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ASIAN URBANIZATION AND DEVELOPMENT:

A COMPARATIVE ANALYSIS

by

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ABSTRACT

A comparative perspective on Asian urbanization and development is offered in this paper. In the first part, some aspects of urbanization and spatial concentration are discussed using data on South, Southeast, East and Centrally Planned Asian countries. South and Southeast (and to some extent Centrally Planned) Asian countries have been experiencing slow urbanization but rapid urban and rural population growth; the reverse is true for East Asian countries. In the second part, an expanded urbanization-development model is proposed and then tested empirically. The results show that, in addition to manufacturing and agricultural growth, population growth plays a crucial role but this is to slow down the urbanization process. Agricultural development also appears to retard urbanization, perhaps because it allows for absorption of labor, lending further support to the notion that rural development can reduce unwarranted migration to cities. Another noteworthy finding is that openness of the economy, besides manufacturing activity, is a significant determinant of concentration in the metropolis. Apparently, concentration is a response to the need to be near the principal port as well as to offices that issue import licenses and foreign exchange, among other things. Thus, spatial concentration seems to be partly an unintended consequence of economic policies, salient among which was the import-substitution industrialization strategy in the past.

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There seems to be a recognition that urbanization is a problem to be reckoned with during the 1980s and beyond. The reason is not because there is something wrong or unusual about urbanization per se which is a feature that goes with development. Rather, the reason seems to be that urbanization, like economic development itself, continues to be unbalanced spatially or concentrated in the metropolitan centers of LDCs. There is a sense that the great majority of the people outside those centers have been practically left out from the benefits of urbanization and development. There is also the common observation that the carrying capacity of urban centers is bursting at the seams, so to speak. These and other concerns appear to have become prominent in recent years.[1]

This paper offers a comparative perspective on Asian urbanization. An analysis of certain indicators of urbanization and spatial concentration may provide a clue as to what particular aspects of the urbanization

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[1]See, e.g., the report of the U.N. Economic and Social Council (1978) and Todaro (1979).

problem" our concerns should be addressed. The focus of the paper is on South, Southeast and East Asia, and the constituent countries exclude city-states (Hongkong and Singapore) and countries in turmoil (Cambodia and Vietnam) or with inadequate data (Nepal). In addition, two centrally planned Asian countries, namely the Peoples Republic of China (PROC) and the Peoples Republic of Korea (North Korea) are included to increase the range of experiences.[2]

The trends for the different Asian regions are first presented in the context of the world's more developed and less developed regions. Comparative data on the constituent countries in each of the regions are next shown. Then a modified urbanization-development model is proposed and subsequently tested empirically. The concluding section summarizes the findings and implications.

ASIAN REGIONS IN CONTEXT

According to data from the United Nations (1980), the world in 1980 was about 41 percent urban; more developed regions were 70 percent urban and less developed regions 30 percent urban. In absolute terms, these translate to 1,806 million urban population in the world as a whole, 834 million in more developed regions and 972 million in less developed regions. Against this background we can situate the Asian

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[2] Professor Oshima has written important treatises (1978, 1980, 1981) on the economic performance of, and prospects for, Asian countries. The present paper could perhaps serve as a complement to those treatises.

regions in 1980 with the following statistics (from Tables 1 and 2):

	Percent Urban	Urban Population (in millions)
South Asia	22.0	201.1
Southeast Asia	22.7	61.4
Centrally Planned Asia	26.1	241.4
East Asia	72.5	112.9

The data readily indicate extremes in urbanization levels in these regions. At one end is East Asia which corresponds closely to the average for the more developed world, and at the other end are South, Southeast and Centrally Planned Asia which fall below the mean for the less developed world and far below the average for the world as a whole.[3] The majority of Asia is thus still relatively unurbanized, reflecting the low level of development in these regions. This is particularly true of South Asia and Southeast Asia which are less than a quarter urban.

The relatively unurbanized status of Asia is the result of its slow pace of urbanization even in recent decades. This is contrary to the common impression that Asia has a problem of rapid urbanization. If anything, the problem seems to be more that Asian regions have

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[3] The less developed world average is actually pulled up by Latin America whose urbanization level is closer to the more developed world than to the less developed world.

been urbanizing rather sluggishly as evinced by the following comparative data (from Table 1) on rates of urbanization[4] (in percent) over three decades:

	1950-60	1960-70	1970-80
South Asia	11.3	14.5	19.4
Southeast Asia	20.3	16.0	19.0
Centrally Planned Asia	82.8	21.4	24.3
East Asia	53.3	45.8	46.8
World	25.7	17.0	17.3
More developed Regions	28.5	28.7	28.3
Less developed Regions	39.3	24.3	26.4

South Asia's rate of urbanization has been the lowest and that of Southeast Asia has been practically the same especially in the 70s. These rates resemble the world average but are lower still than the mean for less developed regions.[5] Centrally Planned Asia's urbanization has been faster than South and Southeast Asia (unusually fast during

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[4] Rate of urbanization is here defined as the percentage change in urban-rural ratio rather than the change in proportion urban. The former measure is superior because it does not have an upper limit of 1.

[5] There is also evidence to show that the rate of urbanization in LDCs is not rapid compared to the historical experience of Western countries (see Davis 1975, Pernia 1976, Preston 1979).

1950-60) and close to the less developed world average. The remarkable performance is that of East Asia whose speed of urbanization has been over 50 percent faster still than the average for the more developed world.

The pattern of urban population growth is quite the reverse. Southeast Asia manifests the highest rate of urban growth, approximating the average for the less developed regions, followed closely by South Asia. What is more striking is the pattern of rural population growth. The growth rates for South and Southeast Asia are very high relative to the average for the less developed regions as well as for the world as a whole. But the real contrast is with East Asia and the more developed regions whose rural growth rates have been negative throughout the three decades. The comparative rates of urban and rural population growth (from Table 2) are (in percent):

	1950-60		1960-70		1970-80	
	Urban	Rural	Urban	Rural	Urban	Rural
South Asia	33.5	20.0	42.8	24.6	47.6	23.7
Southeast Asia	47.3	22.2	48.7	27.9	52.3	28.3
Centrally Planned Asia	95.5	7.1	37.9	13.5	39.0	11.8
East Asia	41.5	-7.7	32.9	-8.8	29.5	-11.8
World	39.8	11.1	33.9	14.8	33.4	13.8
More developed Regions	27.6	-0.8	22.7	-4.6	18.7	-7.5
Less developed Regions	59.6	14.6	48.3	19.1	49.3	18.2

It is clear that in purely demographic terms the high rate of rural population growth is slowing down the pace of urbanization in Asia (except East Asia) and in the less developed world (despite high urban growth rates). If we compute for urban-rural growth difference (URGD), we would see the same interregional pattern as that for rates of urbanization (Table 2).[6]

South Asia

This region, as already mentioned, is predominantly rural. It was 16 percent urban in 1950 and even in 1980 only 22 percent urban. The countries in this region are among the lowest in terms of levels of income and their growth rates. Recent data on levels of urbanization, industrialization and GNP per capita for individual countries (from Tables 1 and 5) are as follows:[7]

	Urbanization (1980)	Industrialization (1978)	GNP per capita (1978)	GNP per capita (1960-78 annual change)
Bangladesh	11.2%	8%	90 US $	-0.4%
Burma	27.2	10	150	1.0
India	22.3	17	180	1.4
Sri Lanka	26.6	23	190	2.0
Pakistan	28.2	16	230	2.8

[6] URGD is also used to measure speed of urbanization.

[7] Industrialization level is here indicated by manufacturing share of GDP since this is the most dynamic component of the industrial sector. Data on GNP per capita are taken from the World Bank (1980).

The degree of concentration (proportion of urban population in largest city) in these countries in 1980 ranged from a low of 6 percent for India to a high of 30 percent for Bangladesh (Table 3). Urban concentration has remained more or less stable in India and in Pakistan (at 21 percent) but has markedly risen in Bangladesh from 20 percent in 1960. By contrast, Sri Lanka has evinced remarkable deconcentration from 28 percent in 1960 to 16 percent in 1980 despite the presence of only one city of over 500,000 inhabitants.

Southeast Asia

The region as a whole has exhibited practically the same urbanization trend as South Asia although all but one country have been classified by the World Bank as middle-income countries. Indonesia, like South Asian countries, still belong to the low-income group of countries. Comparative data on urbanization, industrialization and GNP per capita for individual countries (from Tables 1 and 5) are shown below:

	Urbanization (1980)	Industrialization (1978)	GNP per capita (1978)	GNP per capita (1960-78 annual change)
Indonesia	20.2%	9%	360 US $	4.1%
Thailand	14.4	18	490	4.6
Philippines	36.2	25	510	2.6
Malaysia	29.4	17	1,090	3.9

The income levels as well as their growth rates are significantly higher in Southeast than in South Asian countries. Thus, if the link between urbanization and economic growth continues to hold, Southeast Asian countries would probably accelerate in urbanization in the coming years, at least relative to South Asian countries.

Urban concentration (proportion of urban population in largest city) is very pronounced in the region, ranging from 23 percent in Indonesia to 69 percent in Thailand (Table 3). And this indicator has been steadily rising in all four countries, as can be seen below:

	1960	1970	1980
Indonesia	20	22	23
Thailand	65	68	69
Philippines	27	29	30
Malaysia	19	23	27

It may be hypothesized that the exceptionally marked urban concentration or primacy in Southeast Asian countries is not unrelated to the import-substitution industrialization strategy pursued by these countries in the 1950s and 60s (see Myint 1972). This point will be discussed further and partial support for the hypothesis will be shown in subsequent sections.

Centrally Planned Asia

This region includes two countries: PROC whose level of urbanization appears similar to some countries in South and Southeast Asia, and North Korea which resembles more the countries in East Asia than elsewhere. By World Bank income standards, PROC would be considered a low-income country and North Korea a middle-income country, as denoted by the following data (from Table 1):

	Urbanization (1980)	GNP per capita (1978)	(1960-78 annual change)
PROC	25.4%	230 US $	3.7%
North Korea	59.7	730	4.5

Another point that may be noted is that the economic growth performance of both countries compares well with those of the high performers in Southeast Asia.

The remarkable characteristic that seems to set these two countries apart from the other Asian countries is the relative absence of urban concentration. PROC exhibited only 6 percent urban concentration from 1960 to 1980 while North Korea had 15 percent concentration in 1960 which declined to 12 percent in 1980. It would seem that such relative lack of concentration is due to central controls on population movements.

East Asia

The countries in this region are among the great economic performers of the post-war era: Japan in the 50s and 60s, Taiwan in the 60s and 70s, and South Korea in the 70s (see, e.g., Oshima 1980). The average annual growth rate of GNP per capita in these countries from 1960 to 1978 was in the vicinity of 7 percent. (See also Table 4)

It is not surprising, therefore, that they have also experienced very rapid urbanization rates of over twice those manifested by the other Asian countries. By 1980, more than half of the population in South Korea was urbanized, and over three-fourths of both Taiwan and Japan's populations were urbanized. The growth rates of rural population in these countries have been negative for some time already. Data on 1980 degree of concentration show that 41 percent of South Korea's urban population is in Seoul, while for Japan 22 percent is in Tokyo. (There is no information on concentration in Taiwan.)

URBANIZATION AND DEVELOPMENT MODEL

The level of urbanization at a point in time, its pace over time, and the degree of concentration are indicative of the current and future scale of the urbanization problem. These are among the major indicators of concern relative to the urbanization issue. From the previous discussion of experiences across Asian regions and countries within each region it appears that urbanization is closely related to economic

development. What needs to be done now is to determine the principal correlates of urbanization. The Asian countries included in this study portray varied experiences and circumstances such that a cross-sectional statistical analysis should throw some light on the urbanization-development nexus. Specifically, what this cross-sectional analysis should do is to identify the factors that account for the variation in urbanization levels and rates, as well as in the degrees of concentration across Asian countries.

On the basis of standard development theory (e.g., Lewis 1954, Ranis and Fei 1961), we suppose that overall development of the economy as well as developments in both the agricultural and industrial sectors determine urbanization in a fundamental way. Agricultural development tends to release farm labor and population over time which are then attracted to the urban-industrial sector. Thus, it has been assumed that the speed of rural-urban transformation is directly conditioned by agricultural and industrial developments. This seems to be the traditional view. Recent data on LDCs, however, suggest that rapid population growth tends to retard the urbanization process. The relationship may be hypothesized to operate in two ways. In the first place, where overall population growth is high, it is usually pronouncedly higher in the rural sector than in the urban sector, and this has the direct demographic effect of pulling down the rise in the proportion urban. In the second place, population

growth tends to hamper economic development and thus, indirectly, the urbanization process itself. It, therefore, seems warranted to expand the standard urbanization-development model by adding the population growth variable.

Concerning degree of urban concentration, our hypothesis is that it is also influenced by industrial development (or manufacturing activity) and population growth. In addition, degree of openness of the economy would play a crucial role inasmuch as importation of goods and services requires licenses and foreign exchange which are more easily obtainable in the capital city. Likewise, most other support services for manufacturing are found in the metropolis. There is clearly then a strong incentive for industries and business concerns to locate in the capital metropolis which in most cases is also the capital port of the country. This is all the more so in developing countries where transportation and communications are deficient (Alonso 1968). The spatial coincidence of the capital metropolis and the capital port is thus advantageous for manufacturing activity with its import requirements. As is known, import-intensive industrialization characterized many Asian economies in recent past.

Data, Notations, and Results

The data employed in our regression exercise pertain to the South, Southeast, Centrally Planned and East Asian countries considered

in the previous discussion. The data are reported in the most recent publications of the United Nations (1980) and the World Bank (1980). (See Tables 1 through 6.) To increase the number of cases we pooled the cross-section observations for 1960, 1970, and 1980 (or 1978). The variable notations and their specifications are as follows:

URB_t = level of urbanization at time t, specified as urban-rural ratio (or $\frac{\text{proportion urban}}{\text{1-proportion urban}}$) rather than simply proportion urban which has an upper limit of 1.

$RURB_{t-1,t}$ = rate (or speed) of urbanization during some interval, specified as percentage change in URB.

$CONC_t$ = degree of concentration at time t, specified as $\frac{L}{1 - L}$, where L denotes the proportion of urban population in the largest city.

IND_t = industry share of GDP at time t, which represents economic level.

$GRAG_{t-1,t}$ = average annual growth rate of agricultural production.

$GRMAN_{t-1,t}$ = average annual growth rate of manufacturing production. (Manufacturing is often the most dynamic part of the industrial sector.)

$GRPOP_{t-1,t}$ = average annual growth rate of population.

$OPEN_t$ = degree of openness of the economy, specified as the import share of GDP.

Our regression results correspond to three dimensions of an urbanization-development model explaining: (1) level of urbanization, (2) rate of urbanization, and (3) degree of concentration.[8]

$$(1)\quad URB = -1.249 + 1.669\ IND - 0.732\ GRAG + 0.234\ GRMAN$$
$$\qquad\qquad\quad (4.683)\qquad (2.211)\qquad (0.917)$$
$$R^2 = 0.66$$

$$(1')\quad URB = 0.559 + 1.292\ IND - 0.533\ GRAG + 0.276\ GRMAN - 1.129\ GRPOP$$
$$\qquad\qquad\quad (3.494)\qquad (1.685)\qquad (1.178)\qquad (2.146)$$
$$R^2 = 0.73$$

Equation (1) shows that level of urbanization is significantly conditioned positively by economic level (IND) and negatively by agricultural growth (GRAG).[9] A 1.0 percent increase in economic level brings about a 1.7 percent change in urbanization level; on the other hand, a similar change in agricultural growth pulls down urbanization level by 0.7 percent. Manufacturing growth (GRMAN) has a positive effect on urbanization but is not significant.

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[8] t-values are enclosed in parentheses under regression coefficients.

[9] Both equations (1) and (1') are in double-log formulations.

Equation (1') is an enhanced model with population growth (GRPOP) added as an explanatory variable. GRPOP has a significant negative influence on URB and the overall explanatory power of the model increases from 66 percent to 73 percent. This result lends strong support to our hypothesis.

The results for rate of urbanization (specified in semi-log form) are as follows:

$$(2)\quad RURB = 3.910 - \underset{(0.483)}{0.006}\ IND - \underset{(3.716)}{0.415}\ GRAG + \underset{(3.288)}{0.110}\ GRMAN$$

$$R^2 = 0.48$$

$$(2')\quad RURB = 5.270 - \underset{(1.632)}{0.021}\ IND - \underset{(2.898)}{0.313}\ GRAG + \underset{(3.220)}{0.097}\ GRMAN - \underset{(2.351)}{0.556}\ GRPOP$$

$$R^2 = 0.61$$

Equation (2) parallels equation (1) with the dependent variable expressed as speed of urbanization over time. Economic level (appropriately lagged as IND_{t-1}) has the reverse sign as expected but is now insignificant. The negative sign simply means that urbanization tends to slow down at higher economic levels. Agricultural growth (GRAG) continues to be negative and significant, and manufacturing growth now exhibits a significant positive effect.

Equation (2') is likewise analogous to equation (1') with the added population growth variable (GRPOP) once again figuring importantly with its negative sign, and raising the explanatory value of the model by 13 percent.[10] The negative effect of agricultural growth on urbanization in all four regressions, though contrary to standard urbanization-development theory, seems to reflect absorption of labor in agriculture which would otherwise migrate to urban areas.

Our last regression results have to do with urban concentration (in double-log):

$$(3)\quad \underset{}{CONC} = \underset{}{1.914} - \underset{(0.203)}{0.055\ URB} + \underset{(2.501)}{0.682\ GRMAN} + \underset{(0.802)}{0.655\ GRPOP}$$

$$R^2 = 0.34$$

$$(3')\quad CONC = 1.020 - \underset{(0.827)}{0.192\ URB} + \underset{(1.761)}{0.433\ GRMAN} - \underset{(0.130)}{0.096\ GRPOP} + \underset{(2.822)}{0.889\ OPEN}$$

$$R^2 = 0.56$$

Among the independent variables in the previous equations, GRMAN and GRPOP were picked for both theoretical and statistical significance reasons (equation 3). URB (similar to IND) is included as a control variable but is not significant. Equation (3') shows that adding degree of openness (OPEN) raises the R^2 by 22 percentage points. All

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[10] We experimented with 2-SLS regressions to deal with possible simultaneity bias but the results were not encouraging.

the signs are in accord with expectations although they are not significant for URB and GRPOP. The important thing to note, however, is the significance of the variable OPEN -- a 1.0 percent increase in degree of openness raises urban concentration by about 0.9 percent. This result strongly supports our hypothesis that openness of the economy to the foreign sector is a strong incentive for concentration in the principal port and city of the country.

CONCLUSION

Asia is still predominantly rural -- a reflection of both its low level and pace of development. From within this vast region, however, East Asia has sprung forth as a great achiever (at least in a relative sense) in both urbanization and development so that it can now be better associated with advanced countries than with developing Asian countries.

Whether or not South and Southeast Asian countries will follow the trajectory of East Asian countries would depend on many things. The empirical results of an expanded urbanization-development model suggests that, in addition to manufacturing activity and agricultural development, population growth plays a crucial role in urbanization.[11]

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[11] Needless to say, one should be cautious about using the results of cross-section analysis for predicting future trends.

Population growth seems to result in a slowing down of the urbanization process. Hence, if population growth is going to decelerate in South and Southeast Asian countries, ceteris paribus, we could expect faster urbanization in the coming decades.

Another important point to consider is that agricultural development appears to retard urbanization, perhaps because it allows for labor absorption in the rural sector which would otherwise migrate. This could be the effect of agricultural growth at low levels of economic development. It is possible that at higher levels, agricultural development would have the reverse consequence, as observed, for example, in industrialized countries. In any case, the negative relationship between agricultural development and urbanization observed for Asian countries lends further support to the notion that rural/agricultural development can reduce unwarranted migration to cities.

Urban concentration or primacy seems moderate in South Asian countries but high and rising in Southeast Asian countries, including South Korea. It is virtually negligible in the Centrally Planned countries of PROC and North Korea for obvious reasons. There is no clear development-concentration relationship, however, even if the exceptional cases of PROC and North Korea are set aside. We have countries like Thailand and South Korea which have extremely high concentration ratios but which differ substantially with

respect to urbanization and development levels. We also have India which has little concentration, and Bangladesh which is less urbanized and developed than India but has a moderate degree of concentration similar to Japan.

It would seem, therefore, that there are other factors that account for urban primacy differentials (after allowing for measurement problems). Our analysis suggests that degree of openness of the economy, in addition to manufacturing growth, is a significant determinant of the primacy phenomenon. The reason behind manufacturing growth is known: manufacturing activity has invariably been concentrated in the metropolitan capitals of many Asian countries. The finding on degree of openness bears out our hypothesis that concentration in the metropolis is a response to the need to be near the principal port as well as to offices that issue licenses and foreign exchange, among other things. Thus, spatial concentration appears to be partly an unintended consequence of macroeconomic and growth policies in the past, salient among which was the now-famous import-substitution industrialization strategy. This point seems also worth noting in the design of urbanization and spatial development policies for Asian countries.

Table 1. Urbanization Indicators for Selected Asian Regions/Countries, 1950-1980

Region/ Country	Percent Urban				Urban-Rural Ratio[a/]				Percent Change in Urban-Rural Ratio		
	1950	1960	1970	1980	1950	1960	1970	1980	1950-60	1960-70	1970-80
South Asia	15.7	17.1	19.1	22.0	0.186	0.207	0.237	0.283	11.3	14.5	19.4
Bangladesh	4.4	5.2	7.6	11.2	0.046	0.054	0.082	0.127	17.4	51.8	54.9
Burma	16.1	19.3	22.8	27.2	0.192	0.239	0.296	0.373	24.5	23.8	26.0
India	16.8	17.9	19.7	22.3	0.202	0.218	0.245	0.286	7.9	12.4	16.7
Sri Lanka	14.4	17.9	21.9	26.6	0.168	0.218	0.280	0.362	29.8	28.4	29.3
Pakistan	17.5	22.1	24.9	28.2	0.212	0.284	0.331	0.392	34.0	16.5	18.4
Southeast Asia	15.0	17.5	19.8	22.7	0.177	0.213	0.247	0.294	20.3	16.0	19.0
Indonesia	12.4	14.6	17.1	20.2	0.142	0.171	0.206	0.253	20.4	20.5	22.8
Thailand	10.5	12.5	13.2	14.4	0.117	0.143	0.152	0.168	22.2	6.3	10.5
Philippines	27.1	30.2	32.9	36.2	0.372	0.432	0.491	0.568	16.1	13.7	15.7
Malaysia	20.4	25.2	27.0	29.4	0.256	0.337	0.369	0.416	31.6	9.5	12.7
East Asia[b/]	44.6	55.2	64.2	72.5	0.803	1.231	1.795	2.635	53.3	45.8	46.8
South Korea	21.4	27.7	40.7	54.8	0.272	0.383	0.686	1.212	40.8	79.1	76.7
Taiwan	-	50.0	-	77.0	-	1.381	-	3.348	-	-	-
Japan	50.2	62.4	71.3	78.2	1.008	1.659	2.484	3.596	64.6	49.7	44.8
Centrally Planned Asia	11.3	18.9	22.1	26.1	0.128	0.234	0.284	0.353	82.8	21.4	24.3
PROC	11.0	18.6	21.6	25.4	0.124	0.228	0.276	0.341	83.9	21.0	23.6
North Korea	31.0	40.2	50.1	59.7	0.450	0.672	1.003	1.481	49.3	49.3	47.7
World	29.0	33.9	37.5	41.3	0.408	0.513	0.600	0.704	25.7	17.0	17.3
More Developed Regions	52.5	58.7	64.7	70.2	1.107	1.423	1.831	2.350	28.5	28.7	28.3
Less Developed Regions	16.7	21.8	25.8	30.5	0.201	0.280	0.348	0.440	39.3	24.3	26.4

[a/] Ratio of urban population to rural population or $\frac{\text{proportion urban}}{\text{1-proportion urban}}$.

[b/] Regional average for East Asia excludes Taiwan.

Source: Table 2.

...ions, and Growth Rates: Asian Regions/Countries, 1950-80

Source: Table 2.

Table 2. Urban and Rural Populations, and Growth Rates: Asian Regions/Countries, 1950-80

Urban Population (in millions)				Percent Growth of Urban Population			Rural Population (in millions)				Percent Growth of Rural Population			Urban-Rural Growth Difference		
0	1960	1970	1980	1950-60	1960-70	1970-80	1950	1960	1970	1980	1950-60	1960-70	1970-30	1950-60	1960-70	1970-
5	95.4	136.3	201.1	33.5	42.8	47.6	384.7	461.8	575.3	711.6	20.0	24.6	23.7	13.5	18.2	23.9
8	2.6	5.1	9.5	48.3	94.4	85.1	39.2	48.8	62.5	75.3	24.3	28.2	20.4	24.0	66.2	64.7
0	4.3	6.3	9.6	44.6	47.8	50.9	15.4	18.0	21.4	25.6	16.6	19.2	19.7	28.0	28.6	31.2
2	76.6	107.0	154.5	29.2	39.7	44.4	293.4	351.2	436.1	539.8	19.7	24.8	23.8	9.5	19.2	20.6
1	1.8	2.7	4.1	60.2	54.4	50.1	6.6	8.1	9.8	11.4	23.5	20.5	16.1	36.7	33.9	34.0
4	10.1	15.0	23.4	58.7	48.4	55.3	30.1	35.7	45.4	59.6	18.8	27.1	31.2	39.9	21.3	24.1
4	27.1	40.3	61.4	47.3	48.7	52.3	104.2	127.4	162.9	209.1	22.2	27.9	28.3	25.1	20.8	24.0
4	13.5	20.4	31.3	44.4	50.8	53.4	66.1	79.2	99.1	123.6	19.8	25.1	24.7	24.6	25.7	28.7
1	3.3	4.7	7.1	57.5	43.1	50.5	17.9	23.1	31.0	42.4	28.9	34.3	36.6	28.6	8.8	13.9
7	8.3	12.4	18.9	45.8	49.2	52.6	15.3	19.2	25.2	33.3	25.6	31.3	32.0	20.2	17.9	20.6
3	2.0	2.8	4.1	58.2	41.6	45.6	4.9	5.9	7.6	9.9	20.0	29.2	29.4	38.2	12.4	16.2
3	65.6	87.2	112.9	41.5	32.9	29.5	57.6	53.2	48.5	42.9	-7.7	-8.8	-11.8	49.2	41.7	41.3
3	6.8	12.8	20.9	57.4	66.6	63.9	16.0	17.8	18.6	17.3	11.5	4.2	-7.2	45.9	82.4	71.1
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0	58.8	74.4	92.0	39.9	26.7	23.6	41.6	35.4	29.9	25.6	-15.0	-15.4	-14.6	54.9	42.1	38.2
4	125.9	173.7	241.4	95.5	37.9	39.0	503.5	539.1	612.0	684.2	7.1	13.5	11.8	88.4	24.4	27.2
4	121.7	166.7	230.7	98.2	37.0	38.4	496.8	532.8	605.1	677.0	7.2	13.6	11.9	91.0	23.4	26.5
0	4.2	7.0	10.7	39.9	64.4	53.8	6.7	6.3	6.9	7.2	-6.3	10.2	4.2	46.2	54.2	49.6
.	1012.1	1354.4	1806.8	33.8	33.8	33.4	1776.9	1973.7	2255.8	2567.0	11.1	14.3	13.8	28.7	19.5	19.6
0	572.7	702.9	834.4	27.6	22.7	18.7	405.5	402.4	383.9	355.0	-0.8	-4.6	-7.5	28.4	27.3	26.2
2	439.3	651.6	972.4	59.6	48.3	49.3	1371.4	1571.3	1871.9	2212.0	14.6	19.1	18.2	45.0	29.2	31.1

or East Asia excludes Taiwan.

ons, Patterns of Urban and Rural Population Growth, 1980, Annex II, Tables 48 and 49.

b/ Regional average for East Asia excludes Taiwan.

Source: Table 2.

Table 2. Urban and Rural Populations, and Growth Rates: Asian Regions/Countries

Region/ Country	Urban Population (in millions)				Percent Growth of Urban Population			Rural Population (in millions)				Percent G Pop
	1950	1960	1970	1980	1950-60	1960-70	1970-80	1950	1960	1970	1980	1950-60
South Asia	71.5	95.4	136.3	201.1	33.5	42.8	47.6	384.7	461.8	575.3	711.6	20.0
Bangladesh	1.8	2.6	5.1	9.5	48.3	94.4	85.1	39.2	48.6	62.5	75.3	24.3
Burma	3.0	4.3	6.3	9.6	44.6	47.8	50.9	15.4	18.0	21.4	25.6	16.6
India	59.2	76.6	107.0	154.5	29.2	39.7	44.4	293.4	351.2	436.1	539.8	19.7
Sri Lanka	1.1	1.9	2.7	4.1	60.2	54.4	50.1	6.6	8.1	9.8	11.4	23.5
Pakistan	6.4	10.1	15.0	23.4	58.7	48.4	55.3	30.1	35.7	45.4	59.6	18.8
Southeast Asia	18.4	27.1	40.3	61.4	47.3	48.7	52.3	104.2	127.4	162.9	209.1	22.2
Indonesia	9.4	13.5	20.4	31.3	44.4	50.8	53.4	66.1	79.2	99.1	123.6	19.8
Thailand	2.1	3.3	4.7	7.1	57.5	43.1	50.5	17.9	23.1	31.0	42.4	28.9
Philippines	5.7	8.3	12.4	18.9	45.8	49.2	52.6	15.3	19.2	25.2	33.3	25.6
Malaysia	1.3	2.0	2.8	4.1	58.2	41.6	45.6	4.9	5.9	7.6	9.9	20.0
East Asia[a/]	46.3	65.6	87.2	112.9	41.5	32.9	29.5	57.6	53.2	48.5	42.9	-7.7
South Korea	4.3	6.8	12.8	20.9	57.4	86.6	63.9	16.0	17.8	18.6	17.3	11.5
Taiwan	-	-	-	-	-	-	-	-	-	-	-	-
Japan	42.0	58.8	74.4	92.0	39.9	26.7	23.6	41.6	35.4	29.9	25.6	-15.0
Centrally Planned Asia	64.4	125.9	173.7	241.4	95.5	37.9	39.0	503.5	539.1	612.0	684.2	7.1
PROC	61.4	121.7	166.7	230.7	98.2	37.0	38.4	496.8	532.8	605.1	677.0	7.2
North Korea	3.0	4.2	7.0	10.7	39.9	64.4	53.8	6.7	6.3	6.9	7.2	-6.3
World	724.1	1012.1	1354.4	1806.8	39.8	33.8	33.4	1776.9	1973.7	2255.8	2567.0	11.1
More Developed Regions	448.9	572.7	702.9	834.4	27.6	22.7	18.7	405.5	402.4	383.9	355.0	-0.8
Less Developed Regions	275.2	439.3	651.6	972.4	59.6	48.3	49.3	1371.4	1571.3	1871.9	2212.0	14.6

a/ Regional average for East Asia excludes Taiwan.

Source: United Nations, Patterns of Urban and Rural Population Growth, 1980, Annex II, Tables 48 and 49.

Table 3. Urban Concentration Indicators: Asian Countries, 1960-80

Percentage of Urban Population					Number of Cities of Over 500,000 Persons			Index of Primacy[a/]		
Largest City		In Cities of Over 500,000 Persons								
1970	1980	1960	1970	1980	1960	1970	1980	1960	1970	1980
25	30	20	39	51	1	2	3	0.80	1.0	1.20
23	23	23	23	29	1	1	1	1.56	1.81	1.89
6	6	26	31	47	11	19	36	0.68	0.56	0.46
20	16	0	20	16	0	1	1	4.85	2.17	1.92
21	21	33	50	52	2	6	7	0.88	0.95	0.99
22	23	34	44	49	3	6	9	1.15	1.32	1.48
68	69	65	68	68	1	1	1	-	-	-
29	30	27	29	36	1	1	3	3.55	3.68	3.71
23	27	0	23	27	0	1	1	0.96	0.99	1.17
42	41	61	69	77	3	4	7	1.07	1.52	1.49
-	-	-	-	-	-	-	-	-	-	-
20	22	35	38	41	5	7	9	1.25	1.35	1.48
6	6	42	41	44	38	47	65	0.72	0.72	0.71
13	12	15	13	19	1	1	2	1.00	0.85	0.73

tion of largest city to the combined populations of the second, third and fourth largest cities.

Bank, World Development Report 1980, Annex Table 20; and United Nations, Patterns of Urban and l Population Growth, 1980, Annex Tables 48 and 50.

Table 3. Urban Concentration Indicators: Asian Countries, 1960-80

Country	Percentage of Urban Population						Number of Cities of Over 500,000 Persons			Index of Primacy	
	In Largest City			In Cities of Over 500,000 Persons							
	1960	1970	1980	1960	1970	1980	1960	1970	1980	1960	1970
Bangladesh	20	25	30	20	39	51	1	2	3	0.80	1.0
Burma	23	23	23	23	23	29	1	1	1	1.56	1.81
India	7	6	6	26	31	47	11	19	36	0.60	0.56
Sri Lanka	28	20	16	0	20	16	0	1	1	4.65	2.17
Pakistan	20	21	21	33	50	52	2	6	7	0.88	0.88
Indonesia	20	22	23	34	44	49	3	6	9	1.15	1.33
Thailand	65	68	69	65	68	68	1	1	1	-	-
Philippines	27	29	30	27	29	36	1	1	3	3.55	3.68
Malaysia	19	23	27	0	23	27	0	1	1	0.96	0.99
South Korea	35	42	41	61	69	77	3	4	7	1.07	1.53
Taiwan	-	-	-	-	-	-	-	-	-	-	-
Japan	18	20	22	35	38	41	5	7	9	1.25	1.33
PROC	6	6	6	42	41	44	38	47	65	0.72	0.72
North Korea	15	13	12	15	13	19	1	1	2	1.00	0.88

[a] Ratio of population of largest city to the combined populations of the second, third and fourth largest cities.

Source: World Bank, World Development Report, 1980, Annex Table 20; and United Nations, Patterns of Urban and Rural Population Growth, 1980, Annex Tables 48 and 50.

able 4: Average Annual Percent Growth Rates of Population, GDP and Sectoral Production: Asian Countries, 1960-70, 1970-78

Population		GDP		Agriculture		Industry		Manufacturing		Services	
1960-70	1970-78	1960-70	1970-78	1960-70	1970-78	1960-70	1970-78	1960-70	1970-78	1960-70	1970-78
2.5	2.7	3.6	2.9	2.7	1.6	7.9	5.9	6.6	5.3	3.8	4.7
2.2	2.2	2.6	4.0	4.1	3.6	2.8	4.5	3.3	4.2	1.5	4.2
2.5	2.0	3.6	3.7	1.9	2.6	5.5	4.5	4.8	4.6	5.2	4.6
2.4	1.7	4.6	3.4	3.0	2.3	6.6	3.0	6.3	1.2	4.6	4.3
2.8	3.1	6.7	4.4	4.9	1.9	10.0	4.8	9.4	3.5	7.0	6.2
2.2	1.8	3.5	7.8	2.5	4.0	5.0	11.2	3.3	12.4	8.0	8.7
3.0	2.7	8.2	7.6	5.5	5.6	11.6	10.2	11.0	11.5	9.0	7.4
3.0	2.7	5.1	6.3	4.3	4.9	6.0	8.6	6.7	6.8	5.2	5.4
2.9	2.7	6.5	7.8	-	5.0	-	9.6	-	12.3	-	8.4
2.4	1.9	8.5	9.7	4.5	4.0	17.2	16.5	17.2	18.3	8.4	8.7
2.6	2.0	9.2	8.0	3.4	1.6	16.4	12.9	17.3	13.2	7.8	4.1
1.0	1.2	10.5	5.0	4.0	1.1	10.9	6.0	11.0	6.2	11.7	5.1
2.1	1.6	5.0	6.0	-	-	-	-	-	-	-	-
2.8	2.6	7.8	7.2	-	-	-	-	-	-	-	-

d Bank, World Development Report, 1980, Annex Tables 2 and 17.

Table 4: Average Annual Percent Growth Rates of Population, GDP and Sectoral Production: Asian Countries, 1960-70, 1970-78

Country	Population		GDP		Agriculture		Industry		Manufactur	
	1960-70	1970-78	1960-70	1970-78	1960-70	1970-78	1960-70	1970-78	1960-70	19
Bangladesh	2.5	2.7	3.6	2.9	2.7	1.6	7.9	5.9	6.6	
Burma	2.2	2.2	2.6	4.0	4.1	3.6	2.8	4.5	3.3	
India	2.5	2.0	3.6	3.7	1.9	2.6	5.5	4.5	4.8	
Sri Lanka	2.4	1.7	4.6	3.4	3.0	2.3	6.6	3.0	6.3	
Pakistan	2.8	3.1	6.7	4.4	4.9	1.9	10.0	4.8	9.4	
Indonesia	2.2	1.8	3.5	7.8	2.5	4.0	5.0	11.2	3.3	
Thailand	3.0	2.7	8.2	7.6	5.5	5.6	11.6	10.2	11.0	
Philippines	3.0	2.7	5.1	6.3	4.3	4.9	6.0	8.6	6.7	
Malaysia	2.9	2.7	6.5	7.8	-	5.0	-	9.6	-	
South Korea	2.4	1.9	8.5	9.7	4.5	4.0	17.2	16.5	17.2	
Taiwan	2.6	2.0	9.2	8.0	3.4	1.6	16.4	12.9	17.3	
Japan	1.0	1.2	10.5	5.0	4.0	1.1	10.9	6.0	11.0	
PROC	2.1	1.6	5.0	6.0	-	-	-	-	-	
North Korea	2.3	2.6	7.8	7.2	-	-	-	-	-	

Source: World Bank, World Development Report, 1980, Annex Tables 2 and 17.

Table 5. Percentage Distribution of GDP: Asian Countries, 1960-78

Country	Agriculture			Industry			Manufacturing			Services		
	1960	1970	1978	1960	1970	1978	1960	1970	1978	1960	1970	1978
Bangladesh	61	59	57	8	10	13	6	7	8	31	31	30
Burma	33	38	46	12	14	13	8	10	10	55	48	41
India	50	47	40	20	22	26	14	14	17	30	31	34
Sri Lanka	34	34	35	22	19	31	17	12	23	44	47	34
Pakistan	46	37	32	16	22	24	12	16	16	38	41	44
Indonesia	54	47	31	14	18	33	8	9	9	32	35	36
Thailand	40	28	27	19	25	27	13	16	18	41	47	46
Philippires	26	28	27	28	30	35	20	23	25	46	42	38
Malaysia	37	32	25	18	26	32	9	14	17	45	42	43
South Korea	40	30	24	19	27	36	12	18	24	41	43	40
Taiwan	28	15	10	29	41	48	22	33	38	43	44	42
Japan	13	6	5	45	47	40	34	36	29	42	47	55

Source: World Bank, World Development Report, 1980, Annex Table 3; and World Tables, 1980 (Second Edition), Table 4, pp. 392-395.

Table 5. Percentage Distribution of GDP: Asian Countries, 1960-78

Country	Agriculture			Industry			Manufacturing			Services	
	1960	1970	1978	1960	1970	1978	1960	1970	1978	1960	1970
Bangladesh	61	59	57	8	10	13	6	7	8	31	31
Burma	33	38	46	12	14	13	8	10	10	55	48
India	50	47	40	20	22	26	14	14	17	30	31
Sri Lanka	34	34	35	22	19	31	17	12	23	44	47
Pakistan	46	37	32	16	22	24	12	16	16	38	41
Indonesia	54	47	31	14	18	33	8	9	9	32	35
Thailand	40	28	27	19	25	27	13	16	18	41	47
Philippines	26	28	27	28	30	35	20	23	25	46	43
Malaysia	37	32	25	18	26	32	9	14	17	45	42
South Korea	40	30	24	19	27	36	12	18	24	41	43
Taiwan	28	15	10	29	41	48	22	33	38	43	45
Japan	13	6	5	45	47	40	34	36	29	42	47

Source: World Bank, World Development Report, 1980, Annex Table 3; and World Tables, 1980 (Second Edition) Table 4, pp. 392-395.

Table 6. Export and Import Shares of GDP (in percent)

Country	Exports of Goods and N.F.S.[a]			Imports of Goods and N.F.S.[a]		
	1960	1970	1977	1960	1970	1977
Bangladesh	10.0	8.3	9.1	9.3	12.5	15.7
Burma	19.7	5.2	6.0	20.7	8.7	10.0
India	5.3	4.1	6.2	8.3	4.7	7.1
Sri Lanka	29.8	17.5	23.4	32.8	19.7	20.7
Pakistan	8.4	7.8	9.5	15.0	14.6	19.4
Indonesia	13.3	12.8	21.6	12.6	15.8	18.8
Thailand	17.4	16.7	21.5	18.9	21.5	27.0
Philippines	10.6	19.1	19.0	10.4	19.4	22.5
Malaysia	53.6	43.8	50.3	40.8	39.2	41.9
South Korea	3.4	14.3	35.6	12.8	24.1	35.6
Taiwan	11.1	29.5	53.5	18.6	29.6	47.8
Japan	11.0	10.8	13.1	10.5	9.5	11.4

[a] N.F.S. means non-factor services.

Source: World Bank, World Tables, 1980 (Second Edition), Table 3.

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