

## THE CONSTRUCTION BOOM OF THE 1970s: THE END OF HIGH GROWTH IN THE NICs AND ASEAN?

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I WOULD hypothesize these points. (1) The past year of sharp economic decline in the newly industrializing countries (NICs) of Asia and the members of the Association of South East Asian Nations (ASEAN) indicates a turning point of major historical significance. (2) The high growth of the past decade can be attributed not only to the export boom, commonly considered the cause, but also to an unprecedented boom in construction. The end of the construction upsurge leaves behind a host of problems, which, together with low exports, will slow the NICs' growth in the coming years. (3) The slowdown that affected the West and Japan in the 1970s will spread to the NICs in the 1980s. This is because the OECD countries have had an economic upsurge during the 1950s and 1960s that satisfied demand pent-up from two decades of depression and war and have now returned to a historic 2.5–3 per cent rate of growth.

If my hypotheses are valid, the NICs' high growth rates in the 1970s do not look as good as if they had been achieved by export expansion, i.e., by competitive export strength, alone. It seems that their high growth is partially attributable to the high level of external loans and that any country should be able to achieve that kind of growth as long as it is able to finance it. Not only that but most of these countries did not do a very good job in allocating funds, errors which now cause them to incur a large debt burden.

A summary of the views expressed here is given below. The huge level of foreign funds flowing into construction from 1975 to 1982 was a major factor in the recent high growth of the NICs (about 8 per cent GDP, 1973–83) and four ASEAN countries (7 per cent). When the boom subsided, the upsurge of exports to the OECD countries in 1983 and 1984 sustained high growth. But, in 1985, construction expenditures and exports disappeared causing a drop in GDP growth to the 2–4 per cent level in the Republic of Korea, Taiwan, Indonesia, Malaysia, Thailand, and Hong Kong and to negative levels in Singapore and the Philippines. Since prospects for high exports are poor and OECD trends are sluggish, halved growth levels are likely. With the public debt burden

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This paper is an extensive revision of one written earlier for the Simon Kuznets memorial volume [23]. I am grateful to Dr. Burnham Campbell of the Asian Development Bank for his astute comments. The ASEAN countries here are the Philippines, Thailand, Malaysia, and Indonesia; the NICs here are Taiwan, the Republic of Korea, Hong Kong, and Singapore. The generalizations in the latter half of the paper are based on a forthcoming volume of mine entitled *Economic Growth in Monsoon Asia: A Comparative Survey* [24].

already high, construction levels will continue to be low and private construction demand will effectively satiate for the time being. The large portion of government budget used to service the debt will place constraints on any attempts to raise domestic demand by pump priming. The debt will not be quickly liquidated and it will be some time before the situation is corrected.<sup>1</sup>

The role of construction in major, long-run fluctuations has been widely discussed in the literature, beginning with Simon Kuznets's description of long swings during the nineteenth century and Moses Abramovitz's model of long swings in which construction is a primary factor.<sup>2</sup> Despite major changes in the nature of long swings since World War I, Abramovitz holds that construction continues to influence wages, employment, capital formation, and aggregate demand. And, long gestation periods produce lags in the adjustment of capital stock which in turn causes construction expenditures to continue creating unbalanced growth in aggregate demand and capacity to product [3]. The significance of construction in the growth of GDP is that general business cycles, the Kitchins, are too short for the forces of secular growth to act themselves out and the other fluctuations, the five- to ten-year Juglars and the half-century Kondratieffs, have not been theoretically established.<sup>3</sup> This leaves the swings as the main vehicle for observing secular growth, something not easily done without a great deal of manipulation—aggregating, deflating, and averaging—raw data.

#### I. NIC AND ASEAN CONSTRUCTION EXPENDITURES DURING THE HIGH GROWTH 1970s

Table I shows the share of construction in various national expenditures for GDP. Construction shares for the NICs and the ASEAN rose in the 1960s and 1970s. This is especially true during the latter half of the 1970s when the shares were double the 5 per cent of the latter 1950s. In contrast, shares for India, Japan, and the major OECD countries increased much less during the 1970s.

After gaining their independence in the 1950s, the NICs and the ASEAN countries hastened to build the physical infrastructure needed to develop a modern economy. The infrastructure that had been built during the prewar decade was grossly inadequate, set up for a colonial system devoted chiefly to plantation crop production, definitely not to overall economic development. If they were to modernize and industrialize their countries, the new governments urgently needed

<sup>1</sup> Most data in this paragraph is from [12]. My approach is two-pronged, one that emphasizes both construction and exports, rather than the more common approach that stresses export growth alone and misses the interplay between construction and exports in the slowdown.

<sup>2</sup> [1]. On construction swings, see [2] which contains extensive references. Also see [15]. Miyohai Shinohara has found long swings in the data for Japan and traced them back to the early decades of this century when the economy was predominantly agricultural as in the ASEAN countries today [27, Chap. 7].

<sup>3</sup> [1]. See also the press interview [6]. The interview was at the U.P. School of Economics, Los Baños, Manila, at the end of a tour in which Abramovitz lectured throughout ASEAN on growth in the United States and other industrialized countries.

TABLE I  
SHARE OF CONSTRUCTION EXPENDITURES IN GDP, POSTWAR ASIA  
(IN CONSTANT VALUES, EXCEPT MALAYSIA BEFORE 1972)

	1955-59	1960-64	1965-69	1970-74	1975	1976	1977	1978	1979	1980	1981	1982	1983
Japan	4.1	5.0	6.0	7.8	7.6	7.8	7.5	7.7	7.1	6.2	5.8	5.5	5.1
Taiwan	6.4	8.6	10.0	9.9	13.6	13.0	13.9	13.8	13.6	13.7	12.9	12.5	10.9
Korea	4.7	6.1	11.3	13.6	14.6	14.9	16.5	18.9	18.1	19.1	16.9	19.5	21.6
Philippines	7.4	7.8	8.4	6.1	9.0	11.0	11.4	11.2	12.6	12.0	12.5	12.8	12.0
Thailand	6.9	8.9	11.2	9.4	7.9	8.9	9.7	10.7	9.8	10.1	10.2	9.6	9.8
Hong Kong			11.0	9.5	10.9	10.5	12.5	12.5	11.7	12.1	11.9	12.6	11.6
Singapore		8.2	11.3	11.8	11.4	11.7	10.9	10.1	10.3	11.4	12.9	17.0	20.3
Malaysia		9.9	9.5	11.3	14.8	14.7	16.2	17.1	17.2	17.8	18.6	19.1	19.4
India	8.4	9.1	11.3	10.9	9.7			10.1	9.7	9.1	9.2		

Sources: Japan, Economic Planning Agency, *Annual Report on National Accounts*, 1982 and 1985 editions; Republic of China, Executive Yuan, Directorate-General of Budget, Accounting and Statistics, *National Income of the Republic of China* (1984); Republic of Korea, Bank of Korea, *National Income in Korea*, 1982 (1982); Economic Planning Board, *Major Statistics of Korean Economy*, 1984 (1984); Philippines, National Economic and Development Authority, *Philippine Statistical Yearbook*, 1979 and 1984 editions; Thailand, Office of the Prime Minister, *National Income of Thailand*, 1964, 1968-69, 1972-73, and 1983 editions; Hong Kong, Census and Statistics Department, *Estimates of Gross Domestic Product*, 1966-1983 and 1966-1984 editions; Singapore, Department of Statistics, *Economic & Social Statistics, Singapore 1960-1982* (1983); Malaysia, Department of Statistics, *National Accounts of Peninsular Malaysia, 1960-71* (1975); India, Ministry of Planning, *Statistical Abstract, India 1982* (1984).

Notes: Data for India are from 1955-56, 1960-61, 1965-66, 1970-71. Data on construction expenditures for Malaysia are not available after 1971. The 1971 total was extrapolated by data on real product originating in construction in GDP.

roads, harbors, communications, public facilities, factories, buildings, dam drainage, water works, and so on. Hence, construction expenditures for these countries in the 1960s were already high. The exceptions are Japan, which had begun to modernize long before and did not have to start from scratch, and the Philippines, which, with assistance from the United States, was able to begin modernizing in the 1940s. With large infusions of U.S. assistance, Korea (despite the interruptions of the Korean War, 1950–53) and Taiwan were able to make early progress in establishing physical infrastructure. Left-wing political difficulties held back Malaysia and Singapore in the 1950s, but they advanced swiftly once those problems were resolved. Never having been colonized, Thailand lacked even limited modernization and had to work much harder when it began, in the 1950s, to catch up with its neighbors.

Before examining the figures, it would be convenient to review, via the multiplier and accelerator mechanisms, the impact that changes in construction expenditure have on GDP because that impact, for various reasons, tends to be larger on GDP than on other expenditures.

Construction expenditures on the expenditure side of the GDP account are transformed into (1) value added in the construction industry on the product side of the GDP account and (2) intermediate inputs produced in other industries. Thus, in the Philippine input-output tables for 1974, a total of P7,500 million in construction expenditures is subdivided into P3,100 million of value added in the construction industry and P4,400 million of intermediate inputs purchased from other industries, chiefly lumber (P322 million), cement (P459 million), chemicals (P44 million), metals (P700 million), and trade (P357 million). The industries that produce the inputs needed by the construction industry add value in turn to intermediate inputs purchased from other manufacturing, mining, and service industries. The multiplier and accelerator mechanisms work through the P4,400 million of intermediate inputs in other industries and the P3,100 million of value added.

The value added in construction is paid out in the form of employee compensation (76 per cent of the P3,100 million total), property and proprietor's income (18 per cent), taxes (4 per cent), and depreciation allowance (4 per cent). These in turn are spent for consumption goods and anything left over is saved. Sales in the relevant industries increase to the extent that spending increases. These sales are divisible into value added and intermediate input. Similarly, the P4,400 million in intermediate input, decomposed into sales for the industries noted above, are decomposed into value added and intermediate input in the next round and spent for consumption and other goods and what is left over is saved.

In this dwindling chain of transactions, simple multiplier theory holds that all construction expenditures (less leakage to abroad) will eventually amplify incomes into multiples equal to the reciprocal of the marginal propensity to save. Because of the small leakage from the country from the initial multiplicand, the final, multiplied incomes are larger for construction than for other expenditures; only P28 million of leakages as reported in the Philippine input-output tables for 1974.

Moreover, the marginal propensity to save is likely to be very small for the construction industry and its suppliers since most employee compensation goes to manual workers. Workers in construction and construction material industries do heavy work at low pay, a fact that gives them one of the highest Engel coefficients in the economy. The Philippines' *1971 Family Income and Expenditure Survey* [25], shows that construction and manual worker families have a negative average propensity to save. Allowing for understated income in the survey, the manual worker families' marginal propensity to save is probably still close to zero. According to official national accounts, the average Filipino family had a ratio of saving to personal income of one-tenth during the second half of the 1970s, (8 per cent of national income). Including corporate and government savings of about 10 per cent, the ratio of savings to national income reaches 20 per cent in the latter 1970s.<sup>4</sup> Thus, the multiplier for the nationwide average multiplicand is five, but for construction expenditures it will be larger than five, since most of the first round of value added from initial construction expenditures will be paid to manual workers in the construction and construction material industries. And, in the dwindling series of multiplier rounds, it is the first and second that are overwhelmingly important. But the later rounds are not unimportant if construction expenditures rise for several years.

The accelerator is also larger for construction than for other expenditures. There is no data available on annual investment growth in various manufacturing industries in the Philippines and elsewhere. National accounts data, however, shows that value added in the main industries that sell to construction grew faster than it did in other industries when construction expenditures spurted in the latter part of the 1970s and tapered off and fell in the 1980s when growth slowed down.

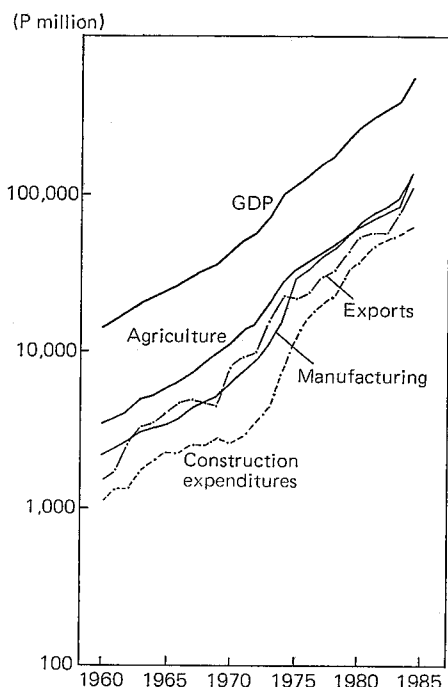
The larger multiplier and accelerator effects imply that in the upswing the impact on GDP growth is likely to be strong but when construction expenditures slow down, the downward impact is also likely to be strong, worsening the imbalance between the capacity to produce and to consume. During the upswing, construction expenditures, more than any other multiplicand, pressure prices to rise because the manual worker demand for food is high but those expenditures provide only a meager contribution to food production. Hence, consumer prices, in which food price is a major part, are sensitive to construction expenditures.

The sensitivity of GDP to construction in Asia, except Japan, is also due to the larger GDP portion that originates from sectors producing mainly for subsistence, particularly in the small enterprises. This is true for small peasant farms, informal services and most small- and medium-sized industries. Whether harvests are good or bad, growth in the subsistence-producing sector is slow and steady. Thus, the construction and export sectors are volatile, fluctuating with changes in external finance or demand conditions.

The figures below more clearly present the relations between changes in con-

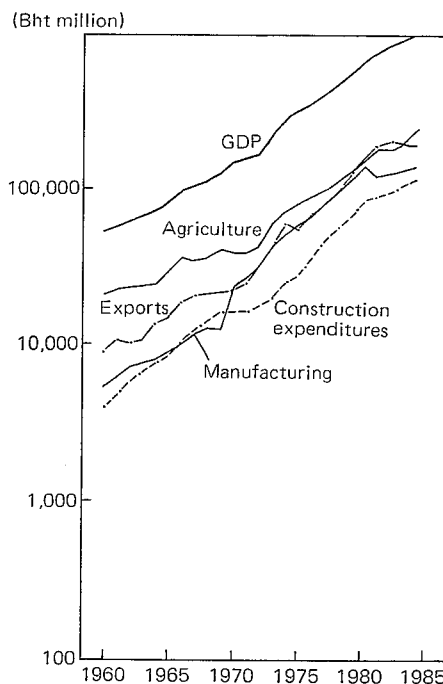
<sup>4</sup> Figures on personal saving from national accounts are very approximate, one of the weakest figures in the accounts. Personal savings are residuals from the household account, largely the difference between roughly estimated personal income and consumption totals.

Fig. 1. Growth of Exports, Construction Expenditures, and GDP in Current Prices: Philippines



Sources: 1960-75 data are from the Philippines, National Economic and Development Authority, *National Income Accounts, CY1946-1975* (1981); 1976-84 data are from idem, *Philippine Statistical Yearbook, 1985* (1985).

Fig. 2. Growth of Exports, Construction Expenditures, and GDP in Current Prices: Thailand



Sources: Thailand, Office of the Prime Minister, *National Income of Thailand, 1969, 1970-80, and 1984* editions.

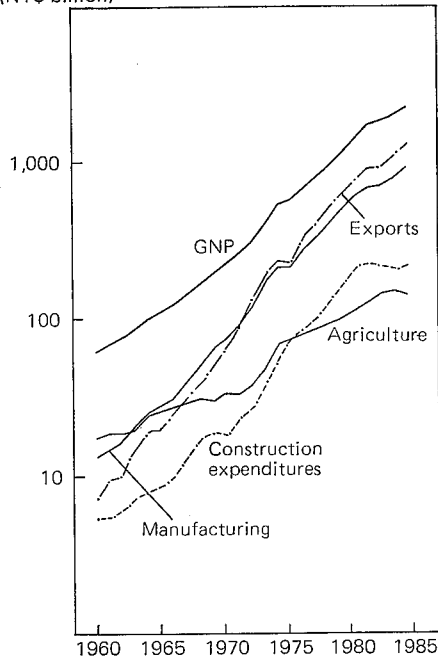
struction, exports, and GDP which underly the previously discussed interplay. Note the relative change in the slope of construction contrasted with that of exports. Also note the slope of exports contrasted with the slopes of agriculture and manufacturing. This variability in construction slopes for the NICs and ASEAN is greater than for other countries. The current price series presented here is more sensitive than the constant price series, although the relative relationships of the constant prices series are similar to those of construction expenditures.<sup>5</sup>

Figure 1 shows Philippine construction expenditures in the 1960s growing more slowly than exports, agriculture, and manufacturing but beginning to accele-

<sup>5</sup> See Table II and the constant price charts in my paper [23]. What little changes occur in the relationship are due to the change in the mix of dwellings, buildings, road, and other construction with value added being largest for constructing dwellings.

Fig. 3. Growth of Exports, Construction Expenditures, and GNP in Current Prices: Taiwan

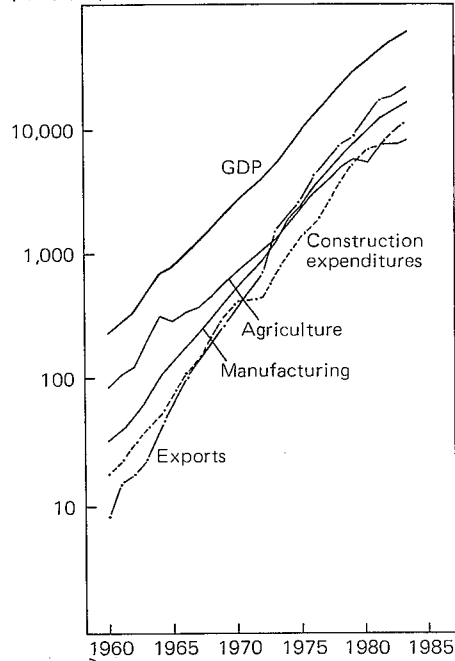
(NT\$ billion)



Source: Republic of China, Executive Yuan, Directorate-General of Budget, Accounting and Statistics, *Quarterly National Economic Trends: Taiwan Area, the Republic of China*, No. 30 (1985).

Fig. 4. Growth of Exports, Construction Expenditures, and GDP in Current Prices: Korea

(W billion)



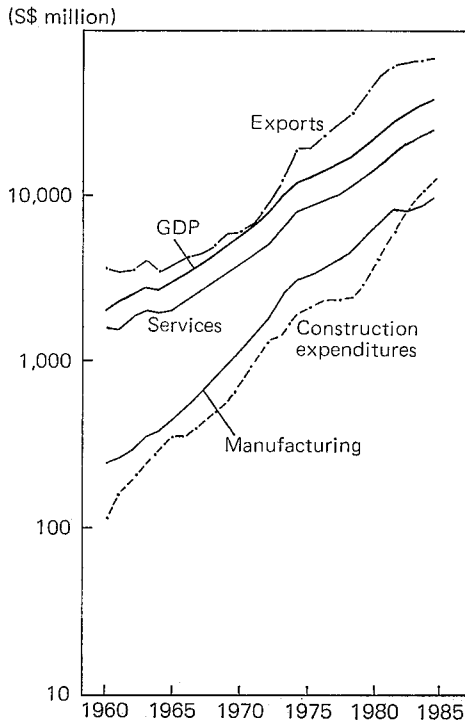
Sources: Republic of Korea, Bank of Korea, *National Income Accounts, 1982* (1982); Economic Planning Board, National Bureau of Statistics, *Korea Statistical Yearbook, 1984* (1984).

rate in the 1970s at a rate faster than the other three sectors. In the 1970s, the expenditures for construction are closer to the GDP curves. GDP would have grown slower in the 1970s than shown because agriculture was not growing as fast. Growth in manufacturing would have been even slower if it were not for construction's multiplier/accelerator effect. Note that, in the 1970s, the acceleration of both construction series tended to lead the acceleration in the other series. But in the early 1980s, when construction and exports taper off, the other series slow down. With prices rising rapidly and construction and exports falling sharply in 1984 and 1985, the constant-price GDP fell absolutely.<sup>6</sup>

Thailand's (Figure 2) construction in the 1960s rose faster than its other sectors and led the acceleration of GDP in the late 1960s despite the slow growth in export, agriculture, and manufacturing, all three of which would have created slower GDP growth than the figure shows. In the early 1970s, construction slowed

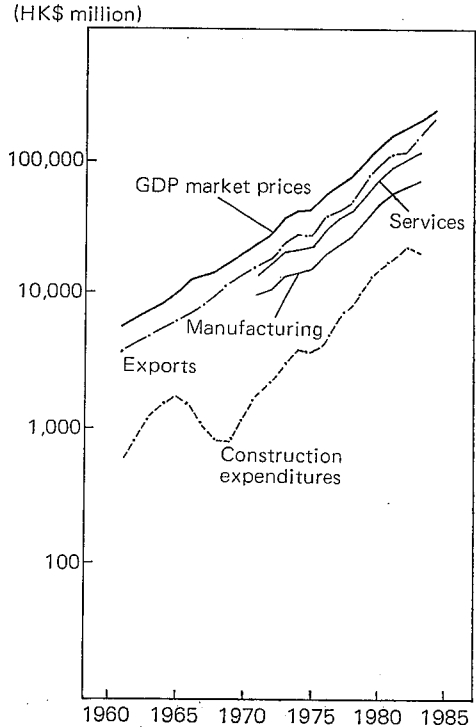
<sup>6</sup> The Philippine case is an exceptional one as discussed below.

Fig. 5. Growth of Exports, Construction Expenditures, and GDP in Current Prices: Singapore



Sources: Singapore, Department of Statistics, *Singapore National Accounts, 1973* (1975); *idem, Yearbook of Statistics, Singapore, 1984/85*; *idem, Economic & Social Statistics, Singapore 1960-82* (1983) for exports 1960-73.

Fig. 6. Growth of Exports, Construction Expenditures, and GDP in Current Prices: Hong Kong



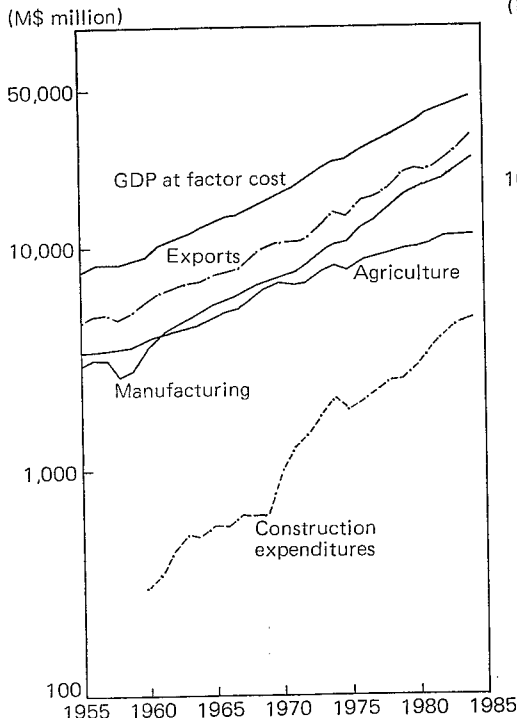
Sources: Hong Kong, Census and Statistics Department, *Estimates of Gross Domestic Product*, various issues; Asian Development Bank, Economic Office, *Key Indicators of Developing Member Countries of ADB*, Vol. 16 (April 1985).

down considerably and, despite the acceleration of exports and manufacturing, GDP rose more slowly than in the 1960s. In the late 1970s, construction and exports again accelerated to push GDP upward. In the 1980s construction slowed, retarding manufacturing and GDP.

In Taiwan (Figure 3), exports and construction grew rapidly in the 1960s and 1970s and more than offset the sluggish growth in agriculture. Growth in industry and GDP would probably have been much slower if it had not been for export and construction growth. Construction tapered off in the 1980s, which caused GNP to slow down, although growth in exports was sufficient to keep GNP rising but at a pace slower than previously. Figure 4 shows that, similarly, the rapid rise in exports and construction kept Korean GDP growth high in the 1960s and 1970s, despite agriculture's slower movement. And if it had not been

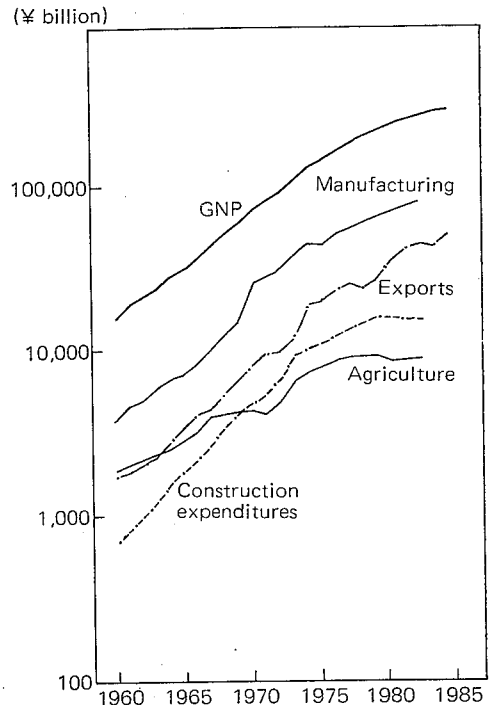


Fig. 7. Growth of Exports, Construction Expenditures, and GDP in Constant Prices (1978): Malaysia



Sources: Malaysian official national accounts data (up to 1970 West Malaysia, thereafter Malaysia).

Fig. 8. Growth of Exports, Construction Expenditures, and GNP in Current Prices: Japan

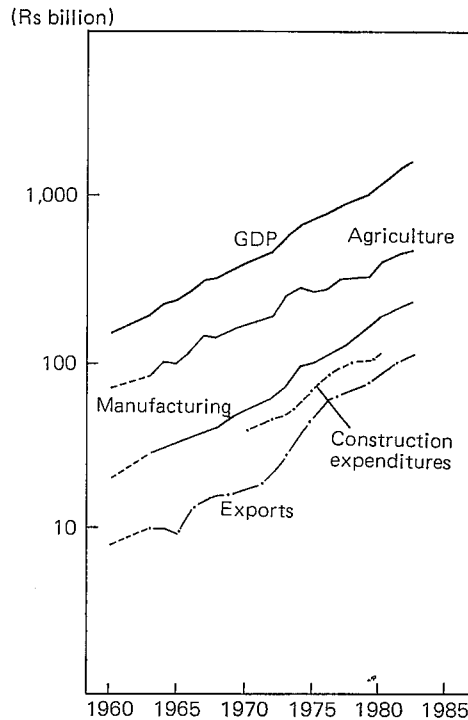


Sources: Japan, Economic Planning Agency, *Annual Report of National Accounts*, 1977, 1982, and 1984 editions; Office of the Prime Minister, Bureau of Statistics, *Japan Statistical Yearbook*, 1972 (1973).

for exports and construction, growth in manufacturing would have probably been slower than shown.

Despite the slower increases in exports and services in Singapore (Figure 5) throughout the 1960s, construction spearheaded growth, pulling manufacturing up with it via the multiplier. That situation continued into the early 1970s. Beginning in the mid-1970s, construction growth sagged, slowing down GDP; but in the late 1970s and into the 1980s, construction picked up and sustained GDP growth despite the slowing down of the export and other sectors. In the 1970s, Hong Kong's construction expenditures in current prices rose twice as fast as GDP, giving a sustained rate that was higher than the growth of exports and all other sectors (Figure 6). The more rapid growth of construction expenditures in Malaysia contributed to a faster rise in GDP than in Thailand, the Philippines, or Indonesia (Figure 7).

Fig. 9. Growth of Exports, Construction Expenditures, and GDP in Current Prices: India



Sources: United Nations, *Yearbook of National Accounts Statistics*, various issues.

These countries accelerated the growth of construction substantially in the 1970s. In countries where construction did not accelerate significantly, GDP did not accelerate but moved at about the same pace as the other sectors. Figures 8 and 9 show the data for Japan and India, where construction growth remained about the same as in the 1960s and GDP accelerated little or none at all. In Japan, construction expenditures in the 1960s and 1970s moved roughly parallel to exports, manufacturing, and GNP, but faster than the sagging agriculture sector. However, when construction slowed down in the 1980s, exports rose to keep GDP from slowing down. Figure 9 shows similar performance for India, with exports in the 1970s moving more rapidly to offset the agricultural slowdown. U.S. national accounts data also show construction and GNP moving in parallel, the ups and downs of construction being offset by faster growing exports. All three are large economies that are not greatly affected by externally induced sectors. With their longer industrial experience, Japan and the United States had built most of their physical infrastructure in the prewar decades, making sharp increases in postwar construction unnecessary.

TABLE II  
AVERAGE GROWTH RATES OF GDP, CONSTRUCTION, AND EXPORTS  
IN THE NICs AND ASEAN, CONSTANT PRICES

	(%)			
	1950s	1960s	1970s	1980-84
<i>Taiwan</i>				
GDP	8.8 <sup>a</sup>	8.9	9.7	6.7
Construction and exports	10.0 <sup>a</sup>	18.0	15.7	9.0
<i>Korea</i>				
GDP	3.7 <sup>b</sup>	8.4	8.0	7.0 <sup>c</sup>
Construction and exports	7.5 <sup>b</sup>	23.0	15.9	12.1 <sup>e</sup>
<i>Philippines</i>				
GDP	6.5	5.1	6.2	0.7
Construction and exports	3.8	5.1	9.5	0.5
<i>Thailand</i>				
GDP	8.3	11.3	15.9	10.5
Construction and exports	9.5	11.0	21.0	8.9
<i>Hong Kong</i>				
GDP		8.9 <sup>a</sup>	9.4	5.4 <sup>c</sup>
Construction and exports		10.2 <sup>e</sup>	9.9	11.5 <sup>f</sup>
<i>Singapore</i>				
GDP		9.2	9.1	8.1
Construction and exports		6.2	23.0	6.8
<i>Malaysia</i>				
GDP		6.1	5.1 <sup>g</sup>	6.6
Construction and exports		4.1	6.1 <sup>g</sup>	9.0

Sources: Official national income reports or statistical yearbooks.

Note: Figures for Thailand are in current prices. Figures for Malaysia 1960-70 are in current prices.

a 1951-60.

b 1953-60.

c 1980-83.

d 1961-70.

e 1966-70.

f 1980-82.

g 1973-80.

Table II lists, in constant prices, GDP growth rates and combined sums of construction expenditures and exports for various decades (except for Thailand and Malaysia which did not have constant price data for construction or exports in the 1960s). In all countries except Hong Kong, the combined growth of construction and exports was highest in the 1970s and GDP growth rates were as high as or higher than in previous decades.

Early starts in developing agriculture and labor-intensive industries allowed Taiwan and Korea to grow rapidly in the 1950s and 1960s. Fast growth in service and labor-intensive sectors led Hong Kong from the early 1950s and Singapore to rapid growth from the 1960s. For these countries, the colonial period had bequeathed some fortunate legacies: for Taiwan and Korea, the introduction of

scientific rice culture from Japan and a good start in industrialization; and for the city-states of Hong Kong and Singapore, British modernization that gave them the most efficient financial and mercantile sectors in Asia.<sup>7</sup> These four were able to take full advantage of the opportunities afforded when Western markets for labor-intensive industries opened up in the 1950s and 1960s. While China and India were concentrating on heavy industry and constraining their labor-intensive sectors by forcing them to purchase poor-quality, local machines and raw materials, these NICs were importing the latest machines from the West. If they had not, they would have been no match for the highly experienced textile manufacturers of Bombay and Shanghai. (Many Shanghai entrepreneurs fled China before the Communist armies took over and started business in Hong Kong, assisted in funding by British banks and in finding markets abroad by British merchants.)

Helped by their governments, Thai and Malay agriculture spearheaded national growth in the 1960s. A major factor in this lead, was that the Malay small holders had been given land and that Thailand had replaced unstable Burma and Vietnam as rice exporter to Southeast Asia plantations. While the Sri Lankan and Indonesian governments harassed their plantations, the Malaysian state left its plantations unhindered and this allowed them to take the lead in commercial crop production. The establishment of capital-intensive industries meant rapid growth in the Philippines during the 1950s, but a slowdown occurred later as these overprotected industries failed to export.

All these sources of growth in the early decades cannot be counted on to support growth in the future. They are largely "once and for all" sources of growth and though their potential is by no means exhausted, their future worth is probably only that of moderate growth. However, the possibility remains that the NICs will be able to develop into full-fledged industrialized nations and generate high growth, catching up with the OECD countries as Japan did. But this will take some time. Japan had more than half-century of industrial experience before World War II which enabled it to effectively work on R & D during the latter postwar decades.

Japan also was able to count on a much larger internal market than what all the NICs have put together and that made it possible to attain economies of scale before venturing abroad.

Korea, with the most advanced industrial structure among the NICs, illustrates the difficulties. Moving forward boldly in an attempt to catch up, Korea has built a large number of sophisticated industries only to find that its internal market is too small to achieve economies of scale, especially in the machinery industries. The Koreans have also found that these advanced industries are types that require good R & D programs to keep abreast of OECD countries' changes in design and production technology. Finding the experienced people to staff the numerous R & D programs is proving difficult.<sup>8</sup> It should be noted that both China and India have yet to succeed in this regard, even with much larger pools of scientists and technicians to draw from.

<sup>7</sup> For these and other generalizations in this section, see [24].

<sup>8</sup> For details, see [17].

## II. PROSPECTS FOR THE REMAINDER OF THE 1980s

At the beginning of this paper, I hypothesized that if it had not been for the mix of increased construction expenditures and high export growth, a slowdown in GDP should have occurred before 1985, perhaps along the lines of the slowdown that Japan experienced in the 1970s. Asian NIC governments sensed the adverse impact of an OECD slowdown on their exports and investments in the latter 1970s and decided to borrow more from abroad for construction and to finance on the deficit as a counter cyclical measure. But in doing so, they have probably aggravated the situation and made later adjustments more difficult, as events in the 1980s are showing. Unlike the Keynesian situation of excessive borrowing, public spending and deficits have *preceded* the difficulties in the 1980s. To resort to deficit spending now would rekindle inflationary fires. These difficulties did not originate from excessive savings as in Keynesian contraction.

The huge construction expenditures and oil price hikes of the latter 1970s and early 1980s accelerated increases in the money supply and consumer prices and led to multiplier and accelerator effects that raised aggregate demand and overheated the economies. Mounting balance of payments deficits forced every country into a devaluation, either gradual or sudden.<sup>9</sup> The slowdown in export growth in 1985 removed the second prop underlying high growth and contributed a sharp fall in aggregate demand.

What is happening is in line with past retardations in long swings. As every economy settles into a lower equilibrium of aggregate activity, a decline in construction and exports produces a minus multiplier-acceleration effect on incomes and aggregate demand that cancels out the increases from previous years. The process manifested itself in various forms. In nonagricultural sectors, full- and part-time unemployment rose and full-time hours worked per week declined, thereby reducing aggregate work hours per year. Real earnings per hour fell as wages were frozen, or increased at rates that were less than the increase in consumer prices. To varying extents, this has happened in the first half of the 1980s in all NICs and ASEAN countries—with adverse, and apparently worsening, impact on the distribution of family incomes. Inequality in Taiwan has been kept extremely low through the decades, falling in most of the 1960s and 1970s, but rising slightly since 1980, in large part because the share of employee compensation out of total personal income began to decline [26, pp. 9–10]. Thailand has had the lowest income inequality among the ASEAN countries, but here too, inequality is rising over the past decade, a fact associated with increasing idleness in the labor force [29] [20] [22].

In addition to a pronounced negative multiplier-acceleration effect, construction boom is followed by a large debt repayment flow (besides interest payments) which dampens household, government, and business spending. Singapore and Hong Kong best illustrate the problem of household repayments on mortgages. The boom in residence construction in the Asian city-states was accompanied

<sup>9</sup> For data on money supply, prices, and public finance, see [5].

TABLE III  
THE DEBT SERVICE SHARE IN GOVERNMENT REVENUES

	1973	1976	1980	1983
Korea	38.1	19.2	24.2	25.5
Taiwan	8.7	7.8	16.6	—
Singapore	3.6	5.5	9.6	9.4
Malaysia	6.4	11.0	5.8	11.9
Thailand	4.0	3.9	9.1	15.1
Indonesia	8.7	10.9	10.8	16.0
Philippines	15.2	9.6	12.9	30.0

Sources: International Bank for Reconstruction and Development, *World Debt Tables: External Debt of Developing Countries*, 1983–84 and 1984–85 editions.

by an upsurge in home purchases financed by private and public loans. In 1983, these loans accounted for about one-tenth of total personal income (roughly estimated from official GNP). Consumption expenditures must be reduced by the level of annual repayments which must be made from household personal income. For government debt servicing (debt repayment and interest on loans outstanding), I have computed, from the World Bank's *World Debt Tables*, the share of debt services as a percent of central government revenues (Table III).

The debt service share of each of the NICs and ASEAN countries rose from 1973 (1976 for Korea) to 1983. Singapore and probably Hong Kong are the only countries where the share is less than 10 per cent of the budget, the reason being that, as noted above, the purchase of housing from the government shifted much of the public debt to the households. More disturbing is the prospect that the shares of each ASEAN country will rise during the rest of the decade since the combined repayments and interest payments are projected to increase by about 15 per cent by the end of the decade [11]. Data for private business's debt servicing is not available for most countries, the exceptions being Thailand and the Philippines where, in 1980, private debt outstanding (not guaranteed) was about one-third of public external debt outstanding. Thus, if the debt serviced by households, governments, and business is taken together, it comprises a substantial chunk of national income, much of which is a major constraint on present and future consumption propensities.<sup>10</sup> As the growth in budget revenue slows down in the coming years, governments are likely to feel the squeeze on their ability to spend for pump priming projects that inject purchasing power.

For countries such as Taiwan and Singapore that are better off in the sense that they have low outstanding debt and large foreign reserves, constraints will probably emerge on the demand side. After such high levels of construction in the 1970s and 1980s, the demand for construction may be saturated and effective demand will have been met for the time being. In Taiwan, construction of various facilities outpaced GDP, growing from 1971 to 1981 at an average annual rate

<sup>10</sup> For details, see [19]. Data on home loans is from [10] [28].

of 11.2 per cent compared to GDP's 8.8 per cent. The demand for schools and residences rose at an annual rate of 10 per cent but demographic trends now point to saturation in this demand. Household formation grew at 3.4 per cent per year in the 1970s and the twenty–twenty-nine age group is expected to fall from 6 per cent of the population in the 1970s to less than 1 per cent in the 1980s. Public school enrollment increased at 9.5 per cent in the 1970s but slowed to a 4.0 per cent increase in 1980–83.<sup>11</sup> Similar demographic trends prevail in the Singaporean economy which has been propelled by a two-and-a-half-decade boom in high-rise apartment construction and where two-thirds of the families now live in public housing.

The Philippines is in the worst situation. Like the others, it borrowed vast sums, but unlike them, it used those sums for dubious and inefficient projects that yielded low, zero, and sometimes even negative returns. Thus, the burden of servicing the debt is not just payment and repayment of interest but bailing out to cover losses. The most serious thing for the future of the Philippines is the degeneration of institutions that has occurred over the past two decades, while all other countries have generally been making improvements. It is hard to know what kind of data is most useful for measuring how much an institution has weakened, but some of the indirect indicators are stagnation in productivity, slow improvement in life expectancy during the 1970s and rising birth rates and crime rates. The weakening of institutions is particularly evident in the public sector: the bureaucracy, the civil service, the armed forces, the forces of law and order, the judiciary, schools, postal system, the mass media, public utilities and enterprises, agricultural extension, and social services. Indeed, it is difficult to find any Philippine public institution that has improved its performance in the last decade. The problem is more than that of inadequate budgets. Certainly a great deal of it is attributable to the foul atmosphere of corruption, with too much money from foreign loans floating around, debasing Philippine institutions. It takes a long time to develop good institutions, especially public ones, because the people who staff them are tenured in their positions.<sup>12</sup> But without good institutions, recovery from economic stagnation will probably be slow. After two disastrous years of steep declines on top of more than a decade of erosion in real wages, the economy could well stagnate because of insufficient purchasing power.

By these reckonings, the prospect for future high growth in the NICs and ASEAN does not appear to be good. However, one prospect will probably save the situation: the appearance on the international scene of a vital China, with its plans to quadruple per capita income to U.S.\$1,200 by the year 2000. With a population twice that of Japan, the NICs and the ASEAN countries put together, China would make a major difference. But for the rest of the 1980s, the impact will not be that great because incomes are projected to reach the level of only U.S.\$600 by 1990. Even in the 1990s, the benefit will probably still go mainly to Japan and the other OECD countries that possess the technology and capital

<sup>11</sup> Data from Taiwanese official national accounts and statistical yearbooks.

<sup>12</sup> On the Philippine crisis, see [7].

that China needs, while the ASEAN countries will be faced with a formidable newcomer competing for overseas markets. There are too many imponderables about China's future impact on Asia and this is particularly so with regard to its ability to modify socialist institutions and make them more efficient in production.<sup>13</sup> It is relatively easy to import technology from the West but to import Western institutions to a nation educated in socialist ways with a leadership clinging firmly to socialist goals is not as easy. For this reason and others I have placed a question mark after the title of this essay.<sup>14</sup>

India, the other giant of Asia, has begun to stir under young leadership. With its lower wages, it may turn out to be a mixed blessing to ASEAN and the NICs, as China will probably be. But, because India has done little to educate its impoverished masses, the challenge is likely to be less serious, except in special areas like electronics. The heavy industry strategies which both countries began in the 1950s provided many inefficient, nationalized industries. Rehabilitating those industries would be costly; their output would be of low quality and they would continue to resist liberalization and hinder the progress of small industry, especially those with export potential. Other countries of South Asia, such as Burma, Sri Lanka, and Bangladesh rank after India and they too are bogged down with a large collection of inefficient state corporations and other socialist institutions. The area will probably offer little challenge to the NICs and ASEAN for some time to come.

### III. POLICY IMPLICATIONS

Assuming that construction and export growth rates in the NICs and ASEAN fall substantially for the rest of the 1980s, perhaps to one-half of the 1970 levels, GDP growth rates will fall to about 4 per cent, a level that can be characterized as moderate growth. The Philippines is, of course, an exception, because its average growth rate will be about 2 per cent, implying negative per capita income growth throughout the 1980s. Attempts to borrow excessively and to deficit-finance the path to high growth will push the NICs and other ASEAN countries into the Philippine position with governments tightly hemmed in with little room to maneuver.

Historically, in the capitalist economy, contraction and downswing periods function to adjust and correct the imbalances, distortions, and inefficiencies that

<sup>13</sup> Efficient market forces do not grow spontaneously just because planning is abolished. Markets work well in the West because of their underlying institutions and values and these institutions and values take a long time to evolve.

<sup>14</sup> There is the most tantalizing prospect that the new Soviet leaders will take major steps to reduce armament costs, thus releasing vast sums for economic development. I would speculate that the past two decades of enormous defense expenditures by the OECD and Warsaw Pact countries have been the major factor slowing down their long-term growth, not just in reducing expenditures on productive areas, such as education, but in raising taxes. With lower taxes, the private savings rate would be much higher. This is one reason that Japan's growth rates have been higher than those of the OECD and Warsaw Pact nations.



crop up during expansion and upswing. These adjustments are necessary to prepare for the next round of expansion and to strengthen the economy by weeding out the inefficient and reducing the waste from distortion. This subjection to periodic cleanings is one reason why the capitalist economic system continues to be stronger than the socialist. The socialist process permits the accumulation of weak enterprise and does not present the stronger corporations with the challenges that keep them vigorous. As Keynes noted in tracing the roots of laissez-faire [14], the process of phasing out weak enterprises and turning their assets and labor force over to stronger companies is comparable to Darwinian natural selection.

Prolonged periods of high growth in the West have caused imbalances in external payments positions, some countries having large surpluses and others having deficits in production and consumption capacities, high wages and low capital returns. Institutionally, labor and product markets are sluggish and competitive pressures are weak. Political and social institutions are becoming cumbersome and ineffective.<sup>15</sup>

Protection, subsidies, and special privileges to certain industries have been major causes of distortions in Asia during long periods of high growth. Agricultural and industrial protection policies and subsidies have kept more cheaply produced ASEAN goods out of Japanese and NICs' markets and many of the capital-intensive industries in ASEAN have been protected for too long. If there is little likelihood of robust trading with the West, then this is probably the right time to expand intra-regional trade by opening ASEAN and NIC markets to each other. If the ASEAN countries could sell their diverse agricultural and labor-intensive products to Japan and the NICs and use the proceeds to buy capital-intensive, high technology products from East Asia they might be less prone to shift quickly into costly capital-intensive and high technology industries.<sup>16</sup>

A renewed effort for regional cooperation of one sort or another in production and trade should be made. Most ASEAN and NIC economies are small—too small to achieve scale-economic production in a broad range of industries—particularly in the manufacture of components and processed materials for the middle-stream of downstream assemblies. Such a situation calls for plans for regional specialization, similar to what the smaller countries of Western Europe have succeeded at for years. With prospects of exporting to countries outside the region no longer very good, it would seem sensible that efforts for regional cooperation be intensified, particularly in sharing one of the scarcest resources,

<sup>15</sup> See [8] [4] [6] [16] [9]. Richard Nelson emphasizes the complex interactions between various factors and the roll of institutions in [18].

<sup>16</sup> Although agriculture shows up in the charts as a damper on GDP *fluctuations*, it is still very important in the ASEAN countries as far as long term *trends* are concerned. Functionally, monsoon Asia's diversified agriculture and agribusiness is vital to the attainment of full employment because it uses employs people during the slack farm seasons. Since services follow other sectors, they are omitted from the charts but they are important functionally for supplying externals such as banking, transport, marketing, and public services.

experienced and skilled manpower, so that large-scale production could be achieved quickly and efficiently. But further regional cooperation will depend on the economic rationality of the human resources, the leadership and the institutions in the various countries. It took a long time for that level of rationality to be attained as the Western experience demonstrates.

One could say that the high growth of GDP has outpaced the development of institutions and human resources. It took the OECD countries centuries to accumulate capital and technology to their present levels and to develop manpower and institutions to their present state. But the ASEAN and the NICs have been able to borrow the technologies and capital in a matter of decades. Some institutions cannot be borrowed and others can, although they require long periods of adjustment and modification before they are suitable. Indigenous institutions should be used but they require certain modifications. It takes a long time to train human resources because that training has to take place, not just in the schools, but more importantly, in the workplace. Perhaps with the end of a feverish period of technological imports and infrastructure building for high growth, the time has come to pay more attention to manpower and institutional development. Not that progress in these areas has been lacking (except for the Philippines) but that improvements have fallen behind the pace of economic growth. To prepare for the next round of high growth, which will require more sophisticated levels of manpower and institutional performance, the period of moderate growth will be best used to develop manpower and institutions. If the institutional selection, modification, dissemination, and use of future technologies will cause high growth to be generated once more, manpower and institutions must grow together, one reinforcing the other, since human beings are the most important component in institutional operation.

The postwar NICs and ASEAN have rapidly increased the number of schools but they have sacrificed quality for quantity. Better-trained teachers at higher pay and an improved curriculum, one that is oriented away from soft subjects and toward scientific, technical, and vocational ones, will be necessary when agriculture and industry reach higher levels of technological sophistication. This calls for an expansion of junior high schools in the ASEAN countries and senior high schools in the NICs and that cannot be done without major increases in educational budgets.

A more important source of manpower is the workplace. The schools cannot be the main source of skill formation because they have other vital functions to perform such as the teaching of the social sciences and humanities to modernize social values, to foster national development and to improve institutions for better ways of living. In the workplace, the expanding of off- and in-service training can be the major source for improved work methods. Another major source of skill formation for the labor force, as well as for personal and national development, is the mass media through which state assistance can generate well-worked-out programs for adult and life-long education to replace the cheap programs that are intended solely for entertainment.

Upgrading of institutions is probably the most important task for the ASEAN and the NICs. The subject is a large one and only a few broad generalizations can be made here. The lag of institutions behind technology has been observed in Western development. As Kuznets emphasized, too long a lag can obstruct the processes of growth which lie above the interplay between technological and institutional change. Growth is retarded when market institutions are weak, when greed is too much a part of the political process, when bureaucrats substitute vested for national interest, when the forces of law and order violate law and disrupt the peace, and when religion refuses to modify theologies that the passage of time has rendered obsolete. The ways of improving institutions are few, difficult, and time consuming. One way is through human resource development, especially in the schools and in the home.

Another way is through wider participation in decision-making within the institutions. The NICs and the ASEAN countries started out with authoritarian ways of decision-making and have been too slow to broaden the base of decision-making during the ensuing postwar decades. The time is now appropriate for wider participation. During these three decades of human resource development, a modernized, educated manpower has emerged that is eager to participate in decision-making and implementation and is capable of understanding modern processes. This contrasts sharply with the tradition-bound, uneducated labor force of the early decades. The need at that time may have been for leadership to make urgent decisions quickly so that the country could make a fast start in modern economic growth. To exclude the new forces from decision-making now will not only alienate them but will cause the leadership to miss an important opportunity for motivating these new forces so that they can vitalize the institutions.<sup>17</sup>

The paths of postwar experience are littered with the disastrous results of authoritarian decision-making. Wider participation could have averted the disasters caused by misallocated and misused funds in the Philippines, by the plunge into heavy engineering, petrochemicals, and other costly enterprises in Korea, by the two hundred projects of the Indonesian military and by Mao's Great Leap Forward and Cultural Revolution. There is no insurance that a leader elected by ballot will be an adequate medicine for arbitrary decision, particularly if that leader is head-strong and surrounded by too narrow a circle of advisors, as can be attested by the Indian experience with heavy industrialization in the 1950s and the Malaysian experience of the past few years. Dismantling political authoritarianism is, of course, important but it alone will not be enough if steps are not taken to broaden institutional participation—whether in bureaucracy, marketplace, workshop, factory, school, mass media, or community organization. Unlike Westerners, Asians have been raised in traditions of monsoon padi agriculture that require greater group participation than capitalist wheat agriculture, coopera-

<sup>17</sup> The ordering and pushing around by Latin American dictators of populaces with high levels of education contributes to the instability of those countries.

tion rather than individualism. Asians will have to be motivated through participation rather than top-down authoritarianism.<sup>18</sup>

After its disastrous experience with pre-1945 authoritarianism, Japan has found that broader participation in political, economic, and social institutions helps to avert major blunders. "More brains than less" can come up with a good solution, especially if the problem affects large numbers of people. Although it takes much more time for discussion, the quick implementation of decisions arrived at because of broader participation more than makes up for lost time. In problems of growth, there is usually no single, correct decision, and compromise is to be preferred rather than a situation where only the interests of the "winners" receive attention and the "losers" are left completely out in the cold. Moderate growth targets will make it easier to accommodate the losers—all in the interest of stable sustainable growth. Most important is that wider participation is crucial in motivating and vitalizing manpower and injecting dynamism into lagging institutions.<sup>19</sup>

In sum, Western experience does not support the possibility of long periods of high growth uninterrupted by periodic downswings. Rapid growth inevitably generates imbalances and distortions which must be corrected as soon as possible so that high growth can resume. The period of downswings is the time to consolidate the gains and liquidate the losses and the quicker this is done, the earlier the resumption. Accordingly, there is plenty to do.

#### *Addendum*

Since the paper was written, unexpected developments induced by some of the difficulties have occurred and more changes are yet to come. The change in political leadership in the Philippines, the rise in the exchange value of the yen, and the fall in interest rates in the OECD countries may prove to be favorable in the long run for most Asian countries. The NICs are better prepared industrially to take advantage of the strong yen in the coming years. Their exports to Japan and other countries are increasing and Japanese small- and medium-scale industries are becoming interested in joint ventures. As a result, rising employment and improving foreign trade balances may induce these countries to open up their markets for the agricultural and labor-intensive industrial products of the four ASEAN countries. When labor shortages begin to occur in the NICs, firms from Japan and the NICs may turn to the ASEAN region. It is possible, therefore, to end this paper on an upbeat note, despite the problems discussed in this paper.

<sup>18</sup> I have developed this in [24, Chap. 1]. Despite authoritarian central governments in both countries, I found that Taiwanese farmers who control their own cooperatives perform better than Korean farmers who operate under state-controlled cooperatives. Details will be given in a forthcoming paper in *Economic Development and Cultural Change*.

<sup>19</sup> This theme is pursued in [21]. After having seen vitality decline in Europe, the Japanese have made its maintenance a major concern in their planning for the next fifteen years [13].

## REFERENCES

1. ABRAMOVITZ, M. "The Nature and Significance of Kuznets Cycles," *Economic Development and Cultural Change*, Vol. 9, No. 3 (April 1961).
2. ————. *Evidence of Long Swings in Aggregate Construction since the Civil War* (New York: National Bureau of Economic Research, 1964).
3. ————. "The Passing of the Kuznets Cycle," *Economica*, Vol. 35, No. 140 (November 1968).
4. ————, "Welfare Quandaries and Productivity Concerns," *American Economic Review*, Vol. 71, No. 1 (March 1981).
5. Asian Development Bank, Economic Office. *Key Indicators of Developing Member Countries of ADB*, Vol. 16 (April 1985).
6. *Business Day* (Manila), October 6, 1977.
7. DE DIOS, E. S. *An Analysis of the Philippine Crisis: A Working Report* (Quezon City: University of the Philippines Press, 1984).
8. DENISON, E. "Accounting for Slower Growth," in *International Comparisons of Productivity and Causes of the Slowdown*, ed. John Kendrick (Cambridge, Mass.: Ballinger Publishing Co., 1984).
9. GIERSCH, H., and WOLTER, F. "Towards an Explanation of the Productivity Slowdown," *Economic Journal*, Vol. 93, No. 369 (March 1983).
10. Hong Kong, Census and Statistics Department. *Hong Kong Annual Digest of Statistics, 1984 Edition* (1984).
11. International Bank for Reconstruction and Development. *World Debt Tables: External Debt of Developing Countries, 1984-85 Edition* (Washington, D.C., 1985).
12. ————. *World Development Report, 1985* (Washington, D.C., 1985).
13. Japan, Economic Planning Agency, Economic Council, Long Term Outlook Committee. *Japan in the Year 2000* (Tokyo: Japan Times, 1983).
14. KEYNES, J. M. *The End of Laissez Faire* (London: Macmillan, 1926).
15. KUZNETS, S. *Capital in the American Economy* (Princeton, N.J.: National Bureau of Economic Research, 1961).
16. LINDBECK, A. "The Recent Slowdown of Productivity Growth," *Economic Journal*, Vol. 93, No. 369 (March 1983).
17. LO, S. Y. *Industrial Technology Development in the Republic of Korea*, Asian Development Bank Economic Staff Paper No. 27 (Manila: Economic Office, Asian Development Bank, 1985).
18. NELSON, R. "Where Are We in the Discussion?: Retrospect and Prospect," in *International Comparisons of Productivity and Causes of the Slowdown*, ed. John Kendrick (Cambridge, Mass.: Ballinger Publishing Co., 1984).
19. OSHIMA, H. T. "Debt Repayment and Cyclical Fluctuation," *Review of Economics and Statistics*, Vol. 40, No. 2 (May 1958).
20. ————. "Perspective on Trends in Asian Household Income Distribution: An Overview with Special Reference to Indonesia," *Ekonomi dan Keuangan Indonesia*, Vol. 30, No. 1 (March 1982).
21. ————. "Reinterpreting Japan's Postwar Growth," *Economic Development and Cultural Change*, Vol. 31, No. 1 (October 1982).
22. ————. "Changes in Philippine Income Distribution in the 1970s," *Philippine Review of Economics and Business*, Vol. 20, Nos. 3 & 4 (September & December 1983).
23. ————. "On Long Swings and Their Implications for Asia, in the Latter 1980," in *Memorial Volume for Simon Kuznets*, ed. Paul Liu (Taipei: Academia Sinica, 1985).
24. ————. *Economic Growth in Monsoon Asia: A Comparative Survey* (Tokyo: University of Tokyo Press, forthcoming).

25. Philippines, National Census and Statistics Office. *1971 Family Income and Expenditure Survey* (Manila, 1973).
26. Republic of China, Executive Yuan, Directorate-General of Budget, Accounting and Statistics. *Report on the Survey of Personal Income Distribution in Taiwan Area, 1983* (Taipei, 1985).
27. SHINOHARA, M. *Structural Changes in Japan's Economic Development* (Tokyo: Kinokuniya Bookstore, 1970).
28. Singapore, Department of Statistics. *Economic & Social Statistics, Singapore 1960-1982* (1983).
29. Thailand, National Statistical Office. *Report on Socio-Economic Survey* (Bangkok, 1985).