

INCOME DISTRIBUTION POLICIES IN EAST ASIA

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I. INTRODUCTION

TO keep the present paper within reasonable length, its scope will focus on policies to reduce the size distribution of family income and exclude the subject of poverty, although policies affecting the family income distribution usually affect the incidence of poverty.

Policies concerning size distribution must take into account the effectiveness of implementation. Many countries have laws dealing with income inequality, but their implementation is so poor that they are not effective. This is true of land reform policies in Myanmar, Pakistan, and the Philippines. Forces opposing equalization are very powerful, and only determined implementation efforts can succeed.

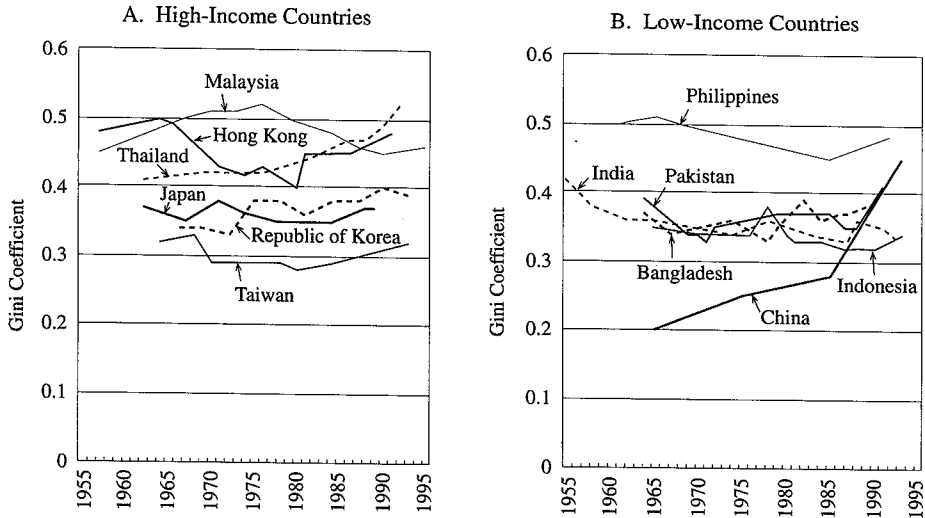
Although our main interest is the experience in the East and Southeast Asian countries, we shall also briefly refer to South Asian countries, as in the above paragraph, to illuminate differences and make contrasts.

Policies to reduce income inequality should be pro-GDP growth or growth-promoting: i.e., leading to increases in the growth of GDP. Some types of welfare policy are not conducive to growth and may even be anti-growth, as was the case of Sri Lanka's heavily subsidized food and housing policies, which were made available to all including the very rich. The cost of such subsidies had to be paid for by heavily taxing plantations to the extent that these businesses became inefficient, unlike the situation in Malaysia.

Figure 1 and Table I show the trends and levels of Gini coefficients computed from household surveys. Note that trends in the faster growing countries are more clear-cut than the slower growing countries (South Asia and the Philippines). When growth is slow, other factors such as weather conditions and political instability have greater impact on income distribution, and since such factors are random and episodic, trends are not sustained and erratic changes tend to dominate (see also Appendix Table I).

In the faster growing countries, broadly based patterns of growth make for falling Ginis, as in the case of Taiwan, Malaysia, Japan, Hong Kong, and Indonesia, while Ginis tend to rise in more narrowly based patterns of growth based on a single

Fig. 1. Gini Coefficients in Asian Countries



region, as in Thailand and China, or more narrowly based on a few industries, such as in the Republic of Korea.¹

The Gini coefficients range from 0 (or perfect equality) to 1.0 (or perfect inequality), but this does not mean that the lowest is the best. As the Gini approaches zero, inequality becomes too low and differences in income stop serving as incentives for maximum work effort or for skill formation, thus becoming an obstacle to GDP growth. This was true for China under Mao's egalitarian policies, under which the Gini may have been close to 0.2. The best Gini for equity and growth is one falling around 0.3, as in Taiwan, Japan, post-1980 China, and Indonesia, and between 0.3 and 0.4 for city-states (without rural sectors).

The approach in this paper will be to describe the more important measures implemented by East Asian countries to reduce income inequality and assess policy effectiveness. These policies pertain to the following activities:

- (1) Rural development (including land reform) programs aiming to increase the income and well-being of the lowest-income families—small farmers, tenants, and landless workers—through the provision of land, credit, extension services, irrigation and drainage facilities, electrification, and so on. Land reform

¹ Figure 1 and Table I have been extracted from *Income Distribution in Asia: Levels and Trends*, by Harry T. Oshima and Associates. This volume discusses income distribution in nearly all Asian countries with the exception of Nepal, Vietnam, Democratic People's Republic of Korea, Cambodia, and Laos, where long-term data are not available.

TABLE I
INCOME AND EXPENDITURE INEQUALITY IN POSTWAR ASIA: NATIONWIDE GINI COEFFICIENTS

Taiwan		Japan		Republic of Korea ^a		Hong Kong		Singapore		China ^b		Thailand	
Year	Gini	Year	Gini	Year	Gini	Year	Gini	Year	Gini	Year	Gini	Year	Gini
1964	0.32	1962	0.37	1965-67	0.34	1957	0.48	1966	0.50	1960s	0.20	1962	0.41
1968	0.33	1967	0.35	1968-70	0.34	1963/64	0.50	1972	0.44	1970s	0.25	1968/69	0.42
1970	0.29	1971	0.38	1971-73	0.33	1966	0.49	1974	0.43	1980s	0.28	1975/76	0.42
1974	0.29	1974	0.36	1974-76	0.38	1971	0.43	1979	0.42	Early 1990s	0.45	1980/81	0.44
1978	0.29	1978	0.35	1977-79	0.38	1973/74	0.42	1984	0.47	Average	0.33	1985/86	0.47
1980	0.28	1981	0.35	1980-82	0.36	1976	0.43	1990	0.43			1988	0.47
1984	0.29	1984	0.35	1983-85	0.38	1979/80	0.40	Average	0.45			1990	0.49
1987	0.30	1986	0.36	1986-88	0.38	1981	0.45					1992	0.52
1990	0.31	1988	0.37	1989-91	0.40	1986	0.45					Average	0.46
1993	0.32	1989	0.37	1992-94	0.39	1991	0.48						
Average	0.31	Average	0.33	Average	0.37	Average	0.45						
Malaysia		Indonesia ^c		Philippines		India ^d		Pakistan		Sri Lanka		Bangladesh	
Year	Gini	Year	Gini	Year	Gini	Year	Gini	Year	Gini	Year	Gini	Year	Gini
1957	0.45	1964/65	0.35	1961	0.50	1954/55	0.42	1963/64	0.39	1953	0.46	1963/64	0.37
1967	0.50	1969/70	0.34	1965	0.51	1957/58	0.38	1966/67	0.36	1963	0.45	1966/67	0.34
1970	0.51	1976	0.34	1971	0.49	1961/62	0.36	1968/69	0.34	1973	0.35	1973/74	0.36
1973	0.51	1978	0.38	1985	0.45	1964/65	0.36	1969/70	0.34	1978/79	0.44	1977/78	0.33
1976	0.52	1980	0.34	1991	0.48	1968/69	0.35	1970/71	0.33	1981/82	0.45	1978/79	0.35
1979	0.50	1981	0.33	Average	0.48	1973/74	0.34	1971/72	0.35	1986/87	0.46	1981/82	0.39
1984	0.48	1984	0.33			1977/78	0.36	1979	0.37	Average	0.44	1983/84	0.36
1987	0.46	1987	0.32			1983	0.34	1984/85	0.37			1985/86	0.37
1990	0.45	1990	0.32			1986/87	0.33	1985/86	0.36			1986/87	0.37
1995	0.46	1993	0.34			1987/88	0.36	1986/87	0.35			1988/89	0.38
Average	0.48	Average	0.34			1991	0.35	1987/88	0.35			Average	0.36
						1992	0.34	1990/91	0.41				
						Average	0.36	Average	0.36				

Sources: Japan: Mizoguchi and Terasaki (1992). Taiwan: Chu (1995). Republic of Korea: Ahn (forthcoming). Hong Kong: Chau (forthcoming). China: Oshima and Estudillo (forthcoming). India: Harry Oshima with the assistance of Jona Estudillo, "Uncertain Trends and Erratic Changes in India's Income Distribution." Thailand: Ikemoto and Ira Santisart (forthcoming). Malaysia: Ikemoto (forthcoming). Philippines: Estudillo (1995). Sri Lanka: H. N. S. Karunatilake, "Long Term Changes in Income Inequality in Sri Lanka." Bangladesh: Bangladesh Statistical Bureau. Indonesia: Akita, Lukman, and Yamada (1998). Singapore: Deininger and Squire (1996). Pakistan: Saeed (1995).

^a Three-year average.
^b Per capita household income.
^c Consumption expenditures.
^d Per capita expenditures.

may not be necessary in most parts of countries like Malaysia and Thailand, where land was plentiful, and in areas like Java, where large-scale landlords were not numerous. Rural development policies seek to raise the productivity of small farmers. Land redistribution attempts to raise the incomes of tenants and the landless by providing land rent-free, while preventing the power of landlords from forestalling the enactment of rural development programs or sabotaging their implementation.

- (2) Promoting off-farm (or nonagricultural) activities to supplement on-farm incomes by providing jobs during the dry months. In monsoon rice farming, when rains stop, farmers are faced with several months of slack activity, during which small farmers have little to do since their farms are too small to keep them fully occupied in animal husbandry, forestry, fishing, or even multiple cropping. In Thailand, Malaysia, and Sumatra, where farms are larger and more land is available, the need for off-farm occupations is less urgent. Nevertheless, in all monsoon countries, some degree of off-farm work is needed to alleviate underemployment endemic to monsoon agriculture.

Off-farm income lowers income inequality in agriculture by providing jobs to smaller farms, among which surplus labor is more plentiful than on larger farms. As off-farm jobs become more plentiful, housewives begin to take over more of the on-farm work with small, mechanized equipment, freeing the males for factory work. On the supply side, when full employment is attained in the urban sector, and wages rise, the smaller, more labor-intensive industries must move to rural areas in search of workers willing to toil at lower wages. As this process continues, farm mechanization frees workers for factory work. Income inequality declines in agriculture as smaller farm income rises faster than larger farms, and the income gap between the urban and rural sectors diminishes.²

- (3) Industrial policies emphasizing labor-intensive production to reduce income inequality. Such strategies benefit smaller enterprises and increase jobs and income for less-skilled workers. In contrast, import-substitution programs tend to support more capital-intensive industries by protecting them against foreign imports, while making it easier for local industries to import machinery and other capital goods more cheaply. Also, agriculture tends to be discriminated against by import-substitution protection.
- (4) Promotion of skill formation and schooling, when extended to include lower-income families, eventually bringing down skilled wages by increasing the supply of skills. Lower-income families will benefit from having more skilled wage earning members; and under conditions of full employment, more jobs

² For greater elaboration on the process of off-farm activities, see Oshima (1993, chap. 7). The diagrams on page 170 show that off-farm income of smaller farms is greater than that of larger farms.

for females will raise their contributions to the incomes of families in the lower-income brackets.

- (5) Policies to slow population growth leading to labor scarcity and raising returns to labor relative to capital in the urban sector, while reducing the size of the tenant and landless classes in the agriculture sectors of densely populated countries. When fertility declines spread to the lower-income groups, per capita household income inequality declines, as saving and capital accumulate among lower-income groups and child dependency falls. Increase in savings can be invested in human and material capital, whose returns will raise income among lower-income families.
- (6) Fiscal measures affecting inequality mainly through welfare policies. Public welfare spending for lower-income families improves income distribution, especially if the welfare spending is financed by the progressive taxation of higher-income groups. However, excessive spending for welfare, especially for higher-income families, may overburden taxpayers and become detrimental to their work effort and GDP growth, as in Sri Lanka during the earlier postwar decades.
- (7) Policies to develop lagging regions, thereby reducing income inequalities by shrinking inter-regional income gaps. Moreover, within each region, policies raising rural income in order to diminish the rural-urban income gap.

In addition to the main policies to reduce inter-regional disparities noted above—namely, the diffusion of rural development, industrial development, and skills and education, the completion of fertility transition, and the spread of welfare to all corners of the nation—the only new policy needed to reduce regional disparities is the spread of the physical infrastructure nationwide.

II. RURAL DEVELOPMENT POLICIES

Japan

Major efforts at income equalization were made in Japan during the 1950s (and in Taiwan) through well-executed rural development policies. To begin with, comprehensive land reform was begun in 1946, when the government purchased all absentee landlord land with former landlords permitted to retain no more than 2.5 acres of tenant-cultivated land. Owner-cultivators were permitted 7.4 acres on condition that the land was worked only by family labor. As a result, the number of tenant farmers fell to 10 per cent in 1948 from 48 per cent in 1947.³

³ See *Area Handbook for Japan* (Washington, D.C.: Foreign Area Studies, American University, 1974). These *Handbooks* were written for nearly every country in the world, and were compiled by the American University in Washington, D.C., directed by W. Evans-Smith. In the late 1980s, they were revised by the Federal Research Division of the Library of Congress. Most of the factual content of each country in our paper is taken from the various revised editions, but further references to these area handbooks will not be made in the pages to follow.

TABLE II
RURAL/FARM HOUSEHOLD INCOME GINI COEFFICIENTS

A. Farm Households

Japan		China ^a		Republic of Korea ^b	
Year	Gini	Year	Gini	Year	Gini
1953	0.25	1980	0.34	1965-67	0.20
1955	0.24	1983	0.32	1968-70	0.19
1957	0.25	1988	0.33	1971-73	0.22
1959	0.25	1990	0.34	1974-76	0.21
1961	0.24	1991	0.34	1977-79	0.21
1963	0.23	1993	0.38	1980-82	0.18
1967	0.23	Average	0.34	1983-85	0.15
1970	0.24			1986-88	0.12
1973	0.24			1989-91	—
1975	0.25			1992-94	—
Average	0.24			Average	0.18

B. Rural Households

Malaysia		India ^c		Bangladesh		Thailand		Pakistan		Indonesia		Philippines	
Year	Gini	Year	Gini	Year	Gini	Year	Gini	Year	Gini	Year	Gini	Year	Gini
1957	0.41	1954/55	0.36	1963/64	0.33	1962	0.36	1979	0.32	1964/65	0.35	1961	0.40
1970	0.45	1957/58	0.34	1973/74	0.35	1969	0.39	1984/85	0.34	1969/70	0.34	1965	0.42
1973	0.45	1961/62	0.32	1981/82	0.36	1975	0.40	1985/86	0.33	1976	0.31	1971	0.46
1976	0.47	1964/65	0.31	1983/84	0.35	1981	0.42	1986/87	0.32	1978	0.34	1985	0.38
1979	0.47	1968/69	0.35	1985/86	0.36	1986	0.45	1987/88	0.31	1980	0.31	1988	0.38
1984	0.43	1973/74	0.32	1988/89	0.37	Average	0.40	1990/91	0.41	1981	0.29	1991	0.39
1987	0.42	1977/78	0.32	Average	0.35			Average	0.35	1984	0.28	Average	0.41
Average	0.45	1983	0.31	1986/87	0.31			1987	0.26	1987	0.26	1990	0.25
		1988/89	0.30	1988/89	0.30			1990	0.25	1990	0.25	1993	0.26
		1991	0.31	1991	0.31			1993	0.26	Average	0.30		
		1992	0.30	1992	0.30			Average	0.30				
		Average	0.32	Average	0.32								

Source: See Table I.

^a Per capita household income.

^b Three-year average.

^c Consumption expenditures.

Land reform was immediately followed by a number of institutional changes: the democratization of cooperatives, extension systems, education and local government, elimination of the power and privilege of landlords, increases in the power and income of small farmers, and higher wages for rural workers. Land reform enabled farmers to diversify their crops away from rice and produce more than one crop, without permission from the landlords. Farmers were now able to pressure the government to build roads, electric power plants, railways, and irrigation and drainage facilities. Unemployment and underemployment were sharply reduced, and the resulting higher productivity led to greater income, which was later used to mechanize farms when labor became scarce. Income inequality within the rural sector fell as the incomes of small farmers, tenants, and laborers rose, and the income gap between rural and urban sectors diminished as farm income grew at a higher rate than in the urban sector.⁴

Taiwan

Rural development policies in Taiwan were very similar to those of Japan. Power was transferred from landed elites to farmers through land reform and the democratization of extension services, and via the provision of credit, water, fertilizer, and insecticides through farmers' associations, which came under the control of small farmers. The infrastructure was improved, and with crop diversification and multiple cropping extended to nearly all farms, incomes rose, and mechanization followed when labor became scarce.

Early in the 1950s, large landholdings predominated as 49 per cent of the total cultivated area was worked by tenants. The average size of a tenant farm was about one hectare with rent usually between one-half and two-thirds of the crop value. However, agrarian reform was started in 1949 and carried out through 1953 with a drastic reduction of rent and the securing of tenure. This was followed by land redistribution. Former landowners could retain only six hectares, and the government bought the excess and sold it to tenants. All these changes improved the incentive to work, and invest in farm improvement, thus raising productivity and income.⁵

Republic of Korea

Korea also undertook to develop its rural sector, but implementation and results were not as effective or impressive as in Japan and Taiwan.

As in Taiwan, land reform began with the transfer of Japanese-owned land to the Korean government, which later broke up large holdings of Korean landlords by

⁴ Summarized from Oshima (1987, pp. 110–15). See also Table 7 in Mizoguchi and Terasaki (1992).

⁵ See Oshima (1987, p. 158). See also Chu (1995). In the late 1980s, a second phase of agrarian reform was conducted whereby joint management and land consolidation became necessary to take advantage of mechanized farming methods.

restricting them to seven acres. By 1951, 1.5 million tenants received an average of one hectare; but inflationary and other pressures forced some farmers to sell their land. Unlike Taiwan and Japanese farmers, the opportunity to earn income in non-agricultural activities were limited, partly because industrialization was more capital-intensive and concentrated in a few cities and the transport infrastructure was limited.

Korea's rural development was shifted to the Saemaul movement in 1971, into which the government poured massive funding for projects to upgrade the rural infrastructure. Previous to the Saemaul movement, centralized administration of rural projects had been too authoritarian without grassroots participation; and the orders from Seoul were not suitable to local conditions. Also, grain prices were too low, and rural-urban income gaps widened with urban workers' income rising three times more than farm income.

With the Saemaul movement, grain prices were raised, and free cement was provided to the villages to improve infrastructure, especially for off-farm activities to help reduce underemployment. Rural incomes began to rise, the rural-urban gap fell, and the rural Gini coefficient began to fall in the 1970s.⁶

China

In the initial agrarian reform, land was distributed from landlords to poor farmers and farm laborers; but soon the process of collectivization began. In the first stage, mutual aid teams were formed and organized into producers' cooperatives, where individual holdings were pooled into common land and became collectively owned. Later, the cooperatives were organized into communes; but after Mao's death, the commune system was dismantled and restructured into the so-called township-collective-household system. In farming, the household production responsibility system came into being, whereby households were assigned specific plots for fifteen years. This system motivated farmers to work harder and maximize production. Output doubled between 1978 and 1985, but income inequality at first increased as more motivated farmers produced more than the others. Nevertheless, inequality between agriculture and nonagriculture probably fell, not only because agricultural incomes rose, but also because farmers were free to undertake whatever nonfarm activities they wanted to. Once the household responsible system spread extensively among farm families, inequality within agriculture began to fall.

Indonesia

In 1960, the government estimated that 60 per cent of cultivators were tenants, mostly in Java. Sukarno instituted land reform measures which set the limit of holdings to 5 hectares for rice and banned absentee ownership. Due mainly to opposi-

⁶ Based on Cho and Kim (1991).

tion by landlords and poor implementation, only a small amount of land was redistributed. The 1983 census of agriculture indicated that 44 per cent of farm households were either landless or near-landless. The average holding in Java was 0.66 hectare.

Under Suharto's rural development program, focus was shifted from land reform to raising yields, especially by using HYVs; but this was more beneficial to the wealthier farmers, who had the means to cultivate the new rice seeds types, although some poor farmers were able to take advantage through government credit and thus improve their income. Other small farmers moved to the outer islands through a migration program, and were given one hectare of land. Schools and clinics were built besides irrigation works, which permitted the cultivation of more than one crop.

Improvement in the transportation infrastructure enabled farmers to commute to the cities to take nonagricultural jobs, and by 1985, 36 per cent of rural households earned a major share of income from such jobs.

Important also in preventing large-scale landlords and tenants from emerging was the strong communal tradition of providing as many villagers as possible with a plot of land, the system of Moslem inheritance dividing land among all siblings, and certain legal prohibitions.

Estate lands were nationalized in 1957, but their output fell. By 1969 a considerable portion of expropriated lands were returned to the former owners, while other portions went to small holders and put into rubber and other tree crops.

Malaysia

After the May 1967 riots, measures were adopted to reduce income inequality. Besides measures to expand education to include poor Malays and diversify industry through a number of industrial estates in various parts of the country, the land development program, which favored large agricultural estates and rich farmers, was changed to benefit lower-income farmers. Half a million hectares of new land were given to small holders and the landless. The Federal Land Development Authority and other organizations helped settle the landless on unused land. In addition, infrastructure facilities, crop diversification, cooperatives, agricultural societies, marketing and credit facilities, electrification, and so on, were promoted by the government. By 1987, 12,000 families were resettled on 200,000 acres of land (Ikemoto forthcoming). Malaysia was fortunate to have had plenty of surplus land. Since only one-fifth was under cultivation, there was no need for land reform. Moreover, the government was successful in settling small farmers and the landless on new land. This success was partly due to the absence of a large landlord class powerful enough to oppose the program, as was unfortunately the situation in the Philippines, Pakistan, Bangladesh, and parts of India.

Thailand

The pattern of agriculture in Thailand was predominantly small independent farming, with plantations only in the southern region. This was due to King Chulalongkorn's reform efforts requiring that land owned by the nobility which remained uncultivated must revert to the state for allocation to others willing to cultivate. There was a four-hectare limit. After slavery was abolished and the *corvée* system (unpaid work by the vassal to the lord) restricted, the nobility was forced to give up the land because of a lack of workers. During the 1950s and 1960s, full truancy encompassed only about 5 per cent of all farmers, although in the central region, a rice-growing area, truancy was as high as 11 per cent.

However, tenancy did increase during the early 1970s to 23 per cent, in part due to the rapid rise in rural population. Unrest spread among tenants due to high rents and insecure land tenure, erupting into demonstrations which forced the government in 1974 to pass rent controls and lengthen tenure contracts to six years (instead of one), renewable indefinitely. Still, this was not enough; so another land reform act was passed in 1975 which provided for the allocation of land from large landholders to tenants and the landless. The landlords, aristocrats, and the military were strong enough to slow land allocation after the military coup in 1976. To appease the most discontented tenants (illegal squatters), laws were passed to issue legal titles for the land they occupied. Despite these efforts, rural income inequality rose, as the large farms in the central region prospered with the export of rice, maize, and sugar.

The Philippines

Unlike Thailand, highly concentrated landownership was one legacy from the Spanish colonial period, along with a long history of agrarian unrest. In the post-colonial era, various attempts were made to launch land reform programs, but with only limited success. For example, Marcos decreed that holdings should be limited to seven hectares, and Aquino also in 1988 followed suit, but either produced little results.

Under Magsaysay, such rural development projects as bridges, roads, irrigation canals, artisan wells, extension services, farm credit, and resettlement were undertaken with some success, but his life was cut short before more could be done.

III. OFF-FARM (OR NONAGRICULTURAL) EMPLOYMENT

Japan

Income from off-farm activities came to only 28 per cent of on-farm income in 1950. It rose to 73 per cent in 1960, and jumped to 393 per cent in 1970 after full employment in the urban sector was attained and unemployment fell to 1.2 per cent during the 1960s. Off-farm income then rose to 403 per cent in 1981 and 511 per

cent in 1992, but fell to 340 per cent in 1994. The national Gini fell from 0.38 in 1970 (after a full decade of rural development policies) to 0.35 during the 1980s, then rose to 0.37 in the 1990s.

It was the rapid industrialization of the 1960s and 1970s that contributed to full employment in the urban sector, after a series of industrial reforms in the 1950s. After extensive internal migration in the 1970s, the flow of new workers gradually slowed, especially to the big cities.⁷

At this point, small industries began moving to smaller cities and towns, due to rising wages. These firms were able to use the cheaper labor available in the rural districts, and with lower food and dwelling costs and cheap transportation for daily commuting, off-farm employment rose rapidly. Male workers commuted to work by train and bus, leaving the farm work to the women and the elderly, who used small, light equipment to work the farms.⁸

Thus, the policies to increase off-farm income were related to the rapid growth of labor-intensive industries, the spread of education to rural districts, improvement in transportation, the mechanization of agriculture, and household appliances that freed females from house work.

Taiwan

Off-farm experience in Taiwan was similar to that of Japan, although it came a decade later. Off-farm income was 55 per cent of on-farm income in 1964, rose to 106 per cent in 1970, tripled to 306 per cent in 1980, 312 per cent in 1988, 441 per cent in 1993, and then declined to 406 per cent in 1995. The Gini fell from 0.32 in 1964 to the lower level of 0.28 in 1980 (when off-farm income shares registered their sharpest rise). The Gini began to rise after 1980 and reached a peak of 0.32 in 1993 (Oshima 1993, chap. 7). Even more so than in Japan, policies promoted labor-intensive industries, which were widely dispersed through industrial estates; and as in Japan, full employment, educational, and transport policies contributed to the spread of off-farm employment in rural Taiwan.

Republic of Korea

The growth of off-farm income in Korea was slower than in Taiwan and Japan. Off-farm income was 17 per cent of on-farm income in 1970, 32 per cent in 1980, 76 per cent in 1990, and 101 per cent in 1993. This was due to capital-intensive industrialization, which as noted above requires full-time, year-round workers who had to be located in or near large cities, the slower progress of rural development, and belated attainment of full employment.

⁷ Data on off-farm income is from Oshima (1993). This section on off-farm policies is based on Oshima (1987, 1993).

⁸ For elaboration, see Oshima (1993).

Other countries

The growth of off-farm activities was very slow in China during the Mao's regime because of restrictions on the activities of farmers confined solely to farm work. However, in the post-Mao era, structural reforms beginning in the 1980s opened up opportunities for the farmers to take up off-farm work. The off-farm income share was only 2.6 per cent in 1978 and 5.0 per cent in 1980, but it jumped to 33 per cent in 1985. Nevertheless, those who took part in off-farm activities tended to be richer farmers with skill, experience, and political connections, resulting in increased income inequality. Off-farm income was also causing disequalization in Malaysia.⁹

Nor did off-farm income contribute to equalization in Thailand, where share growth was also slow, rising from 60 per cent in 1971 to 100 per cent in 1990. The transportation infrastructure was inadequate, thus presenting an obstacle to large-scale movements of farmers to Bangkok, where industrialization was concentrated. Also in Thailand and Malaysia, where farms are much larger than Northeast Asia, the need for off-farm work was less urgent. One additional factor in Malaysia was the predominance of tree crops, which require year-round care, unlike monsoon rice. The level of off-farm activities was low (19 per cent) in the Philippines, where underemployment was high, about 25 per cent during the 1980s. Hence, in Southeast Asia, levels of off-farm activities up to and including the 1980s were too low to have any significant impact on GDP and income distribution. This is true of South Asia as well.

IV. INDUSTRIAL DEVELOPMENT POLICIES

Japan

Industrial policies in the 1950s promoted the rehabilitation of labor-intensive industries, whose products, such as textiles and garments, were exported to earn foreign exchange. Unemployment fell from 2.5 per cent in 1955 to 1.7 per cent in 1960.¹⁰

During the 1960s after the attainment of full employment, policy shifted to capital-intensive industrialization in steel, petrochemicals, industrial machinery, electrical appliances and electronics, and automobiles. Assembly industries subcontracted the making of parts and components to small and medium industries, thus creating a dual structure resulting in increased income inequality. The government provided financing, tax breaks, and research and development funding. The rapid spread of industrialization raised the share of employee compensation whose inequality is lower than other type of income, as noted by Mizoguchi and Terasaki (1992).

⁹ See papers in Shand (1986).

¹⁰ Section IV is largely based on Oshima (1987, 1993).

TABLE III
URBAN/NONFARM HOUSEHOLD INCOME GINI COEFFICIENTS

Japan ^a		China		Republic of Korea ^b		Malaysia		India ^c	
Year	Gini	Year	Gini	Year	Gini	Year	Gini	Year	Gini
1953	0.29	1985	0.28	1965-67	0.40	1957	0.44	1954/55	0.41
1955	0.30	1988	0.26	1968-70	0.38	1970	0.48	1957/58	0.38
1957	0.32	1990	0.26	1971-73	0.38	1973	0.49	1961/62	0.38
1959	0.32	1991	0.24	1974-76	0.46	1976	0.49	1964/65	0.37
1961	0.32	1992	0.26	1977-79	0.43	1979	0.48	1968/69	0.33
1963	0.31	1993	0.30	1980-82	0.41	1984	0.44	1973/74	0.34
Average	0.31	Average	0.26	1983-85	0.43	1987	0.43	1977/78	0.35
				1986-88	0.42	Average	0.46	1983	0.33
				1989-91	0.44			1986/87	0.30
				1992-94	0.41			1989/90	0.35
				Average	0.42			1991	0.35
								1992	0.36
								Average	0.36
Bangladesh		Thailand		Pakistan		Indonesia ^c		Philippines	
Year	Gini	Year	Gini	Year	Gini	Year	Gini	Year	Gini
1963/64	0.41	1962	0.36	1979	0.40	1964/65	0.34	1961	0.52
1973/74	0.38	1969	0.44	1984/85	0.38	1969/70	0.33	1965	0.51
1977/78	0.37	1975	0.41	1985/86	0.35	1976	0.35	1971	0.45
1981/82	0.41	1981	0.43	1986/87	0.36	1978	0.38	1985	0.44
1983/84	0.37	1986	0.46	1987/88	0.37	1980	0.36	1988	0.42
1985/86	0.37	Average	0.43	1990/91	0.39	1981	0.33	1991	0.47
1988/89	0.35			Average	0.38	1984	0.32	Average	0.47
Average	0.38					1987	0.32		
						1990	0.34		
						1993	0.33		
						Average	0.34		

^a Employee households.

^b Three-year average.

^c Consumption expenditures.

Taiwan

Industrial development was predominantly labor-intensive, much more so than Japan and Korea. Earlier on, import-substitution policies (tariff, import controls, multiple exchange rates) were implemented, but when the easy phase of import substitution was completed, policies were adopted to promote other export-oriented industries, such as wood, leather, rubber, and plastic products, small machinery, food, and luxury higher-valued textiles. Loans to exporters were provided at preferential rates, while tax incentives and three export-processing zones were established to attract foreign investment. The rapid growth of labor-intensive industries generated jobs and full employment, which was reached by the late 1960s.

Republic of Korea

Like Taiwan, Korea started its industrialization with labor-intensive industries, then embarked on comprehensive capital-intensive industrialization in the mid-1970s. Korea had some experience in industrialization during the colonial period when the Japanese relocated some of their industries to Korea in preparation for waging war on China. Therefore, a substantial group of skilled workers, technicians, and entrepreneurs from the prewar period, and compatriots who came from North Korea and Japan were on hand. And when the United States and Europe fixed quotas on Hong Kong and Japanese textile exports, the opportunity to export came for Korea and Taiwan.

In 1975 Korea embarked on the construction of heavy and chemical industries, which required large investment in huge plant complexes, equipment, railways, storage facilities, harbors, utilities, and so on, most of which were concentrated in the south and in a few giant firms. This meant Korea's resources for light industries and agriculture were insufficient. All of this contributed to income inequality.

Hong Kong

Hong Kong grew rapidly from the 1950s with labor-intensive industries operated by small enterprises; but when the United States and United Kingdom limited exports of textiles with quotas, Hong Kong diversified into toys and clocks and watches in the 1970s, and foreign investors established factories to produce electrical appliances and chemicals for export. Hong Kong also became a major financial center and a tourist destination. Immigration from mainland China doubled the population, but with the rapid expansion of exports, full employment was attained and income inequality fell.

During the 1980s, when economic reform in China opened up neighboring Guangdong Province, Hong Kong industrialists made huge investments in South China, relocating production facilities across the border (Chau forthcoming).

Singapore

Singapore's industrialization was more capital-intensive than in Hong Kong. Unlike the latter, Singapore had to depend almost entirely on foreign investors, because there was very little industrialization and few industrial entrepreneurs existed during the 1950s. Foreign direct investment was attracted by a favorable business climate and a well-trained and disciplined labor force.

Unlike Hong Kong, immigration was restricted, so when the labor market became tight, wages began to rise, and in 1986 wages were frozen. Industrialization shifted to skill- and technology-intensive industries, such as telecommunications and computers and other electronic industries. The only heavy industries were petroleum and petrochemicals (see Geiger and Geiger 1975).

China

What is unique about the Chinese experience is that during the decades before the 1980s, the urban Gini coefficient was very low (0.18 in the 1970s), even though industrial policy emphasized heavy industrialization. However, in the early 1980s, the urban Gini rose (to 0.25 in 1983 and 0.28 in 1985), despite a shift from emphasis on heavy to light industries.

The reason for such unexpected results is that in the early capital-intensive phase, wages were kept relative, even under Mao's egalitarian philosophy, especially after the Cultural Revolution. Wage differentials between the highest and lowest grades ranged from 2.5 to 3.2 times.¹¹ (These wages included those paid for unskilled work and technical and professional work.)

After economic reforms from the early 1980s, wage controls were relaxed and differentials widened. Also in the private sector, where employment increased more than in other sectors, the differentials between the highest and lowest wages were larger than for state and collective enterprises.

Malaysia

Import-substitution policies protected labor-intensive industries, but in the 1980s there was a shift to heavy industries.

One unique aspect was the construction of nine free trade zones and forty-five industrial parks, where electronic industries flourished. Foreign investment in the late 1980s was extensive, and the economy became fully employed (Ikemoto forthcoming).

Thailand

As in Malaysia, before import-substitution policies were implemented during the 1970s, industrialization had been confined to processing agricultural products and cement, cotton-spinning and weaving, sugar refining, and small metal workshops, with expansion into plywood and veneer boards. All of these were largely labor-intensive, and unemployment fell to less than 1 per cent during the 1970s. To attract foreign investment, concessions on import duties and business and income taxes were allowed. In the late 1980s, there was a massive influx of foreign investment (Ikemoto and Ira Santisart forthcoming).

The Philippines

After national independence, import-substitution policies protected light industries, but during the 1960s the Philippines began to invest in capital-intensive industries. However, they were protected too long and became oligopolistic and

¹¹ *Area Handbook for the People's Republic of China* (Washington, D.C.: Foreign Area Studies, American University, 1972), p. 511. See also Oshima and Estudillo (forthcoming).

inefficient, operating far below full capacity, as unemployment rose to double-digit levels during the mid-1980s.

Indonesia

Import-substitution policies protecting capital-intensive industries began to be dismantled in the mid-1980s, and export promotion was initiated under deregulation, devaluation, liberalization, and other reforms. Labor-intensive industries and nonpetroleum exports grew rapidly.¹² Severe underemployment, which included 45 per cent of the labor force in 1975 and 38 per cent in 1980, fell dramatically to 13 per cent in 1986. This contributed to a lowering of the rural Gini coefficient during the 1980s. One unique feature was the widespread prevalence of cottage industries.

V. EDUCATIONAL POLICIES

Early in postwar period, East Asia invested heavily in human capital. By 1980, mean years of schooling for the population twenty-five years and over were 10.4 years for Japan, 6.6 for Korea, 6.3 for Taiwan, 6.2 for Hong Kong, and only 3.5 for Singapore and 4.8 for China. These compare with 4.0 for Malaysia, 3.5 for Thailand, 3.1 for Indonesia, and a surprising 6.6 for the Philippines. (South Asia averaged around 2.0 with Pakistan the lowest at 1.4 and Sri Lanka highest at 5.5.)¹³

Japan

Japan's high rate (exceeded only by the United States) was a legacy from the Tokugawa period, at the end of which the literacy rate was 50 per cent for males and 15 per cent for females. More importantly, during the Meiji era compulsory, universal education was adopted, and by the 1920s almost 100 per cent of the children of school age were enrolled. During the post-World War II period, under U.S. urging, free, compulsory education was extended to nine years, and soon nearly 100 per cent were enrolled, about the highest in the world. Then by 1973, Japan completed the transition to mass higher education, emphasizing vocational, technical education in secondary education.

Taiwan and the Republic of Korea

Taiwan and Korea were able to accelerate their educational programs immediately after World War II, an inheritance from the Japanese colonial period of a large

¹² Hal Hill points out that Indonesia's industrial policies starting with capital-intensive industries, then switching to labor-intensive industries, were similar to those of India and China, and unlike the smaller countries elsewhere. See Hill (1996).

¹³ Data from UNDP (1990). The rest of this section is based on *Area Handbook for Thailand* (Washington, D.C.: Foreign Area Studies, American University), various editions.

corps of educated young people who could be quickly converted into teaching staffs of the many new schools established. Both countries, like Japan, adopted compulsory primary education early during the post-World War II years, and all three countries included morality or ethics education based on Confucian ideas, which taught diligent, disciplined work habits. However, Taiwan and Korea's mean years of schooling were lower than Japan because compulsory, universal education was not adopted during the Japanese occupation.

The quality of pre-college education was high in all three countries, compared to Southeast Asia, with the exception of Singapore. Because of Confucian backgrounds, education was highly regarded, with the highest esteem in Korea accounting for the percentage of college-age students enrolled in higher education nearly as high as the United States.

Hong Kong and Singapore

The much lower level in mean years of schooling (for the people twenty-five years and above) in Singapore was the result of a policy that the government pursued in the 1950s and 1960s, i.e., the British colonial policy of educating only a small number, in contrast to Hong Kong which required compulsory primary schooling together with three years of secondary education by 1970. The need for education came earlier in Hong Kong, which experienced a shortage of skilled labor much earlier than Singapore because of earlier industrialization. When Singapore began to industrialize rapidly in the 1970s, education laws were adjusted, and primary and secondary schools were quickly constructed. As in Japan, Taiwan, and Korea, vocational and technical education was not neglected.

China

The growth in education was rapid. Only 20 per cent of those in the age group were enrolled in primary schools during the early postwar decades, but 96 per cent were enrolled by 1985, although the dropout rate was high with only 60 per cent graduating. Rural parents were not happy having their children away from the farm, where the household responsibility system called for more work. In 1986, nine years of schooling became compulsory, with tuition free and the children of the poor getting stipends.

Secondary schooling expanded very rapidly after the Cultural Revolution, prior to which it was restricted by Mao, but the dropout rate was high due to parental attitudes in the rural areas.

During the Cultural Revolution decade, many college students left school, crippling the higher education system, but they came back afterwards and expansion was rapid, perhaps to the detriment of primary education. One problem was the poor quality of higher education resulting from the selection of students and faculty on ideological and political grounds. This changed beginning in 1976, when

steps were taken for selection to be made on academic standards, as the standard entrance examination was reinstated.

In sum, countries in East and Southeast Asia were able to expand education very rapidly during the postwar period, but quality declined in Southeast Asia compared to East Asia, which had a large stock of educated youth to train as teachers.

Malaysia

Malaysia's mean schooling level higher than Singapore's may be unexpected. Historically, the Chinese established Chinese-language schools and the British made available free primary schooling to all in the pre-World War II period, while plantations provided Tamil schools to Indian population. After independence, free primary education became available to all in 1958, and in 1965 three more years of schooling was added. Educational levels of native Malays were lower than the Chinese and Indian populations during the British period because opportunities for schooling were much less available, since the former were located mainly in the rural areas where there were no schools. However, after independence, when schools were built in the rural areas, the Malays caught up with the others.

Thailand

Modern education was begun in the latter half of the nineteenth century by King Chulalongkorn. During the postwar period, attendance was made compulsory for every child up to and including the sixth grade, but attendance was poor in the rural areas and the dropout rate high. By 1983 primary school attendance was 99.4 per cent of children aged seven to twelve years. The weak point of Thai education was secondary schooling, which was available mostly in the major cities and was especially inadequate in the North and Northeast. Moreover, the quality of schooling was poor. Higher education was insufficient to meet the demand in 1970, as only 2 per cent of college-age students enrolled, but the situation improved rapidly later on, perhaps too rapidly.

Indonesia

Educational facilities under Dutch colonialism were severely limited and insufficient to provide teachers after independence. Many of the primary school teachers were untrained, physical facilities, including textbooks, were inadequate, and vocational training was also handicapped by both a lack of teachers and equipment. Because of low literacy among adults, literacy campaigns were conducted and community education centers were established; but by 1986, the proportion enrolled in secondary schools had more than tripled to 41 per cent from 12 per cent in 1965. Higher education expanded very rapidly, and together with Thailand, Malaysia, and the Philippines, there was a tendency to emphasize higher education at the expense of secondary education.

The Philippines

The high level of education attained by the Filipinos was a legacy of United States colonial policy, similar to Japan in Korea and Taiwan, but unlike the Dutch in Indonesia and the British in Malaysia. Free, compulsory education up to and including the fourth grade, and four years of secondary schooling were provided by the United States. The quality was good thanks to the 1,000 American teachers sent to the Philippines to staff the schools throughout the archipelago, including the rural areas, in contrast to Thailand, Malaysia, and Indonesia.

After independence, the policy of compulsory, free education was continued, and by 1963/64, 80 per cent of children seven to thirteen years had been enrolled. However, quality began to deteriorate as the old generation of teachers gave way to new ones, whose training was not very good, and as financial provisions for the schools became inadequate. Low quality education reduces substantially the benefits of high mean schooling years, and some have suggested that quality should be improved at the expense of quantity, since literacy rates are not increasing.¹⁴

VI. POPULATION POLICIES

Japan was the first Asian country to complete the fertility transition. Singapore was next, followed by Hong Kong, then Taiwan and Korea in the 1980s, and Thailand and China in the early 1990s. Simon Kuznets has observed that these were the most rapid fertility completion in population history (see Appendix Table II).¹⁵

In *Japan*, family planning movements before World War II were banned, but after the war family planning centers were set up, where contraceptives were made available and spread rapidly. These policies were extremely effective and births declined sharply, but when labor shortages became acute in the 1970s, there were efforts to amend the laws permitting abortion, but they were not successful.

Also in *Taiwan*, authorities in the immediate post-World War II years opposed family planning on the grounds that a large army was needed to invade the China mainland; but it was not long before the China Family Planning Association was formed, with the government approving family planning.

In the *Republic of Korea*, nationwide family planning programs were launched in 1962, and by the 1980s, the government was promoting through family planning centers the distribution of contraceptive devices and instruction in family planning methods, granting subsidies and privileges such as low interest rates on housing loans to parents undergoing sterilization, and denying parents with more than two children tax deductions for educational expenses. The programs were successful.

¹⁴ See A. N. Herrin's contribution to ADB-EDRC (1990). This publication also contains chapters on Indonesia, Thailand, Republic of Korea, besides Bangladesh.

¹⁵ Section VI is largely based on *Area Handbooks* (Washington, D.C.: Foreign Area Studies, American University) for various countries.

Singapore conducted an aggressive campaign to reduce fertility. During the 1960s widespread publicity campaigns were launched on the advantages of a small family and material incentives were also extended. During the 1970s, abortion and voluntary sterilization were legalized, and various disincentives to families with three or more children were instituted: such as hospitals charging high fees and no extra considerations in public housing assignments. The program turned out to be very successful; in fact too successful, as the government began to worry about the sharp decline in fertility, especially among the highly educated. Thus during the 1980s, the campaign was shifted to a pro-natal program and incentives were reversed.¹⁶

In *China* also, the communist authorities were at first opposed to family planning, but changed their minds and established birth control offices. Births were cut in half by the mid-1960s. During the 1970s, "barefoot doctors" distributed contraceptives in the rural areas and recommended three or four children per family in the villages and two in the cities; but in 1979, one-child families were urged with plenty of publicity, social pressures, and even coercion. Those who complied were rewarded with cash bonuses, better child care facilities, and preferred housing arrangements. Those who exceeded the limit were strongly advised to abort and to be sterilized. The program was successful in the cities, but less so in the villages, where children were needed to help with farm work. Fertility fell from 3.8 in 1975 to 2.0 in 1993.

Thailand was the most successful family planning case in Southeast Asia, excepting Singapore. A national population program was adopted in 1970, and the Planned Parenthood Association and Family Planning Services conducted very successful programs, with one-fourth of all married couples of child-bearing age using contraceptives.

In *Indonesia*, the National Planned Parenthood Organization was founded in 1968 with regional institutes, boards, and clinics; and by the 1990s birth control programs were being implemented throughout the country.

In *Malaysia*, the National Family Planning Board was established in 1967 and began distributing planning information and contraceptive materials. By 1974, one-half of Chinese and Indian women, twenty-five to forty-four years, and one-fourth of Malay women were practicing contraception.

In the *Philippines*, Popcom was established in 1985, and recommended two-child families and marriage delays, but the Catholic Church opposed birth control and attempted to end all population programs, but did not succeed. Nevertheless, the programs were not successful, because of inadequate support by the government and sabotage in the parishes by the clergy.

¹⁶ In place of slogans like "two is enough," "three or more if you can afford it" and the like were coined.

VII. WELFARE POLICIES

Neither East nor Southeast Asian countries spend much on social welfare. Budget spending for pensions, assistance for living expenses of poor families, social insurance, medical assistance, elderly care, and the like came to 2.9 per cent of the total in Japan in 1990, 2.0 per cent in Taiwan, Singapore, and Malaysia, 1.5 per cent in Korea, 1.0 per cent in Hong Kong, and less than 1.0 per cent in China, Thailand, Indonesia, and the Philippines. These percentages compare with 3.7 per cent in Sri Lanka and 13 per cent in the United States. Asian welfare contributions are too small to have much impact on income distribution. If all of the spending on welfare came from taxes on individual and corporate incomes, the effect on income distribution would have been greater, but in Indonesia in 1990 only one-seventh of the tax revenue came from income (most coming from oil). In Korea, Hong Kong, and the Philippines income accounted for one-third of the tax revenue, and one-half in Japan, Taiwan, and Singapore.¹⁷

Thus, income redistribution effects were greatest in Japan, Taiwan, and Singapore, but it is difficult to assess the distributive impact of welfare and taxes, unless one can determine the income status of the welfare beneficiaries and the progressivity of income taxes for each country. Such information is not available in statistical yearbooks and similar compilations.

In any case, it may be better to adopt policies which keep unemployment and poverty at low levels through spending for policies suggested above: i.e., rural development, off-farm employment, labor-intensive industrialization, making education and skills available to lower-income families, population controls, and so on. As suggested by the experience of welfare states such as Sri Lanka and Western countries, too much welfare spending may have serious trade-offs against GDP growth.

Nevertheless, countries like China, Thailand, Indonesia, and the Philippines spending less than 1 per cent of GDP may be overlooking significant groups of the chronic sick, disabled, the homeless, the indigent elderly, impoverished families, and others who have no means of support. Perhaps somewhere between 1 to 2 per cent of GDP would be ideal for welfare spending.

VIII. INTER-REGIONAL DISPARITIES

Regional differences are not of great significance in the smaller countries of East Asia; but in China, Thailand, and Indonesia their impact on income distribution

¹⁷ Estimated from various yearbooks of respective countries, and *The Far East and Australasia, 1992* (London: Europa Publications, 1991).

cannot be ignored. In the earlier period, the gap in per capita prefectural incomes was considerable in Japan, but the strategy for dispersing industries to lower-income prefectures appears to have narrowed regional differences. In 1990, Tokyo had the highest per capita income, and the lowest was recorded by Okinawa with a little less than one-half of Tokyo. In the earlier postwar decades Okinawa was not part of Japan, and was thus left out of its regional strategies; but since reverting to Japan in the early 1970s, policies to raise income have been attempted, though accelerated only during the 1990s.

Malaysia

Malaysia has attempted to reduce its regional income differences by measures such as social welfare, locating industrial estates in the poor states, and improving infrastructure through projects such as roads, ports, rural electrification, and water supply; but regional differences rose between 1990 and 1995 from 5.0 in 1990 to 5.8 in 1995 (in 1978 prices). Apparently there were other forces at work; for example, direct foreign investment being concentrated in the rich states.¹⁸

Thailand

As noted above, regional disparities are wide in Thailand. Historically there has been a tendency for central Thai to look down upon those in the outlying regions, ignore their needs, and even exploit them. The government tried to change this trend in the 1960s, and community and agricultural development policies were implemented with mixed results.

Large regional differences are also due to topographic and other natural forces. The Northeast, the poorest region, has soil unsuitable for agriculture, with insufficient rain during a very short monsoon season, in contrast to the central region which enjoys plenty of rain for irrigation. The next poorest is the North with extensive mountainous and steep valleys.

During the 1980s, in the midst of increasing regional income disparity, policies were adopted to build infrastructure and to decentralize industries away from Bangkok, where average household income was highest in comparison to the lowest in the Northeast and North (Ikemoto and Ira Santisart forthcoming), but it was not possible to overcome such disequalizing forces as the concentration of direct foreign investment in and around the capital city, like in Malaysia.

China

In the 1950s about two-thirds of industrial output was located in eastern and

¹⁸ See *Mid-Term Review of the 6th Malaysia Plan, 1991–1995* (Kuala Lumpur, 1993). Ikemoto (forthcoming) notes that the gap between mean *household* income (instead of per capita income) was much smaller, 2.7 times.

northeastern China. Policies to disperse industries to the north, central-west, and central-south were instituted, and by 1983 they were accounting for 40 per cent of industrial output. Attempts to develop the interior regions of the far west was abandoned because of a lack of infrastructure for industrialization.

In 1983 farmers per capita income in the industrialized coastal areas was 1.6 in comparison with 1.0 in the northwest hinterland, and by 1993 the ratio had nearly doubled to 3.0:1.0. Between 1989 and 1995 household per capita income nationwide rose 121 per cent, but only 59 per cent in the northwestern provinces.¹⁹ This was mainly due to the faster rising in wages received by farmers in the coastal provinces from nonagricultural or off-farm activities. Wages in the coastal provinces rose by 82 per cent from 1993 to 1995, but only by 50 per cent in the northwest.²⁰ Not only did inter-regional but also intra-regional disparities increase, because most of the wage increases in the coastal areas went to richer farmers as a result of their higher educational levels, entrepreneurial experience, and communist party connections (Oshima and Estudillo forthcoming). Thus, China's policies contributed to growing regional inequalities by concentrating industries in the coastal area.

Indonesia

Indonesia is another country where policymakers are concerned with regional disparities. Per capita gross regional product in 1990 was highest in Jakarta, nearly seven times greater than the lowest province, East Nusa Tenggara, when excluding oil revenues. (If oil revenues are included, East Kalimantan is the richest at sixteen times the poorest.)²¹

Under Dutch rule, regional differences grew because of the emphasis placed on Java in neglect of the other islands, but during the 1980s, more government funds per capita were allocated to smaller provinces, being invested in infrastructure outside of Java. If oil is excluded (and it should be since its revenues accrue outside of the production areas), there appears to have been a lowering of regional income disparities since 1983.²²

IX. CONCLUDING REMARKS

Rural development and off-farm policies have been discussed in this paper in the hope that they were the key policies underlying rapid GDP growth and low income inequalities in monsoon Asia. Without successful rural development there is not

¹⁹ Based on data from *Beijing Review*, July 24–30, 1995.

²⁰ Based on data from *China Statistical Yearbook, 1995* (Beijing: State Statistical Bureau, 1995).

²¹ See Hill (1996, chap. 11). Other differences noted are population density, natural resource endowment, the size of gross regional product, social indicators, and economic structure.

²² Hill (1996, chap. 11). See also Akita, Lukman, and Yamada (1998).

enough domestic demand to nurture industries until they become efficient enough to advance into foreign markets; nor can enough workers be released from the rural sector to expand industries once they begin to export rapidly. Furthermore, savings accrued from the increased income from rural development and off-farm activities enables low-income farmers to mechanize their farms and afford to pay for the education of their children who, when they grew up, will make up a cheap work force for rapidly growing export industries. Thus, East Asia has been able to grow earlier and faster than Southeast Asia, where rural development has been less successful and off-farm activities minimal.

Rural development and off-farm activities are crucial in lessening inter-regional (and intra-regional) income inequalities, while reducing the need for social welfare in the rural areas. It is probable that the fertility transition would have been much slower if the rural housewives could not find sufficient work on the farms and in the factories to keep them busy and did not have the income to send their daughters to school.

This paper has also focused on full employment, whose attainment would have been difficult in monsoon Asia without off-farm employment. It was full employment that wiped out unemployment and underemployment, especially the latter. Under conditions of full employment, unskilled and inexperienced workers from lower-income farm households were able to raise the income of the households in the lowest echelons.

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APPENDIX TABLE I
ANNUAL AVERAGE GROWTH RATES OF GDP PER CAPITA IN ASIA, 1950-95

	1950s	1960s	1970s	1980s	1991-96	1950s to 1995	ADB Estimates ^a 1965 to 1990
East Asia:							
Japan	6.6	10.1	4.1	3.6	-0.5	4.8	—
Republic of Korea	3.1	6.0	6.6	8.7	6.8	6.3	7.4
Taiwan	4.0	6.3	7.6	6.7	5.4	6.0	6.3
Hong Kong	4.5	7.2	6.8	5.6	3.7	5.6	5.8
Singapore	1.3	6.7	7.4	5.3	6.3	5.4	7.4
Simple average	3.9	7.3	6.5	6.0	4.3	5.6	6.7
Southeast Asia:							
Malaysia	1.0	3.3	5.0	2.9	6.2	3.7	4.5
Thailand	2.8	4.7	4.5	5.9	7.6	5.1	4.6
Indonesia	1.9	2.3	5.4	3.9	6.2	3.9	4.7
Philippines	3.6	2.2	3.3	-1.2	0.3	1.6	1.4
Simple average	2.4	3.1	4.5	2.9	5.1	3.6	3.8
South Asia:							
Bangladesh	—	1.1	3.4	1.9	2.6	2.2	0.8
Sri Lanka	1.3	2.5	3.8	2.5	2.6	2.5	2.3
Nepal	1.2	0.4	-0.5	2.1	2.7	2.0	—
Pakistan	0.8	2.4	1.6	3.2	1.4	2.1	1.8
India	1.9	2.2	1.0	3.2	3.1	2.3	2.0
Simple average	1.5	1.7	1.9	2.6	2.5	2.3	1.7
China	—	3.1	4.7	7.8	8.9	6.1	

Sources: The 1950s and 1960s are from the World Bank, *World Tables, 1980*. The 1970s and 1990s are from ADB, *Asian Development Outlook*, various issues; data pertain to 1971-80 period. The 1980s are from the World Bank, *World Development Report, 1993*; data pertain to 1980-91 period.

^a From ADB (1997, p. 2). Regional averages are not simple averages but adjusted by purchasing power parity.

APPENDIX TABLE II
 RATES OF POPULATION GROWTH, 1820-1992
 (ANNUAL AVERAGE COMPOUND RATES)

	1820-70	1870-1913	1913-50	1950-73	1973-92
Asian countries:					
Bangladesh	n.a.	n.a.	0.8	2.3	2.3
Burma	n.a.	2.5	1.1	2.0	2.0
China	-0.1	0.5	0.6	2.1	1.5
India	0.4	0.4	1.0	2.1	2.2
Indonesia	1.0	1.3	1.2	2.0	2.1
Japan	0.2	0.9	1.3	1.1	0.7
Pakistan	n.a.	n.a.	1.7	2.5	3.1
Philippines	1.7	1.4	2.1	3.1	2.4
Republic of Korea	n.a.	n.a.	1.9	2.2	1.3
Taiwan	n.a.	n.a.	2.2	3.0	1.5
Thailand	0.4	1.0	2.2	3.1	2.1
Average for Asia	0.6	1.0	1.5	2.3	1.9
Average for:					
West European countries	0.8	0.9	0.6	0.8	0.3
Western offshoots ^a	4.8	2.4	1.4	1.9	1.1
Latin America	1.6	1.8	1.8	2.8	2.2

Source: Maddison (1995, Table A-2).

^a Western offshoots include the United States, Australia, New Zealand, and Canada.

APPENDIX TABLE III
 COEFFICIENT VARIATION OF WAGES AND SALARIES IN ASIAN MANUFACTURING
 (WEIGHTED BY SIZE OF EACH SECTOR)

Japan		Taiwan		Republic of Korea		Singapore		Malaysia		Indonesia		Hong Kong	
Year	Variation	Year	Variation	Year	Variation	Year	Variation	Year	Variation	Year	Variation	Year	Variation
1976	0.25	1953	0.19	1977	0.24	1976	0.45	1976	0.57	1976	0.41	1976	0.45
1980	0.25	1955	0.20	1980	0.29	1980	0.44	1981	0.53	1980	0.42	1980	0.33
1984	0.25	1959	0.20	1983	0.36	1984	0.41	1987	0.54	1986	0.45	1984	0.17
1987	0.26	1964	0.17	1986	0.30	1987	0.42	1990	0.50	1989	0.47	1987	0.23
1991	0.25	1972	0.31	1988	0.28	1990	0.43			1989	0.47	1990	0.25
				1990	0.29								
Philippines		China		India		Bangladesh		Thailand		Pakistan		Sri Lanka	
Year	Variation	Year	Variation	Year	Variation	Year	Variation	Year	Variation	Year	Variation	Year	Variation
1976	0.68	1977	0.06	1976	0.45	1976	0.40	1988	0.84	1988	0.36	1981	0.38
1980	0.58	1980	0.08	1980	0.36	1980	0.52						
1984	0.52	1982	0.09	1985	0.44	1985	0.54						
1988	0.53			1989	0.69	1989	0.69						

Sources: United Nations, *Industrial Statistics Yearbook*, various issues.