

University of the Philippines
SCHOOL OF ECONOMICS

Discussion Paper No. 8614

December 1986

SIMILARITIES UNDERLYING EAST ASIA'S
HIGH GROWTH AND CONTRASTS WITH OTHER REGIONS

by

Harry T. Oshima
Visiting Professor

NOTE: UPSE Discussion Papers are preliminary versions
circulated privately to elicit critical comment.
They are protected by the Copyright Law (PD No. 49)
and not for quotation or reprinting without prior
approval.

UP8608197
27

Abstract

This paper continues on with the theme of my previous papers emphasizing the importance of human resource development in East Asia's postwar growth. It is argued that the NICs were better prepared to start rapid growth early in the postwar era because of prewar experience. Japan, in order to increase rice yields in the colonies so that the surplus could be imported for Japan's industrialization and militarization, had to modernize agriculture in Taiwan and Korea with better rice seeds, fertilizer, irrigation, extension, roads, and so on. To wage war in China, Japan established modern industries in Korea to produce for its army fighting in China. And in the 1930s with the beginning of invasion of China, Japan's economy began to experience labor shortages, and various labor-intensive industries were transferred to Taiwan. Since for modern agriculture and industry, an educated labor force was necessary, primary schools were extensively established. In the city-states, to develop Hong Kong and Singapore as efficient centers for entrepot trading and finance, the British had to develop modern physical and institutional infrastructure including education as the modern service industries needed educated labor force even more than modern agriculture and industry. In contrast, Western colonial powers were interested in plantations and not in rice production and did very little to improve peasant production. In exchange for plantation products, the West sold manufactured goods to the colonies, and there was no need to industrialize the colonies. The greater experience with modern agriculture enabled Japanese, Taiwanese, and S. Korean peasants to take full advantage of land reform to improve agricultural production in the 1950s. And when there was the unprecedented expansion in demand for manufactured goods in the West during the 1960s, East Asian manufacturers were able to produce to sell to the West.

Similarities Underlying East Asia's High
Growth and Contrasts with other Regions*

by

Harry T. Oshima
Visiting Professor

I. East Asia's Postwar Growth Record:

In Table 1 are shown the various indexes comparing the performances of Asian countries for which we have the data. The better record of East Asia (Japan and the newly industrializing countries or the NICs, Taiwan, South Korea, Hong Kong and Singapore), over the ASEAN Four (Malaysia, Thailand and Indonesia), and ASEAN's better record over the countries in South Asian Five (India, Nepal, Bangladesh, Sri Lanka and Burma, even though Burma is geographical in Southeast Asia). This is true whether one looks at the growth of aggregate GDP, or per capita or per worker GDP. Elsewhere, I have presented estimates of higher growth of total productivity in Japan, Taiwan and South Korea over that of industrialized countries in the West, ^{1/} generally speaking. These growth rates for East Asia are generally better than any other region of the world, including the Western industrialized countries, Latin America, Africa and Middle East as a whole for the three

*/ This paper was presented in Vanderbilt Conference, Nashville, October 17 and 18, 1986.

^{1/} Singapore data do now show total factor productivity to be rising and adequate data for other countries in Asia are difficult to find since capital stock estimates are not available. See my volume cited below for details, and also Economic Development and Cultural Change, April 1986.

complete postwar decades.^{1/} In fact, in the statistical annals of modern economic growth as conceived by Kuznets, no better record is found in the world for the past two centuries during a period as long as three decades and for a population as large as 170 million.

Moreover, this growth performance was accompanied by good progress in socio-economic development. By the end of the period adult literacy, years of school completed, life expectancy and food intake were higher in East Asia than the rest of Asia and total fertility rates and family income disparities were lower, as may be seen in Table 2.

II. Human Resource Approach^{2/}

In analyzing how and why East Asia grew so rapidly and performed creditably in socio-economic development, various approaches have been taken by different writers, with some focussing on savings and investment others on exports, and so on. I will try an alternative approach emphasizing the importance of human resources and manpower development. My reference period is a long one, three decades or so, in order to get at

^{1/} See statistical appendix of World Development Report, 1984.

^{2/} This section is a summary part of my "Human Resources in Macro-Comparative Productivity Trends in Asia," forthcoming in a volume edited by S. Ichimura and published by the Asian Productivity Organization, Tokyo.

secular forces. East Asia (except Singapore) was already doing better than other Asian countries in the 1950s, before the upsurge of exports and investments in the 1960s.^{1/} Development of human resources takes a long time, nearly a life-time, with the labor force containing more than one generation. Hence, one has to go back to the prewar decades to understand what was happening in the early decades of the postwar.

Savings and exports can be thought of as proximate forces in the long run, underlying which forces are more persistent and in a sense more fundamental forces. Kuznets has pointed to the importance of the interplay of technology and institutions as the basic forces in modern economic growth. For the developing countries most new technologies are imported and the capacity to select the appropriate ones depends much more on manpower than the advance of new knowledge which is partly a function of time. In the interplay of technology and institution it is the latter that is dominant. And the efficiency of institutions in turn depends on the quality of manpower since institutions may be viewed as groups of people working and thinking in patterned ways. Hence, the quality of manpower contributes to the effectiveness in the import, absorption, dissemination and adaptation of technologies through institutions in the market, in the government, and elsewhere.

^{1/} Growth rates of per capita GDP averaged in the 1950s nearly 4% (leaving out Singapore which grew at only 1.3%) compared to the ASEAN Four and South Asian Five. See my volume Economic Growth in Monsoon Asia: A Comparative Survey, Tokyo University Press, 1986.

During the first industrial revolution of the 19th century, capital accumulation was the major factor underlying modern economic growth as capital was needed for large-scale production and physical infrastructure such as roads, railways, and other structures. In the 20th century with the technologies powered by electricity (and gas-powered internal combustion engines) instead of steam, technology came to the fore and the skills needed by the workforce multiplied many times. The unskilled workers, the industrial proletariat of Marx, began to be replaced by skilled and technical workers. The tendency accelerated as the decades went by in the 20th century particularly after World War II.

The early population censuses' one digit classification of occupations had to be expanded to two digits, then to three, and to four or five in order to classify the large number of skills in the postwar decades in the developed countries. Also the number of industries multiplied, so that the cross-classified industry/occupation tables of 3 or 4 digits required a volume to list all the different types of workers instead of a few pages. In the 19th century, the textile industry was manned mostly by unskilled and semi-skilled workers, but they fell to one-half in mid-1940s and then to 10% by the end of the 1970s.^{1/} The types of machines multiplied

^{1/} With the increasing mechanization of the homes, farms and factories, unskilled workers (private household workers, farms and industrial laborers in the occupational classification declined absolutely to 8.7 million in 1978 from 15.6 million in 1900 and 13.4 million in 1950 although the labor force tripled, 1900 to 1978. Historical Statistics of the U.S., Colonial Times to 1970 and 1979 Statistical Abstract, Bureau of the Census, U.S. Department of Commerce, Washington.

from a few thousands into nearly a million.^{1/} Thus, skills and knowledge rather than muscle power emerged as the main contribution of human beings to the production process, and with this, human resources (rather than just labor) and their development came to the fore as a major factor of production in the second half of the present century. Moses Abramovitz has found that in the 20th century for the main industrialized countries, there has been a shift to labor productivity as the source of growth of GNP from the 19th century. He traces the source of labor productivity growth to investment in human capital rather than the rise in capital intensity.^{2/}

If we divide resources into material (natural and capital) and human resources, the latter is strategic in its interactions as it is manpower which manipulates material resources through institutions. The niggardliness of nature and the occasional misbehavior of heaven can be offset by the diligence and ingenuity of manpower. (Manpower is that part of human resources in the labor force.)

But the problem with this approach is the difficulty of measuring

^{1/} For details, see my "Problems of Heavy Industrialization in Asia," Philippine Review of Economics and Business, March 1983.

^{2/} See also R. C. O. Matthews and Associates, British Economic Growth, Stanford, 1982, and E. Malinvaud, French Economic Growth, Stanford 1975; both tend to stress the importance of human resources in the accelerated growth of the two countries in 1950s and 1960s. For Japan, see my "Reinterpreting Postwar Japanese Growth," Economic Development and Cultural Change, October 1982.

the level of human resource development in various countries. For education, years of schooling completed can be used, but the days and hours of schooling per year vary significantly in different countries, let alone the quality of the teaching and learning. But schooling is not the only source of human resource development, perhaps not even the most important, if we think of this development as more than skill formation, and including attitudes toward work and behavior in the workplace, or work culture or ethics.^{1/} The other sources are the home where pre-school children first learn about the basic institutions of society, including language, and evolve attitude toward work, leisure, learning and their behavior to one another. The skills and attitudes in the homes and schools are developed further in the workplace where the labor force spends most of its active hours of the day. Mass media, the church and other community institutions are other important sources. If so, it appears to be a hopeless task to look for rough proxies to measure human resource development such as statistics of patents for technologies or life expectancy for health.

Some very rough indications or manifestations of stronger work ethics and higher work culture may be obtained from data on hours of work, female participation rates, savings, and years of school completed. Hours of work per week even in the 1970s were about 8 to 10 hours in

^{1/} See M. J. Bowman, Education and Income, IBRD Staff Paper No. 402, Washington, D. C., 1980.

East Asia than in other parts of Asia, and female participation rates higher in East Asia than in other countries (except in Thailand), despite the fact that proportionately more East Asians were attending secondary schools and therefore staying out of the labor markets. Average years of schooling completed by the labor force come to about 7 years compared to 5 in the ASEAN Four and less in South Asia.^{1/} The gross internal or domestic savings (personal, corporate, government savings plus depreciation allowances) as a percent of GDP were higher in East Asia, averaging in Japan 28% during the 1950s, in Taiwan 21% during the 1960s, in Hong Kong and Singapore 25% in the 1970s, compared to about 20% in India, Indonesia, Philippines, and Thailand, and less than 20% in Bangladesh, Burma, Nepal and Sri Lanka in the 1980s,^{2/} according to available national account data. All these are approximate indications of work ethics as they are affected by other forces, and we need to resort casual observations and descriptions, which though based on two decades of living and travelling in Asia can be misleading.

^{1/} Data from ILO Yearbook of Statistics, 1978; for Taiwan from Statistical Yearbook of the Republic of China, 1985. Estimates from my paper in the Asian Productivity Organization volume, op.cit.

^{2/} Earlier estimates are taken for East Asia when per capita incomes were lower. South Korea's rate was only 11% in the 1960s, while Malaysia (with large Chinese population) saved about 25% in the 1970s. Data for Japan and Taiwan from official national accounts statistics, the rest from Key Indicators, Asian Development Bank, 1985. For the 1950s, data are available from official national accounts for three countries, India with 9%, Philippines with 11% and Thailand with 15% although these estimates must be regarded as very rough.

They do suggest that people's behavior and attitudes toward work vary from country to country. In Japan, work is taken seriously and the government finds it difficult to reduce weekly work hours of laborers and retire old farmers and others. In other countries, manual work is looked down upon and exhortation to work hard and save as improper and a sign of greediness. In East Asia, children are pressured to excel in work and study by the parents, and the ideal of seeking life's fulfillment in work as much as in leisure and pleasure is promoted in mass media in the workplace, and other community institutions, besides the home. In such a society the social milieu is one of hustle and bustle, giving rise to a work environment of great vigor and vitality, which affects even those who tend to be lethargic and lazy.^{1/}

To understand the differences in life-and work-styles in East Asia as compared to other regions, we turn to Max Weber who besides asserting the importance of the rise of Protestant ethics in the emergence of capitalism in the West undertook the study of Asian religions to see why capitalism did not emerge in Asia.^{2/} Weber thought that Confucianism and Maha-

^{1/} In Japan in the Year 2000, Economic Planning Agency, 1981, much concern for the loss of vitality is shown as Japan moves toward a mature society dominated by older people by the year 2000.

^{2/} This sections is a summary of my note "The Role of Manpower Development in Postwar Asian Differential Growth," Philippine Review of Business and Economics, Dec. 1978. See Max Weber, Essays in Sociology ed. H. H. Gerth and S. W. Mills, Oxford, 1958. In the Religion of India, New York, 1967, Weber found that the separatism and heirarchical ordering in the caste system and the view of life as a cycle of birth, death, transmigration of the soul, rebirth and ultimate salvation incompatible with capitalism. See also his Religion of China, New York, 1964.

yana Buddhism dominant in the traditions and Weltanschauung of East Asians were much more favorable to capitalistic society than Theravada Buddhism of Sri Lanka, Burma, Thailand, and Cambodia, and the Hinduism of India and Nepal, the Islam of Pakistan, Bangladesh, Indonesia and Malaysia, and the Roman Catholic of the Philippines.

The East Asian religions were more rational, pragmatic, and utilitarian than the ethical systems found in the other religions in Asia and hence conducive to the assimilation though not in the emergence of capitalism. The Geigers, note that the importance of the family and the reverence of ancestors, of filial piety, of education and moral learning, and of being motivated to achieve success to advance the position of the family and gain the respect of ancestors.^{1/}

R. Bellah found that in Japan, the ethics of hard work frugality and loyalty found in Confucianism and modified in Zen Buddhism spread to all classes in the Tokugawa (1600 to 1868) period, just as in Korea under the various dynasties. At the beginning of the Meiji period, a large Japanese mission to Europe (1871-1873) to study capitalism was impressed with the vast differences in the central values and temperament between East and West, and attributed them to the influence of religion on Western society. The mission, however found that Catholicism in

^{1/} Geiger and Geiger, see below.

Southern Europe, especially in Spain, was obstructive of development.^{1/}

The importance of religious traditions in the current views about work, leisure, and life in Asia should not be minimized. For Asian religions represent the crystallization of social values from the many centuries of traditions whose unbroken continuity have been handed down to the present, unlike in the West. The religions of the West have not been able to make much more than a dent in the hold that traditional religion has for Asians, particularly for the lower classes, even though efforts were made in the colonial period and in the postwar decades to convert them to Christianity, except in the Philippines, and to a lesser extent in South Korea. In the Philippines there was no organized, formal religion to resist the imposition of Roman Catholicism.^{2/} Everywhere in Asia, one finds the ubiquitous

^{1/} D. S. Shively, Tradition and Modernization in Japanese Culture, 1971, Princeton. Weber regarded Hinduism as a "kind of Indian Catholicism," see his Sociology of Religion, Introduction, New York, 1927, Bellah, Tokugawa Religion, Boston, 1959.

^{2/} Japan except in Nagasaki is an example of how negligible a headway Christianity has made despite a century of efforts by many Western missions, some of which are now preparing to close and give up. See also J. K. Fairbank, E. O. Reischauer, and A. M. Craig, East Asia: Tradition and Transformation, Boston, 1973; D. J. Steinberg and Associates, In Search of Southeast Asia: A Modern History, Oxford, 1971.

The pervasive influence exerted by organized religions in Asia on the economy and society was not only through the priests in the temples but through the education extended to the elites whose values in turn were transmitted to classes below.

temples, whether they be Buddhist, Moslem Catholic or Hindu. They influence the attitudes to work, to save and learn, and thereby the behavior of workers and management in the farms and workshops and in the offices and bureaucracy. They contribute to the ability of management and technicians to absorb the technology transferred from abroad, of workers and peasants to use efficiently the new technologies, and of rulers to govern diligently. Self-fulfillment is found in work rather than in pleasure or worship even for the blue-collar workers. In Japan, workers take no more than a week of vacations when entitled to two, while in Hindu Bali much time is spent in numerous festivals.

III. Endowments and Legacies from the Prewar Past

It was fortunate for East Asians that Confucian teachings stressed more the worship of ancestors than of god or gods as in the case of other religions of Asia. This led to the emphasis of life on earth instead of life hereafter. To please the ancestors, the well-being of descendants was the goal of life while Mahayana Buddhism evolved in East Asia into a ceremonial religion mainly confined to the rites of birth, marriage, and death, unlike in Tibet. Theravada Buddhism, Islam and Hinduism in varying degrees taught believers that man's salvation was in the hereafter and life on earth was to prepare for life hereafter. The fulfillment of life on earth was through asceticism, renunciation, and fatalism which were not conducive to a strong

work ethic. For the Confucian, ancestors were best served by hard work and savings for better future of their descendants and the perpetuation of the family which also pleased the Confucian Heaven.

In this social milieu, the Japanese colonialists in the early decades of this century proceeded to exploit Taiwan and Korea as a source of rice for Japan's manpower in the drive for industrialization and militarization and as a market for its manufactures. To produce a surplus exportable to Japan, it was necessary to modernize rice growing which in turn called for the construction of irrigation facilities, transport, and other infrastructure, and above all, improved manpower, and institutions. Primary schools were established to expand literacy, numeracy, and the rudiments of science, besides the Japonification of the Koreans and Taiwanese. This was necessary if the thousands of extension agents sent to these countries can carry out their work effectively and expeditiously. These policies undertaken previously in Japan were successful in raising rice yields with the Japanese peasants. Primary education was needed in the 1920s when the first high-yielding varieties (HYVs) were developed in Japan. These needed fertilizers which in turn called for weeding and pesticides. Thus, for the dissemination and proper use of modern inputs, the extension agents had to teach the peasantry the rudiments of scientific agriculture. The policy succeeded in raising yields and East Asia started the postwar decades with yields substantially higher (about double) than

other regions of Asia.

In contrast, the Western countries (which are not rice-eating) occupying Asian countries were much less interested in rice production compared to the production of plantation crops (tea, coffee, coconuts, sugar, and with the rise of automobile production, rubber, too). Not much was done to develop rice production, although the British did succeed in developing HYV's in Malaysia in the 1920s (about the same as the Japanese did, but due to lack of education of the peasantry and an extension system, their propagation did not succeed. The United States in the Philippines began to establish primary schools and a small extension system but since HYV's were not developed, not much was accomplished in the modernization of rice growing; this was also the case with unoccupied Thailand.

By the mid-1940s more than one-half of the number of children of primary school age was attending public schools, which was greater than in the colonies of the Dutch, British and French. These schools were of good quality and helped in manpower development, better than the traditional Buddhist temple education in the pre-colonial period, or in the temples of Sri Lanka, Thailand and Cambodia. The emphasis on Confucian ethics and work education in the Japanese schools contributed to the strengthening of the culture of work among the peasantry and in the bureaucracy which was dedicated to national development. The East

Asian countries (together with Philippines) started the postwar decades with three-fourths of the number of children of primary school age able to read and write compared to one-half for the Theravada Buddhist countries and less than one-fourth for Indonesia, Malaysia, India, China, Nepal, and other other countries.^{1/}

In the early 1930s, Japan began to develop industries in Korea for preparation for the war in China, and in the latter 1930s in Taiwan as Japan began to experience labor and fuel shortages with the acceleration of its industrialization and militarization.^{2/} Thus, the industrial skills and experience gained before the 1950s in Taiwan and especially Korea were considerably greater than elsewhere. And, the preparation for the Chinese war opened up opportunities for industrialization in the Japanese colonies, unlike elsewhere.

^{1/} See Samuel Ho, Economic Development of Taiwan, 1860-1970, pp. 99-102, Yale : 1978 and N. F. Mc Ginn and Associates, Education and Development in Korea, pp. 80-85, Harvard: 1980. In the Theravada Buddhist temples, the priests taught the children to read the Buddhist scriptures while in Islam education, the children learned to recite the Korean in the mosques. The British rulers were too worried about education being "disruptive" in their colonies.

^{2/} See Ching-Yuan Lin, Industrialization in Taiwan 1946-1972, Chapter 2, New York: 1973. "In a matter of 45 years, from 1895 to 1940, Taiwan underwent a transformation from an opium-smoking traditional society ... to one that was substantially modernized" and this was modified ".... not just in physical facilities but in institutional set-up and the behavioral patterns of the people." Fuel-intensive industries such as metallurgy and chemicals, besides raw material-based industries such as paper and pulp, sugar mills, etc. were developed.

It must be noted that with the technologies of the pre-war decades, skill formation of the workforce was mainly done in the workplace whether farms or factories, and not in the secondary schools which were not adequately developed in Asia, although primary education was also needed to facilitate the absorption of skills on the farm from extension agents and in the factories through in-service training.

As to the city-states of Hong Kong and Singapore, the British developed them as financial, mercantile, and shipping centers to handle the plantation production of Indonesia, Malaya, and Borneo in the case of Singapore, and the trading of diverse products from China in the case of Hong Kong unlike Taiwan and Korea where the emphasis was on agriculture and industry they became highly developed cities with extensive physical structures and institutions for the service industries (including government services). The service sectors, especially finance, trade, communication and the public services, make large demands on educated manpower. In Asian countries, years of school completed of the labor force in the service sector were higher than that in industry and agriculture where a much larger proportion of unskilled and semi-skilled workers belonged. Hence, in order to develop the city-states, the British rulers could not neglect education which was supplemented with the establishment of private schools. More important was the training and experience obtained from working in the banks, marketing, shipping, wholesale and retail firms. Free trade and laissez faire made hard work and efficiency necessary for survival in the

highly competitive markets. The Chinese who came to the city-states learned that the British banks and other institutions were of little help and had to rely on their own efforts. Some failed but many succeeded and developed into hardly entrepreneurs. Manpower in the entrepot cities was well advanced in business practices at the beginning of the postwar decades.

The Geigers point out that the Chinese merchants in Singapore handled the inflow of primary goods from Malaya and Indonesia, while the British agency houses handled their outflow to the West and the inflow of manufactured products. In Hong Kong, opium from India was sold to China in exchanged for tea, silk and porcelain and other products. Also financing and management of the plantations came from Singapore and the construction of railroads, public utilities, harbours and other facilities from Hong Kong. They stress the importance of the Confucian background of the Chinese who came to the city-states, particularly the ideals of "reverence and accountability to the ancestors as progenitors of the family and concern for its perpetuation and reputation with periodic reports on the family's welfare and good name," and the acquisition of knowledge and the importance of formal education.^{1/}

^{1/} See T. and F. Geiger, The Development Progress of Hong Kong and Singapore, Macmillan: 1976.

Except for the location of their countries, the natural resource endowment of East Asia has always been meager, Hong Kong is close to the main centers of Southern China and one can reach Shanghai readily by ship while Singapore's location is strategic to Malaysia and Indonesia and both are blessed with excellent harbours. The main cities of Japan, Taiwan and Korea are closer to the United States than any other major of Asian cities. The lack of primary materials and energy to export compelled East Asia to develop manufactures and services whose earnings were used to finance food imports needed for survival and equipment needed for growth. In 1960, the share of primary imports (food, non-food agriculture, fuels, minerals) was greater than their export share while the reverse was true for manufactures in East Asia. In Southeast Asia, the share of primary exports exceeded the share of imports, while for manufactures, the share of primary imports exceeded export share by wide margins.^{1/} In the city-states, excess of export of services (shipping, trading, tourism) over imports was a major source of financing imports of food and machinery. But manufacturing and service industries are human-resource intensive so that the poverty of natural resources means that human resources must be developed in order to be able to export. Despite meager natural resources,

^{1/} Estimated on the basis of data from World Tables, Second Edition, IBRD, Washington, 1980. Per capita exports of manufactures in 1965 were \$64 in East Asia, compared to the ASEAN Four's \$10 and India's \$1 or \$2 estimated from World Development Reports.

productivity per worker was rising in Japan, Taiwan and Korea in the 1910s, 1920s and 1930s at an average annual rate of about 2.5% (representing to GDP growth of 3.5%) while available data for other countries in Asia indicate little or not increases in productivity.^{1/}

IV. Postwar Development Patterns^{2/}

With prewar growth rates moderately high, it was easier to shift to high growth in East Asia, in the postwar period since it is difficult to jump from stagnation or low growth (0 to 2% GDP) to high growth (8 to 10% GDP), skipping moderate growth (3 to 5% GDP), under normal circumstances, the capital, manpower, institution, or technology required to shift from low to high gear are not at hand. East Asia was able to get going earlier than the other countries which were beset with problems of attaining national independence, social consensus, nation-building, and political stability; (Malaysia, Indonesia, Burma) with those achieving early independence (Philippines, India, China, Sri Lanka) an industrialization strategy demanding sophisticated manpower beyond their capabilities was selected. The

^{1/} See my paper in Economic Development and Cultural Change, April 1986 for data and R. Hooley's article in Philippine Economic Journal, First Semester, 1968.

^{2/} For details of this section, see my forthcoming volume, op. cit., Tokyo University Press, 1986.

early start in the prewar and postwar decades was important because East Asia was able to seize the opportunity and was prepared to export industrial goods when the Western economies opened up to liberalized trading in the 1950s and 1960s. Other countries were too busy with political problems or with industries which could not export to the West as they were too capital-intensive and not competitive, other countries were too backward to have any industries (Thailand, Nepal, Burma). This early start in simple labor-intensive industrialization and exportation enabled East Asia to graduate rapidly and smoothly to more sophisticated capital-intensive industrialization in the course of the postwar era so that by the end of the 1970s, its industrial capabilities were far ahead of other regions, even those of China, India and the Philippines, which were bogged down with too sophisticated, capital-intensive industries.

In the earlier years of the postwar era, it was fortunate that the United States government, influenced by the view that feudalistic agriculture contributed to political instability and militarism, sought to abolish landlordism not only in Japan, but in Taiwan and South Korea through demands for comprehensive land reform, the sweep of communism and agrarian reform in neighboring China which influenced not only the United States but also the governments of East Asia. Freed from landlordism, the peasantry through their organizations (established by the Japanese previously) began to demand more irrigation, credit, extension services, and other means to develop agricultural production further. These peasants

through past experience knew the importance of modern inputs in raising productivity.

Crucial to agricultural development was the availability of irrigation water for more crops in the drier seasons and higher yields in the wet season. Large sums were spent to extend further irrigation and transport infrastructures of the prewar decades. By the early 1960s, the share of irrigated area to the arable land was more than double that of Southeast Asia and South Asia.^{1/} Rice yields per hectare in East Asia rose steadily and by the end of the 1970s, they reached 4 to 5 million tons, further widening the yield gap with South and Southeast Asia. Moreover, the crops in the dry season enabled peasant families to keep themselves busy with more lucrative work, contributing to higher family incomes, greater purchasing power for industrial products, and conserving foreign exchange for the import of industrial equipment.

Industrially, many of the prewar industries were bombed out in Japan, Taiwan, and Korea by the United States during World War II. But with the experienced manpower, Japan began to export labor-intensive products in the early 1950s and Taiwan and South Korea in the 1960s (after a decade of import-substitution) when the Western markets opened up.

^{1/} Based on data from FAO Production Yearbook, 1976, 1980, and 1983 and from Taiwan Agricultural Yearbook, 1974 and 1982 edition.

In all three, the emphasis was on labor-intensive industrialization which was less demanding of capital and experienced, skilled manpower and for which technology was readily transferred from the outside.

In the city-states, Hong Kong was in great trouble when Mao's army cut off the entrepot trading with China. Similarly, but much less so with Singapore as Indonesia attained independence and began to build up its own cities for export. Both countries faced the need to shift to industrialization to create employment and exports. It was fortunate that the experienced Shanghai textile manufacturers with some of their technicians, fled to Hong Kong in 1948 and with the arrival of new machines in Hong Kong which they had previously ordered from England, they began to produce for exports to the West. These entrepreneurs were assisted by the British banks in finance and by the mercantile agencies in shipping and marketing. This gave Hong Kong an early start in industrialization, and when the big department stores and chains of the United States came to Asia to look for cheaper sources to supply them with garments, shoes, toys, furniture, processed foods, kitchen wares, radios and television sets, etc. to sell in the United States, they went to Japan in 1952 and then to Hong Kong. This was a great boom to both countries since these mass-distributors brought marketing and engineering specialists to teach Hong Kong entrepreneurs the best ways of producing and marketing products to the Western countries. (Mass dis-

tributors from from Europe followed later.^{1/}) Singapore's start was slower since much more of their entrepot trade survived in the 1950s and being part of the Malayan Union, it opted for import-substitution industrialization. But with high levels of unemployment and without an industrial entrepreneur class, it decided to industrialize by opening its economy to multi-national branches, after separation from Malaya in the mid-1960s. By the end of 1960s Singapore was approaching full employment levels.

When quotas on textiles and garments were put on Japanese and Hong Kong exports, and when wages began to rise rapidly with full employment by the early 1960s the Western mass distributors began to move out to Taiwan and South Korea where wages were still low. Industrialization accelerated in these countries in the 1960s as the mass distributors found plenty of experienced entrepreneurs and skilled workers to produce the goods needed for the rapidly expanding markets in the United States and Europe whose growth of GNP accelerated to 5% levels in the 1960s. By the end of the 1960s, Taiwan reached full employment not only in the rural areas but also in the urban areas and South Korea was approaching full employment in the early 1970s, delayed by half a decade because of the Korean

^{1/} See Geiger and Geiger, op.cit.; Gene Gregory traces, "Asia's Electronic Revolution" to the U.S. mass distributors arrival when they found that the Western cartel were charging them high prices; see Euro-Asia Business Review, Volume 1, No. 1, 1982, and for further details see my volume, op. cit.

War in the early 1950s and the slower development of agriculture. After rice self-sufficiency, Japan and Taiwan diversified into other farm products but Korea was slower in reaching self-sufficiency. Thus, by the late 1960s all the East Asian countries had attained or were well on the way to full employment, unlike the rest of Asia.

In the 1970s, growth was sustained at high levels, except in Japan, which was hit hard by the oil shocks, whose growth fell to moderate levels of 4% per capita GDP, a rate which is double the 2% levels of other OECD countries. The high levels were the outcome of rapid substitution of imported machines for workers in the factories, farms, offices, and stores, under conditions of full employment as in the neo-classical model. But it was also the result of the big construction boom made possible by huge borrowing from petro-dollars, except in Japan. ^{1/} High industrial growth in the 1960s produced shortages of housing, road and transport, harbours, buildings, and so on in the rapidly growing cities of East Asia.

This pattern of East Asian growth differs sharply from those of other parts of Asia, with the possible exception of Malaysia. Preoccupied with the communist rebellion in the 1950s, the latter started out late with rural development in the 1960s and 1970s. The Malay political leadership

^{1/} For details, see my "Construction Boom in the 1970s," The Developing Economies, September 1986, Institute of Developing Economies Tokyo.

concentrated on improving the income of Malay peasants, leaving the plantations to the British enterprises and industrialization to the Chinese. The plantations developed into some of the most productive in the world, far outstripping the Sri Lankan and Indonesian plantation which were both operating under heavy-handed policies of the government. The Chinese developed labor-intensive industries, especially electronics in Penang which grew into one of the largest in the world. By the end of the 1970s, full employment was approached and Malaysia's per capita GDP in U. S. dollars rose to surpass South Korea.^{1/}

Malaysia's economy is rather unusual for monsoon Asia. There is a mini monsoon in the dry months which keeps Malaysia green and lush throughout the year, supplying enough water for the perennial crops, chiefly rubber and palm oil. Most of Malaysia's soil is loose and sandy, suitable for trees but not for paddies which hold water. Cultivated land is mainly for perennials, unlike other Asian countries where rice cultivation predominates with the exception of Sri Lanka which is another plantation economy. The labor intensity of perennial crop growing is far less than in paddy so that Malaysia is much more sparsely settled with larger farms than East Asia.^{2/}

^{1/} World Development Report, 1982. The high dollar income was due to the high level of incomes at the beginning of postwar growth which in the early 1950s was higher than any country in Asia. (Estimated to be \$160 by the UN, higher than Japan, but probably lower than the city-states.)

^{2/} For data see my volume, op.cit.

In the rest of Asia, growth was slow or moderate at high levels of idleness, especially underemployment during the dry months. In countries which concentrated their finance on capital-intensive industrialization such as the Philippines and India, not enough was spent on labor-intensive industries and agriculture to create employment, while the protection needed for the large industries resulted in high cost and poor products which in turn were forced on small businesses, peasants, and the consumers. Similar problems emerged in countries going in for nationalized industrialization (Sri Lanka, Burma and Bangladesh). Indonesia started out too late saddled with Sukarno for a long time, and though a good effort was made to develop agriculture in the 1970s, the military began to spend too much on large enterprises in the late 1970s. Thailand's peasants moved out to the Northeast and contributed to the growth of agricultural exports but found that the lack of irrigation limited the growth of agricultural productivity, especially during the dry months, and thus were unable to find much remunerative employment when the monsoon rains went away. Without experience in the prewar decades, the import-substitution industries were slow to mature into export industries. Like the NICs, all the ASEAN Four borrowed heavily from petro-dollars in the 1970s, not only for physical infrastructure but for large government-owned enterprises which appear to be inefficient and incurring heavy losses. Debt payments take a large chunk of the current budget and are likely to constrain growth in the future.^{1/}

^{1/} See construction paper in The Developing Economies, op.cit.

East Asia was fortunate to industrialize and export earlier. But what made this possible was the prewar experience of Japan, Taiwan and South Korea in modern agriculture and industrialization, while the city-states possessed a ready-made urban infrastructure with modernized and efficient mercantile, financial, and shipping facilities attractive to outside industrial entrepreneurs.^{1/} A good headstart, the selection of an appropriate postwar strategy of development (agriculture and labor-intensive industries first), and so on may be traced to the higher development of human resources both before and after the war. The legacy of a strong work ethics originating from centuries from centuries of Confucian teachings and its reinforcement in East Asian schools under the Japanese occupation together with the experience gained from the modernizing agriculture and industry (and in the services with regard to the city-states).

The strength of the work ethic may be inferred from the maintenance of longer hours of work in East Asia and the high savings propensity in the 1970s despite growing affluence and rapidly rising real wages, contributing to the growing productivity. Unlike other countries, they relied on themselves, disdainful of public hand-outs. Unlike in Sri Lanka, Burma

^{1/} The importance of possessing a modernizing agriculture of a traditional one is attested to in the case of Western industrialization in the 19th century when those entering into modern economic growth were those which eliminated feudalistic aspects of agriculture earliest, or those which did not start with any, like the United States, Canada and Australia.

and Malaysia, welfare programs had no place or were of little importance in the budgets of East Asian governments in the early decades when funds were meager and badly needed for economic growth.^{1/} Besides, employment in the bureaucracy was kept down compared to the bloated bureaucracies of the Philippines, Malaysia, Sri Lanka, and elsewhere. Nor did the East Asian countries adopt measures guaranteeing employment as in the "iron rice bowl" philosophy of Communist China which can damage long traditions of good work ethics, perhaps at the least, temporarily.

Full employment in the East Asian countries meant that human resources, both skilled and educated, and unskilled were utilized maximally and efficiently. In countries like the Philippines and Sri Lanka educated unemployment has long been excessive and now rapidly growing in countries like Thailand, India, and others. Manpower is wastefully utilized and exploited under conditions of large surpluses, and the incentives to train them in-service are low. The scarcer the supply, the more efficient is the use, and the greater is the desire of management to minimize its use through substitution with machinery and other technologies. The accelerating use of new technologies was a source of improving man-

^{1/} See IMF, Government Finance Statistics Yearbook, Washington: 1984; even in the early 1980s when per capita incomes have risen to high levels, the budget share of expenditures for social security, welfare, and housing was lower in South Korea and Taiwan than in Sri Lanka, Burma and Malaysia.

power skills as the workforce had to learn to work with more and better technologies, these in turn led to higher incomes and more savings for the workers who can finance more education for their children.

All this was conducive to improving the capacity to absorb the new imported technologies. All the countries of Asia were raising the technological levels of their economy by bringing in new technologies from the outside, like in Japan during much of the 1970s, except biological technologies in agriculture. The capacity of manpower to absorb, modify, and utilize them efficiently (including their maintenance and repair so that there is no prolonged stoppage in the operation) was crucial if the technological transfers were to proceed efficiently and raise productivity. Apparently East Asian countries were able to successfully transfer technologies, and in due course to reproduce them, thereby reducing foreign exchange costs for their importation, and in the process building up the machinery industries which ^{1/} later began to export them to other countries in East Asia.

As noted, the engineers and marketing specialists of the United States mass distributors found East Asian entrepreneurs and workers capable of absorbing the technologies they brought with them and preferred these countries to others even though wages were higher. Moreover, instead of formal and costly methods of technological transfers such as licensing,

^{1/} In Japan and Korea had centuries of experience in the transfer of technologies from China in the earlier periods.

technical tie-ups, proprietary means, and joint-venture agreements, East Asian countries picked up technologies abroad to work as apprentice and ^{1/}train on the job. For other nations with less experience, the difficulties of transfer are many: the selection of the most appropriate technologies and bargaining for the best terms, besides mastering and adopting them for maximum use and efficiency, and transmission and dissemination. Multi-national firms often complain of the difficulties in the transferring technologies to other countries and of the high cost of bringing their own staff for prolonged periods while the countries complain of receiving inappropriate technologies. In other cases, such as in India, China, Philippines and elsewhere, the technologies brought in were too costly and complex for their manpower to manage, adapt, and operate efficiently, with the result ^{2/}of incurring heavy losses.

In the selection, financing, management and marketing of the

^{1/} C. J. Dahlman, L. E. Westphal, L. Kim in Nathan Rosenberg editor, International Transfer of Technology, Measures, and Comparisons, New York, Pergamon Press, 1986. Also S. Y. Lo, Industrial Technology Development in the Republic of Korea, ADB Staff Paper No. 27, July 1985 Manila. Also Cost and Conditions of Technological Transfer Through Trans-national Corporations, ESCAP/UNCTC, Series B, No. 3, Bangkok, 1984.

^{2/} The best example is the intergrated iron and steel industry in India and China which could not be operated on a full capacity basis for three decades despite the large demand for its products. In contrast, the Koreans brought in technologies from Japan in the latter 1970s and have not only been operating the industry fully but also exporting to other countries including Japan.

The ability to absorb technologies successfully, particularly to adapt and reproduce them is an important step in the success with which R and D can be undertaken for new technologies in the future.

technologies to be imported, the strategic role is played by the upper echelon of manpower, the entrepreneurs, and the managers. The Geigers note that today, most entrepreneurs in Hong Kong are South Chinese, many of them learning from the Shanghai manufacturers. Many of them were former employees usually technicians, foremen and skilled workmen or junior managers, salesmen and other office personnel. Thanks to the socio-cultural characteristics analyzed in Chapter II they are alert and inquisitive enough to learn much more about the business than their specifically assigned tasks, and are ambitious enough to want to increase their incomes by becoming entrepreneurs themselves.^{1/} The "characteristics analyzed in Chapter II" are the Confucian ideals of learning and economic success to improve the family positions and gain the ancestors' respects. These entrepreneurs springing from the lower levels were willing to take risks with their own or family funds, and compete aggressively with the more established enterprises unlike in other parts of Asia where entrepreneurs and managers come from the upper classes or from the bureaucracies with funds borrowed from

^{1/} Geiger and Geiger, *op.cit.*, p. 75. One study on Korean entrepreneurship identified Confucian virtues as the major ingredient in successful entrepreneurship. Schooling was not unimportant but the most important characteristic in smaller enterprises was the learning experience from working in the family business or in other firms. See L. P. Jones and Il Sakong, Government, Business and Entrepreneurship in Economic Development: the Korean Case, Harvard: 1980. In the Philippines, MBA's from United States universities are plentiful, bringing with them the latest techniques of management, but good entrepreneurship goes far beyond techniques and encompasses the ability to take risks and venture forward and willing to endure long hours of intense work and forego leisure.

the banks or the governments. In some of these countries, aggressive competitors were looked down upon as deviants, selfish and greedy, alien to the traditional culture and values which stemmed from production for subsistence rather than for commerce. East Asian entrepreneurs had no compunction in amassing wealth as it was the calling of their ancestors, no different from the protestant entrepreneurs who were working along and hard in response to the calling of their God and fulfilling His will during the beginnings of capitalism in the West. It was in competitive striving that entrepreneurs and managers developed most rapidly unlike in private and public monopolies. Without competition to spur on the entrepreneurs, managers, and their workforce, the traditional subsistent society cannot shake off its lethargy and be transformed into one of hustle and bustle, growing with vigor and vitality.

Finally, the selection of the proper strategy in the early stages of development, i.e., the concentration on agricultural development and labor-intensive industries, and then evolving away from rice agriculture into diversified farming and more capital-intensive industrialization in the later stages, bespoke well of the political elites and the bureaucracy. Instead of jumping into complex, capital-intensive industries, the East Asian political elites selected a development strategy that their countries' manpower can handle. Rice growing was not a new industry; the basic manpower skills were there, only the farmers had to be taught better ways of cultivation and this was easier to do with the peasantry owning their farms

and without the interference of traditional landlords. The skills and experience obtained in modern rice-growing could be transferred readily to diversified crop production later on as irrigation infrastructure become more plentiful for the drier season cropping. And as real wages rise, machines can be bought from larger incomes, releasing labor with more education to the urban sector. The semi-skilled manpower required for the simple technology of labor-intensive industries could readily be trained on the job. The demands for highly skilled and educated technical manpower were minimal in most labor-intensive industries which as in spinning in the textile industry used the same or similar machines instead of a variety of inter-connected machines as in car assembly or the iron and steel complex. Moreover, the capital required in this type of industries was small. This strategy was appropriate in the sense that it created jobs in the rural areas during the dry seasons and jobs for the large pool of urban idle labor and responded to the need for food and clothing by the populace in the early stages of development.

The political elites and the bureaucracies in many other countries were too busy to be working on development strategies as they were locked in the struggles for independence from their colonial rulers, or after independence with rebellions and dissidence. The others who started their development early in the mid-1940s opted for capital-intensive industrialization, which absorbed most of the trained manpower. Besides shortages of supportive physical infrastructure such as transportation and intermediate

inputs such as coal, the most important obstacle was the inadequacy of manpower to manage and technical skills to operate the plants smoothly and attain efficiency. The subsidies and protection needed to make them viable had to be extended over too long a period, thus making it difficult to inject competitive forces for the growth of efficiency.

The upper levels of the bureaucracies in the colonies, Taiwan and Korea, were occupied by the Japanese who had to leave after World War II; and this was no different from those of other colonies. In Taiwan, the Nationalists came to replace the Japanese and proceeded to clean out the inefficiencies in the Taiwanese bureaucracy. In South Korea, the corrupt Singman Rhee government was swept away with the coming of a military government. Both new ruling elites were concerned about the challenge posed by Communist armies from the North. It was imperative that agriculture be developed to conserve foreign exchange used for the building of a large army and attain food security in case of invasion, and that labor-intensive exports be promoted to earn foreign exchange to buy machinery and raw materials. In both countries and in Japan, the elimination of the traditional landlords from the political scene made it easier for the new ruling elites to govern more rationally toward the modernization of the economy.

This was different from the experience of other countries where land reform was not or only partially undertaken, and the influence of the

landlords was to a greater or lesser degree pervasive in the political process. The coming into power of the Socialist and welfarist Labor Power in England encouraged former British colonies like India, Sri Lanka, and Burma to undertake industrialization through large publicly-owned enterprises while leaving the peasants to fend for themselves against the landlords. This was not so with Japan, Taiwan, and South Korea where United States influence encouraged the development of market forces through the growth of private enterprises. In Hong Kong, British rule, from the beginning of the postwar era, worked to establish political stability, relying on the resources of British and Chinese banks, mercantile and shipping agencies and the experience of Shanghai industrial entrepreneurs to develop the economy through market rather than public mechanisms. The success of market forces was a deterrence to Labor Party meddlings.

Land reform was most urgently needed in the Philippines where unlike in other colonized countries, the indigenous landed oligarchy established sugar, coconut, and other plantations, and large rice holdings, since the Spanish period. Unlike the Spaniards, the British, Dutch, and French colonizers were not interested in agricultural production. In the American period the landlords continued to expand their holdings. When independence came, other countries (with the exception of Malaya) took over the plantations from the British, Dutch and French owners, but no such transfers occurred in the Philippines and the landed oligarchy remained powerful in politics. Instead of trying to develop peasant agri-

culture and labor-intensive industries, policies concentrated on large-scale agriculture and industry, the latter supplemented with the entry of American corporations which together with indigenous entrepreneurs were given prolonged protection from outside competitions.

The East Asians political elites and the bureaucracies perceived that in the early stages of development, the existing physical infrastructure manpower skills and experience, and capital supplies were far more appropriate for the development of rice agriculture and labor-intensive industries, and that only gradually can they move toward the more complex diversified agriculture and capital-intensive industries. Their background of Confucian ideals and values shaped their behavior and their selection of an appropriate development strategy. In the distant past of China, Korea and Japan, Confucianism was the official ideology of the bureaucracy, to be fostered by the ruler and taught to the ruled.

As A. F. Wright notes: "Confucians of all ages viewed the natural and human worlds as an organism made up of multitudinous interconnected parts. When any one of the parts fell from its place or was disrupted in its functioning, the harmony of the whole was impaired. Heaven, which was neither deity nor blind fate, presided over this organic whole and was a force for harmony and balance. But man was the principal agent which through ignorance, perversity, or misconduct, could cause serious disruptions and, by the application of knowledge, wisdom, and discipline,

could restore harmony. Either man in the masses or an irresponsible elite might disrupt the balance of harmony, but only the learned and the wise could restore it. The wise and the learned were to be found among the Confucian elite^{1/}"

Perhaps the bureaucracy which the Confucian elite traditionally controlled, was able to follow the loft, Confucian precepts, better in the postwar era with the encouragement of the United States and the emancipated peasantry. Besides better direction in policies, there was much less corruption and inefficiency in the politics and public management in East Asia than in other countries of Asia.

In sum, this review shows that a number of events exogenous to their countries played an important part in the success of East Asia. It was the higher human resource development that played a crucial part in resource-poor East Asia. When the West opened their markets, experienced manpower with stronger work ethic was able to attract the Shanghai industrialists, and the engineers and managers of Western mass distributors despite lower wages elsewhere. They were lucky to be influenced by the United States who pressured for land reform to strengthen private enterprises and market forces instead of the socialist Labor Party of Britain which promoted nationalized industries.

^{1/} A. F. Wright and D. Twitchett, edited, Confucian Personalities, Stanford University Press, 1962, page 5.

Note that the British Labor Party left Hong Kong to develop in laissez faire directions, in large part due to the prewar experience of efficiently functioning markets with developed market forces. Note also the quick switch to open markets in Singapore once it was pushed out of the Malayan Union in the mid-1960s. It was also rather accidental that Korea and Taiwan did not have land sufficient to establish plantations and that the colonialists, being rice-eaters, had to develop peasant agriculture with irrigation, extension and education. And when Japan militarized and started wars, the colonies were left to industrialize. The point to note is that the elites in East Asia were not only able to attract and seize upon these boosters, but their manpower was able to sustain growth beyond the exogenous events and to reach higher levels of development. Now their industries are sophisticated enough to benefit from the high yen far better than in other countries where wage levels are much lower.

V. Implication and Prospects: "Look East"

The record of East Asia has not gone unnoticed in other countries of Asia. Malaysians have been recently urged to "Look East," for lessons to be learned by their leaders and the leadership in Singapore had brought in Confucian scholars from abroad to write textbooks. The new Filipino leaders have announced that the values, attitudes and behavior in the Philippines must be changed. And South Asians are beginning to turn their attention to East Asian affairs. And this is all to the good.

But social values and beliefs take a long time to change and they change faster in action — at work and play, and in day to day activities, and the issue that emerges is what the best strategy to learn from the East is both in the shorter and the longer run. We need results which can be achieved soon if current development is to benefit while others will take generations. There are many steps that can be taken with earlier pay-offs than those of changing of values and Weltanschauung.

Development policies could be more strongly directed towards employing the labor force fully and increasing growth rates by utilizing manpower more extensively throughout the year, and less on nationalistic policies, self-reliance, technological sophistication, etc., which can come later after full employment. There is nothing wrong with being a nation of "hewers of wood and plowers of the soil" as long as this is the first step on the road to industrialization. ^{1/} As noted, in monsoon countries, work is difficult to find in the rural areas during the dry months. Once full employment levels are attained, manpower becomes scarcer and is more intensively and effectively used — more work for the adult male, increasing female participation, and greater vigor as income and food consumption rise. With rice self-sufficiency, agriculture can shift to diversified crops in the dry season. Much greater emphasis could be placed

^{1/} And a necessary step as South Asia has learned and as the new regime in the Philippines now recognizes.

on work education in the primary and secondary schools. This tends to be neglected in other countries. Schooling in the former colonies in South and Southeast Asia which has been influenced by Western education models has paid less attention on work education than in the Confucian-influenced schools of East Asia. In the West, the tradition of leaving to the churches the task of teaching work ethics and culture comes from the Protestant Reformation. But there is no such tradition in Asia where the Buddhist, Hindu and Islamic temples concentration is on the life-hereafter. Work education needed for modern production can be taught without the conversion of social values to Confucian directions, as the elements of good working habits are within the confines of most Asian cultures and acceptable to Asian parents. Good work habits which need to be emphasized in schools of other countries can be best taught in general vocational courses. And these additions to the curriculum will require children to be kept in the schools for longer hours in a day and more days in the year.

Besides being costly to the parents and the government, schools are not capable of giving good specialized vocational training. The firms should undertake this task in their workshops. But the firms are reluctant to spend much on training on the job if workers move to other firms too quickly. In some of the countries, labor, mobility is high as in the West and attempts should be made to get back to the tradition of apprenticeship training and longer hiring practices. And it is cheaper for the government

to pay for part of the costs of in-service training than to undertake specialized education. To improve training on the job, those with skills in the upper echelon must be willing to transmit their skills and experience to those below. This calls for more involvement of the upper echelon in the work of the lower and for better attitudes and practices in industrial relations which will motivate the lower echelon to be willing to learn and the upper echelon to teach. A more participatory labor-management system than prevailing in other countries which have been influenced by Western practices are necessary if the workplace is to become more productive with improving skills and better work attitudes.^{1/}

The mass media (the newspapers, radio, and TV) can be used more effectively in developing human resources in other countries. This calls for great space and time devoted to education than to entertainment. After schooling, the mass media can be a major source of life-long education, skill formation, and the dissemination of knowledge. They can reach the parents in the homes to teach them better ways of living and working, of child-rearing, and social conduct.

The modernization of Asian religions may take a longer time but must be made, if they are not to fall by the wayside as the younger genera-

^{1/} See R. Hirono, Industrialization and Technology in ASEAN Countries, ADIPA Conference, Kuala Lumpur, 1986.

tions with education in science come to adulthood. This calls for more attention to living on earth than hereafter, more on the relation of man to man than to God.

But not every thing in the experience of the East should be transmitted to other parts of Asia. Work ethics need not be so strong and a better balance with leisure may be desirable in East Asia. Confucian bias against females is not desirable. Most important, authoritarian governance, a legacy of Confucianism, should be relaxed. In the early years of the post-war era, there may have been justifications for authoritarian rule in East as well as in other parts of Asia. The confusion from the liquidation of colonialism and the establishment of new institutions required swift and resolute actions at a time when experience with self-government was limited, educational levels of the populace was low, and vested interests from the past strong. But today, most of generation coming into adulthood and the labor force is educated and from schools with more modern and liberal teachings than the earlier generation. They are not likely to be as docile and pliant as their parents, and more difficult to be ordered and pushed around in authoritarian fashion whether in political or in economic affairs. Their participation in decision-making will be desirable to ensure not only political and social stability but to develop their capabilities, initiatives and exuberance through participation in discussion on policies and its implementation. And better decisions and more efficient implementation

may be the outcome as the modern economy and governance move toward more varied and complex forms. There are dangers and risks in this, but authoritarianism was not without them, as the Marcos' billions of dollars abroad, Park Chung Hee's idle plants of petrochemical and heavy machinery plants and the Tojo militarists' plunge into the last war would attest.

The prospects for the future of East Asia have brightened with the recent appreciation of the yen to high levels, bringing more opportunities to export to Japan and the West, and more Western and Japanese firms moving into other East Asian countries. Now is the time to bring down their tariffs and other protective measures on the import of agricultural and industrial products, permitting the restructuring of their economy from high-cost food and overly protective industrial production to more sophisticated industrialization and to services, and enabling other countries in Asia to export to them. Persisting in the present tendencies to protect agriculture and industries through the perpetuation of small peasant farming and off-farm employment in nearby industries is to force ASEAN countries to continue in their policies for a second round of import substitution with capital-intensive industrialization, most of which are in trouble. Now may be the time with the high yen to begin to dismantle the structure of protection of part-time peasant farming depending on off-farm industrial employment, and move on to larger-scale farming and industrialization, opening up opportunities for ASEAN countries to export. The

peasant farm's historic mission of providing jobs and improving skills with the use of small farm technologies in densely populated monsoon Asia is fulfilled for East Asia, moving for long on full employment levels. The last obstacles that the monsoons placed on the road to complete economic modernity should be swept away as soon as possible, if Pacific Asia is to move speedily into the Pacific Century.^{1/}

^{1/} See my "Levels and Trends of Farm Families' Nonagricultural Income at Different Stages of Monsoon Development," Philippine Review of Economics and Business, September/December 1985.

TABLE 1
AVERAGE GROWTH RATES, 1950 TO 1980 : POPULATION, EMPLOYMENT, GDP IN ASIA IN PER CENT AND LEVELS

	<i>Population</i>	<i>Employment</i>	<i>GDP</i>	<i>GDP Per Capita</i>	<i>GDP Per Worker</i>	<i>Levels of Per Capita Dollar GNP, 1980</i>	<i>Agri. Pop. Per Hectare of agri. Land, 1979</i>
EAST ASIA	<u>2.4%</u>	<u>3.5%</u>	<u>8.4%</u>	<u>6.1%</u>	<u>4.8%</u>	<u>4446</u>	<u>5.1%</u>
Japan	1.1	1.6	8.0	6.9	6.3	9890	2.7
S. Korea	2.1	3.5	7.7	5.7	4.2	1520	6.7
Taiwan	2.7	4.0	8.7	5.7	4.7	2150	5.8
Hong Kong	3.2	4.9	5.5	6.0	4.7	4240	.
Singapore	2.9	3.6	5.1	6.2	4.0	4430	.
SOUTH-EAST ASIA	<u>2.6</u>	<u>3.4</u>	<u>6.1</u>	<u>3.5</u>	<u>2.9</u>	<u>853</u>	<u>2.7</u>
Malaysia	2.6	3.0	6.0	3.2	3.0	1620	1.7
Thailand	2.8	3.6	7.1	4.2	3.5	670	2.0
Indonesia	2.1	3.1	5.2	3.3	3.0	430	4.6
Philippines	2.8	3.9	6.0	3.1	2.0	690	2.3
SOUTH ASIA	<u>2.2</u>	<u>2.3</u>	<u>3.7</u>	<u>1.5</u>	<u>1.8</u>	<u>190</u>	<u>3.8</u>
India	2.1	2.7	3.6	1.8	0.9	240	2.6
Bangladesh	2.5	.	3.3	0.7	.	130	7.9
Burma	2.2	.	4.5	2.2	.	170	1.8
Sri Lanka	2.2	1.8	4.2	2.0	2.6	270	3.6
Nepal	1.8	.	2.5	0.7	.	140	3.2

Note : Regional averages are simple, unweighted averages.

Sources : Employment data are computed from various issues of *ILO Yearbook of Labour Statistics*. Unless otherwise indicated, product and population data for the 1950s and 1960s were taken from *IBRD World Tables 1980* and those for the 1970s from *IBRD World Development Report 1982*. Taiwan's data for the 1970s computed from various issues of *National Income of ROC* and *Statistical Yearbook of ROC*.

INDICATORS OF HUMAN RESOURCE DEVELOPMENT
(Circa 1980)

	<i>Adult Literacy</i>	<i>Life Expectancy at Birth (years)</i>	<i>Total Fertility Rate</i>	<i>Daily Per Capita Calorie</i>	<i>TDI of Quintiles</i>	<i>% of Male Agri. Labour Force in Total Labour Force</i>	<i>Female Working Rate</i>	<i>Average Years of School Completed</i>
EAST ASIA	<u>87</u>	<u>71</u>	<u>2.4</u>	<u>2,879</u>	<u>.49</u>	<u>14</u>	<u>36</u>	<u>6.7</u>
Japan	99	76	1.8	2,912	.41	6	39	11.5
China	59	64	2.9	2,539	.50	41	.	0.6
Taiwan	90	72	2.5	2,812	.40	13	35	8.5
Hong Kong	90	74	2.2	2,898	.57	2	35	8.0
Singapore	83	72	1.8	3,158	.52	2	34	6.0
S. Korea	93	66	3.0	2,957	.55	19	37	8.5
SOUTH-EAST ASIA	<u>71</u>	<u>61</u>	<u>4.3</u>	<u>2,381</u>	<u>.67</u>	<u>34</u>	<u>39</u>	<u>5.5</u>
Malaysia	60	64	4.2	2,625	.73	24	36	6.6
Thailand	86	63	4.0	2,308	.62	36	47	5.8
Philippines	75	64	4.6	2,275	.68	37	37	6.0*
Indonesia	62	53	4.5	2,315	.66	38	36	3.7
SOUTH ASIA	<u>46</u>	<u>52</u>	<u>5.2</u>	<u>2,046</u>	<u>.60</u>	<u>56</u>	<u>22</u>	<u>2.6</u>
India	36	52	4.9	1,880	.60	55	17	1.8
Sri Lanka	85	66	3.6	2,238	.50	39	28	5.1
Burma	66	54	5.3	2,174	.	.	.	.
Nepal	19	44	6.1	1,977	.78	57	35	1.0
Bangladesh	26	46	6.0	1,960	.51	71	6	2.6

* Estimated by Thai growth rate, 1971-81.

Notes: TDI derived as the sum of differences between shares of income and household of each quintile with signs ignored. To give an idea of relationship between TDI and gini coefficient, the latter is generally about three-fourth of the former. Female workers as per cent to total labour force.

Source: IBRD World Development Report, 1982, 1983, and 1984 editions except column 6 which is computed from ILO Yearbook of Labour Statistics 1982. In early years see previous report. Years of schooling completed of labour force computed from the 1980 Censuses.