21	23	23
Indonesia	8	10	12	12	11	13	14	14	14	13
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Singapore	58	61	65	66	66	71	75	79	77	80
Malaysia	71	81	87	91	93	108	130	126	116	118
Thailand	38	39	43	48	55	59	62	63	62	64
Philippines	22	23	24	28	26	27	27	26	26	29
Indonesia	13	15	17	17	18	21	25	25	26	28
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Singapore	85	88	90	84	82	82	82	83	103	120
Malaysia	89	62	81	101	105	107	111	117	125	125
Thailand	68	73	76	79	79	79	81	91	107	114
Philippines	31	32	34	38	42	47	51	56	59	60
Indonesia	34	37	39	40	41	43	47	50	48	55
	2000	2001	2002	2003	2004	2005				
Singapore	108	115	114	116	111	110				
Malaysia	122	137	135	131	126	125				
Thailand	112	113	111	110	108	105				
Philippines	59	58	57	56	53	51				
Indonesia	50	47	46	45	44	41				

Source: World Development Indicators (2006)

Table 4.39: Money (M2) as a Percentage of GDP, 1970-2005: Chinese Taipei and Mongolia

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Chinese Taipei	15	17	19	22	19	22	23	26	30	27
Mongolia	..	..	..	..	..	..	..	..	..	..
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Chinese Taipei	27	25	27	29	29	30	40	48	56	53
Mongolia	..	..	..	..	..	..	..	..	..	..
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Chinese Taipei	44	44	44	46	47	44	43	43	42	47
Mongolia	..	..	24	14	18	16	17	17	21	21
	2000	2001	2002	2003	2004	2005				
Chinese Taipei	45	51	54	64	68	71				
Mongolia	24	26	32	40	41	44				

Source: World Development Indicators (2006), Statistical Yearbook of the Republic of China (2005)

Table 4.40: Money (M2) as a Percentage of GDP, 1970-2005: Pakistan, Maldives, Sri Lanka, Bangladesh, Bhutan, and Nepal

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Pakistan	41	44	47	44	36	31	33	36	37	40
Maldives	..	..	..	..	..	..	..	..	..	..
Sri Lanka	22	23	24	22	18	18	18	21	24	27
Bangladesh	..	..	..	..	..	8	11	13	12	13
Bhutan	..	..	..	..	..	..	..	..	..	..
Nepal	11	11	12	15	14	12	14	18	19	20
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Pakistan	39	37	37	40	39	38	40	42	40	38
Maldives	36	44	43	34	21	23	26	24	24	24
Sri Lanka	28	28	29	29	27	29	29	29	29	29
Bangladesh	13	14	14	16	18	19	20	20	21	22
Bhutan	..	..	..	..	18	19	18	16	17	20
Nepal	22	22	24	26	26	26	26	27	27	29
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Pakistan	37	36	38	42	42	41	42	44	45	44
Maldives	24	24	24	25	28	29	31	34	40	41
Sri Lanka	26	27	28	29	30	34	36	35	35	36
Bangladesh	22	23	24	25	27	27	28	28	28	29
Bhutan	20	22	23	25	25	29	30	34	39	41
Nepal	30	31	30	32	34	36	36	39	43	44
	2000	2001	2002	2003	2004	2005				
Pakistan	37	38	41	43	45	45				
Maldives	40	41	44	48	53	65				
Sri Lanka	36	37	37	38	39	40				
Bangladesh	32	35	37	38	39	41				
Bhutan	46	45	46	47	46	47				
Nepal	47	42	35	35	37	38				

Source: World Development Indicators (2006)

For China, the high rates of inflation in the 1970s eventually moderated by the end of the decade. The two inflationary outbursts in 1988 and 1989, and again in 1993-94-95 have been on record. The monetary policy was forcefully managed to contain the situations and for 1997 through 2005, the inflationary pressure was not evident. For the time period of the

study, Japan has managed its inflation rate well with notable exception for the mid -1970s. Indeed, during the period the petroleum supply came to be managed by the petroleum producing countries and the consequent price push impacted most economies. India presents a picture of relative higher rate of inflation for much of the period. For the recent years, especially for 2000-2005, its monetary-fiscal policy has contained its rate of inflation, which compares with the rates in China and Korea; for the same period Japan, of course, records zero or negative inflation rates.

Based on limited data below, Myanmar, Laos, Cambodia present a picture of varied rates of inflation while Brunei and Vietnam offer a more progressive report for 1990 -2005. It may be noted that Vietnam which experienced high triple-digit inflation rates during the years of war, has managed its monetary policy to contain it, bringing it down to single digit. Except for the years of the oil-shock in mid-1970s, Singapore, Malaysia and Thailand have experienced limited inflation rates for 1970-2005. True Thailand had problem of its own in 1980 and 1981. For the Philippines and Indonesia the story is different and the two economies have in general remained exposed to inflationary challenges. In the Philippines the rate was as high as 50 percent in 1984 while Indonesia was hurt by the high rate of 58 percent in 1998. With the exception of Indonesia and the Philippines, the

economies of Singapore, Malaysia, and Thailand, from 1982 through 2005, present an instructive story of monetary policy. Singapore reported a negative rate in 1986 and in 1976.

For 1970-2005, Chinese Taipei has a record of very modest inflation rates, except for 1974, 1980 and 1981. Generally; it records low single digit rates of inflation, with zero rates for as many as six years. Data on Mongolia is limited to 1993-2005, showing its score of moderating the inflation rate from a high of 268 percent in 1993 to low of single digits in subsequent years.

The economies of Pakistan, Maldives, Sri Lanka, Bangladesh, Bhutan and Nepal offer varied inflationary situations. Pakistan has contained its inflation rate to single-digit rates for 1998-2005. Indeed for this time period, other economies in the region report the same pattern, with variations for Sri Lanka in 2001 and 2002, and for Nepal in 1998.

Table 4.41: Annual Change in Inflation, 1970-2005: China, Japan, Korea, and India

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
China	..	..	..	..	..	..	..	..	..	..
Japan	8	6	5	12	23	12	9	8	4	4
Korea	16	13	12	3	24	25	15	10	14	18
India	5	3	6	17	29	6	-8	8	3	6
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
China	..	..	..	..	..	..	..	7	19	18
Japan	8	5	3	2	2	2	1	0	1	2
Korea	29	21	7	3	2	2	3	3	7	6
India	11	13	8	12	8	6	9	9	10	6
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
China	3	4	6	15	24	17	8	3	-1	-1
Japan	3	3	2	1	1	0	0	2	1	0
Korea	9	9	6	5	6	4	5	4	8	1
India	9	14	12	6	10	10	9	7	13	5
	2000	2001	2002	2003	2004	2005				
China	0	0	-1	1	4	2				
Japan	-1	-1	-1	0	0	0				
Korea	2	4	3	4	4	3				
India	4	4	4	4	4	4				

Source: World Development Indicators (2006)

Table 4.42: Annual Change in Inflation, 1970-2005: Myanmar, Laos, Cambodia, Vietnam, and Brunei

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Myanmar	-4	2	8	25	25	32	22	-1	-6	6
Laos	..	..	..	..	..	..	..	..	..	..
Cambodia	..	..	..	..	..	..	..	..	..	..
Vietnam	..	..	..	..	..	..	..	..	..	..
Brunei	..	..	..	..	..	..	..	..	..	..
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Myanmar	1	0	5	6	5	7	9	25	16	27
Laos	..	..	..	..	..	..	..	..	..	61
Cambodia	..	..	..	..	..	..	..	..	..	..
Vietnam	..	..	..	..	..	..	..	..	..	..
Brunei	..	9	6	1	3	2	2	1	1	1
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Myanmar	18	32	22	32	24	25	16	30	51	18
Laos	36	13	10	6	7	20	13	28	91	128
Cambodia	..	..	..	..	..	1	10	3	15	4
Vietnam	..	..	..	..	..	..	6	3	7	4
Brunei	2	2	1	4	2	6	2	2	0	0
	2000	2001	2002	2003	2004	2005				
Myanmar	0	21	57	37	5	9				
Laos	25	8	11	15	10	7				
Cambodia	-1	-1	3	1	4	6				
Vietnam	-2	0	4	3	8	8				
Brunei	2	1	-2	0	1	1				

Source: World Development Indicators (2006)

Table 4.43: Annual Change in Inflation, 1970-2005: Singapore, Malaysia, Thailand, Philippines, and Indonesia

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Singapore	0	2	2	20	22	3	-2	3	5	4
Malaysia	2	2	3	11	17	4	3	5	5	4
Thailand	0	0	5	16	24	5	4	8	8	10
Philippines	14	21	8	17	34	7	9	10	7	18
Indonesia	12	4	7	31	41	19	20	11	8	16
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Singapore	9	8	4	1	3	0	-1	1	2	2
Malaysia	7	10	6	4	4	0	1	0	3	3
Thailand	20	13	5	4	1	2	2	2	4	5
Philippines	18	13	10	10	50	23	1	4	9	11
Indonesia	18	12	9	12	10	5	6	9	8	6
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Singapore	3	3	2	2	3	2	1	2	0	0
Malaysia	3	4	5	4	4	3	3	3	5	3
Thailand	6	6	4	3	5	6	6	6	8	0
Philippines	13	18	9	7	8	7	8	6	9	6
Indonesia	8	9	8	10	9	9	8	6	58	20
	2000	2001	2002	2003	2004	2005				
Singapore	1	1	0	1	2	0				
Malaysia	2	1	2	1	1	3				
Thailand	2	2	1	2	3	5				
Philippines	4	7	3	3	6	8				
Indonesia	4	12	12	7	6	10				

Source: World Development Indicators (2006)

Table 4.44: Annual Change in Inflation, 1970-2005: Chinese Taipei and Mongolia

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Chinese Taipei	4	3	3	8	47	5	2	7	6	10
Mongolia	..	..	..	..	..	..	..	..	..	..
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Chinese Taipei	19	16	3	1	0	0	1	1	1	4
Mongolia	..	..	..	..	..	..	..	..	..	..
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Chinese Taipei	4	4	4	3	4	4	3	1	2	0
Mongolia	..	..	..	268	88	47	37	9	7	12
	2000	2001	2002	2003	2004	2005				
Chinese Taipei	1	0	0	0	2	2				
Mongolia	6	1	5	8	4	9				

Source: World Development Indicators (2006), Statistical Yearbook of the Republic of China (2005)

Table 4.45: Annual Change in Inflation, 1970-2005: Pakistan, Maldives, Sri Lanka, Bangladesh, Bhutan, and Nepal

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Pakistan	5	5	5	23	27	21	7	10	6	8
Maldives	..	..	..	..	..	..	..	..	13	28
Sri Lanka	6	3	6	10	12	7	1	1	12	11
Bangladesh	..	..	..	..	..	..	..	..	..	..
Bhutan	..	..	..	..	..	..	..	..	..	..
Nepal	15	-2	8	11	20	8	-3	10	7	4
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Pakistan	12	12	6	6	6	6	4	5	9	8
Maldives	24	24	22	..	..	..	..	..	..	7
Sri Lanka	26	18	11	14	17	1	8	8	14	12
Bangladesh	..	..	..	..	..	..	..	10	7	6
Bhutan	..	10	10	18	7	2	10	6	10	9
Nepal	15	11	12	12	3	8	19	11	9	9
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Pakistan	9	12	10	10	12	12	10	11	6	4
Maldives	4	15	17	20	3	5	6	8	-1	3
Sri Lanka	21	12	11	12	8	8	16	10	9	5
Bangladesh	6	6	4	3	5	10	2	5	8	6
Bhutan	10	12	16	11	7	9	9	7	11	7
Nepal	8	16	17	8	8	8	9	4	11	7
	2000	2001	2002	2003	2004	2005				
Pakistan	4	3	3	3	7	9				
Maldives	-1	1	1	-3	6	3				
Sri Lanka	6	14	10	6	8	12				
Bangladesh	2	2	3	6	9	7				
Bhutan	4	3	2	2	5	5				
Nepal	2	3	3	6	3	7				

Source: World Development Indicators (2006)

4.5 The Government Sector

For China, Japan, Korea and India, the data for the 1970s and 1980s are limited. Discussions here center on 1990-2005. In Japan, the percentage of government consumption of GDP is progressively approaching 20 percent. For China it varies between 14 and 16 percents, while for Korea

and India the shares are between 11 and 13 percents. Critics point out that in China, the control by the government is generally overwhelming and is truly at 100 percent. For the 1990-2005, annual tax revenues collected by China are far less than annual government consumption. Corresponding data on budget deficits are not reported. True, China reports marginal budget deficits for 2002-2004. Japan reports limited data on tax revenue and budget deficit. For Korea, the tax revenue collected generally match government consumption and overall, the record is one of budget surplus for the 1990-2005, excepting 2004 when the report is one of balanced budget. In India the story is one of persistent annual budget deficit, varying between -5 percent of GDP in 2002 and -2 percent in several years.

For Myanmar, Laos, Cambodia, Vietnam, Brunei, data limitations do not permit us to make a careful review of the situations relative to the government sector. For Singapore, Malaysia, Thailand, the Philippines and Indonesia, we have data for 1990-2005. Singapore's budget is uniformly surplus for the 16 year period. Malaysia reports budget deficits for 6 years and balanced budget for 3 years. Thailand has limited data. For the Philippines and Indonesia, their respective records of budget deficits warrant further critical reviews.

The Chinese Taipei reports budget deficits, mostly for its government policy of public investment in developing high-tech industries for manufacturing quality-and-cost competitive export products, with highest acceptance ranking in the world market, necessary human capital and its security. Availability of related data on Mongolia is too limited. For Pakistan, Maldives, Sri Lanka, Bangladesh. Bhutan and Nepal data is reported only for 1990-2005. The record of persistent budget deficits for these economies must be a factor for concern.

Table 4.46: Government Consumption, Revenues and Deficits as a Percentage of GDP, 1970-1979: China, Japan, Korea, and India

Consumption	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
China	8	8	8	8	7	8	8	8	13	15
Japan	11	11	12	12	13	14	14	14	14	14
Korea	10	10	10	9	10	11	11	11	10	10
India	9	10	10	9	9	10	10	10	10	10
Tax Revenues	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
China	..	..	..	..	..	..	..	..	..	..
Japan	..	..	..	..	..	..	..	..	..	..
Korea	..	..	..	..	..	..	..	..	..	..
India	..	..	..	..	..	..	..	..	..	..
Budget Deficit	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
China	..	..	..	..	..	..	..	..	..	..
Japan	..	..	..	..	..	..	..	..	..	..
Korea	..	..	..	..	..	..	..	..	..	..
India	..	..	..	..	..	..	..	..	..	..

Source: World Development Indicators (2006)

Table 4.47: Government Consumption, Revenues and Deficits as a Percentage of GDP, 1980-1989: China, Japan, Korea, and India

Consumption	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
China	15	15	15	15	15	14	15	14	13	14
Japan	14	14	14	15	14	14	14	14	14	13
Korea	12	12	12	12	11	11	11	11	11	12
India	10	10	11	11	11	11	12	12	12	12

Tax Revenues	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
China
Japan
Korea
India

Budget Deficit	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
China
Japan
Korea
India

Source: World Development Indicators (2006)

Table 4.48: Government Consumption, Revenues and Deficits as a Percentage of GDP, 1990-2005: China, Japan, Korea, and India

Consumption	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
China	14	16	16	16	15	14	14	14	15	15	16	16	16	15	15	14
Japan	13	13	14	14	15	15	15	15	16	17	17	18	18	18	18	..
Korea	12	12	12	12	11	11	12	12	13	12	12	13	13	13	14	14
India	12	11	11	11	11	11	11	11	12	13	13	12	12	11	11	11
Tax Revenues	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
China	4	4	3	2	6	5	5	5	6	6	7	7	9	9	9	..
Japan	13	14	12	12	..	..	..	..	..	..	..	..	..	..	..	..
Korea	14	13	14	14	14	14	14	14	14	14	16	15	15	16	15	16
India	10	10	10	9	9	9	9	9	8	9	9	8	9	9	10	..
Budget Deficit	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
China	..	..	..	..	..	..	..	..	..	..	..	..	-3	-2	-2	..
Japan	-1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Korea	2	1	1	2	2	2	3	3	1	1	5	3	4	2	0	1
India	-3	-2	-2	-4	-2	-2	-2	-3	-3	-3	-4	-4	-5	-4	-4	..

Source: World Development Indicators (2006)

Table 4.49: Government Consumption, Revenues and Deficits as a Percentage of GDP, 1970-1979: Myanmar, Laos, Cambodia, Vietnam, and Brunei

Consumption	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Myanmar
Laos
Cambodia	23	..	..	..	..	..	..	..	..	..
Vietnam
Brunei	17	17	9	7	4	4

Tax Revenues	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Myanmar
Laos
Cambodia
Vietnam
Brunei

Budget Deficit	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Myanmar
Laos
Cambodia
Vietnam
Brunei

Source: World Development Indicators (2006)

Table 4.50: Government Consumption, Revenues and Deficits as a Percentage of GDP, 1980-1989: Myanmar, Laos, Cambodia, Vietnam, and Brunei

Consumption	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Myanmar
Laos	7	9	9	8	11	..
Cambodia	5	8
Vietnam	8
Brunei	8	4	6	9	..	..	..	..	..	..

Tax Revenues	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Myanmar
Laos
Cambodia
Vietnam
Brunei

Budget Deficit	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Myanmar
Laos
Cambodia
Vietnam
Brunei

Source: World Development Indicators (2006)

Table 4.51: Government Consumption, Revenues and Deficits as a Percentage of GDP, 1990-2005: Myanmar, Laos, Cambodia, Vietnam, and Brunei

Consumption	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Myanmar
Laos
Cambodia	7	7	10	5	7	6	6	5	5	5	5	5	5	5	5	4
Vietnam	12	8	6	7	8	8	8	8	8	7	6	6	6	6	6	6
Brunei
Tax Revenues	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Myanmar	6	6	5	5	4	4	4	4	4	3	3	2	2	..	..	..
Laos
Cambodia	8	8	8	8
Vietnam
Brunei
Budget Deficit	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Myanmar
Laos
Cambodia	-3	-4	-2	0
Vietnam
Brunei

Source: World Development Indicators (2006)

Table 4.52: Government Consumption, Revenues and Deficits as a Percentage of GDP, 1970-1979: Singapore, Malaysia, Thailand, Philippines, and Indonesia

Consumption	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Singapore	12	13	12	11	10	11	11	11	11	10
Malaysia	15	16	19	15	15	17	15	16	16	13
Thailand	11	12	11	10	9	10	11	11	11	12
Philippines	9	9	10	10	10	11	11	10	10	9
Indonesia	8	8	8	10	7	9	9	10	11	10

Tax Revenues	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Singapore
Malaysia
Thailand
Philippines
Indonesia

Budget Deficit	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Singapore
Malaysia
Thailand
Philippines
Indonesia

Source: World Development Indicators (2006)

Table 4.53: Government Consumption, Revenues and Deficits as a Percentage of GDP, 1980-1989: Singapore, Malaysia, Thailand, Philippines, and Indonesia

Consumption	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Singapore	10	9	11	11	11	14	13	12	10	10
Malaysia	16	18	18	15	14	15	16	15	14	14
Thailand	12	13	13	13	13	14	13	11	10	10
Philippines	9	9	9	8	7	8	8	8	9	10
Indonesia	11	11	12	10	10	11	11	9	9	9

Tax Revenues	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Singapore
Malaysia
Thailand
Philippines
Indonesia

Budget Deficit	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Singapore
Malaysia
Thailand
Philippines
Indonesia

Source: World Development Indicators (2006)

Table 4.54: Government Consumption, Revenues and Deficits as a Percentage of GDP, 1990-2005: Singapore, Malaysia, Thailand, Philippines, and Indonesia

Consumption	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Singapore	10	10	9	9	8	8	9	9	10	10	11	12	12	12	11	11
Malaysia	14	14	13	13	12	12	11	11	10	11	10	13	14	14	13	13
Thailand	9	9	10	10	10	10	10	10	11	11	11	11	11	11	11	12
Philippines	10	10	10	10	11	11	12	13	13	13	13	12	12	11	10	10
Indonesia	9	8	9	9	8	8	8	7	6	7	7	7	7	8	8	8
Tax Revenues	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Singapore	15	16	17	17	17	16	17	16	15	15	15	15	13	13	12	..
Malaysia	19	20	20	19	20	20	19	20	17	14	14	19	19	18	..	..
Thailand	..	..	..	..	..	..	..	..	..	..	..	..	..	15	16	17
Philippines	14	15	15	16	16	16	17	17	16	15	14	13	13	13	12	13
Indonesia	18	16	16	14	16	15	14	16	15	16	..	11	12	12	12	..
Budget Deficit	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Singapore	11	10	13	18	21	20	17	21	11	13	11	6	5	3	4	..
Malaysia	-3	0	0	2	5	2	2	4	0	-3	-3	-3	-6	-4	..	..
Thailand	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	2
Philippines	-3	-1	-2	-1	..	..	..	..	..	..	-4	..	..	-5	-4	-3
Indonesia	0	0	-1	0	2	3	2	0	-2	-2	..	..	0	-2	-1	..

Source: World Development Indicators (2006)

Table 4.55: Government Consumption, Revenues and Deficits as a Percentage of GDP, 1970-1979: Chinese Taipei and Mongolia

Consumption	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Chinese Taipei	18					16				
Mongolia	..	..	..	..	..	..	..	..	..	..
Tax Revenues	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Chinese Taipei	16	15	15	15	16	17	17	17	17	18
Mongolia	..	..	..	..	..	..	..	..	..	..
Budget Deficit	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Chinese Taipei	0	0	1	1	4	0	1	-1	-1	2
Mongolia	..	..	..	..	..	..	..	..	..	..

Source: World Development Indicators (2006), Statistical Yearbook of the Republic of China (2005)

Table 4.56: Government Consumption, Revenues and Deficits as a Percentage of GDP, 1980-1989: Chinese Taipei and Mongolia

Consumption	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Chinese Taipei	16					17				
Mongolia	..	25	23	21	22	23	26	26	26	23
Tax Revenues	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Chinese Taipei	18	18	18	16	16	16	14	14	16	17
Mongolia	..	..	..	..	..	..	..	..	..	..
Budget Deficit	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Chinese Taipei	0	-1	-2	-1	0	0	-1	0	1	-7
Mongolia	..	..	..	..	..	..	..	..	..	..

Source: World Development Indicators (2006), Statistical Yearbook of the Republic of China (2005)

Table 4.57: Government Consumption, Revenues and Deficits as a Percentage of GDP, 1990-2005: Chinese Taipei and Mongolia

Consumption	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Chinese Taipei	18	18	17	16	15	15	15	15	15	14	14	14	14	14	14	13
Mongolia	30	25	19	23	30	13	14	14	18	17	18	19	19	17	17	15
Tax Revenues	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Chinese Taipei	19	16	18	17	17	17	15	15	15	14	19	13	12	12	13	..
Mongolia	..	..	..	..	..	..	..	..	..	..	..	..	..	23	..	..
Budget Deficit	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Chinese Taipei	0	-5	-6	-6	-5	-5	-3	-2	1	0	-4	-4	-4	-3	-2	
Mongolia	..	..	..	..	..	..	..	..	..	..	..	..	..	0	..	..

Source: World Development Indicators (2006), Statistical Yearbook of the Republic of China (2005)

Table 4.58: Government Consumption, Revenues and Deficits as a Percentage of GDP, 1970-1979: Pakistan, Maldives, Sri Lanka, Bangladesh, Bhutan, and Nepal

Consumption	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Pakistan	10	10	12	12	10	11	11	11	11	10
Maldives	..	..	..	..	..	..	..	..	..	..
Sri Lanka	12	13	12	11	12	9	10	9	9	9
Bangladesh	13	..	..	4	5	3	4	5	5	6
Bhutan	..	..	..	..	..	..	..	..	..	..
Nepal	..	..	..	..	..	8	7	7	7	9

Tax Revenues	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Pakistan
Maldives
Sri Lanka
Bangladesh
Bhutan
Nepal

Budget Deficit	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Pakistan
Maldives
Sri Lanka
Bangladesh
Bhutan
Nepal

Source: World Development Indicators (2006)

Table 4.59: Government Consumption, Revenues and Deficits as a Percentage of GDP, 1980-1989: Pakistan, Maldives, Sri Lanka, Bangladesh, Bhutan, and Nepal

Consumption	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Pakistan	10	10	10	11	12	12	13	14	16	17
Maldives	..	..	..	..	..	..	..	..	..	..
Sri Lanka	9	7	8	8	8	10	10	10	10	10
Bangladesh	6	5	5	4	4	4	4	4	4	4
Bhutan	24	19	19	19	23	23	18	14	13	16
Nepal	7	7	9	10	9	9	9	9	9	10

Tax Revenues	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Pakistan
Maldives
Sri Lanka
Bangladesh
Bhutan
Nepal

Budget Deficit	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Pakistan
Maldives
Sri Lanka
Bangladesh
Bhutan
Nepal

Source: World Development Indicators (2006)

Table 4.60: Government Consumption, Revenues and Deficits as a Percentage of GDP, 1990-2005: Pakistan, Maldives, Sri Lanka, Bangladesh, Bhutan, and Nepal

Consumption	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Pakistan	15	14	13	13	12	12	13	12	11	10	9	8	9	9	8	8
Maldives	..	..	..	..	..	17	16	18	18	21	23	23	23	22	24	..
Sri Lanka	10	10	10	9	10	11	11	10	10	9	11	10	9	8	8	8
Bangladesh	4	4	4	5	5	5	4	4	5	5	5	5	5	5	6	6
Bhutan	16	14	14	16	15	18	21	22	20	18	21	21	20	20	20	..
Nepal	9	9	8	9	8	9	9	9	9	9	9	10	10	10	10	10
Tax Revenues	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Pakistan	13	12	13	13	13	13	14	13	13	13	10	10	10	11	10	10
Maldives	14	15	15	14	13	14	13	14	14	14	14	14	13	14	17	16
Sri Lanka	19	18	18	17	17	18	17	16	14	15	15	15	14	13	14	14
Bangladesh	..	..	..	..	..	..	..	..	..	..	..	8	8	8	8	..
Bhutan	4	5	5	6	6	7	8	7	8	7	10	8	9	9	7	..
Nepal	7	7	7	7	8	9	9	9	9	8	9	9	9	9	10	10
Budget Deficit	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Pakistan	-2	-6	-6	-7	-5	-5	-7	-7	-6	-6	-4	-4	-3	-3	-2	-3
Maldives	-8	-9	-11	-11	-5	-7	-2	-2	-3	-4	-5	-5	-5	-5	-4	-13
Sri Lanka	-5	-7	-5	-6	-7	-8	-8	-6	-7	-6	-8	-9	-8	-7	-8	-7
Bangladesh	..	..	..	..	..	..	..	..	..	..	..	-1	0	0	-1	..
Bhutan	-6	0	-2	7	3	0	3	0	2	-2	-2	-9	-4	-10	2	..
Nepal	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	-1

Source: World Development Indicators (2006)

4.6 The Foreign Sector: Current Account Balance

For China, with exceptions of negative current account balance in selected years (1979, 1985, 1986, 1988, 1989, 1993) and balanced account in 1989, the record is one of surplus for 1977-2005. The consequent accumulation of foreign exchange reserves, estimated to be larger than that of Japan, has earned China its international credit rating. Recently, China has purchased United States bonds. However, the debate remains open as to how much of the Chinese exports originate from industries in China owned one-hundred percent by overseas investors. Excepting 1979 and 1980, Japan has a positive record for 1977-2005 and has been noted for its international standing as a creditor economy. Korea has a mixed record with negative balances for as many as sixteen years for the time period. It is to be noted that for 1998-2005, the Korean economy reports a period of positive current account balance. India in this group of four economies report negative balances for 1980 through 2000. An effort to remedy the imbalance must be in place.

Myanmar and Brunei report no data for the time period. Based on the data recorded for Laos 1984-2001, Cambodia 1992-2005, and Vietnam 1996-2005, it is evident that these economies are struggling to balance their

respective accounts. For Singapore, Malaysia, Thailand, the Philippines and Indonesia, the five original ASEAN members, the story is relatively progressive. In the 1970s and 1980s, Singapore had mostly negative balances, while for 1990-2005, the record is progressively positive. Malaysia has recorded its persistent positive balance for 1998 through 2005. The record was substantively mixed in the earlier years, 1970- 1987 with marginal positive balance only for six years. Thailand experienced negative balances from 1975 through 1997, reversing the trend to a period of positive balance for 1999-2004. In 2005, a negative balance is on record. Data for the Philippines from 1975 through 2001 relate to the economy's consistent negative balances. Even for the four recent years, 2002-2005, the situation is not quite encouraging. Indonesia reports a similar pattern. The economy records negative balances for 1977-1997, but gaining positive balances from 1998-2004 time period. The Chinese Taipei has uniformly positive record for 1970-2005, and this is indeed a creditor economy with much of its recent investments taking place in China. Mongolia's data for 1981-2004 includes only five years of positive balance, varying between 10 percent of its GDP in 1997 and 4 percent in 2004.

In South Asia, Bhutan reports no data, while economies of Pakistan, Maldives, Bangladesh, and Nepal present a record of negative balances for

the time period with some exceptions for a given economy in selected years.

Reviewing the data for Pakistan, the largest economy in the group and of Bangladesh, the second largest member economy, for 1976 through 2005, a case must be made for progressive trends.

Table 4.61: Current Account Balance as a Percentage of GDP, 1970-2005:
China, Japan, Korea, and India

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
China	..	..	..	..	..	..	..	..	..	..
Japan	..	..	..	..	..	..	..	2	2	-1
Korea	..	..	..	..	..	..	-1	0	-2	-6
India	..	..	..	..	..	0	2	2	1	0
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
China	..	..	3	2	1	-4	-2	0	-1	-1
Japan	-1	0	1	2	3	4	4	3	3	2
Korea	-8	-6	-3	-2	-1	-1	4	7	8	2
India	-1	-1	-1	-1	-1	-2	-2	-2	-2	-2
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
China	3	4	2	-3	1	0	1	4	3	2
Japan	1	2	3	3	3	2	1	2	3	3
Korea	-1	-3	-1	0	-1	-2	-4	-2	12	6
India	-2	-2	-2	-1	-1	-2	-2	-1	-2	-1
	2000	2001	2002	2003	2004	2005				
China	2	1	2	3	4	7				
Japan	3	2	3	3	4	4				
Korea	2	2	1	2	4	2				
India	-1	0	1	1	..	..		

Source: World Development Indicators (2006)

Table 4.62: Current Account Balance as a Percentage of GDP, 1970-2005:
Myanmar, Laos, Cambodia, Vietnam, and Brunei

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Myanmar
Laos
Cambodia
Vietnam
Brunei
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Myanmar
Laos	-7	-5	-6	-13	-13	-11
Cambodia
Vietnam
Brunei
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Myanmar
Laos	-6	-3	-4	-3	-10	-13	-14	-12	-6	6
Cambodia	-5	-4	-6	-5	-5	-6	-6	-5
Vietnam	-8	-6	-4	4
Brunei
	2000	2001	2002	2003	2004	2005				
Myanmar				
Laos	0	-5	..	..	..	..
Cambodia	-4	-2	-3	-5	-4	-6				
Vietnam	4	2	-2	-5	-2	0				
Brunei				

Source: World Development Indicators (2006)

Table 4.63: Current Account Balance as a Percentage of GDP, 1970-2005:
Singapore, Malaysia, Thailand, Philippines, and Indonesia

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Singapore	..	..	-17	-12	-20	-10	-10	-4	-6	-8
Malaysia	..	..	..	..	-5	-5	5	3	1	4
Thailand	..	..	..	..	..	-4	-3	-6	-5	-8
Philippines	..	..	..	..	..	..	..	-4	-5	-5
Indonesia	..	..	..	..	..	..	..	..	..	..
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Singapore	-13	-11	-8	-4	-2	0	2	-1	8	10
Malaysia	-1	-10	-13	-11	-5	-2	0	8	5	1
Thailand	-6	-7	-3	-7	-5	-4	1	-1	-3	-3
Philippines	-6	-6	-9	-8	-4	0	3	-1	-1	-3
Indonesia	..	-1	-6	-7	-2	-2	-5	-3	-2	-1
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Singapore	8	11	12	7	16	17	15	16	22	17
Malaysia	-2	-9	-4	-4	-6	-10	-4	-6	13	16
Thailand	-9	-8	-6	-5	-6	-8	-8	-2	13	10
Philippines	-6	-2	-2	-6	-5	-3	-5	-5	2	-4
Indonesia	-3	-3	-2	-1	-2	-3	-3	-2	4	4
	2000	2001	2002	2003	2004	2005				
Singapore	12	14	13	24	24	28				
Malaysia	9	8	8	13	13	15				
Thailand	8	5	6	6	4	-2				
Philippines	-3	-2	0	0	2	2				
Indonesia	5	4	4	3	1	0				

Source: World Development Indicators (2006)

Table 4.64: Current Account Balance as a Percentage of GDP, 1970-2005:
Chinese Taipei and Mongolia

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Chinese Taipei	0	3	6	5	-8	-4	2	4	6	0
Mongolia	..	..	..	..	..	..	..	..	..	..
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Chinese Taipei	-2	1	5	9	12	15	22	19	12	9
Mongolia	..	-35	-33	-30	-35	-37	-37	-33	-32	-34
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Chinese Taipei	7	7	4	3	3	2	4	2	1	3
Mongolia	-31	-5	-5	5	6	3	-3	10	-8	-6
	2000	2001	2002	2003	2004	2005				
Chinese Taipei	3	6	9	10	6	5				
Mongolia	-7	-6	-9	-8	4	..				

Source: World Development Indicators (2006), Statistical Yearbook of the Republic of China (2005)

Table 4.65: Current Account Balance as a Percentage of GDP, 1970-2005:
Pakistan, Maldives, Sri Lanka, Bangladesh, Bhutan, and Nepal

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Pakistan	..	..	..	..	..	..	-6	-5	-4	-6
Maldives	..	..	..	..	..	..	..	..	..	..
Sri Lanka	..	..	..	..	..	-3	0	3	-2	-7
Bangladesh	..	..	..	..	..	..	-3	-3	-3	-3
Bhutan	..	..	..	..	..	..	..	..	..	..
Nepal	..	..	..	..	..	..	1	0	-2	-1
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Pakistan	-4	-3	-3	0	-4	-3	-2	-2	-4	-3
Maldives	-52	-45	-40	-42	-15	-4	0	6	5	6
Sri Lanka	-16	-10	-11	-9	0	-7	-7	-5	-6	-6
Bangladesh	-4	-5	-3	0	-2	-2	-3	-1	-1	-4
Bhutan	..	..	..	..	..	..	..	..	..	..
Nepal	-2	-1	-4	-6	-4	-5	-4	-4	-8	-7
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Pakistan	-4	-3	-4	-6	-3	-6	-7	-3	-4	-1
Maldives	5	-4	-7	-17	-3	-5	-2	-7	-4	-13
Sri Lanka	-4	-7	-5	-4	-6	-6	-5	-3	-1	-4
Bangladesh	-1	0	1	1	1	-2	-2	-1	0	-1
Bhutan	..	..	..	..	..	..	..	..	..	..
Nepal	-8	-8	-5	-6	-9	-8	-7	-8	-1	-2
	2000	2001	2002	2003	2004	2005				
Pakistan	0	3	5	4	-1	-3				
Maldives	-8	-9	-6	-5	-17	-43				
Sri Lanka	-6	-1	-1	0	-3	-3				
Bangladesh	-1	-1	2	0	0	0				
Bhutan	..	..	..	..	..	..
Nepal	-2	-3	4	3	1	2				

Source: World Development Indicators (2006)

Asian economies, specially the AE-22 member economies, are in general newly industrializing, given the fact that a select group has earned the rank of mature industrialized economies. For an economy, the progress of industrialization involves acquisition of physical capital goods plus management-cum- technical know-how, which involves commitment for

dues to be paid off. The only way for these economies to make these payments will be to export products from the newly instituted industries. Earning of export revenues in world currencies become an integral part of the progression of a pre-industrialized economy's industrialization. Hence, a critical review of the current account balance of the economies in our study is very much in order.

4.7 Some Concluding Remarks

Based on the selected parameters, the member economies of the AE-22 present a record of industrialization for the 1970-2005 time period, some of them leading while others continuing to lag. The economies adopted necessary pro-growth macroeconomic policies with monetary and fiscal guidelines. True, the Asian financial crisis of 1997-98 failed to be foreseen and several member economies were adversely impacted. The softening of an economy growing at an accelerated rate has, of course, been an accomplishment for some member economies of the group.

Given the well defined regional Asian map, the AE-22 is a viable economic compact. The Asian money will facilitate its forward movement. The leading members of the AE-22 have been following economic policies toward further industrialization of the ones now lagging. The Asian

Economy with Asian Money is a paradigm for sustained critical appreciation.