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### A NEW DIMENSION OF INTERNAL MIGRATION IN JAPAN

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#### Foreword

This Series No.69 contain two papers which were originally written by Mr. Toshio Kuroda, Chief, Migration Research Division of our Institute. One entitled "Demographic Aspects of Urbanization in Japan -New Dimension of Internal Migration and Urbanization-" was submitted to the London Conference of the International Union for the Scientific Study, 3-11 September 1969, on the request of Dr. G. B. Saxena, Organiser of 10.2 in Section X (Internal) Migration.

Another one entitled, "Continuity and Transition in Internal Migration-Japan's Experience" is a paper intended to distribute for reference to participants in a meeting of Research Committee on Urban Sociology of the International Sociological Association, held in Stockholm, Sweden, 12-16 September 1969.

Major point in discussion in these papers is very similar, but differing in emphasis placed on each paper. The author wanted to point out a transitional stage of migratory behavior of Japanese population, which seems to be really phenomenal and should be seriously examined from all angles of social and economic development.

That is one reason why we publish these papers in the form of English Pamphlet Series of our Institute.

August 15, 1969

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### CONTINUITY AND TRANSITION IN INTERNAL MIGRATION JAPAN'S EXPERIENCE

### Introduction

Migration behavior poses theoretical development in connection with demographic transition and economic modernization, in terms of historical and prospective context. Migration policy should be formulated on the basis of scientific development of migration theory.

"Over-urbanization" or "pseudo urbanization" in developing countries on the one hand, and acceleration of uneven distribution of population in developed countries such as United States and Japan on the other are urgent problems to be scientifically examined from the standpoint of economic growth and social welfare.

It seems to me that internal migration played dual functions in the past. One was the contribution to economic growth by shifting farming population to urban, industrial sector.

Another was that to demographic transition process particularly by inducing fertility decline through social mobility and urbanization for which spatial migration was basic element.

However, migration of population is a field which has seldom attracted serious attention from both demographers and social scientists. This is really an area of study necessitating

multi-disciplinary approach. Even in the field of demography migration has not been given due status as compared with mortality and fertility studies.

Basic idea of this paper is to emphasize usefulness and urgency of migration study by discussing Japan's experience.

Japan is now experiencing a new stage of migratory movement combined with redistributive behavior of population, following after several phases of drastic change of population.

Demographically, Japan is typically characterized by successive stages of drastic change of population since the end of the world war II. First stage which started immediately after the war was that of explosive increase of population. More than six million was repatriated from abroad back to their home country reduced to nearly half of the former territory. Moreover, baby boom brought about more than eight million population in the three year period, 1947-49. Second stage was vital revolution which started in around 1950 and birth rates continued to decline quickly to reach the level of 17-18 % in 1956, then stabilizing at this low level. Third stage started immediately after the stabilization of birth rate. It is characterized by heavy and accelerated process of internal migration. Migration volume according to the Inhabitants Registration System increased quickly from five million persons per year during the latter half of the 1950's to more than seven million per year in the former half of the 1960's. Simultaneously urbanization process swept the whole country. Not only urban population increased greatly, but also urban way of life penetrated into even remote mountain villages. Standardized way of life and life consciousness has been

characteristic of present Japan.

Tremendous increase of population had been followed by vital revolution and tremendous movement of population. Successive stages of demographic change were of very short time period each.

Pattern of internal migration is seemingly entering a new transitional stage which may have a great impact on the social and economic structure of Japan.

Main aim of this paper is to document this new movement with historical trend of migration and to consider demographic and socio-economic reasons why a new dimension of migratory movement is apparently emerging. In connection with a Japanese experience a hypothesis is presented here. That is, distributional pattern of population has its own self-regulating function, tending to equalize in the regional distribution of population eventually.

### Continuity in the Pattern of Internal Migration

Internal migration pattern in Japan is historically characterized by constant flow of population from local, rural to urban areas, mostly two great cities, Tokyo and Osaka.

Migration volume, of course, varied greatly from time to time. However, migratory movement has dominantly been directed to this simple process. Another great urban center, Nagoya, has

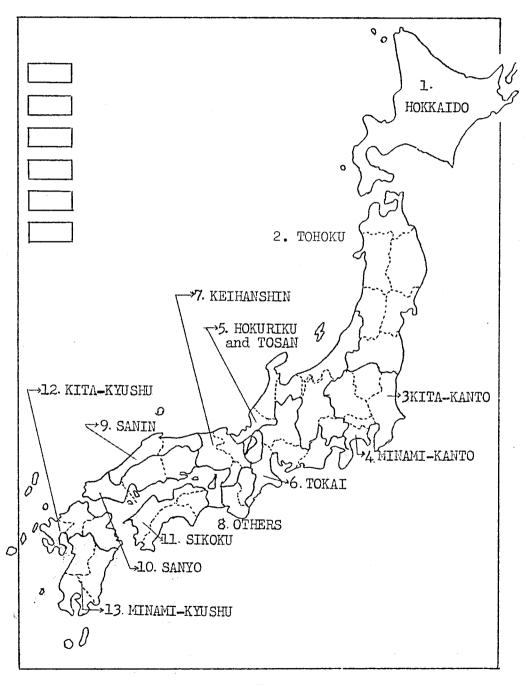
barely come to be a metropolitan area absorbing significant population only after 1955.

Historical trend of migration based on net volume of migration between prefectures clearly indicates such a continuous pattern of migration flow. Table 1 shows net migration in 13 regions since 1920.

Table 1. Net Migration in Thirteen Regions in Japan, 1920-25 to 1960-65, (in thousand)

	Region	1920-25	1925-30	1930-35	1935-40	1947-50	1950-55	1955-60	1960-65
1.	Hokkaido	-110	+49	<b>-</b> 24	<b>-</b> 56	+116	+44	<b>-</b> 50	-177
2.	Tohoku	<b>-</b> 145	<b>-</b> 190	<b>-</b> 238	<del>-</del> 404	<b>-</b> 167	<b>-</b> 474	<b>-</b> 584	<b>-</b> 677
3.	Kanto	+512	+510	+482	+609	+656	+1,136	+1,235	+1,739
4.	Minami-Kanto	+605	+619	+619	+751	+902	+1,472	+1,580	+1,917
5.	Hokuriku and Tosan	<b>-</b> 192	<b>-</b> 182	<del>-</del> 300	-281	-317	<b>-</b> 496	-421	<b>-</b> 397
6.	Tokai	+31	<b>-</b> 28	+8	-17	<b>-</b> 54	+36	+109	+252
7.	Keihanshin	+456	+434	+778	+453	+395	+618	+732	+950
8.	Others (Kinki)	<b>-</b> 45	<b>-</b> 41	<b>-</b> 35	<b>-</b> 94	-121	-107	<b>-</b> 109	-21
9.	Sanin	<b>-</b> 32	<b>-</b> 26	<b>-</b> 55	-61	<b>-</b> 54	<b>-</b> 62	-117	<b>-</b> 128
10.	Sanyo	<b>-</b> 47	<b>-</b> 68	<b>-</b> 18	<b>-</b> O	<b>-</b> 106	<b>-</b> 136	-212	-184
11.	Shikoku	<b>-</b> 91	<b>-</b> 92	-177	<b>-</b> 197	-111	<b>-</b> 237	-297	<b>-</b> 278
12.	Kita Kyushu	<b>-</b> 89	+0	<b>-</b> 35	+104	+30	<b>-</b> 130	-347	<b>-</b> 642
13.	Minami Kyushu	<del>-</del> 76	<b>-</b> 59	<b>-</b> 150	<del>-</del> 249	<b>-</b> 129	<del>-</del> 254	<del>-</del> 431	<b>-</b> 460

Remarks: Computation based on prefectural population enumerated in census and vital statistics.



Minami-Kanto region including Tokyo and three adjoining prefectures which is now called Tokyo Metropolitan area has been conspicuous in net influx for whole period. Keihansin including three prefectures, Osaka, Kyoto and Hyogo, which is now called Hanshin Metropolitan area has been another great agglomeration in which Osaka city has continued to be central place to absorb population.

Nearly all other regions has continued to lose population. It means that all local regions has continuously been great reservoir excess population from where labor force has been siphoned out for Tokyo and Osaka region.

It should be pointed out that migration flow has been accelerated to a considerable degree in the post war years. The excess of in-migration over out-migration for the period 1960-65 was nearly two million and one million in Tokyo and Osaka region respectively.

Remarkable urbanization may be demonstrated by extreme concentration of population in the three large metropolitan areas, Tokyo, Osaka and Nagoya, which are located in line along Tokaido Railway Line from Tokyo to Kobe. We often call these areas combined Tokaido Megalopolis or Pacific Seaboard Industrial Zone. The population in the Tokaido Megalopolis increased from 36.6 million in 1960 to 42.1 million in 1965. The increase of population in the Tokaido Megalopolis was

5.5 million exceeding the increase of national population in the same period by more than 0.6 million. It means that all other remaining areas lost population. The population of the Tokaido Megalopolis occupies 43 per cent of the national population in spite of the 13 per cent of the total land area.

It was surprising to note that 25 out of total 46 prefectures and 76 per cent of all minor administrative units, 3376 as of 1965, lost population in the quinquennial period, 1960-65.

Heavily accelerated migration particularly since 1960 has brought polarized, uneven distribution of population, extremely crowded on the one hand, and losing population areas on the other.

In particular, it should be noted here that heavy and continuing out-migration process of age selection, say, 15-29 years old, from rural to urban areas has come to introduce serious change in vital rates in both areas.

### Demographic Effect of Migration

Unprecedented effect of out-migration has been firstly gradual declining of natural increase rates and finally turning into minus rate of natural increase in some rural losing population areas exemplified in Japan. I found out that in 1965

196 minor administrative units, about six per cent of all minor administrative units in Japan have indicated reverse of vital

rates, that is higher death rates than birth rates. As far as I know, such drastic change in vital rates is never experienced before in any countries. Distribution of level of natural increase rates by administrative units is shown in the following map.

Moreover, 1020 minor administrative units, 30 per cent of all, are showing very low level of natural increase rates, less than 5.0% which is much lower than national level of 10.0% It suggests that they are undergoing declining process of natural increase rates and might be expected to turn into negative situation in near future.

Natural disaster can give occasion to reversal of vital rates by suddenly increased number of deaths, but only temporarily. However, Japan's experience is based on structual change in age composition primarily caused by cumulative effect of drastic migration. Major factor is exhaustive out-migration of population who are mostly in the fertile age group or marriageable people. It tends to produce lower birth rate. On the other hand, older people exposed to higher probability of dying remain in rural area. That is why death rates there tend to be higher.

Distribution of minor administrative units in 1965 classified by four levels of natural increase rate are as follows.

Level of Natural Increase Rate	Number of M.A. Units	Per Cent Distribution
Minus	196	5.8 %
0.0 ~ 5.0 %	1,020	30.2
5.0 ~ 10.0 %	1,354	40.1
10.0 and over	806	23.9
Total	3 <b>,</b> 376	100.0

Regional distribution of each pattern of natural increase rate is very uneven. Minor administrative units indicating.

Minus rates of natural increase are concentrated in Chugoku region closely connected with Osaka metropolitan area.

Metropolitan areas and Northernmost prefectures are characterized by higher rates of national increase. The natural increase rate in the former is naturally inflated by influx of young po population. However, it is interesting to note that the latter which is much less developed agricultural area indicates higher rate of increase. The reasons are that out-migration recently has become intense but it started later than western part of Japan and therefore cumulative effect is not sufficiently manifested to produce lower rate of natural increase.

Another fact is presented here in terms of prefecture which is largest unit of local administration. Traditional urban-rural pattern of reproduction, especially higher birth rates in rural prefecture than in urban prefecture, started to

change since around 1956. Finally in 1965 any rural prefectures have come to show lower birth rates than urban prefectures. This is also phenomenal change never experienced before in any countries. It should be noted here that as far as fertility is concerned in terms of age specific birth rate or total fertility rate, it is still slightly higher in rural than in urban area. So it suggests how heavy migratory movement of population has been in Japan.

Needless to say that severe change of migration behavior without precedent has been combined product of economic and social change. It should also be kept in mind that drastically changing process of demographic behavior brings about in turn serious effects on economic, social structure and regional development.

### New Dimension in Internal Migration

There are some evidences that a century long pattern of migratory flow of population has come to nearly the end and to transform into a new pattern of migration. Firstly, it should be mentioned about new migration trend between metropolitan and local areas. Out-migration from local regions seems to have reached saturation point in about 1964, and thereafter started to decrease. On the other hand, return migrants going back to original local areas from metropolitan areas has already begun

to increase considerably as early as 1960. Consequently, net migration, excess of out-migration over in-migration in local regions historically characterized by losing population started to shrink remarkably, although net migration is still negative.

Secondly, population increase in local cities of large and middle size, 100,000 to 300,000 population, have shown highest rates of 17 per cent in the latest intercensal period, 1960-65, as compared with largest and small cities. It indicates some localizing trend of migration.

Thirdly, intra-metropolitan and inter-metropolitan migration also show steadily increasing trend since about 1960.

Migration pattern seems to be transforming from traditional rural-urban type to diversified, decentralized types. A century long modernization process in Japan has been associated with rural-urban migration which was mainly motivated by surplus, under-employment population in rural sector. Japan is now just facing a new dimension of migration behavior, which should be carefully examined from the standpoint of socioeconomic and population policy making particularly because any change in migration behavior is a delicate indicator of population adjustment to changing social and economic environment.

## Factors of Historical Transformation in Migratory Movement

Factors influencing internal migration are so complex, greatly varying from place to place and from time to time. However, it may be hypothesized that regional economic disparity is basic factor initiating migration. Uneven distribution of economic activity levels among regions tend to accelerate migration motivation with regional reproductive differentials of population.

However, nature of migration trend in prewar period is essentially distinguished from that of postwar period. Universal difference of reproductive performance and industrialization process with remarkable fluctuations of economic activities and concomitant differentiation of regional economy determined direction and volume of internal migration, but could not siphone off excess population produced by higher fertility level in rural areas.

However, in the postwar period high economic growth initiated particularly since 1955 exerted strong pulling power of labor force and could succeed to aborb accumulated surplus labor force in rural areas composed of chronic surplus population and tremendous repatriated people, numbering more than six million. Strong demand pull on urban side was dominant

direct factor of migratory movement with rather expanded disparity of regional economic activities.

On the one hand, vital revolution achieved in very short time of period contributed so much to reduce fertility and mortality differentials between urban and rural. In other words, reproductive differentials among regions have come to be reduced very much. It is very important to remember that regional differentials of reproductive performance of population have been recognized as an influential factor of internal migration.

On the other hand, disparity of regional economic activities also have begun to shrink quickly but only in most recent years. Of course, we recognize that still remarkable differentials exist among small regions like minor administrative units. However, overall situation on regional differentials of economic activities indicates shrinking tendency in relative terms.

It appears that both factors, differentials of regional reproductive performance and regional economic activities, which are basic to initiating migratory motivation are losing traditional generating power of migration in Japan. It does not necessarily mean that migration volume start to decrease. It suggests at least that migration pattern is likely to change.

It may be useful at this moment to refer to actual conditions influencing migration, keeping in mind the statement

made above.

#### Various Elements in Relation to New Dimension

Sharp decreasing trend of young age population, say 15-29 years old, who are most mobile in any countries in the world, should be mentioned in examining prospects of migration. The population aged 15-29 is surely expected to decrease from about 29 million in 1965 to 24 million in 1985. If the age specific migration rates observed do not change, remarkable reduction of most mobile young population can contribute to the reduction of migration volume.

Second, rual population who has been major source of supplying population to urban, industrial places, is now approaching the limit, losing the margin for pushing out population.

Third, in large cities like Tokyo, Osaka and Nagoya which have received influx of population, suburbanization of population is proceeding quickly and constituting large and larger metropolitan areas. On the other, increasing outer diseconomy and difficulty of recruiting labor force tend to push manufacturing industries out to local areas and in particular to establish new factories in some local places where land value is reasonable and labor force is available. In brief, such population agglomerations are gradually losing original advantages of excitement and lure which added to the forces

making for larger aggregations. It simply is exemplified by the more out-migration than in-migration in Tokyo metropolis which started since 1967.

Fourth, urban problems in large cities has been aggravated recently. Traffic congestion, housing supply and quality problems, circulation of persons and goods, solid and human waste removal, air and water pollution and so on. Social and organizational problems are indicated by the incidence of delinquency and crime drug addittion, and mental disorder in large cities in particular.

Fifth, as metropolitan situation become personally, physically worse, local places gain advantages relatively. Particularly middle or small sized local cities of 100,000 to 300,000 population can be attractive residence for people. Expanding opportunities of employment in local places can be a practical condition making metropolitan people who are recognizing urban problems to decide out-migration. If level of living and also life environment in local cities is compared with that of large metropolitan areas, local life may be more comfortable and attractive.

One of them tends to stimulate out-migration from metropolitan areas as push-factor. The other operates to attract people to local places as pull-factor. Lastly, social-psychological element may be added here.

Broadly speaking, social-economic status of migrants in

metropolitan areas is generally lower than those of natives

born in the metropolitan areas. Migrants may expect psychologically that they can enjoy upward mobility in their home towns

if they move there after some years' experience of occupation

and life in metropolitan areas.

### Self-Adjustment Movement

### in Regional Distribution of Population:

### A Hypothesis

Originally, migratory movement is a mechanism of personal adjustment, and consequently for the population as a whole it is adjustment movement of population corresponding to levels and changes in economic, social and demographic variables.

Economic progress and social-demographic change in the process of a century long modernization in Japan produced historic continuity of migration pattern of rural-urban. A decade after 1955 witnessed dramatic wave of migratory movements from rural to urban, concentration in three large metropolitan areas. This created economic and social problems never experienced before both in metropolitan and rural areas basically caused by rapid migration process, and also produced regional reversal of reproductive behavior, more reproduction of

population in metropolitan and less in rural areas, due to heavy concentration of young reproductive age population in metropolitan area and exodus of those people from rural areas. Both net migration and reversal of reproduction reinforce each other in rate increasing or decreasing shares of the population in metropolitan and rural areas. This is really new dimension in the fields of internal migration and regional distribution of population.

A hypothesis is presented here. Regional distribution of population is self-regulating movement, tending to take proper balance of distribution among regions in the country by means of internal migration. When the regional distribution of population became imbalanced too much as a result of internal migration or any other reasons, population tends to modify imbalance by redistributing movement.

This hypothesis is based on the clear fact that ruralurban migration is not infinite movement, but necessarily
finite in any country. A question involved here is to know
when rural-urban migration approaches peak and begins to shift
to any other patterns of migration, for example return migration,
urban-urban migration and so on.

Actually, in a few years immediately after the publications of the 1965 census results, all scholars and officials in charge of planning were surprised to find that rural-urban migration

was much more accelerated in volume and scope than that of the five year period 1955-60. All of them projected more acceleration of rural-urban migration in the next five year period on the basis of the latest experience, 1960-65. However, it seems to me that the trend of rural-urban migration was already approaching the peak around 1965.

Some characteristics of migration behavior undergoing a new transformation are mentioned as follows.

First, long distance migration resulting from all local regions to the three metropolitan areas is being replaced by middle or short distance migration.

Second, increasing trend of return migration from large metropolitan areas to local home towns is recognized.

Third, population in the local places, 100,000 to 300,000 population is increasing rapidly, by absorbing people from surrounding rural areas.

Large cities containing one million and over are already in saturation in terms of net minus migration. However, metropolitanization has been progressing centering around large cities. In particular, Tokyo metropolitan area maintains strong capacity of absorbing population as a national center, but mechanism of population increase is gradually changing, by increasing share of higher birth rates and increasing trend of migrating to more and more distant places within access of Tokyo.

Overall situation may be summarized in this way. National scale urbanization process is speedily going on. Expansion of metropolitan areas, development of local medium and small cities will be linked up with each other and stimulate amalgamation of rural and urban areas into national urbanization eventually.

It is intended here to limit discussion to demographic aspects of internal migration, and to highlight firstly a new dimensional transition of internal migration in Japan. Only fragmentally some social and economic implications were referred. Major point is that, I believe, phenomenal change in migration behavior is itself a manisfestation of economic progress accompanied by technical innovation and social change. That was a reason why in this paper I concentrated my attention on specific topic.

# DEMOGRAPHIC ASPECTS OF URBANIZATION IN JAPAN: NEW DIMENSION OF INTERNAL MIGRATION AND URBANIZATION

 Continuity of Pattern of Internal Migration and Urbanization

It is admittedly hypothesized that spatial and social mobility are necessary and inevitable in the process of modernization or industrialization. Japan's experience in this field particularly since the end of the world war II also seems to show a typical recapitulation of western experience.

A century-long history of modernization process in Japan since her Meiji Restoration, 1868, is characterized by the continuity of basic pattern of internal migration, namely rural-urban type and concomitant acceleration of urbanization in long terms. The ratio of urban to total population nearly continued to rise up from 18 per cent in 1920 to 68 per cent in 1965.

Urbanization process in Japan is also characterized by binocular type of growth - continuous, competitive expansion process of two giant cities of Tokyo and Osaka -, and explosive development of the three metropolitan areas which are seemingly converging into a Japanese megalopolis where the population combined together is about 44 million in 1965.

Table 1 indicates historical trends of net migration volume estimated by using census population and vital statistics in nine regions of Japan. It clearly shows that it is only two subregions-Minami-Kanto and Keihanshin which have continued to absorb tremendous migrants for nearly half a century. Tokyo is the central area of Minami-Kanto subregion and Osaka is the core of Keihanshin subregion.

However, these developmental process of urbanization does not seem to fundamentally alter the traditional pattern of migration and urbanization in Japan.

2. New Dimension in Urbanization Process and Migration

Now, it is my assumption that new wave of migration started to take place, shifting from long historical pattern mainly characterized by occupational standpoint to a new pattern of migration on the basis of carefully weighing residential, environmental standpoints with occupations. In this transitional stage the first nevertheless persists and continues, mingling with the second. This new wave may be called "U" turn or return migration, mainly because increasing number of out-migrants from metropolitan areas are mostly people who are going to their own local places.

Before going into discussion on this new turn, overall picture of rapidly changing features of urbanization may be pointed out here.

Firstly, different fatterns of urban growth are recognized according to the population size of cities; stagnant growth of giant cities, accelerating growth of middle-sized cities and declining trend of small cities. Two largest cities, Tokyo and Osaka, has turned to the direction of net outmigration from heavy net in-migration since 1964 and 1963 res-

pectively, although their populations are still increasing due to heavily increased rate of natural increase to which special attention should be given.

In this way, so far rapidly expanding metropolitanization backed up by revolutionary suburbanization of population went on.

Particularly since 1955 when Japanese economy started to shift from post-war reconstruction stage to new growth stage, three metropolitan areas, namely Tokyo, Hanshin and Chukyo have shown explosive increase of population as shown in Table 2.

Table 1. Net Migration in Nine Regions in Japan, 1920-25 to 1960-65, (in thousand)

	Region	1920-25	1925-30	1930-35	<b>1</b> 935 <b>-</b> 40	1947-50	1950-55	1955-60	1960-65	
1.	Hokkaido	-110	+49	<del>-</del> 24	<b>-</b> 56	+116	+44	- 50	-177	
2.	Tohoku	<b>-1</b> 45	<b>-</b> 190	<b>-</b> 238	<del>-</del> 404	-167	-474	<del>-</del> 584	<b>-</b> 677	
3.	Kanto	+512	+510	+482	+609	+6 56	+1,136	+1,235	+1,739	
a.	Kita Kanto	<b>-</b> 93	<b>-1</b> 09	-137	<b>-1</b> 42	<del>-</del> 246	<del>-</del> 336	<del>-</del> 344	-178	
b.	Minami-Kanto	+605	+619	+619	+751	+902	+1,472	+1,580	+1,917	
	Hokuriku and Tosan	<b>-</b> 192	-182	<del>-</del> 300	-281	-317	<del>-</del> 496	-421	-397	
5.	Tokai	+31	<del>-</del> 28	+8	-17	<del>-</del> 54	+36	+109	+252	
6.	Kinki	+411	+394	+743	+359	+274	+511	+6 23	+929	
$a_{ullet}$	Keihanshin	+456	+434	+778	+453	+395	+618	+752	+950	
b.	Others	<b>-</b> 45	-41	<del>~</del> 35	<b>-</b> 94	-121	-107	-109	-21	
7.	Chugoku	<b>-</b> 80	<b>-</b> 94	<b>-</b> 73	-61	-160	<b>-</b> 198	<b>-</b> 329.	-312	
a.	Sanin	<b>-</b> 32	-26	<del>-</del> 55	-61	<del>-</del> 54	<del>-</del> 62	-117	-128	
<b>b</b> .	Sanyo	-47	<b>-</b> 68	<b>-1</b> 8	-0	-106	-136	-212	-184	
8.	Shinkoku	<del>-</del> 91	<b>-</b> 92	-177	-197	-111	<b>-</b> 237	<del>-</del> 297	-278	
9.	Kyushu	<b>-1</b> 65	<b>-</b> 59	<b>-1</b> 85	<b>-1</b> 45	<b>-</b> 99	-383	<del>-</del> 779	<b>-1,</b> 102	
	Kita Kyushu Minami Kyushu	-89 -76 tation b	+0 -59	-35 -150	+104 <b>-</b> 249	+30 <b>-</b> 129	<b>-</b> 130 <b>-</b> 254	-347 -431	-642 -460	

Computation based on prefectural population enumerated in census and vital statistics.

Table 2. Population Increase in Three Metropolitan Areas, 1955-1965

Area	Population (,000)			Rate of Increase (%)		Percentage Distribution			Population density,
	1955	1960	196 5	1955 <b>-</b> 60	1960 <b>-</b> 65	1955	1960	1965	per km <sup>2</sup> (1965)
Tokyo Metrop. 1)	15,424	17,864	21,017	15.8	17.6	17.3	19.1	21.4	1,586
Hanshin Metrop 2)	10,174	11,405	13,070	12.1	14.6	11.4	12.2	13.3	883
Chukyo Metrop. 3)	6,838	<b>7,</b> 330	8,013	7.2	9.3	7.7	7.8	8.2	<b>37</b> 4
Sub-total	32, 437	36 <b>,</b> 599	42,100	12.8	15.0	36.3	39.2	42.8	85 <b>1</b>
Whole country	89, 276	93, 419	98,275	4.6	5.2	100.0	100.0	100.0	266

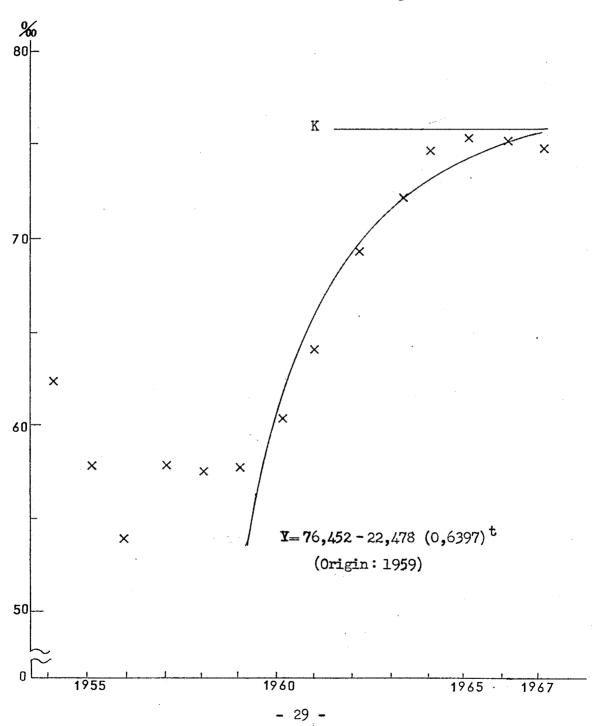
Source: Based on each census results.

Remarks: (1) Area of Tokyo and three adjoining prefectures of Kanagawa, Saitama and Chiba, (2) Area composed of three contiguous prefectures of Osaka, Kyoto and Hyogo, (3) Area comprising three adjacent prefectures of Aichi, Gifu and Mie in which the big city of Nagoya plays a central function.

On the other hand, as referred to earlier, a 76.2 per cent of all minor administrative units, namely city, town and village, numbering 3376 as of 1965, turned to depopulation during the period 1960 to 1965. This is really drastic phenomenon never experienced before in the history of Japan. Most of them are local small sized cities, towns and villages. So called "Kaso" region ("oversparseness" due to heavy depopulation) came to draw serious attention of administrative authorities which are extremely contrasted with concurrent problem of "Kamitsu" region (overcrowdedness or heavily over-populated areas).

Extreme situations of "Kamitsu" and "Kaso" are two aspects of drastic migration and urbanization, but "Kaso" is nothing but the other side of the shield.

Figure 1 Gross Migration Rates Based on Inhabitant Registration Statistics in Japan



Overallipicture of migration volume in recent years may be measured by gross migration rates by using the annual migration statistics since 1954 (Inhabitants Registration Act) and census or estimated total population. Figure 1 seems to indicate clearly that the gross migration rates are approaching to the upper limit after sharply increasing stage since 1959, and now apparently proceeding to the incipient stage of migration.

One of the basic reasons why migration rates are stagnant is that most mobile population aged 15 to 29 years has started to shrink and to decrease greatly soon. One reason is rapid change of age composition of population due to vital revolution since the end of the world war II. Another is rapidly decreasing margin of the population, aged 15-19 years, who are entering the labour market, because overall ratio of graduates proceeding up to senior high school from junior high school has been remarkably higher year by year, reaching as high as 76.7% in 1968.

In addition to basic factors above mentioned, various factors, other demographic, social and economic, are supposed to be contributing to creating new process of migration and urbanization.

Here, only a few phenomenal facts are mentioned in order

to suggest emerging pattern of migration and urbanization.

Firstly, a very new trend of stagnant or decreasing migration out from major local regions into metropolitan areas and on the contrary continuing increase of counter stream of return migration to local areas from metropolitan areas should be noted. As a result, migration balance in local regions which have been historically bases supplying tremendous surplus labor force for urban, industrial development started to shrink rapidly in recent several years. It even may be expected that out-migration and counter stream in local regions would be balanced in not a distant future.

Secondly, it is also important to point out that the young and middle aged persons are major parts of return migrants according to some indirect surveys. This is quite different from that experienced in pre-war period, because majority of return migrants at that time were invalids, unemployed and retired aged people.

Third, it is recognized that urban to urban migration is very steadily increasing. Perhaps two types of urban-urban migration are mentioned, namely intra-metropolitan and intermetropolitan migration.

Lastly, remarkably expanding trend of middle sized cities, say city population size being from about 100,000 to about 300,000,

should be noteworthy. In particular, it is interesting to note that local core cities located outside the large metropolitan areas have shown in general higher rate of population increase than giant cities during the recent intercensal period, 1%0-1%5. Their population increase was mainly due to in-migrants who were rural people living not far from the core city.

In summary, in the first place post-war process in internal migration and urbanization is characterized by the acceleration of polarization in regional distribution of population in two ways. One is polarization process at national level, represented by rapid metropolitanization, leading to the formation of Japanese magalopolis-frequently called "Tokaido" Megalopolis- on the one hand, and depopulation process in nearly all local areas with the exception of them located in Tokaido Megalopolis on the other. Another is polarization process at local level, in most cases at prefectural level, represented by concentration of population into limited urban places and concurrent depopulation in rural areas within the same prefecture. Hiroshima prefecture may be cited as one of the typical cases.

Secondly, as stated earlier, the acceleration of return migration from metropolitan to local areas should be given special attention.

Lastly, the mechanism and changing structure of migration and urbanization is extremely complex, and even contradictory movements seem to be recognized, particularly because demographic revolutionary process is deeply intertwined with rapid economic growth and accelerating change of social system.

Fully permeated net-work of mass communication media and extremely high density of population are also to be given proper consideration in this connection.

Rather hypothetical, prospective conclusion in somewhat long terms is that new wave of migratory movement and urbanization process just started to emerge. In other words, it means the recognition of new dimension of redistributional movement of population, emergence of re-adjusting process of excessively imblanced settlement of population in the total area of Japan.

3. Demographic Effects of Internal Migration and Urbanization

Reversal of reproductive structure of regional population should be one of the most important facts in direct association with the intensity and magnitude of migration. Two types of reverse order in reproductive behavior are mentioned.

First type is concerned with birth rates in urban and rural prefectures. Since approximately 1956 when migration movement started to be decidedly intense, birth rates in a few rural prefectures started to be higher than those in urban

prefectures. Finally, birth rates in all rural prefectures have come to show higher than a few urban, industrial prefectures by 1965. Of course, here the reverse order in birth rates is predominantly caused by accumulative change of age composition through internal migration. Therefore it is not due to change in fertility itself.

Second type is the reversal of vital rates, namely higher death rates than birth rates. In 1965 nearly 200 minor administrative units - city, town and village - showed negative natural increase. Most of them are small sized places from which out-migration has been heavy. In this connection, however, attention should be paid to the fact that in addition to the reversed vital rates a slightly more than one thousand minor administrative districts, occupying 30.2 per cent of total districts as of October 1st, 1965 have come to show very low rates of natural increase through excess of out-migration over in-migration.

It is generally common that urban growth is mainly due to excess of inmigration over outmigration. However, as already noted, growth factors of large cities having population more than one million in Japan have been changing. Tokyo ward area (formerly proper city of Tokyo), Osaka city started to show net loss of migration since 1964 and 1963 respectively.

Net gains by migration in other large cities are also remarkably decreasing. Consequently, population growth in large cities are shifting heavily to the intensity of natural increase.

Higher birth rates and lower death rates, consequently higher natural increase rates in large cities and metrpolitan areas, which are suggested earlier, are expected to compensate more or less net loss or decrease in net gain through migration. Some illustrative figures are given here. The ratio of number of births in three metropolitan areas combined was only about one third of total number of births in pre-war period, but now rose up to 46 per cent in 1965. Number of natural increase in these metropolitan areas occupied 60 per cent for national natural increase in 1965. During the intercensal period, 1960-1965, actual number of natural increase in these three metropolitan areas was 2.5 million which was nearly 20 per cent higher than the expected number of natural increase computed on the assumption of the same national level of natural increase during the same period.

It is easily conceivable that migration, especially rural to urban, directly contributes to the reduction of their size and increase of number of family or household both in rural areas of their departure and in urban areas of their arrival, particularly because migrants are young people mostly fresh

out of junior and senior high school. Fertility decline in general is also an important factor reducing family size.

Especially spectacular has been the increase of families or households in urban and metropolitan areas. Nuclear type family formation has been conspicuous since 1955, which is clearly tested by various kinds of statistical data. It may be interesting to note that the intensity of urbanization seems to be a factor most highly correlated with the distibution of nuclear type families as compared with other relevant factors which was examined by Dr. M. Tachi.

### 4. Some Concluding Remarks

Intense, accelerating migration and urbanization inevitably resulting rapid economic growth have produced two kinds of segregation or discrimination, namely aeral differences in economic and social terms and demographic differentials.

Population are individually making efforts for adjusting themselves to quickly changing conditions under technological and industrial revolution. However, we in Japan are confronting with ever aggravating difficulties both in urban and rural areas. It seems to me that there are basically important discrepancies. One is an independent progress of sciences and technology which are not linked in real sense with human welfare. Another is the lack of close cooperation between

demographers and social scientists who do not recognize the essential inseperability of their own sciences each other. This is particularly so in Japan.

In view of new dynamics and dimension in internal migration and urbanization, comprehensive policies should be designed on the basis of recognition on new currents which may be really effective in solving contradictory regional problems, and emancipating people from dichotomous segregation, urban and rural.

### Résumé

Cette publication a pour but d'examiner d'abord la continuité du schema traditionele de la migration interne et de l'urbanisation depuis la restauration de Meiji à 1868 et ensuite de remarquer la nouvelle dimension venant d'apparaître dans l'evolution de la migration et finalement d'analyser les effets démographiques de la migration interne et de l'urbanisation.

En concernant ce dernier point, nous avons traîté le changement sans précédent du Japon ainsi qu'aux pays occidentaux, dans la structure reproductive de la population régional. Cést à dire, le fait que la natalité et la vitesse de l'augmentation naturelle de population sont plus élevés dans l'urbane que dans la région rural et aussi le tendence renversé de "vital rates" dans les communautés dépopularisés.

