Implications of Prewar Urban Growth in Modern Japan: A Comparative Perspective*

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近代期日本の戦前における都市の発達

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明治初期から戦前期までの日本の都市の発達過程を辿り、単に日本の特殊性のみを扱うだけでなく、他の国の都市の研究にも関連する一般的諸要因の検討も試みた論文である。

まず明治初期の日本は徳川期の遺産としてかなり発達した都市体系を有していたが、封建制の撤廃によりこれらの都市の人口がさらに増大し、このように発達した都市を基盤として近代工業が育成された。一般に従来は工業化が都市化の先行要因と見做されてきたが、日本の例に見る限り都市化が工業化の先行要因であった。ただしこれには人的資源として比較的多くの企業家を擁していたことも関係しているが、一旦近代工業が育成されてからは、それが逆に都市に作用し、市街地の拡大や4大工業地帯の形成をもたらした。

ところで戦前期の大都市には、インフォーマル・セクターに該当する雑業層やスラムといった 貧困層の堆積も顕著であったが、それは徳川期から持ち越されたものであった。従属理論では、 現在の途上国の貧困を中心国に対する従属に帰着させているが、日本では鎖国時代の徳川期、す なわち中心国への従属があり得なかった時期に既に貧困層が堆積していたとすれば、従属関係の 有無と貧困とは係わりのないことになる。

次に日本の地域別に都市発達の差異を検討すると、南関東、東海道の太平洋沿岸、近畿・中国の瀬戸内沿岸、北九州を結ぶベルト地帯での都市の発達が顕著である。これは日本が明治以降加工立国の道を歩んだ関係上、この地帯が原材料の輸入、加工品の輸出のための海路による貿易ルートに近接していたからであり、都市の発達にはこのように国際的要因が強く作用することが理解できる。逆にこの地帯以外の周辺地域で以前は都市が発達していたのは、徳川幕府による有力外様大名のそのような地域への配置政策と関係する。

rank-size distribution に関しては、日本の都市の分布はやや下方に湾曲していて rank-size

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rule には則していないが、primacy と見てよい程には凹んでいない。これは一方では封建制の遺産として比較的都市が発達しており、その反面その 封建制が centralized feudalism と言われるように徳川家による全体的支配の下に成立していたからと思われる。

日本の総人口の伸びも都市の発達に関係をもっている。明治の初頭以降に増加した人口部分は全て人口1万人以上の都市、とくに10万以上の都市に吸収されている。つまり増加人口の扶養は都市、特に大都市の発達によって可能であったことになる。

以上日本の都市の成長を基に一般化を進めると、まず現在の途上国は工業化なき都市化、先進国は工業化による都市化という異なった経路を辿ったと従来言われてきたが、明治期の日本も当初は工業化なき都市化を経験したとすれば、途上国と先進国は異なった都市化の経路を歩んでいるのではなく、同一経路を歩みながらも、ただ歩んできた距離のみが異なると考えられる。最後に都市発達の要因を日本の場合から一般化すると(1)地理的位置、(2)ヒンターランド、(3)インフラストラクチャー、(4)人的資源、(5)歴史的経過、(6)行政的地位、(7)国際的要因、(8)総人口の増加、(9)テクノロジー(特に通信と運輸、最近は空運に関するもの)の水準を挙げることができる。

Introduction

Although this paper traces the historical development of cities in Japan since the start of its modernization, its aim is not to give merely a descriptive exposition regarding the sequential process of their growth. The account will be confined to what are deemed salient aspects of the findings and some of them will be treated in chronological order, but an attempt will be made to explore the implications these findings reveal for the study of the city in general, in this way contributing to the comparative urban study.

Findings

- (1) Due to the Meiji Restoration of 1868, Japan embarked upon the course of modernization by abolishing the feudalism of the shogunate government. According to the population census of 1875, Japan had at the time 90 cities with a population more than 10,000 whereas its total population accounted for 35 millions, thus indicating that it had, as an initial condition of the modernization, a fairly well-developed system of cities. This may be largely attributed to the policy of feudal lords in the preceding era who had attempted to build cities in order to make them the seats of their clan governments. In the later period of the feudal era, these lords encouraged the production of special goods in their fiefs to help cope with the financial difficulties of their governments. This also contributed to the growth of cities, though they remained fettered by feudal restrictions.
- (2) Except for the three largest cities—Edo (the name of Tokyo before the Meiji Restoration), Osaka and Kyoto—main cities in those days were located mostly in peripheral regions of Japan where the shogunate government enfeoffed influential but unaffiliated feudal lords as a means of preventing their revolt. Because the areas allo-

cated to them yielded a large amount of rice, the seats of their clan government grew into leading cities with wealth accumulating in them. With the start of modernization in Japan in the ensuing period, many of them were outgrown by other cities, but they still functioned as nodes for outlying areas and absorbed at least some portion of their rural population.

Table 1. Changing Population Size of Main Cities from 1875 to 1909

| | y i opulation | | | 10.000 |
|------------|-----------------|-----------|-----------|-----------|
| City | 1875 | 1886 | 1898 | 1909 |
| Tokyo | 830,917 | 1,121,883 | 1,440,121 | 2,186,079 |
| Osaka | 271,992 | 361,694 | 821,235 | 1,226,647 |
| Kyoto | 226,134 | 245,675 | 353,139 | 442,402 |
| Nagoya | 109,982 | 131,492 | 244,145 | 378,231 |
| Kanazawa | 109,685 | 97,653 | 83,662 | 110,994 |
| Yokohama | 63,064 | 89,545 | 193,762 | 394,303 |
| Hiroshima | 66,906 | 81,914 | 122,306 | 142,763 |
| Kōbe | 36,030 | 80,446 | 215,780 | 378,193 |
| Sendai | 51,998 | 61,709 | 83,325 | 97,944 |
| Tokusima | 48,861 | 57,456 | 61,501 | 65,561 |
| Wakayama | 61,105 | 54,868 | 63,667 | 77,303 |
| Toyama | 40,538 | 53,556 | 59,558 | 57,437 |
| Hakodate | 28,825 | 45,477 | 78,040 | 87,875 |
| Kagoshima | ※ 20,172 | 45,097 | 53,481 | 63,640 |
| Kumamoto | 44,619 | 44,384 | 61,463 | 61,616 |
| Sakai | 36,457 | 44,015 | 50,203 | 61,103 |
| Fukuoka | 41,635 | 42,617 | 66,190 | 82,106 |
| Niigata | 32,043 | 40,778 | 53,366 | 61,616 |
| Nagasaki | 19,859 | 38,229 | 107,442 | 170,480 |
| Takamatsu | 32,656 | 37,698 | 34,416 | 42,578 |
| Fukui | 39,784 | 37,376 | 44,286 | 50,396 |
| Shizuoka | 37,724 | 36,838 | 42,172 | 53,614 |
| Matsue | 36,102 | 33,381 | 34,651 | 36,209 |
| Okayama | 32,372 | 32,989 | 58,025 | 93,421 |
| Kōchi | 29,539 | 30,987 | 36,511 | 38,279 |
| Simonoseki | 21,175 | 30,825 | 42,789 | 58,254 |
| Morioka | 25,457 | 30,166 | 32,989 | 36,012 |
| Matsuyama | 26,424 | 29,487 | 36,545 | 44,166 |
| Akita | 33,142 | 29,225 | 29,477 | 36,294 |
| Yonezawa | 34,911 | 29,203 | 30,719 | 35,380 |
| Tottri | 37,796 | 28,275 | 28,496 | 32,682 |
| Hirosaki | 33,052 | 28,170 | 34,771 | 37,487 |
| Naha | 14,905 | 27,193 | 35,453 | 47,562 |
| Yamagata | 17,683 | 26,971 | 35,300 | 42,234 |
| Chōshi | 19,859 | 25,766 | 17,824 | 19,461 |
| Otaru | - 10,000 | | 56,961 | 91,281 |
| Sapporo | _ | 15,041 | 37,482 | 70,084 |
| Kure | | | | 100,679 |
| Utsunomiya | 15,061 | 20,475 | 32,069 | 47,114 |
| Ōmuta | 15,001 | 20, 470 | 19,291 | 45,183 |
| Yokosuka | · | 13,251 | 24,750 | 70,964 |
| Moji | | 10,201 | 25,274 | 55,682 |
| Kōfu | 15,882 | 18,587 | 37,561 | 49,882 |
| Aomori | 10,780 | 14,920 | 28,029 | 47,562 |
| | | | | |
| Maebashi | 15,063 | 16,585 | 34,495 | 45,183 |

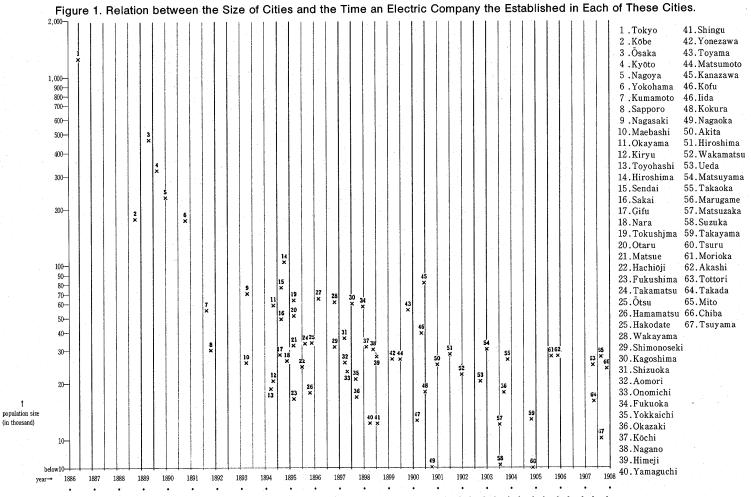
^{*}figure as of 1879

- (3) It may be assumed that in the earliest period of Japanese modernization the growth of cities (Table 1) may be attributed to the lifting of the ban on migration and free choice of occupations, which occurred due to the abolition of feudalism and which, in turn, liberated thitherto suppressed forces seeking to flow into city areas.
- In the same preiod it was the city that facilitated the development of industries, although it has been generally held that the development of modern industry and technology is the prerequisite for the growth of cities. Figure 1 indicates that in Japan electric firms were first established in larger cities and then in cities of lesser size. Because the technology for transmission of electricity was still in its infancy and the cost of the electric lighting was very expensive, electric firms could not have sustained them financially had they not been established in th city where they could find enough customers in a rather short distance from the the power station to cover the cost. The cotton-spinning industry was a main stay of young industrializing Japan, its product being one of the top ranking goods exported to oversea markets, thus acquiring an amount of foreign currency which was precious for Japan at the time. At the outset almost all cotton-spinning factories were established as a means of saving former samurai (warriors) who had been impoverished due to the abolition of feudalism, hence they were established in areas where there were a large number of such former samurai, but none of these factories were successful. The first successful factory was opened in Osaka by Eiich Shibusawa, one of the most prominent entrepreneurs of the time, who took the location into consideration and chose a site close to a large city, i. e., Osaka.
- (5) In view of the fact that a large city provides an industry with both an ample labor power and a good market for its product, it is advantageous for industral production to be in or near a large city if there are no other offsetting obstacles. However, this advantage can not be activated unless there are a number of entrepreneurs. In the case of young Japan, historical sources indicate that they were abundant in many cities, as the aforesaid electric firms established in one city after another illustrate. Soon after the start of modernization, railroads were laid down in many local areas and banks were opend in most of main cities by private firms. Presumably the entrepreneurship of young Japan may be traced back to the attempts made by feudal lords who, as noted earlier, encouraged production of the special goods of their fiefs.

Concerning the large cities of the contemporary developing countries, they are said to suffer from overurbanization or pseudourbanization which is held to be disadvantageous to the progress of industrialization. With the advant of entrepreneurs, however, their disadvantage may possibly turn into an advantage.

(6) Introduction of the electric streetcar into large cities was conductive to the out-





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ward expansion of city areas around the 1920's, but in this case, too, it was the pre-existing condition of large cities that called for its introduction. When three private firms were competing with each other in their plans to choose the route of the streetcar in Tokyo, the then governor of Tokyo prefecture advised these firms to hasten to work out an integrated plan. He pointed out that due to lack of traffic service to commute to their work places many people in Tokyo were forced to live in small and overcrowded residential districts, thus exposing them to the danger of fire and epidemics. He said it was mandatory, therefore, for these three firms to terminate their rivalry and offer a consolidated streetcar service to these people at the earliest possible date.

- (7) As is the case with the present-day cities of developing countries, large cities in Japan at that time included a massive informal sector and a good number of slum dwellers, both of which had been carried over from feudal era and continued to exist for a long time in the ensuing prewar preiod of Japan. The fact that they were found already in feudal era, when Japan was isolated from international relationship due to the seclusion policy of shogunate government, provies evidence to undermine the dependency theory, which attributes existing odd-job men and slums in cities of developing countries to their dependence on countries of core regions. Because feudal Japan was isolated from the international market, it was in no way dependent on any other country. Accordingly, it may be concluded that urban poverty may emerge whether or not a country is involved in a dependent international relationship.
- (8) Subsequently the development of modern industries, especially that of heavy industries, which the preceding city growth facilitated, came to have an impact on the form of urbanization of Japan. The electric streetcar, once introduced, promoted the rapid spread of suburban areas, as indicated in Table 2.
- (9) Most notably, the progress of the electric industry affected the location of factories. In preceding period when the power to run factories had been obtained from the water wheel, factories were located on banks of rivers which supplied enough water current to run their water wheels constantly. The advant of the steam engine eliminated the need for such a location, but it still required a quantity of water for the generation of steam and a large coal yard as well as access to low-cost coal transportation. With the spread of the electric motor which replaced the steam engine, the limitation on location came to be even more reduced. This, in turn, encouraged factories to concentrate in or near large cities because an ample labor force and a profitable domestic market for their products were found therein. A consequence of this process was the rise of the four large industial regions of Japan: Tokyo and Yokohama region, Nagoya region, Osaka and Kobe region and the northern Kyushu re-

Table 2. Population Size of Tokyo and Osaka Cities and Neighboring Municipalities

| | | | | | | _ | | • " | |
|---------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| cities and municipalities | 1886 | 1893 | 1998 | 1903 | 1908 | 1913 | 1918 | 1920 | 1925 |
| Tokyo-shi a) | 1,212,883 | 1,214,113 | 1,440,121 | 1,818,655 | 2,186,079 | 2,050,126 | 2,347,442 | 2,173,201 | 1,995,567 |
| Shibuya-machi a) | ••• | | ••• | | 27,203 | 62,773 | 82,822 | 80,799 | 99,022 |
| Nishisugamo-machi | | | ••• | | ••• | | 39,631 | 51,478 | 98,950 |
| Minamisenju-machi | ••• | | | | ••• | 23,992 | 37,763 | 50,713 | 54,755 |
| Nippori-machi | • ••• | | | | ••• | ••• | 32,546 | 41,551 | 56,928 |
| Shinagawa-machi | | | | | • ••• | 22,910 | 35,051 | 41,059 | 53,096 |
| Takinogawa-machi | | ••• | ••• | • ••• | | 20,142 | 32,815 | 40,689 | 82,252 |
| Yodobashi-machi | | *** | | | ••• | 25,931 | 34,422 | 40,453 | 52,215 |
| Kameido-machi | | • | | | •… | | 29,525 | 38,548 | 57,321 |
| Ōji-machi | | | | | | 29,019 | 37,492 | 38,368 | 60,086 |
| Ōi-machi | ••• | | | ٠ | | 20,188 | 25,905 | 36,659 | 58,619 |
| Sendagaya-machi | | | | | 20,207 | 29,079 | 28,026 | 36,374 | 39,997 |
| Ōsaki-machi | | | | | ••• | | 25,559 | 34,837 | 48,476 |
| Senju-machi | | | | | 22,739 | 25,920 | 27,799 | 31,047 | 52,101 |
| Azuma-machi | | | | | | | 24,077 | 30,660 | 59,920 |
| Sugamo-machi | | | | | | | 21,650 | 28,035 | 40,148 |
| Ōkubo-machi | | | | | | | 21,795 | 27,949 | 32,644 |
| Takada-machi | ••• | | | | | | | 26,786 | 45,147 |
| Ōshima-machi | | | | | | | | 22,333 | 35,420 |
| Nakano-machi | | | | | | | | 21,875 | 60,962 |
| Mikawajima-machi | | | | | | | | 21,623 | 59,252 |
| Yoyohata-machi | | | · | | ļ | | | 20,034 | 51,755 |
| Meguro-machi | | | | | | | | | 45,268 |
| Setagaya-machi | | l | | | | | | | 38,068 |
| Hirastuka-machi | | | | | | | | | 72,256 |
| Komazawa-machi | | | | · | | | | | 20,991 |
| Iriarai-machi | | | | l | | | | | 36,585 |
| Ōmori-machi | | | | | | | ļ | | 32,014 |
| Kamata-machi | | | | | | | | | 25,616 |
| | | | | | | | | | 24,332 |
| Nogata-machi | | | | | | | | | 36,608 |
| Suginami-machi | | | | | | | | | 29,295 |
| Tozuka-machi | | | | | | | | | 20,345 |
| Ochiai-machi | · | | | | · · · | | | | 30,891 |
| Itabashi-machi | | | | | | | | | |
| Oku-machi | ••• | ••• | | | | " | | | 47,493 |
| Iwabuchi-machi | | | | | | | | | 24,525 |
| Komatsuzawa-machi | | | | | ••• | | | | 24,135 |
| Sumida-machi | | | | | | | ••• | ••• | 21,290 |
| Terajima-machi | | | ••• | | | ••• | | ••• | 39,251 |
| Suna-machi | | | | | | | | | 20,346 |
| Ōsaka-shi | 361,694 | 482,961 | 821,235 | 995,945 | 1,226,647 | 1,395,823 | 1,641,580 | 1,252,983 | 2,114,804 |
| Toyosaki-machi | ••• | `••• | | | | 26,232 | 45,894 | 56,110 | b) |
| Imamiya-machi | ••• | | ••• | | | | 27,017 | 50,080 | b) |
| Sagisu-machi | | | ••• | | | 21,879 | 35,728 | 40,904 | b) |
| Tenōji-mura a) | | | | | | | 22,984 | 34,383 | b) |
| Tsuruhashi-machi | | ••• | | | *** | ••• | 27,589 | 32,864 | b) |
| Nakamoto-machi | | ••• | | | | | 26,877 | 31,511 | b) |
| Nakatsu-machi | | | ••• | | | ••• | 22,853 | 21,508 | b) |

Sourse: Toyo Keizai Shinposha (ed.) Meiji Taisho Kokusei Soran (General View of National Affairs in Meiji and Taisho Periods), (Toyo Keizai Shinposha, 1927) p. 642

 $Note: a) \textit{ Shi and machi} \ are \ Japanese \ for \ city \ and \ town, \ respectively. \ b) \ amalgamated \ to \ Osaka-shi$

gion which comprises Fukuoka as its core city. In addition, these benefited from their access to sea routes for foreign trade.

(10) Another factor to be singled out in this respect was the destiny of modern Japan to survive in the international trade market. Due to the scarcity of its natural resources, it was necessary to import raw materials and export finished products in return. Consequently, industrial and economic activities tended to flourish in areas more accessible to sea routes for oversea markets. While contributing to rise of the four large industrial regions, this helped to accelerate the rise and growth of cities in those areas which make up the belt-like zone covering coastal areas of the Kanto and Tokai districts facing the Pacific Ocean, the littoral of Kinki and Sanyo districts along the Inland Sea of Japan and the northern edge of Kyushu Island (Table 3 and Figures 2, 3 and 4).

In contrast, the cities in peripheral regions which, as pointed out already, had occupied upper ranks in the early period of modern Japan, gradually came to be superseded by the cities rising or growing in the belt-like zone (Table 3 and Figure 5.) Thus one may note that in Japan, after it plunged into the world market place, the international factor had a considerable effect on the fate of its cities.

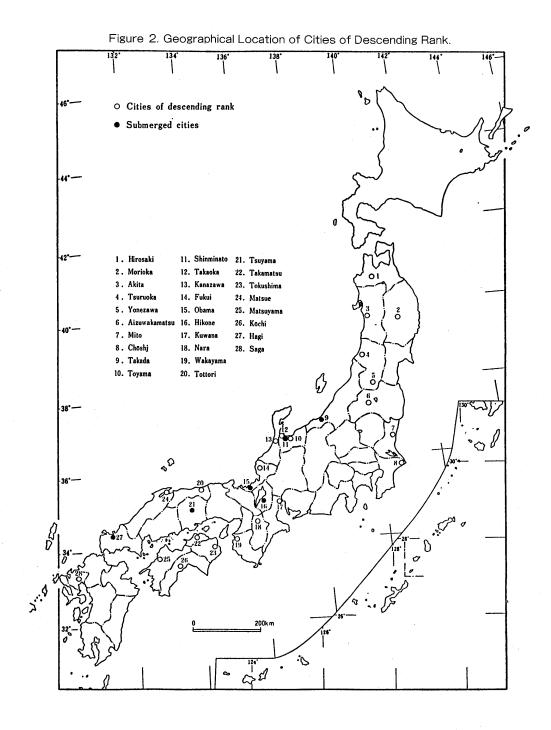
- In the meanwhile, the rank-size distribution of the city system which had indicated some, but very slight, extent of primacy pattern in early days grew to exhibit a pattern peculiar to Japan, revealing the preponderant growth of the six largest cities (Tokyo, Osaka, kyoto, Nagoya, Yokohama and Kobe) of which two at the top (Tokyo and Osaka) were especially dominant. In this way the distribution pattern of the city system in Japan was neither in accord with the rank-size rule nor so much concaved as to be identified as primacy (Figures 6-a~h and 7). Whereas a number of studies have been made to explore the factors conductive to primacy, it may be assumed here that the most relevant to the pattern of Japan is a historical one. At the beginning of this paper it was noted that at the outset of its modernization Japan had a fairly well-developed system of cities due to the legacy of its feudal era. Because of this, the city system of Japan did not fall into a distinct pattern of primacy. As K. Steiner has said, however, the feudalism of Japan was controlled by the shogunate family of Tokugawa which stood at the apex of the political system of the time, hence called "centralized feudalism (1)". Accordingly, the seat of shogunate government, i. e., Edo, attained disproportional growth. It is very likely that due to this historical fact the city system of Japan has been deviating from the rank-size rule.
- (12) In addition to the differential growth of cities in Japan as discussed thus far, what also has to be taken into consideration is the pressure of total population increase that had occurred since the onset of its modernization. As indicated in Figure

Table 3. Changing Rank of Main Cities

| | year | | | · · | year | | | | | | | | | | | | |
|-----------------------|------|------|----------|----------|----------|----------|------|------|----------------|----|----------|----------|----------|-------|----------|----------|----------|
| City | 1875 | 1886 | 1898 | 1908 | 1920 | 1925 | 1930 | 1935 | City | | | | | 1935 | | | |
| Tokyo | 1073 | 1 | 1 | 1 | 1 320 | 1 923 | 1 | 1 | Hakodate | 28 | 13 | 11 | 15 | 9 | 9 | 10 | 13 |
| Ōsaka | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | Otaru | _ | _ | 18 | 14 | 13 | 16 | 17 | 24 |
| Kyoto | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | Kagoshima | 43 | 14 | 19 | 21 | 14 | 17 | 19 | 18 |
| • | 4 | 4 | 4 | 5 | 5 | 3 | 3 | 3 | Kōfu | 61 | 54 | 25 | 30 | 38 | 37 | 42 | 45 |
| Nagoya | 5 | 5 | 9 | 9 | 11 | 10 | 16 | 22 | Saseho | | | 26 | 13 | 21 | 24 | 21 | 20 |
| Kanazawa Hiroshima | 6 | 7 | 7 | 8 | 8 | 7 | 7 | 7 | Sapporo | | 92 | 27 | 19 | 15 | 13 | 13 | 15 |
| Hirosnima Yokohama | 7 | 6 | 6 | 4 | 6 | 6 | 6 | 6 | Naha | 66 | 33 | 30 | 31 | 40 | 48 | 53 | 60 |
| | 8 | 11 | 13 | 17 | 23 | 23 | 24 | 19 | Yamagata | 53 | 34 | 31 | 40 | 48 | 46 | 49 | 56 |
| Wakayama | 9 | 9 | 10 | 11 | 12 | 14 | 12 | 10 | Maebashi | 64 | 64 | 35 | 35 | 34 | 33 | 36 | 41 |
| Sendai | 10 | | 14 | 20 | 28 | 32 | 33 | 35 | Ōtsu | 59 | 40 | 37 | 38 | 85 | 94 | | 55 |
| Tokushima | | 10 | 15 | 23 | 27 | 32 11 | 15 | 16 | Mito | 48 | 51 | 38 | 49 | 60 | 61 | 75 | 64 |
| Kumamoto | 11 | | | | 1.0 | 39 | 44 | 44 | Tsu | 58 | 69 | 39 | 42 | 49 | 52 | 58 | 59 |
| Toyama | 13 | 12 | 16 22 | 26 29 | 35 37 | 43 | 48 | 51 | Kure | 36 | 09 | 63 | 10 | 10 | 15 | 11 | 9 |
| Fukui | 14 | 21 | | l | 7.5 | 90 | 99 | | Yokosuka | | 85 | 64 | 18 | 20 | 22 | 25 | 17 |
| Tottori | 15 | 31 | 53 | 65 | 93 | | | 100 | 7 7 7 | - | 00 | 59 | 27 | 26 | 25 | 27 | 31 |
| Shizuoka | 16 | 22 | 24 | 28 | 24 | 28 | 20 | 14 | Moji | 83 | 70 | 100 | 32 | 47 | 45 | 43 | 36 |
| Sakai | 17 | 16 | 21 | 24 | 22 | 21 | 23 | 25 | Aomori | 65 | 78 47 | 54 42 | 33 | 32 | 31 | 40 | 42 |
| Matsue | 18 | 23 | 34 | 54 | 68 | 79 | 81 | 83 | Utsunomiya | 1- | | 63 | 82 | 121 | 31 | 40 | 42 |
| Kobe | 19 | 8 | 5 | - 6 | 3 | 5 | 5 | 5 | Syuri | 36 | 36 | | | | 20 | 31 | 33 |
| Yonezawa | 20 | 30 | 48 | 58 | 55 | 66 | 80 | 87 | Omuta | _ | | 86 | 34 | 31 29 | 38 | 29 | 26 |
| Akita | 21 | 29 | 50 | 53 | 73 | 69 | 74 | 70 | Toyohashi | 86 | _ | 72 | 1 | | 29 | | |
| Hirosaki | 22 | 32 | 33 | 52 | 83 | 89 | 87 | 99 | Yawata | _ | | - | 89 | 16 | 19 | 14 | 12 |
| Takamastu | 23 | 20 | 36 | 39 | 50 | 36 | 41 | 43 | Hamamastu | | - | 84 | 56 | 30 | 27 | 26 | 28 |
| Okayama | 24 | 24 | 17 | 12 | 18 | 18 | 18 | 21 | Gifu | 82 | 39 | 43 | 41 | 33 | 30 | 34 | 30 |
| Niigata | 25 | 18 | 20 | 22 | . 19 | 20 | 22 | 27 | Asahikawa | - | _ | _ | 44 | 36 | 34 | 38 | . 39 |
| Hagi | 26 | 44 | 110 | _ | T | 96 | | _ | Muroran | - | | _ | 102 | 39 | 54 | 59 | 61 |
| Kōchi | 27 | 25 | 29 | 50 | 46 | 41 | 32 | 34 | Nagano | | 54 | 46 | 47 | 69 | 40 | 45 | 47 |
| Mastuyama | 29 | 23 | 28 | 36 | 41 | 44 | 39 | 46 | Kawasaki | | | _ | _ | 135 | 49 | 28 | 23 |
| Morioka | 30 | 27 | 40 | 56 | 56 | 55 | 50 | 57 | Kokura | _ | 104 | 56 | 68 | 76 | 53 | 35 | 32 |
| Takada | 31 | 38 | 81 | 74 | 95 | 104 | - | - | Nishinomiya | _ | 97 | 133 | _ | 94 | 92 | 93 | 40 |
| Hikone | 32 | 52 | 101 | 101 | | _ | | _ | Aizu Wakamatsu | 42 | 57 | 51 | 46 | 67 | 76 | 86 | 98 |
| Himeji | 33 | 41 | 32 | 42 | 51 | 47 | 51 | 38 | Chōshi | 44 | 35 | 94 | - | - | - | | 95 |
| Tsuruoka | 34 | 50 | 79 | 98 | 98 | 102 | 105 | 111 | Tsuyama | 46 | - | 157 | - | _ | _ | 107 | 115 |
| Takaoka | 35 | 58 | 44 | 61 | 72 | 72 | 69 | 75 | Kohama | 47 | 4 T | | - | _ | - | _ | _ |
| Saga | 37 | 37 | 41 | 55 | 79 | 75 | 78 | 88 | Shinminato | 49 | 72 | 93 | . — | 1 - | - | - | - |
| Fushimi | 38 | 48 | - 74 | 83 | a) | | | | Kuwana | 50 | 75 | 82 | 92 | - | - | - | - |
| Nara | 39 | 42 | 49 | 64 | 59 | 58 | 65 | 78 | Okazaki | 73 | 91 | 97 | 84 | 63 | 67 | 47 | 48 |
| Shimonoseki | 40 | 26 | 23 | 25 | 25 | 26 | 30 | 29 | Ube | - | | - | - | 65 | 60 | 52 | 49 |
| Kurume | 41 | 46 | 52 | 57 | 53 | 35 | . 37 | 37 | Kiryu | - | _ | 66 | . 67 | 66 | 73 | 64 | 50 |
| Fukuoka | 12 | 17 | 12 | 16 | 17 | 12 | 8 | 8 | Amagasaki | - | - | - | - | 74 | 89 | 76 | 54 |
| Nagasaki | 45 | 19 | 8 | 7 | 7 | 8 | 9 | 11 | | | | <u> </u> | <u> </u> | | <u> </u> | <u> </u> | <u> </u> |

a) amalgamated to Kyoto

8, it was cities, especially large cities, that absorbed the increasing portion of its total population. To put it another way, one cannot tell what would have become of this portion of the increased population if it had not been for overall growth of cities in Japan.



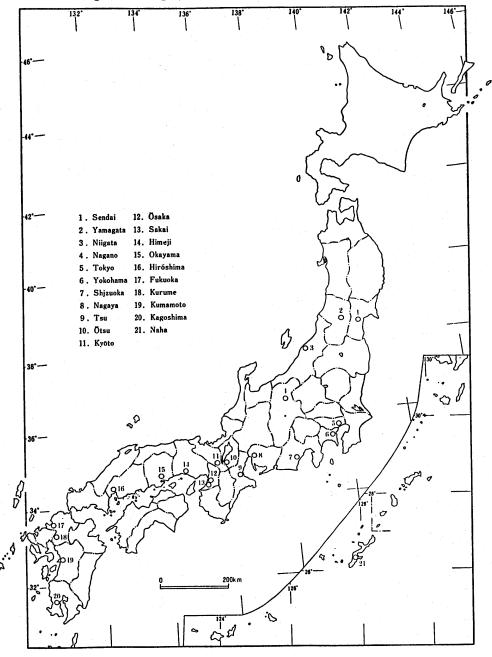


Figure 3. Geographical Location of Cities of Stable Rank.

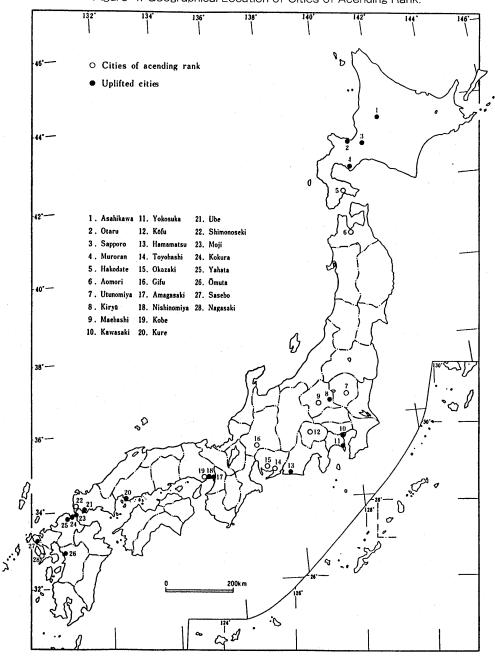
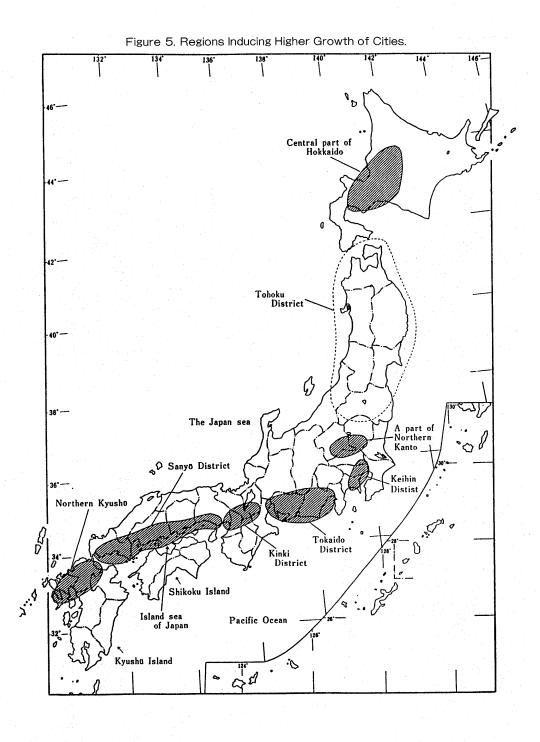


Figure 4. Geographical Location of Cities of Acending Rank.



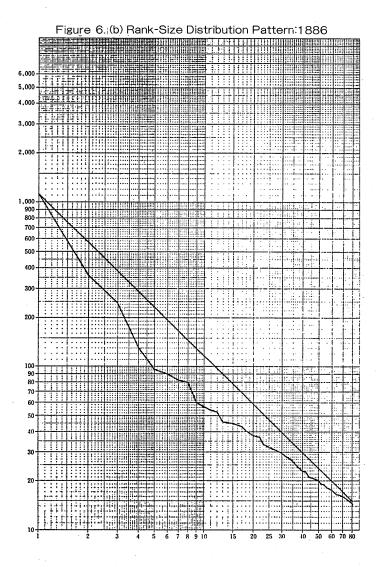
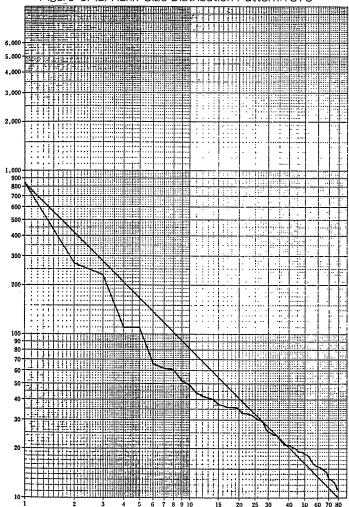


Figure 6. (a) Rank-Size Distribution Pattern: 1875



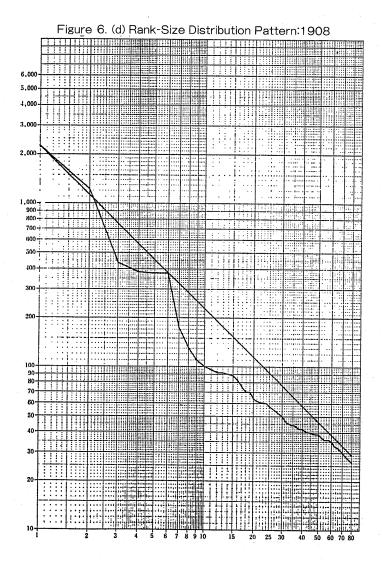


Figure 6. (c) Rank-Size Distribution Pattern:1898

4 5 6 7 8 9 10

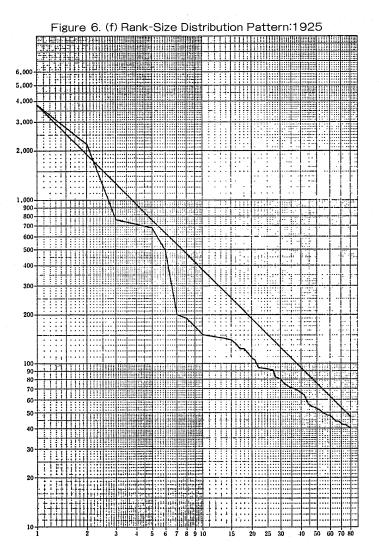


Figure 6. (e) Rank-Size Distribution Pattern: 1920 5,000 3,000 2,000 50

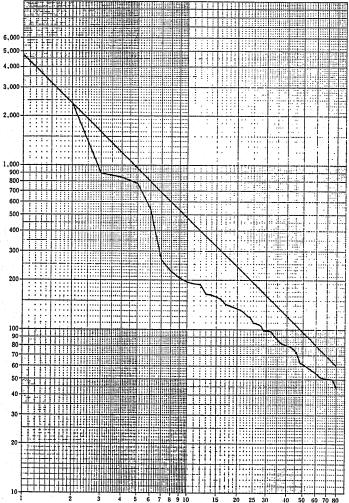
3 4 5 6 7 8 9 10

15

20 25 30

Figure 6. (h) Rank-Size Distribution Pattern:1935

Figure 6. (g) Rank-Size Distribution Pattern:1930



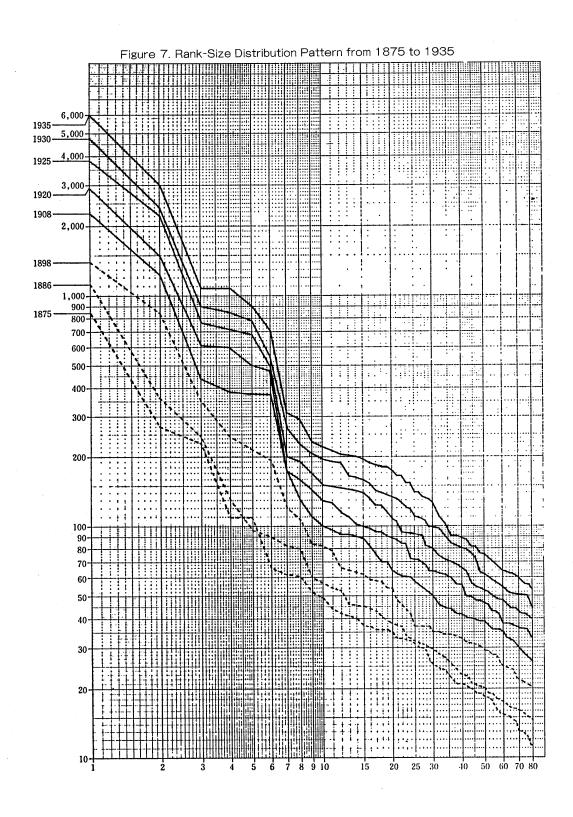
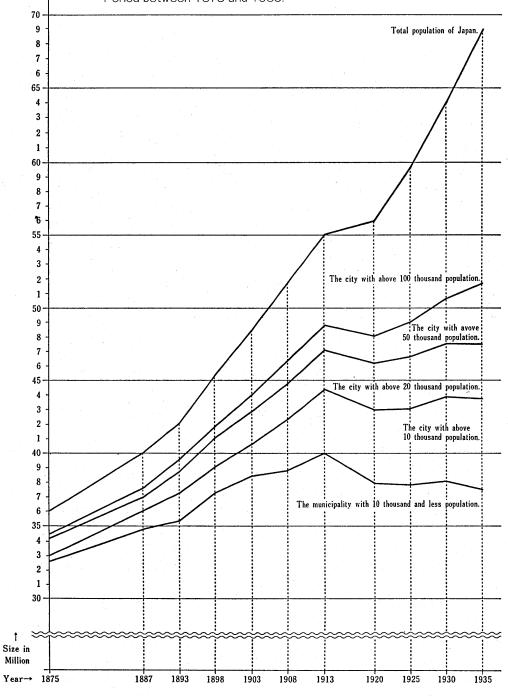


Figure 8. Differential Population Growth among Cities of Diffent Sizes over the Period between 1875 and 1935.



- (13) Though only to a small extent, the pressure of the total population increase also prompted migration to Hokkaido Island, thereby leading to the rise of a few main cities in its central district (Figures 4 and 5).
- Seen in terms of the differential rates of population increase among the prefectures of Japan, what is generally associated with the push factor seems not to have been operative in inducing urbanward migration. In Japan it has been held that prefectures in the Tohoku district (the north-eastern section of Honshu, the main island) comprise the most impoverished population. If the push factor had been really working, there should have been some prefectures in this district which showed the least increase due to the exodus of their population toward urban areas. However, such prefectures are not found in this district in prewar days (Table 4 and Figure 9). Prefectures which lagged behind in terms of population increase and which are accordingly regarded to have forwarded the largest rate of their population to urbanized core regions mostly located neither too far nor too close to large cities. Therefore, it is such distance rather than a push or pull factor, we may assume, that correlated with urbanward migration in the case of Japan. The people living near large cities probably gained benefits flowing out from large cities, thus were not attracted to move to large cities, whereas people living in places too far away have been unable meet the cost of migration which might have been considerable, especially if they lived in dire poverty.

Further Implications

The above findings resulted from the study on the urban growth of Japan in prewar days after it launched its modernization. But it is not necessary to confine this study to an idiographic one on the case of a particular country in a particular period, for if we explore it further we find clues for the analysis of the urban growth of other countries and thus to see urban growth in a broader comparative perspective. Though further research remains to be made with the cooperation of colleges, the following has come to the notice of the present writer.

The findings of this paper seem to offer some implications for understanding cities of the developing countries of today. A distinction has very often been made between the advanced and the developing countries concerning their urbanization, holding that for the former there has been the urbanization with industrialization and for the latter the urbanization without industrialization, hence overurbanization. In this way these two groups of countries are believed to have undertaken different processes of urbanization. We have noted above, however, that even in the earlier phase of its urban growth in Japan poverty was prevailing in its large cities. Though we found that cities provided seedbeds for modern industries, there was a stage in the course of their growth which may be called urbanization without industrialization because it

Table 4. Population Size of Prefectures from 1875 to 1935

| Prefecture | 1875 | 1920 | 1935 | Rate of Increase over 1875 in 1920 | Rate of Increase over 1875 in 1935 | | |
|------------|------------|------------|------------|---------------------------------------|---------------------------------------|--|--|
| Hokkaidō | 284,040 | 2,359,183 | 3,068,282 | 730.6% | 980.2% | | |
| Aomori | 499,549 | 756,454 | 967,129 | 51.4 | 93.6 | | |
| Iwate | 628,591 | 845,540 | 1,046,111 | 34.5 | 66.4 | | |
| Miyagi | 665,345 | 961,768 | 1,234,801 | 44.6 | 85.6 | | |
| Akita | 644,367 | 898,537 | 1,037,744 | 39.4 | 61.0 | | |
| Yamagata | 717,252 | 968,925 | 1,116,822 | 35.1 | 55.7 | | |
| Fukushima | 855,079 | 1,362,750 | 1,581,563 | 59.4 | 85.0 | | |
| Ibaragi | 948,161 | 1,350,400 | 1,548,991 | 42.4 | 63.4 | | |
| Tochigi | 641,420 | 1,046,479 | 1,195,057 | 63.2 | 86.3 | | |
| Gunma | 648,329 | 1,052,610 | 1,242,453 | 62.4 | 91.6 | | |
| Saitama | 1,004,020 | 1,319,533 | 1,528,854 | 31.4 | 52.3 | | |
| Chiba | 1,125,375 | 1,336,155 | 1,546,394 | 18.7 | 37.4 | | |
| Tokyo | 1,484,353 | 3,699,428 | 6,369,919 | 143.2 | 329.1 | | |
| Kanagawa | 658,129 | 1,323,390 | 1,840,005 | 101.1 | 172.5 | | |
| Niigata | 1,628,650 | 1,776,474 | 1,995,777 | 9.1 | 22.5 | | |
| Toyama | 712,532 | 724,276 | 798,890 | 1.6 | 12.1 | | |
| Ishikawa | 739,141 | 747,360 | 768,416 | 1.2 | 4.0 | | |
| Fukui | 592,331 | 599,155 | 646,659 | 1.2 | 9.2 | | |
| Yamanashi | 425,898 | 583,453 | 646,727 | 37.0 | 51.9 | | |
| Nagano | 1,057,494 | 1,562,722 | 1,714,000 | 47.8 | 62.1 | | |
| Gifu | 884,848 | 1,070,407 | 1,225,799 | 21.0 | 38.5 | | |
| Shizuoka | 1,002,693 | 1,550,387 | 1,939,860 | 54.6 | 93.5 | | |
| Aichi | 1,386,473 | 2,089,762 | 2,862,701 | 50.6 | 106.5 | | |
| Mie | 883,462 | 1,069,270 | 1,174,595 | 21.0 | 33.0 | | |
| Shiga | 648,339 | 651,050 | 711,436 | 0.4 | 9.7 | | |
| Kyoto | 848,761 | 1,287,147 | 1,702,508 | 51.7 | 100.6 | | |
| Ōsaka | 1,203,144 | 2,587,847 | 4,297,147 | 115.1 | 257.2 | | |
| Hyogo | 1,466,102 | 2,301,799 | 2,923,249 | 57.0 | 99.4 | | |
| Nara | 488,099 | 564,607 | 620,471 | 15.7 | 27.1 | | |
| Wakayama | 619,343 | 750,411 | 864,087 | 21.2 | 39.5 | | |
| Tottori | 383,241 | 454,675 | 490,461 | 18.6 | 28.0 | | |
| Shimane | 684,856 | 714,712 | 747,119 | 4.4 | 9.1 | | |
| Okayama | 1,045,669 | 1,271,698 | 1,332,647 | 16.5 | 27.4 | | |
| Hiroshima | 1,272,876 | 1,541,905 | 1,804,916 | 21.1 | 41.8 | | |
| Yamaguchi | 899,606 | 1,041,013 | 1,190,542 | 15.7 | 32.3 | | |
| Tokushima | 656,064 | 670,212 | 728,748 | 2.2 | 11.1 | | |
| Kagawa | 643,220 | 677,852 | 748,656 | 5.4 | 16.4 | | |
| Ehime | 886,155 | 1,046,720 | 1,164,898 | 18.1 | 31.5 | | |
| Kōchi | 552,513 | 670,895 | 714,980 | 21.4 | 29.4 | | |
| Fukuoka | 1,148,328 | 2,188,249 | 2,755,804 | 90.6 | 140.0 | | |
| Saga | 527,244 | 673,895 | 686,117 | 27.8 | 30.1 | | |
| Nagasaki | 719,082 | 1,136,182 | 1,296,883 | 58.0 | 80.4 | | |
| Kumamoto | 1,003,777 | 1,233,233 | 1,387,054 | 13.2 | 38.2 | | |
| Ōita | 761,476 | 860,282 | 980,458 | 13.0 | 22.3 | | |
| Miyazaki | 386,299 | 651,097 | 824,431 | 68.5 | 113.4 | | |
| Kagoshima | 941,063 | 1,415,582 | 1,591,466 | 50.4 | 69.1 | | |
| Okinawa | 373,587 | 571,572 | 592,494 | 53.0 | 58.6 | | |
| All Japan | 38,276,376 | 55,963,053 | 69,254,148 | 46.2 | 80.9 | | |

was before the rise of industries, a stage comparable to the overurbanization of today's developing countries. Therefore, it may be concluded that the two groups of countries are not going along different paths but that distintion should rather be

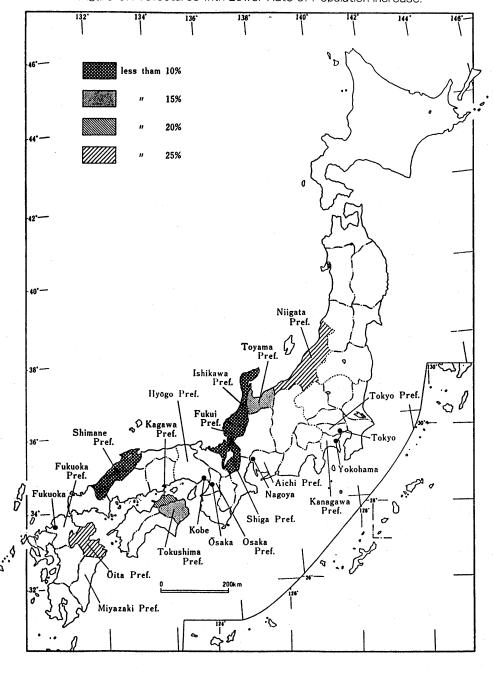


Figure 9. Prefectures with Lower Rate of Population Increase.

made in terms of the distance they have covered in going along the same path.

Nevertheless, it has to be taken into consideration that for its initial condition young Japan was blessed with a fairly well-developed city system and abundant entrepreneurs owing to the legacy of feudal era. Perhaps these two have to be counted among factors which contributed to the modernization of Japan. In light of this, one may expect that in attaining their modernization developing countries, if their intial condition is different, may confront difficulties which were not known in Japan. Even so, the overurbanization into which their cities are said to have fallen should be interpreted not as a problem but as an advantage for it may turn out to be a seedbed of industrialization in the future with the advent of entrepreneurs. In a similar vein, the positive and the negative evaluation previously given to the generative and parasitic cities, respectively, must be reconsidered. As against the generative city which is defined as devoting itself to production, the parasitic city in which overurbanized cities have been classified is held to be inclined to consumption; but how is it possible for the former to play its role if its products are not consumed by the latter?

A study made by the United Nations Center for Regional Development on factors which lead to the development of the city identified six factors as relevant; (1) location, (2) hinterland, (3) infrastructure, (4) human resources, (5) historical evolution and (6) administrative status. (2) In accounting for the role of entrepreneurs and the fairly well-developed city system at the outset of Japanese modernization, this paper paid attention to factors (4) and (5). Though no reference has been made to others, all six factors have to be given their due recognition, but they are not exhaustive. As noted about the cities in the belt-like zone which outgrew the other cities of Japan, the relationship with oversea markets, which may be called the international factor, has to be added as (7), while we should not fail to recognize as (8) the pressure of total population increase which underlies the overall growth of cities. In addition, one may assume that the progress of technology has to be counted as (9), especially the technology related to transportation and communication, to which, for example, the rise of suburban cities are largely attributable, though, as we have seen, the pre-exising situation of the core city necessitated its introduction in the case of Japan. It should be noted in passing that, so far as the technology of transportation is concerned, the present age witnesses the growing importance of the air tranport, though it used to play little role in prewar days. It is assumed here that development of any individual city is derived not from the impact of any single one of these nine factors but from the combined impacts of some among them. With our present knowledge of urban affairs it is difficult to define exactly which ones have had what impact. It is even more difficult to make any definite prediction in this regard. If this is the case, it would seem to be a reckless attempt for policy makers to make an arbitrary intervention in the ongoing urban process. Even so, a reckless attempt are going to be made at present in Japan.

To counteract the heavy concentration of population and the attendant sharp rise of land price in the metrpolitan area of Tokyo, the political and administrative authorities concerned are now planning the dispersion of the population and revitalization of cities in other areas. The measures they are taking for this purpose are, however, confined to investing in infrastructure, relocating some government offices, and reinforcing the compectence of the local government. In terms of the aforesaid nine factors, attention is being paid only to (3) and (6), the factors that can be most easily artifially manipulated by the central government. As said already, however, there are other factors which may very possibly be operative but which can not be artifically manipulated by policy makers, especially the international factor. Until these other factors are fully taken into connsideration, it is likely that any attempt to interfere with the ongoing urban process will eventually fail.

If we still wish revitalize cities outside the Tokyo metropolitan area, one hopeful sign is the prospective takeoff of economic activites around the Japan Sea rim. Due to the recent dramatic changes taking place in socialist countries, it is expected that a region hitherto economically stagnant—the eastern Siberian area, North Korea and a contiguous part of China, all facing the Japan Sea—will overcome its stagnation, though not in a near future. If so, foreign trade among the region and areas bordering the Japan Sea, areas which have remained peripheral in Japan thus far, will be activated. Because the international factor will come to work in this way, cities located in these areas are likely to become prosperous, thereby contributing to the dispersion of population as an unanticipated consequence.

- (1) K. Steiner, *Local Government of Japan*, (Stanford: the Stanford University Press, 1965), p. 15
- (2) Om Prakash Mathur, "The Role of Small Cities in Regional Development" in Om Prakash Mathur (ed), *The Role of Small Cities in Regional Development*, (Nagoya, Japan: United Center for Regional Development, 1984), pp. 18~21.