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**THE POPULATION
OF
KOREA**

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THE POPULATION OF KOREA

by

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PREFACE

This monograph has been prepared by the Population and Development Studies Center, Seoul National University as one of the Series of National Monographs for World Population Year commissioned by the Committee for International Coordination Research in Demography (CICRED).

Each chapter was assigned to one or two research associates of the Center. Tai Hwan Kwon wrote Chapters I,II,VI and part of III, and Hae Young Lee wrote Chapters VII, and part of III. Eui-Young Yu contributed Chapter IV, and Yunshik Chang, Chapter V. Dr. Kwon also assumed the responsibility of editing the entire manuscript into its final form.

Discrepancies and disagreements among the authors were reduced to a minimum, though not completely reconciled, through lively discussions and willing cooperation of the authors in the editing stage.

It is well known that Korean demography suffers from poor vital statistics and that the vital rates are almost exclusively drawn from the census. Naturally, some important disagreements as to the levels of various demographic indices and the trend of population change have evolved owing to different assumptions various studies adopted. The reader should note that our estimates are not necessarily identical with those from other studies on the population of Korea and the official figures issued by the Government. Nor the estimates presented and the views expressed in this document are in any way to represent those of the United Nations and CICRED.

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Seoul
August

Hae Young Lee
Director

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I. POPULATION GROWTH

1. Historical Trends

Throughout the entire period of the Yi Dynasty (1392–1910), a population registry system was in existence and the population was counted fairly often through this system for the purposes of taxation, labour mobilization and conscription of military forces. Despite their poor coverage,¹ the counts provide highly valuable information on the historical trend of population growth in Korea. Information of particular importance may be gained from a series of data on the total numbers of population and households available every three years covering 150 years between 1639 and 1789. These data, particularly for 1678–1789, show a high degree of consistency in their quality. The annual rates of population growth calculated from these materials are presented in Figure I.1 and Table I.1.²

Both Table I.1 and Figure I.1 clearly show that population growth had been almost stationary for about 230 years from 1678 to 1904. The annual rates of population growth range from the highest, 15 per thousand, to the lowest, -15 per thousand. Excluding the early exceptional figures, the rate is in a range between 10 and -5 per thousand. On this ground, we can reasonably assume that the average annual rate of population growth for the 230 years, 1678–1904, was 3 at the highest and 1 at the lowest, averaging 2 per thousand. Historical documents disclose that no war took place during the period, 1678–1864, and also little emigration of Koreans

¹The coverage of population enumeration in the Yi Dynasty is approximated as 40 to 50 per cent. Compiled data on population in the Yi Dynasty are presented in Chosen Sotokufu (Government General of Korea), *Chosen no Jinko Gensho* (Population Phenomena of Korea), Keijo (Seoul), Showa 2, 1926, pp. 1–96.

²Logically, if there are two censuses for an area conducted at a given interval and both are of the same coverage, we can directly obtain the correct rate of population growth from the raw data whatever the level of their completeness. Even if differential quality is assumed, this has little effect on the growth rate calculated directly using the raw data without adjustment when the two counts of censuses involved are far enough apart. According to various internal checks of the data on population and households, we can conclude that the coverage of the population totals for the period 1678–1789 are of approximately the same quality. There is no way but to assume that every count was taken on the same date and month by the Western solar calendar as conversion problems from the lunar calendar for such a long period are insurmountable. The impact of this assumption, however, can be reduced to an insignificant degree when we calculate growth rates over a long time span rather than for every three years. For this analysis we have chosen a 12 year time interval for each rate.

Figure I. 1 Reported Annual Rate of Population Growth
for the Year X to the Year X+12: 1678-1789

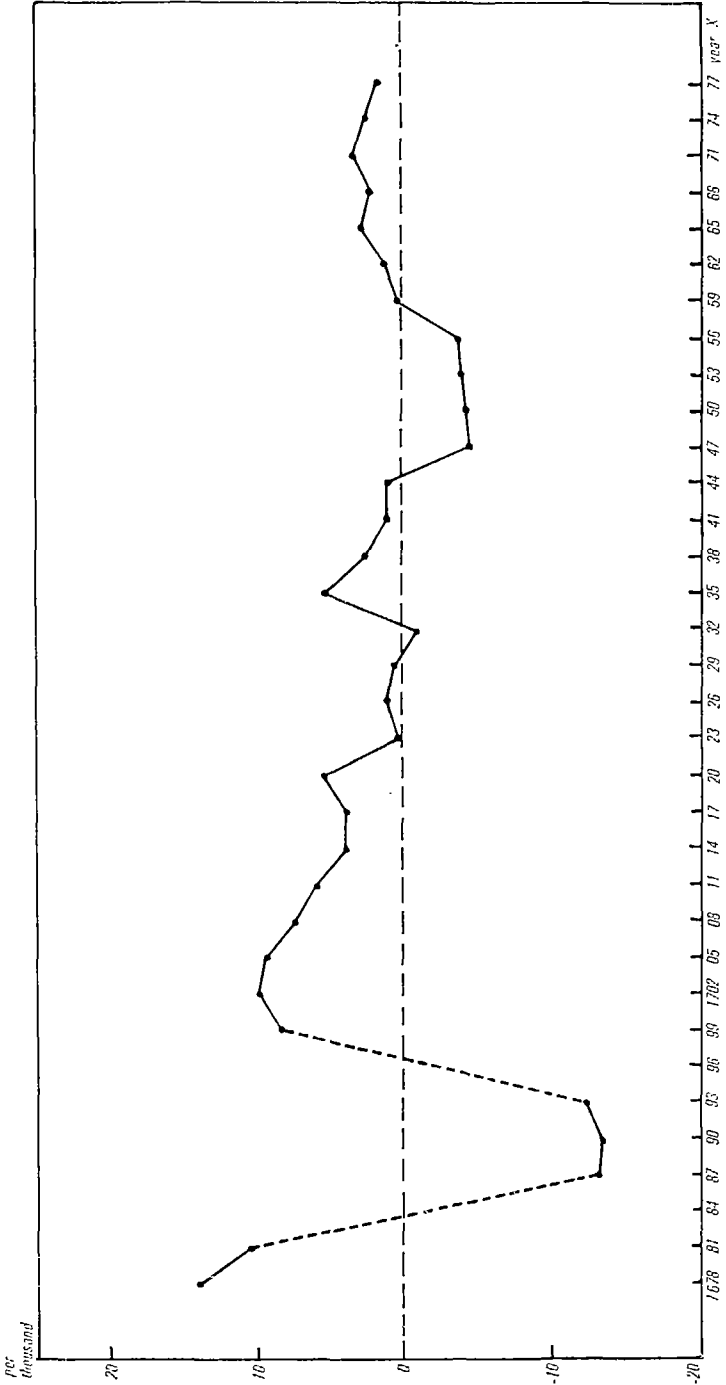


Table I. 1
Reported Annual Rates of Population Growth for
Selected Periods Between 1678–1904

(per thousand)			
Period	Rate	Period	Rate
1678–1690	14.1	1762–1774	1.4
1690–1702	–13.4	1774–1786	2.7
1702–1714	9.8	1786–1807	2.6
1714–1726	4.1	1807–1837	–4.0
1726–1738	1.2	1837–1852	1.0
1738–1750	2.7	1852–1864	0.2
1750–1762	–4.0	1864–1904	–3.5

Source: Chosen Sotoku-fu (Government General of Korea), *Chosen no Jinko Gensho* (Population Phenomena of Korea), Seoul, 1926.

was reported until the late 19th century. Accordingly we can safely assume that the population growth during this period was almost entirely governed by ordinary traditional life settings and affected almost exclusively by epidemic diseases and famine. These would account for the occasional absolute population declines reflected in the above table.

It is generally known that during the entire Yi Dynasty few technical innovations and little industrial development took place, and socio-economic conditions remained pretty much the same. In addition, the kingdom was invaded several times by foreign forces. In this light, the rate of population growth in the early Yi Dynasty is regarded to have been less than or at most near the level observed in the later period of the kingdom. This conjecture also leads us to conclude that the population at most tripled during the entire five hundred years of the Yi Dynasty. According to an estimate from the totals and age structure of the Censuses of 1925 and 1930 and from estimated fertility and mortality rates for 1900–1925, the population of Korea at the turn of the present century was about 17 million. This estimate further indicates that the population at the closing decade of the 14th century, when the Yi Dynasty was founded, reached somewhere between 6 to 8 million.

The Annexation of Korea by Japan in 1910 coincided with the first important turning point in the development and course of the Korean population. Both mortality and fertility have undergone a rapid change ever since. In other words, the Korean population entered the first stage of the demographic transition in the very early colonial years. Population had grown at an increasingly rapid rate during the twenty years 1915–1935, as is clear from Table I. 2. The population was reported as 19,020,000 in 1925 and increased to 25,120,000 in 1944 toward the end of the colonial period. The annual rate of growth more than tripled between 1915–20 and 1930–35; from 5 to 17 per thousand. The five year intercensal period 1935–1940 is

the only exception in the course of population growth in the entire colonial period. When only the natural growth is concerned, however no such exception is found. Population growth was checked to a considerable extent by international migration. But despite of a large emigration of Koreans, population pressure on land intensified; the population density rose from 81 per square kilometer in 1910 to 114 in 1944.

Though the level of total population growth in Korea was largely determined by natural growth, or the difference between the number of births and the number of deaths, international migration played a major role in shaping the trend of total population growth during the entire colonial period. Being highly male selective, international migration also brought about the differential growth of male and female populations; resulting in more rapid growth of the female population than the male population. The most pronounced sex differential was observed during 1935–40 when emigration of Koreans was most voluminous.

As is the case of natural increase, the net reproduction rate, a synthetic result of age-specific fertility and mortality independent of the age distribution of the population, discloses a series of incessant growth throughout the whole of the colonial years. The discrepancy in the trends of the net reproduction rate and natural growth can be explained by the changing age-sex composition of the population, which was in turn severely affected by a large exodus of Koreans to Japan and Manchuria. How the reduction of mortality affected the potentiality of population growth in Korea during the thirty-six years of colonialism is very distinctively reflected in the net reproduction rate, which was estimated as 1.17 for 1910–15 and rose to almost 2 for 1940–1945. Though slightly increased, the level of fertility played a very minor role in raising the growth potential of the Korean population during the colonial period.

After the liberation of the country from the Japanese rule in 1945, Korea was divided into two parts; the American-occupied South and the Soviet-occupied North. The liberation and partition caused extreme political turmoil, widespread social unrest and complete economic breakdown in both parts of the country. The course of population development in Korea during the decade 1945–1955 was a direct or indirect outcome of these political changes and socio-economic conditions of the time. The liberation caused a huge repatriation of Koreans from Japan and Manchuria who had moved out. The total number of repatriated overseas is approximated at 2.3 million, and among them 1.8 million entered South Korea. Besides the population growth due to repatriation, vast redistributions of the population between the two parts of the nation also took place in connection with the current political development. There were two big waves of population movement from North to South Korea, first in 1946–47 and second in the Korean War years 1950–51. The net gain of the population in South Korea due to migration between the two parts of the country is estimated as

around one million. Mortality and health conditions evidently deteriorated immediately after World War II and the level of mortality rose very sharply during the Korean War. These social and demographic conditions during the decade 1945–55 are also thought to have affected the level of fertility to some extent. Though the general course of population change during 1945–55 is more or less self-evident, the details were never known and no usable population data have yet been published for North Korea. The latter prevents us not only the study of the population of North Korea, but also the study of North Korean migration patterns as they complement population development in South Korea during this period of major political disturbances.

At the liberation in 1945, about 16,136,000 people are estimated to have resided in South Korea,³ showing a density of 164 persons per square kilometer. According to the 1949 Census, the population had increased to 20,167,000 and the density to 205. By 1955, the corresponding figures reached 21,502,000 and 218. The annual rate of population growth was reported to be 61 per thousand during 1945–49, a record high in the history of Korea, and 15 per thousand during 1949–55.⁴ The dominant factor in the population trend in this period was undoubtedly the massive influx of population into South Korea, as clear from Figure 1.2. Natural increase accounted for only 31 per cent of the total population growth during 1945–49 and 54 per cent during 1949–55 which includes the Korean War. A relatively low rate of population growth, 14.5 per thousand, during the latter period despite a significant gain of population by refugee migration from the North was a direct result of the Korean War which caused a very high level of deaths and a relatively low level of births.

2. Recent Trends

International migration which governed the levels and trends of population growth during the entire first half of the present century almost ceased after the Korean War, and population size has again become a function of births and deaths. The awareness of population problems was developed in Korea among a limited number of social scientists and doctors in the late 1950s. The 1.5 million increase of population between 1949 and 1955 despite a large number of war deaths during 1950–53 was enough to suggest the high growth potential of the Korean population to many social scientists who were interested in population phenomena. At almost the same time, a few medical doctors trained overseas began, in one way or

³Tai Hwan Kwon, *Population Change and Its Components in Korea 1925–66* (Unpublished Ph. D. Thesis, Australian National University), 1972, pp 241 & 380.

⁴Calculated after adjustment of the 1949 Census population for the 1955 Census boundary. The adjusted 1949 population and its distribution are presented in *ibid*, p. 381.

Figure 1.2 Annual Rates of Total Population Growth and Annual Rates of Net International Migration, 1910–1970

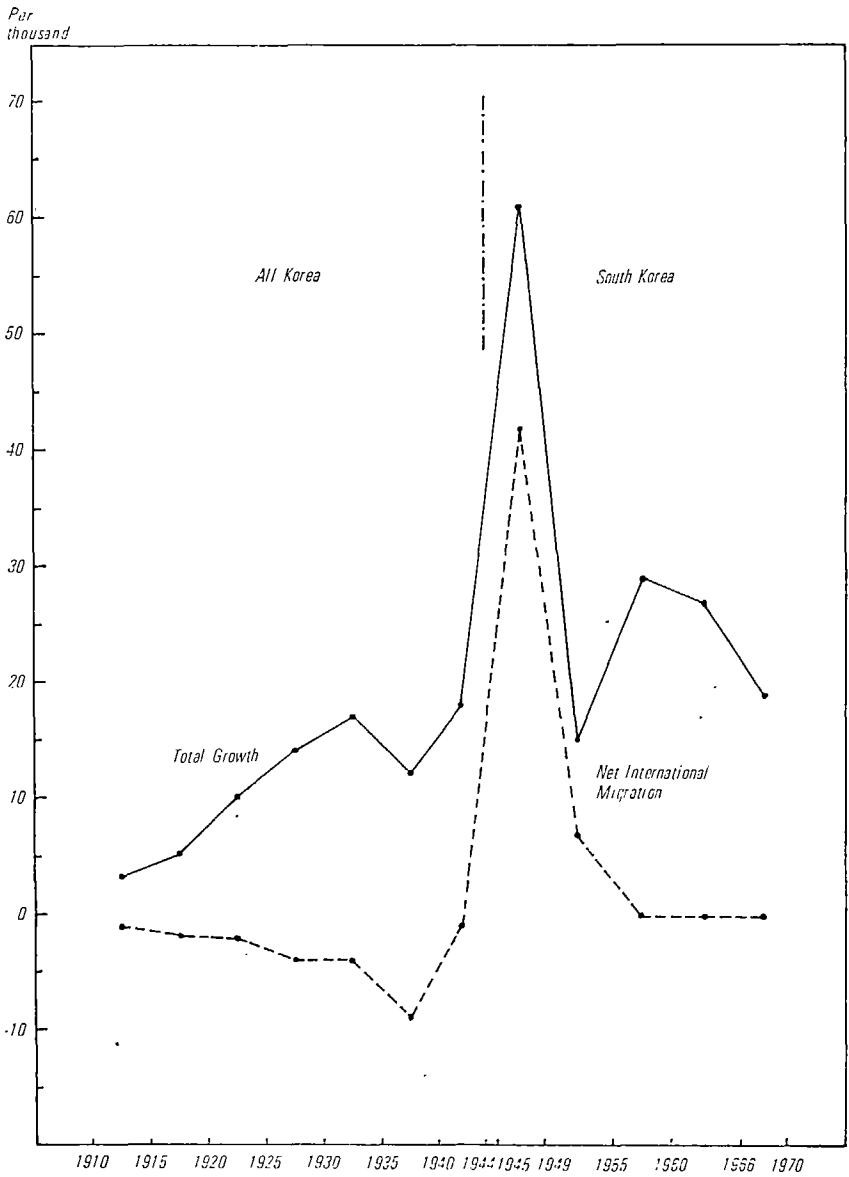


Table 1. 2
Population Growth in Korea, 1900–1970

Year	Number (in 1,000)	Density Per Km ²	Annual Rate (in 1,000) of			Net Reproduction Rate
			Natural Increase	Migration	Total Increase	
1900(Oct. 1)	17,082*		2	—	2	—
1910(Oct. 1)	17,427*		4	—1.4	2.6	—
1915(Oct. 1)	17,656*		7	—2.3	4.7	1.17
1920(Oct. 1)	18,072*		12	—1.8	10.2	1.25
1925(Oct. 1)	19,020	86.1	18.7	—4.3	14.4	1.40
1930(Oct. 1)	20,438	92.5	20.2	—3.6	16.6	1.68
1935(Oct. 1)	22,208	100.5	20.6	—8.9	11.7	1.77
1940(Oct. 1)	23,547	101.1	20.2	—2.2	18.0	1.86
1944(May 1)	25,120	113.7				1.93(1940–45)
All Korea						

South Korea						
1945(Sept. 1)	16,136*		18.9	41.9	60.8	
1949(May 1)	20,167	205.1				
	19,904**		7.9	6.6	14.5	1.97(1945–50)
1955(Sept. 1)	21,502	218.4	28.6	—	28.6	—
1960(Dec. 1)	24,989	253.5	26.5	—	26.5	2.27
1966(Oct. 1)	29,160	296.1	18.8	—	18.8	2.19(1960–65)
1970(Oct. 1)	31,435	319.2				1.77(1965–70)

*Estimated

**for 1955 Boundary

Source: 1) The figures for 1910–25 are estimated from census results of 1925 and 1930 and the observed trend of population growth in the late Yi Dynasty.

2) The figures for 1925–66 duplicated from Tai Hwan Kwon, *Population Change and Its Components in Korea 1925–66* (Unpublished Ph. D. thesis, Australian National Univ.), 1972.

2) The figures for 1966–70 or 1965–70 are recent estimates of the author.

another, to show interest in birth control.⁵ The government stance was pronatalist reflecting preoccupation with military strength over North Korea in terms of population size.

The 1960 Census disclosed an unacceptably high rate of population increase, 29 per thousand annually during the intercensal period 1955–60.⁶

⁵See Taek Il Kim, John A. Ross, and George C. Worth, *The Korean National Family Planning Program* (The Population Council), New York, 1972, pp. 39–44, and also J.C. Caldwell, "Family Planning Policy Development in Korea" (Unpublished mimeograph), 1969.

⁶There is some disagreement concerning the rate of population growth for each intercensal period after 1955. Detailed discussion on quality of the Korean Censuses of 1955–70 and its impact on reliability of the growth rates calculated directly from the

This large increase has been attributed to a post Korean War baby boom and a substantial mortality decline due to a greater availability of antibiotics after the war. The annual growth rate was taken as a warning by policy makers as well as population specialists as to the seriousness of population problems Korea was facing. Realizing a rapid growth was a major hindrance to economic growth in Korea, the new military government adopted a population control policy, or the national family planning programme, in 1962 for the first time in the nation's history. This was a part of the first five-year economic development plan started in the same year, with a target to lower the annual growth rate to 25 per thousand by 1966, the closing year of the economic plan. Since then, the family planning programme has become an integral part of various government development plans, and has resulted in a very significant decline in fertility in a short period of time.

During 1960–66, a moderate decline in population growth was recorded. According to the 1966 Census, the annual growth rate for the intercensal years 1960–66 was 26.5 per thousand, revealing a 2.2 point reduction from the previous intercensal growth rate. Major contributors to this reduction were the cessation of the baby boom which started around 1960, rapidly increasing incidences of induced abortion in the early 1960s, particularly in cities, and the continuously rising age of women at first marriage. The effect of family planning on fertility reduction in its earliest stage was very minor, but is found to have been significant since 1965. Coincidentally, substantial changes occurred in many aspects of Korean life during the same period. The economy began to grow fast, taking off after a century long stagnation. The agricultural population or farmers decreased considerably in proportion to the total population. The level and opportunity of education began steadily increasing. Urbanization was perpetuated through large volume of rural to urban migration. In a word, modernization and urbanization have been major forces of social change during the past two decades, and population change should be viewed as an essential part of this overall societal transformation.

An even more drastic decline in the rate of population growth was reported during 1966–70. The 1970 Census disclosed an annual rate of population growth for the intercensal period 1966–70 as 19 per thousand, showing a decline of 8 points from that for the previous intercensal period. There is little doubt that the most important contributing component to this reduction is a remarkable decline of fertility resulting from the successful implementation of the national family planning programmes. During this period, the marriage age of women showed a further increase and the rate of induced abortion increased in both urban and rural areas. The same census

Censuses is given in Tai Hwan Kwon, "Evaluation of Adequacy and Accuracy of Census Data," in Yunshik Chang, *et. al.*, *A Study of the Korean Population 1966* (The Population and Development Studies Center Publication Series, No. 12, Population and Development Studies Center), Seoul, 1974, pp. 12–18.

revealed that the population of Korea reached 31,435,000 in 1970 with a very high density of 319 persons per square kilometer, or 1,362 persons when only considering arable land, pointing out the seriousness of the population problems Korea is now facing.

The trends of the net reproduction rate largely follow those of population growth (natural growth) after the Korean War. As is shown in Table I. 2, the net reproduction rate which was observed as 2.3 in 1955–60 declined to 2.2 and further to 1.8 during 1960–65 and 1965–70 respectively. However, when the provincial or urban-rural growth rates are compared, large discrepancies are found between the trends in natural growth and net reproduction rate. According to the natural growth rates, there is no consistent and significant difference between urban and rural areas and among provinces. On the other hand, very distinctive trends and patterns are observed with the net reproduction rates. Unlike the natural growth rates, the net reproduction rates reveal a widening gap between urban and rural areas.

Also provincial differences in the reproduction rate had increased. The most notable decline is observed in metropolitan areas of Seoul and Busan, and the Gyeonggi area which surrounds Seoul. In Seoul, the net reproduction rate was reduced from 1.95 to 1.16,⁷ in only one decade from 1955–60 to 1965–70. This observation points out directly the fact that internal migration, particularly rural to urban migration, has been a determining factor not only of regional population growth, but also of the levels of births and deaths through changes in the age-sex structure of its population.

⁷Calculated under the assumption that the age specific death rates are the same as the national ones. For the validity of this assumption, see Chapter II.2.

II. COMPONENTS OF POPULATION GROWTH

1. Fertility

Historical Overview

Very little was explored concerning the development of the Korean population prior to 1925 when the first census in the modern sense was undertaken in Korea. Such was also the case in fertility trends. The levels and trends of fertility before 1925 are, however, hinted at by comprehensive information in population change after 1925 and some historical documents.

According to an estimate based on the Korean Censuses of 1925 and 1930, data on population growth during the Yi Dynasty and registration statistics in the early colonial period, the crude birth rate ranged between 35 to 40 per thousand population during the 17th through the 19th centuries. This is indicative of the fertility level of Korea traditionally determined in the pre-modern agrarian setting. This traditionally high fertility or birth rate was undoubtedly a result of the demographic situation of the time which necessitated a large number of births to compensate for the high death rate particularly at infant ages. The need is reflected in traditional Korean culture in many ways shaped largely by Neo-Confucian principles. Strong normative emphasis on the succession of the family name through sons, fertility, in particular the birth of a son, as the most important determinant of women's status, and early universal marriage system are the examples, and these naturally gave rise to the large family size value. Absence of any effective methods of fertility control and abortion also contributed to high fertility in traditional Korea.

The traditional marriage institution and values of Korea did not consistently favour high fertility. Prohibition of remarriage of widowed women might have held down fertility to some extent. Strong son preference, which is regarded as the core of high fertility attitudes in Korea, might ironically have lowered the level of total population growth, by generating relatively high mortality for females through poor care and diet of daughters as well as adult women. Poor health conditions of women would also have been a cause of lowering the fecundity of the population to a certain degree.

Departure from the traditional fertility pattern started between 1910 and 1920 when the population of Korea entered the first stage of the demographic transition with a gradual decline in mortality. As is shown in Table II. 1, the crude birth rate was marked by a significant increase in the 1920s,

but the trend was reversed for the remaining colonial period 1930–45. The total fertility rate reveals very little change during 1925–45. However, when only the fertility of married women is considered, the level of fertility shows an incessant rise throughout the entire colonial period (1910–45). These differential trends among various fertility indices are both the indication and the result of various demographic changes under the Japanese colonial rule: rising age of women at marriage, changing age distributions due to increasing size of emigration to Japan and Manchuria, and rapid mortality declines. It is clear that, if other conditions were constant, the crude birth rate should have increased throughout the entire colonial period.

According to the 1925 Census, the age of women at first marriage was 16.6. This increased to 17.7 in 1940. The proportion of currently married women was 72 per cent in 1925 and 66 per cent in 1940. This postponement of marriage of women naturally resulted in a drastic decline in fertility of women at ages 15–19, and thus contributed to a large extent to the reduction in the crude birth rate during 1925–40. On the other hand, the reduction of women's mortality in the reproductive ages due to improving health conditions and medical facilities is regarded as having caused gradual increases in fertility for all childbearing ages in the absence of any effective measures of controlling pregnancies and births.

During the fifteen-year period between 1940 and 1955 which includes World War II, liberation of Korea from the Japanese rule, partition of the nation into two Koreas, and the Korean War, the trends of fertility and births underwent an unusual course of development. It is expected that the wars and socio-economic as well as political disturbances lowered the level of fertility to some degree. An estimate based on the Korean Censuses of 1940–60 reveals the crude birth rate for 1940–50 lower by about 5 per cent than that expected without such disturbances. During the Korean War years, the crude birth rate declined further, with the sharpest drop in 1951. Considering the fertility of currently married women only, however, no marked disturbances in its course were observed during 1940–55.¹

Again the main factor in fertility change was the continuous postponement of marriage of women. The wars, especially the Korean War, directly caused delays in marriage by conscripting young men at marriageable ages into the military and labour forces. The age of women at first marriage rose by almost 3 years between the fifteen-year period 1940–55, (see Table III. 3) The proportion of single women showed a noticeable increase not only in the ages 15–19 but in 20–24. As a result, the level of fertility for these two quinquennial age groups was reduced considerably. During the Korean War, a marked increase in the proportion of widowed women due to a large number of deaths of soldiers was also noticed. Besides the wars, a sizeable repatriation of Koreans from Japan and Manchuria, and refugee and

¹Tai Hwan Kwon, *Population Change and Its Components in Korea 1925–66* (Unpublished Ph. D. thesis, Australian National University), 1972, pp.207–208.

Table II.1
 Estimated Crude Birth Rates and Total Fertility Rates
 1910–70

year	CBR (per 1000)	TFR
1910–	35–40	—
1910–15	38	—
1915–20	40	—
1920–25	42	—
1925–30	45	6.2
1930–35	44	6.1
1935–40	44	6.2
1940–45	42	6.1
1945–50	42	6.0
1950–55	40	5.6
1955–60	45	6.3
1960–65	42	6.0
1965–70	32	4.6

Source: 1) The figures for 1910–25 are estimated from census results of 1925 and 1930 and the observed trend of population growth in the late Yi Dynasty.

2) For 1925–1966 the figures are derived from Tai Hwan Kwon, *Population Change and Its Components in Korea 1925–1966* (Unpublished Ph.D. thesis, Australian National University), 1972.

3) The figures for 1966–1970 are recent estimates of the author.

return migration from North Korea, deteriorating economic and health conditions, and extreme social unrest would have contributed, though to a lesser extent, to the deferment of marriage.

This period of political and social disturbances is of special significance to population development after the Korean War. Traditional settings of life and behaviour were greatly weakened during this period, thus allowing a path for rapid societal transformation: the occupation of South Korea by the United States in 1945 and subsequent ties between the two countries meant a strong Western influence to Korean culture and society; population pressure began to be felt through a large population influx into the country in a fairly short time and acute economic difficulties. In a word, the general socio-economic conditions for fertility reduction began to mature in Korea in this period of unrest and disturbances.

Recent Fertility Transition

Immediately after the Korean War, a baby boom erupted similar to that of the Western countries after World War II. This could be mostly explained by reunion of many couples separated during the war and a rush of marriages deferred by the war. Considering the fact that fertility control methods were rarely available and practised before the 1960s, the baby boom could

be only temporary and last only a few years. This distinguishes the post Korean War baby boom from that in Western countries after World War II.

The crude birth rate for 1955–60 was estimated as 45 per thousand population and the total fertility reached almost 7. About 10 per cent of this rate was accounted for by the baby boom. As is clear from Table II. 2, marital fertility increased for all reproductive ages during 1955–60, which was the highest in recent history of the country. Age specific fertility for the young women at ages 15–24 was however lowered due to the continuously rising age of women at marriage. The peak in the post war fertility increase was in 1957. Thenceforward the level of fertility started to decline as the baby boom ceased and was not much prompted by the adoption of fertility control methods.

During this period Korea witnessed for the first time an awareness among social scientists and medical doctors, of the seriousness of the potential problems with rapidly growing population. Induced abortions were found often in cities, though illegal and unaccepted by cultural norm. This was one element of the demand for family planning. Perception of the demographic situation had changed and children's risk of dying was significantly reduced. In other words, one of the most important traditional determinants of high fertility attitude became insignificant in the late fifties. Again economic hardship after the war, the increasing educational cost of children, and the changing socio-economic structure, particularly of cities, brought about a change in the attitude toward children's value; viewing children as burdens rather than productive assets.

Fertility behaviour began to be transformed very rapidly since 1960. Deliberate fertility control was widely noticed among women at late reproductive ages in cities. This coincided with the changing attitude toward a smaller family size. Before the official introduction of the family planning programme in 1962 and in its initial stage, induced abortion, which was illegal then, was the most popular and wide-spread method of birth control. Also a rise in marital age of women continued to contribute to the reduction of fertility at the early reproductive ages 15–24. As a result, the crude birth rate and total fertility rate for 1960–65 showed modest declines to 42 and 6.0 respectively. Though the level of the fertility decline was not so marked, this was obviously a period of demographic significance in Korea. Fertility transition, or the process toward restabilization of the population with low fertility and mortality, started in this period. This is undoubtedly an outcome of the socio-economic changes in Korea since the turn of the present century and began to accelerate in the early 1960s with the Government's adoption of a policy of planned economic change. The process of fertility transition was greatly prompted by initiation of the national family planning programme by the government in 1962. The initiation of the family planning programme not only provided efficient channels and organizations for fertility control, but suppressed organized

activities and strong voices against family planning. This also provided many women with an acceptable outlet of hidden desire for controlling their family size.

During the five years from 1965 to 1970, fertility underwent a drastic decline unprecedented in other countries. As is shown in Table II. 2, the crude birth rate for 1965–70 was reduced to 32 per thousand, and the total fertility rate to 4.6. The peak year in fertility reduction was 1966. The crude birth rate dipped to 35 per thousand population in 1966 from around 40 in 1965. The reduction was most noticeable in urban areas, particularly in Seoul. Since 1966 the level of fertility or births declined rather gradually. The fertility decline occurred in all reproductive ages. The least affected was the age group 25–29. For the young ages 15–24, the major contributing factor was a further delay in marriage. The age of women at first marriage reached 24 in 1970 which places Korea among the countries of late marriage of the world. The incidence of induced abortion increased sharply among women at late reproductive ages. Out of a hundred pregnancies, 23 pregnancies were terminated in induced abortion among the women at ages 20–44 in urban areas and 11 pregnancies in rural areas in 1966. The corresponding figures were 35 and 20 in 1970.² Adoptors of contraceptive methods spread rather widely over the ages 30–49, with a slight concentration in later ages. The marked reduction of fertility in 1966 could be partly accounted for by a traditional value on the animal year of birth of children. According to the Chinese lunar calendar, which is still in use among a majority of Koreans in one way or another and has particular importance in marriage matching, 1966 was called the 'White Horse Year' which comes every sixty years. The customary belief stipulated that women born in the White Horse Year were born with misfortune and therefore ought not to be married. The observance of this custom caused a 30 per cent decline in fertility in Japan in that particular year. In Korea a survey reported that only 40 per cent of the women surveyed did not mind having a baby in the White Horse Year. Even in cities, more than 50 per cent of the women interviewed showed a negative attitude.³ The impact of this custom on the level of fertility is considered to have been much greater in cities where the methods of controlling fertility and births were readily available, than in rural villages where the methods were just introduced and the knowledge of those methods was very limited. The course of fertility change in Seoul, the largest metropolitan area in Korea, a decline to near replacement level in 1966 and a slight increase thereafter, can be also explained in the same context. On the whole, the occasion obviously hastened the pace of

²Sung Bong Hong, *Jungkug Inkong Yusan eu Siltae* (National Status of Induced Abortion), Chesin Eihaksa, Seoul, 1972, pp. 16–17.

³E.H. Choi & J.S. Park, *Some Findings from the Special Demographic Survey* (PDSC Publication Series No. 3, the Population and Development Studies Center), Seoul, 1969, pp. 130–131.

fertility reduction and contributed greatly to early dissemination of knowledge and practice of family planning methods.

During the sixties many changes were observed in various attitudes relating to fertility behaviour. The nuclear family ideal diffused greatly. A significant portion of the young generation began to exhibit little sex preference and to be satisfied with two children family. Awareness of population pressure on the national life as well as the individual grew rapidly and spread widely among influential sectors of the society. Rapid economic development and urbanization during this decade put growing pressure on large families by increasing the level of expectation in everyday living on the one hand and by generating to many people strong feeling of relative deprivation on the other. In a word, Korea's fertility transition in the sixties was a combined result of various factors in societal change of the time, and those factors are expected to continue to affect the level of fertility in coming years.

Age and Marital Specific Fertility

The levels and patterns of age specific fertility and marital fertility during 1925–70 are presented in Table II.2. The fertility for the age group 15–19 declined markedly since 1925; during 1925–30, the fertility rate was estimated as about 190 per thousand women and was reduced to about 10 in 1966. A similar pattern, but much less pronounced, was observed for the ages 20–25. This was undoubtedly a result of the postponement of marriage of women described earlier. The proportion of single women was reported to be only 27 per cent at ages 15–19 according to the 1925 Census. The corresponding figure in 1966 was 96 per cent. When only marital fertility is concerned, no such declining trend could be found. Rather a slight upward trend is seen with marital fertility in those age groups until 1960 and before the introduction of fertility or birth control methods. The five year period 1950–55 which includes the Korean War years was apparently not an exception. And this suggests that the birth rate during this period was affected mostly by the postponement of marriage due to war, and less by the fall in marital fertility itself.⁴ The continuous postponement of marriage naturally resulted in continuous increases in median or mean age of the fertility and birth schedule, and in the interval between generations. For example, the median age of fertility schedule rose from 27.0 in 1925–30 to 28.3 in 1945–50 and 29.6 in 1960–65.

On the other hand, induced abortion and contraceptive practice contributed greatly to the recent reduction of fertility at the late reproductive ages, particularly at age 35 and onwards. The impact of deliberate fertility and birth control on the level of fertility for women aged 20–34 has not been significant until recently, though it is gradually increasing. Considering that

⁴Tai Hwan Kwon, *op. cit.*, 1972, pp. 200 & 207–209.

Table II. 2
Age Specific Fertility Rates and Age Specific Marital
Fertility Rates, 1925-70

a) Age Specific Fertility Rates

	1925- 30	1930- 35	1935- 40	1940- 45	1945- 50	1950- 55	1955- 60	1960- 65	1965- 70
15-19	189	173	158	128	96	45	38	20	12
20-24	324	321	323	313	305	289	308	255	180
25-29	269	270	281	286	292	287	335	351	309
30-34	214	216	225	228	234	233	270	274	223
35-39	153	155	161	164	167	168	194	189	134
40-44	75	77	80	81	83	83	96	92	59
45-49	14	14	15	15	15	15	18	17	10

b) Age Specific Marital Fertility Rates

	1925- 30	1930- 35	1935- 40	1940- 45	1945- 50	1950- 55	1955- 60	1960- 65	1965- 70
15-19	276	273	283	291	300	312	357	356	350
20-24	340	336	350	359	369	385	440	443	394
25-29	283	280	292	299	308	320	367	383	346
30-34	230	227	237	243	250	260	298	295	237
35-39	171	169	176	180	185	193	221	212	148
40-44	90	89	93	95	98	102	117	111	71
45-49	18	18	19	19	20	21	24	22	13

Source: See Table II. 1.

fecundity and actual fertility is usually very high in the ages from 20 to 34 and falls rapidly after 35, we can presume that changes in marital behavior have more potential significance in the growth of the Korean population in the long run.

Differential Fertility

According to the crude birth rates, there have been very minor but fairly consistent fertility differences between provinces until 1950. The difference in the level of births, though very small, widened during the colonial period and narrowed during the following 1945-50 period. The provincial differences in total fertility however remained little changed in this period. The differential level of births between urban and rural areas, though the overall proportion of the urban population was very small, was very considerable. The crude birth rate in cities was about 15 per cent higher than that in rural villages. The urban-rural gap was greater when measured using the total fertility rate, showing more than a 20 per cent difference. When only marital fertility is concerned, the pattern of provincial fertility variations is very different from those observed with the crude birth rate and total fertility. No

great gap in marital fertility was seen between urban and rural areas.⁵

These observations directly suggest two basic demographic factors causing regional differences in the level of births and fertility. They are differential marital composition, in particular age of women at marriage, and changing age-sex composition in each area. A strong association between the level of births or fertility and the age of women at marriage can be easily demonstrated among various regions and provinces for each quinquennial period between 1925–50. During the entire colonial period and the post liberation period up to the end of the Korean War, international and to some extent internal migration brought about significant differences in the age-sex composition between the provinces and urban-rural areas, thus affecting the level of births in those areas. For example, the regional differences in the level of births widened during 1925–40 in close agreement with the growing regional differences in age-sex composition due mainly to large emigration of the Korean population, and narrowed during 1945–50 as the regional differences in age-sex composition were reduced with large scale repatriation and return movement of the previous migrants.⁶

During the years of the Korean War, regional differences in fertility increased greatly. The regional patterns of differential fertility changed year to year according to the course of the war. But when the fertility for the five-

Table II. 3
Per Cent Ratios of Urban, Rural, Seoul Fertility
to National Level, 1930–70

	1930	1935	1960	1966	1970
<i>Crude Birth Rate</i>					
Urban	85	87	85	81	101
Rural	101	101	106	110	99
Seoul	80	86	83	75	102
<i>General Level of Age Specific Fertility Rate*</i>					
Urban	77	77	77	71	84
Rural	101	102	110	118	116
Seoul	72	73	72	61	79
<i>General Level of Age Specific Marital Fertility Rate*</i>					
Urban	92	93	87	80	90
Rural	100	100	105	110	108
Seoul	90	96	84	72	87

*Number of Births reported or estimated in each area/Number of Births expected with the ASFR (or ASMR) for the nation and the age and marital structure in the area \times 100.

Source: See Table II. 1

⁵*Ibid.*, pp. 214–225.

⁶*Ibid.*, pp. 354–367.

year period 1950–55 is considered as a whole, the differential pattern is very similar to those for the colonial periods, and also somewhat consistent with those in the post Korean War years. During 1960–65 when the rapid fertility transition started, the gap in the level of births and fertility including marital fertility widened considerably among the provinces and between urban and rural areas. The increasing differences between cities and rural villages were particularly noticeable. This tendency was undoubtedly related to differences in the cessation and timing of the post Korean War baby boom and rapid spread of induced abortion in the cities. It was also expected that fertility control began to prevail in urban areas and in some provinces, while most of the country was still little affected by the government fertility control programme initiated in 1962. The regional gap, in particular the urban-rural gap, showed a continuous increase up to 1967 with differential dissemination of family planning methods and differential rate of incidences of induced abortion.

The Korean cities experienced a marked fertility reduction in a very short period of time in the early and mid-sixties. For example, the total fertility rate was estimated as 5.4 for 1955–60 in Seoul. But the rate declined to 4.5 for 1960–65 and further to 3.0 in 1966, the level for bare replacement of the population given a stable age structure. The equivalent figures for the nation were 6.3, 6.0 and 5.1 as is presented in Table II.1. Taking the fact into account that the national figures are inclusive of those for urban areas, we can clearly see how great are the differences in the pace of fertility reduction between urban and rural areas until 1967. Since 1968 urban fertility has largely leveled off or even slightly increased while rural fertility began to decline rapidly. As a result, the urban-rural gap in fertility has again narrowed since 1968 though still significant. It is interesting here to note how strongly the population desired to have smaller families consciously or unconsciously around 1960 when effective birth or fertility control methods were not widely available, and how fast the population was motivated to adopt the methods to limit their family size. Also, the observations confirm a general pattern of fertility transition in developing countries that the desire for smaller family size develops, and the control methods adopted, first in cities, especially big cities, and then spread to rural areas.

No data are published or available on socio-economic differentials in fertility before 1960. However, the Censuses of 1960–70 and various recent demographic and family planning surveys provide some information from which we can assemble a picture of fertility differences in terms of socio-economic background of the population. Almost every recent survey or census on children ever born or on maternity history shows clear fertility differences by the level of educational attainment of women at least from the period the survey or census could trace back, usually from the 1940s; the higher the level of educational attainment, the lower the fertility. Among various socio-economic variables, only those which are closely related with

the level of education, such as the degree of reading newspapers and the occupation of the husband, manifest significant differences in fertility. On the other hand such important socio-economic variables as religion, the type of family they had or have, and the standard of living do not reveal any marked association with the level of fertility.

Until 1960, the fertility differences by socio-economic variables, as regional differences, had been largely caused by differential age at marriage and marital distribution of women in reproductive ages. Marital fertility does not appear to have differed significantly by socio-economic background of individuals.⁷ Since 1960, some socio-economic variables, in particular education, have become important factors differentiating fertility behaviour, including marital fertility, through differential access to abortion and contraceptives. In the early stage of birth control, those exposed to it were among the educated, those with any form of urban residential background and those with less traditional values, and accordingly the differential in fertility increased in line with the degree of so-called urbanization and modernization background until around 1967 or 1968 when effective methods of family planning reached all eligible couples throughout the nation. With the decreasing regional gap, socio-economic differentials in fertility are also expected to narrow again.⁸

2. Mortality

Early Mortality Transition

The second decade of the present century could be recorded as one of the most important turning points in the history of Korean demography. During this period the Korean population entered the first stage of the demographic transition with a mortality decline resulting largely from the development of modern health and medical systems. Mortality reduction has persisted ever since with a noticeable exception during the Korean War. The post Korean War years marked the second epoch of mortality decline in Korea. Very rapid and drastic reduction in mortality was observed around 1955 with fast dissemination and large availability of antibiotics throughout the country.

The level of deaths in the later part of the Yi Dynasty can be conjectured roughly from the evidences on population growth in the same period, the levels of birth and death rates during 1925–30 for which the first

⁷Hae Young Lee and Tai Hwan Kwon, 'Differential Fertility in a Korean Middle Town: Ichon Eup,' (Unpublished manuscript).

⁸For example, fertility differentials between slum areas and other areas in Seoul were reported to have narrowed recently. See Jae Mo Yang, *et. al.*, 'A Base Line Survey of Family Planning Program in Urban Slum Areas through Church Activities,' (Unpublished mimeograph), Seoul, 1973.

reliable demographic estimates are most likely, and age distributions of the population in 1925 and 1930 and likely patterns of changing age distributions before those years. From these materials the crude birth rate in the 17th through 19th centuries could be estimated in a range of 32 to 37 per thousand per annum. The expectation of life at birth, a more comparable index of mortality among societies, is considered to have been around 30 years for both men and women. The death rate dropped to 26 and further to 24 per thousand population during 1925–30 and 1930–35. The expectation of life at birth for the same periods were estimated as 37 and 40 years each, as is presented in Table II. 4. These figures are self-sufficient to indicate at least that the level of mortality began to fall before 1925. Nevertheless, it is not an easy job to determine when the mortality transition from the traditional high level actually started. Considering the fact that various socio-economic changes took place around the turn of and early in this century, we can still reasonably assume that a continuous significant decline in mortality was initiated between 1910 and 1920. Some records on development of health and medical systems in Korea also confirm this.⁹

In traditional Korea, there was no institutionally organized health and medical system. Private herb doctors were in practice and herb medicine was readily available all over the country. There is no doubt that these are very effective to cure some diseases and thus contributed to some extent to control the level of mortality in traditional Korean society. But it is widely known that these have little control on infectious and epidemic diseases which were then the most important causes of deaths. At the end of the 19th century, the first historical attempt to introduce preventive care and effective medical institutions was made in Korea. In 1897, the Korean Government issued various regulations relative to vaccination for epidemic diseases such as cholera, typhoid, dysentery and diphtheria. Before Annexation of Korea to Japan in 1910, a few public hospitals and a medical school were established. Vaccination and sanitary measures in general were initiated. Despite their historical significance, these innovations reached only a very limited portion of the population. It is after the Annexation that the government (Government-General) formulated a rather active plan to improve and disseminate the system of medical and hygienic services.

The most significant effort was made in preventing infectious diseases. The ordinance on prevention of infectious diseases was first issued in 1917 and revised in 1928. Quarantines were enforced at the seaports to prevent the intrusion and spread of epidemic diseases. Considerable efforts were made to prevent tuberculosis. Since 1915, vaccination as a preventive against smallpox has been enforced through the local administrative organization.

⁹The following discussions on development of the health and medical systems in colonial Korea are summarized from Yunshik Chang, *Population in Early Modernization: Korea*, (Unpublished Ph. D. thesis, Princeton University), 1966, pp. 279–292.

Medical and health organizations were developed concomitantly. The government established a public hospital in each province and medical schools at the college level to train proper medical personnel. Private hospitals were set up according to the government hospital regulations and their number increased rapidly. It was also attempted that public hospital doctors be engaged in circuit work for the doctorless hinterland.

The experience of developed countries indicates various socio-economic changes, particularly industrialization and so-called modernization, are closely related to mortality change. Marked industrial development in Korea started in the very early part of this century, taking off from the traditional agricultural economy. Industrialization was continued throughout the colonial period. However, there is some doubt whether colonial industrialization, which was based on the exploitation of Korean labour and achieved at the expense of deteriorating living conditions of Koreans to a large extent,¹⁰ contributed greatly to the reduction of mortality in the colonial days. The only decisive aspect we can mention in this regard is railway constructions and development in transportation network started at the end of the 19th century. We can readily assume that this could have eliminated one of the major traditional hazards of food supply and redistribution among various regions of the country which is also considered as an important factor affecting the level of mortality.¹¹

During the fifteen year period from 1940 to 1955, which includes World War II, the Korean War and other important political events like the partition of the nation, Korea experienced very unusual population development. It is natural to assume that the wars would affect the level of births and deaths, particularly the latter. This period also witnessed a large flux of population movement across its boundary and between the North and South. This kind of unusual development with lack of data on population change for these periods makes it extremely difficult to obtain reliable estimates of demographic indices. As a result, the discussion on the level of mortality in this period becomes inevitably subject to how one conceives the socio-economic and health conditions of the time and subject to what one thinks were the main factors determining mortality then.

According to vital registration data, there was an increase in mortality during 1940–44. However, because of apparant overregistration of deaths during these years relative to those for the previous years, we cannot draw any conclusion on the trend of mortality during the World War II years. Though involved in the war, as a staging and supplying area, Korea was out of the actual battle for all the war years, and only a few Koreans were sent to

¹⁰For detailed discussions, see for example, Ki-zun Zo, "Hankug Keundae Kyungje Baldalsa", (History of Development of Modern Economy in Korea), *Hankug Munwhasa Daekje II*, Korea University, Minjog Munwha, Seoul, 1965.

¹¹D.J. Stolnitz, 'A Century of International Mortality Trends-I,' *Population Studies*, Vol. 9, No. 1, 1955, p. 28.

battle fields. Economic conditions deteriorated during the war. But in view of the earlier decline in mortality having been caused without any substantial improvement of living conditions of individuals, economic hardship during the war can be thought to have had little impact on mortality. Some retrenchment in public health measures, though little is known in this regard, would have resulted in an increase in the risk of dying. Most Koreans suffered from food shortages during the war, but the rationing of food and other important daily necessities, which was in operation during the war, could have prevented further deaths due to uneven distribution of food. In a word, the level and course of mortality of Koreans in Korea can be assumed to have been little affected by the war. The age distribution of the population in later years also partly supports this view.¹²

The economy deteriorated irrecoverably and all the colonial systems including the health and medical system, broke down after World War II. Though provided substantial aid, the American Provisional Government made almost no attempt to restore or to develop the Korean economy. The economic rehabilitation started only around 1949 by the newly established Korean Government which was again wiped out a year later with the outbreak of the Korean War in 1950. This development naturally leads us to a conjecture that the level of mortality increased substantially during 1945–50. But there is another aspect we should not overlook; the aid from the States which comprised mainly two items, food and medicine, between 1945 and 1950. Famines prevailed and some epidemic diseases like cholera erupted throughout the country immediately after World War II. The situation worsened with a large influx of repatriates from overseas and refugees from the North. Epidemic diseases however were largely controlled from 1947 due to increased availability of new medicine through aid. The hazard of famine was partially alleviated by food aid. In this light, any substantive rise in mortality during 1940–50 is unlikely. We can assume from the above observations that the crude death rate would have been 20–24 per thousand and the expectation of life at birth 37–40 years during the decade 1940–50.

The mortality situation during the Korean War 1950–53 was quite different. The direct casualties of the war were very heavy. The government reported that there was a total of 403 thousand deaths occurring during the Korean War.¹³ But according to an estimate from the age-sex structure of the population after the war and some other scattered materials, the number of extra deaths due to the war reach 1.6 million. Another estimate revealed that the crude death rate during the war years 1950–53 ranged between 36 and 47 per thousand a year averaging 42.¹⁴ As soon as the war was over,

¹²Kwon, 1972, *op. cit.*, p. 102.

¹³Bank of Korea, *Annual Economic Review 1955*, Seoul, 1955. See also Kwon, 1972, *op. cit.*, p. 291.

Table II. 4
Crude Death Rates and Expectation of Life at Birth by Sex,
1910-70

	CDR (per 1000)	expectation of life at birth	
		male	female
1910-	32-37	—	—
1910-15	34	—	—
1915-20	33	—	—
1920-25	30	—	—
1925-30	26	37.9	37.2
1930-35	24	40.4	40.1
1935-40	23	40.4	41.7
1940-45	23	42.0	44.8
1945-50	23	—	—
1950-55	33	—	—
1955-60	16	46.9	52.5
1960-65	15	48.1	53.5
1965-70	13	50.8	56.5

Source: See citation in Table II. 1 (Kwon, pp. 70-77, 87 & 105).

mortality began to drop rapidly. In 1954 and 1955, the rate was estimated as somewhere between 17 and 20 per thousand. If we consider the quinquennial period 1950-55, it would be around 33.¹⁵

Mortality Transition since 1955

Most Western countries experienced a substantial drop in mortality immediately after World War II owing to an invention of antibiotics during the war and their wide dissemination thereafter. A similar trend was observed in developing countries during the late fifties and the early sixties. Korea was not an exception. During the Korean War years, various new medicines including antibiotics were widely introduced to the country by the United Nations Forces. After the war, antibiotics became rapidly disseminated and available throughout the nation. The result was a marked fall in mortality. During 1955-60 the crude death rate was reduced by 4-6 points to 15 per thousand persons. This period also witnessed an increase in expectation of life at birth of 6-8 years which was equivalent to the total increase during the colonial years 1925-40.

This rapid reduction in mortality appears not to have been much related to any kind of economic development or the betterment of standard of living of the population, nor as we previously argued was the mortality decline during the colonial period. During the war, the country was devastated and most of the industrial facilities were destroyed. People were

¹⁴Kwon, 1972, *op. cit.*, p. 291.

¹⁵*Ibid.*, pp. 103-105.

destitute and the economic restoration or development was very slow. In a word, economic conditions were not favourable at all for controlling mortality. This clearly suggests that, as far as the Korean population is concerned, socio-economic changes exercised little direct impact on changes in mortality, while the impact is found to have been considerable in the case of fertility and migration.

There are wide disagreements among demographers in Korea about the level of mortality since 1960. The discrepancy among various estimates is too wide to be reconciled. For example, the government estimate of the crude death rate for 1970 is 8 per thousand, while our estimate from the census is 12 or 13 per thousand. The expectations of life at birth for 1965–70 is 61 from official life tables and 50 according to census estimates¹⁶ showing 11 years difference. When considering the relative quality of data from the Censuses of 1955 to 1970,¹⁷ the 50 years of life expectancy at birth might be a slight underestimate. The government estimate, however, appears to be obviously an overestimate.¹⁸

According to the estimates from census, the level of mortality has gradually declined since 1960. Life expectancy increased from 50 during 1955–60 to 54 during 1965–70 for both sexes. These reductions may be partly ascribed to rapid economic development since 1960. Equally or probably more important factors might have been the large expansion of health and medical services, public and private, and declining fertility due to increasing adoption of contraceptives and the postponement of marriage throughout the country. The numbers of medical personnel and facilities have increased. The quality of service is also expected to have greatly improved with the adoption of newly developed medical knowledge and techniques. But it should not be overlooked here that medical facilities and services are still heavily concentrated in cities and not available to a con-

¹⁶For official figures, see Economic Planning Board, Korea, *Abridged Life Table of Korea*, Seoul, 1966, (mimeo.) and *Korea Statistical Yearbook*, recent issues. For census estimates, see Yunshik Chang, *et. al.*, *A Study of the Korean Population 1966* (The Population and Development Studies Center Publication Series No. 12, the Population and Development Studies Center), Seoul, 1974, p.106, Tai Hwan Kwon, 'Evaluation of Adequacy and Accuracy of Census Data,' in Chang *et. al.*, *Ibid.*, p. 14, and Table II. 4 herein.

¹⁷Kwon, *ibid.*, pp. 12–18.

¹⁸In fact the government estimate was a conjecture based largely on assumed declines in mortality which should accompany economic development. Given however the weak relationship between economic development and mortality declines in the previous periods and the gaps which continue to exist in medical care, these assumptions do not appear sound. The 50% reduction in infant mortality during five years (from 100 per thousand births in 1955–60 to 50 in 1960–65) is a good case in point. Even by the later period only 5% of total births were attended by doctors and 7% by midwives. Even in Seoul attended births accounted for only 50% of the total. Large doctorless areas and widespread gaps in health and medical coverage lend more credence to the census estimates.

siderable portion of the population. We can also assume, though not clearly demonstrated yet, that fertility reduction could have improved the health conditions of mothers and also reduce the risk of dying among children by enabling mothers to give more care to their children in various ways.

Differential Mortality

It is very difficult to make any decisive judgement on the age-sex patterns of mortality in Korea because of the poor quality and lack of consistency of registration data on deaths. There is little choice but to make use of indirect data, mostly census statistics, to obtain somewhat reliable measures of mortality and its detailed patterns in Korea. In other words, it is highly possible that the methods and assumptions adopted for the estimation blur the real patterns. However, careful examination of census and registration data shed some light on important features of Korean mortality.

It is generally accepted that male mortality is higher than female mortality for all ages. But Korean mortality in the early colonial period did not follow this general pattern which has been observed for a long time in Western and many other countries. According to a series of life tables for Korea since 1925 which were constructed based on graduated census survival ratios, mortality for women was apparently higher than that for men at the crucial reproductive ages 20–34 until 1940. The data on deaths registered in 1939, which are considered as having exceptionally good quality so far as the adult working ages being concerned, also confirm this observation from the census.¹⁹ At least until 1930, the risk of dying was less among males than females in childhood ages 1–14 in Korea. This pattern would have prevailed by the end of colonialism.²⁰ Sons are considered more important and cherished in traditional Korean society in connection with the high valuation placed on ancestor worship, succession of the family name and dependence upon sons in old ages. There is no doubt that this strong son-preference was responsible for the higher mortality among girls than boys. A similar pattern was observed in Japan and Taiwan²¹ which share much of a common cultural heritage with Korea. Higher risk of dying for women than for men at vital reproductive ages can be partly explained in the same cultural context—the low status of women in traditional Korean society. This observation was made in the very first study of Korean mortality in 1939: “In this age span, female mortality is expected to be higher than male mortality considering the hazards of deaths such as

¹⁹Chosen Sotoku-fu, *Chosen Jinko Dotai Showa 14 nen* (Korean Vital Statistics, 1939), Seoul, 1941.

²⁰For more detailed discussion, see Kwon, 1972, *op. cit.*, pp. 122–130.

²¹For detailed discussion of the Taiwanese pattern, see G.W. Barclay, *Colonial Development and Population in Taiwan* (Princeton University Press), Princeton, 1954, pp. 154–157. Japanese patterns are clear from their official life tables.

Table II.5
 Estimated Age Specific Mortality Rates (q_x) By Sex, 1925–70
 (in thousand)

age	male				female			
	1925–30	1935–40	1955–60	1965–70	1925–30	1935–40	1955–60	1965–70
0	184	167	125	94	188	161	103	81
1–4	121	107	76	56	139	114	69	53
5–9	58	51	36	28	75	61	36	28
10–14	29	26	20	19	33	28	17	15
15–19	42	38	29	27	40	33	21	18
20–24	43	39	30	27	46	39	23	20
25–29	38	34	26	24	47	40	24	21
30–34	39	35	27	24	48	41	25	22
35–39	52	48	37	33	53	46	29	26
40–44	74	67	53	48	60	52	35	31
45–49	96	88	71	66	68	60	41	38
50–54	122	114	95	90	83	73	52	48
55–59	163	154	132	126	116	101	74	69
60–64	224	212	186	179	179	157	116	109
65–69	309	295	262	254	264	238	180	170
70–74	416	399	359	357	376	342	269	269
75–79	621	607	577	566	594	567	507	412

Source: 1925–60: Kwon, Table II. 1, pp. 70–77.

1965–70: The author's estimates.

pregnancy, bringing-up children and so forth. Actually this was the case in Japan and among the Japanese in Korea. It is doubtful whether female mortality was lower in Korea where females attained less education in general and were forced to live on a poor diet (to a large extent by custom)."²² Similar patterns were observed in many countries such as Japan and India before the introduction of major health measures and preventive medicine.

The sex differentials mentioned above became less pronounced with the reduction in mortality and almost disappeared after 1955. These observations clearly suggest that, in the traditional society of Korea where only limited methods and resources were available to control deaths, social norms and values played an important role in determining the patterns and level of mortality. In a situation of limited food and resources, how culture influences the pattern of mortality can be readily exemplified by that during the Korean War. Highly female selective childhood deaths were found during the war emergency.²³ The strong son-preference among Koreans was undoubtedly the sole cause for this differential.

This also leads a conjecture that the traditional culture would have gener-

²²Choe, Hui Young, 'Chosen Jumin no Seimeihyo' (Korean Life Tables), *Chosen Igakkae Zasshi* (Journal of the Korean Medical Association), Vol. 29. No. 11, Seoul, 1939.

²³Kwon, 1972, *op. cit.*, pp. 356.

ated relatively unfavourable mortality conditions for women compared to those for men regardless of age. Since the mortality transition started, the pace of reduction has been far faster for women than for men, and this could be partly explained by the weakening strength of cultural factors on the level of mortality as deaths became more and more controllable. As is clear from Table II. 4, the gap in the expectation of life at birth favoring women has increased by 6–7 years during the forty years between 1925–30 and 1960–65.

An estimate of the infant mortality rate (q_0) for 1925–30 was around 180 per thousand births. Another estimate claims the rate around 250.²⁴ It is doubtless that the infant mortality rate was much higher prior to 1925 and might have gone up to around 300 per thousand births before the mortality transition started. The infant mortality rate declined continuously, with possible exceptions between 1940 and 1955, as is clear from Table II. 5. According to our estimates from census survival ratios, about one out of ten infants died before they passed their first birthday during 1955–60. Since 1960, the reductions in the risk of dying of infants has been rather gradual. Judging from the census survivorship for each quinquennial period from 1925 to 1970 and mortality rates presented in Table II. 5, the reduction of mortality has been most conspicuous in infant and childhood ages and less pronounced in old ages for both men and women. In case of women, mortality change in reproductive ages also found to have been significant.

Data on regional differentials, by province and urban/rural areas, are available from registration since the early colonial period. However, most of them are of very poor quality with great differential level of registration by spatial unit, and therefore of almost no use. Only some scattered information enable us to make a rough conjecture about the regional differences in mortality. No information, except for causes of death by occupation, is available concerning the mortality differences by socio-economic background.

Because of differential age composition, the crude death rate is expected to have shown considerable differences in various regions and areas. But focusing only on the level of mortality, we cannot see any decisive regional differentials until quite recently and in the colonial days. Registration data revealed a much lower level of mortality in urban areas than in rural hinterland during the entire colonial period. But when the data and patterns are examined more closely, systematic misreportings of deaths and unlikely pictures emerge. After a comprehensive analysis of the mortality for 1939–41 from the registration by age and selected provinces and cities, we have reached the conclusion that there have been only slight provincial differences in the level of mortality and that urban mortality had become slightly lower than rural mortality, at most by 10 per cent, in the late colonial period.²⁵

²⁴*Ibid.*, pp. 130–132 and Choe, *op. cit.*, pp. 2180–2220.

The 1966 Special Demographic Survey provides information on the mortality differences between urban and rural areas for 1965–66.²⁶ According to this information, the crude death rate was higher, by 20 per cent for males and 25 per cent for females, in rural villages than in cities. However, when the death rates are standardized on the basis of the age distribution of the national population, the difference is reduced on only 3 and 7 per cent respectively. The survey does not produce any evidence for the usual claim that urban-rural differentials in mortality have widened with the drastic reduction of mortality since the Korean War. The quality of the survey might have distorted the real picture in this matter, but one may tentatively conclude that there is no significant difference in mortality between urban and rural areas or between provinces.

One of the important reasons for this slight regional difference in mortality both during the colonial period and in recent years might be the prevalence of oriental (or herb) doctors all over the nation and their acceptance of new Western medicine in their practice though most of them were not licensed. Another reason of little difference in mortality between urban and rural areas might be the insecurity of urban life both financially and emotionally. In rural areas, though the general living conditions are poor, people usually get help from relatives or neighbours in the case of illness or other difficulties. On the other hand, in urban areas people often have to work, even they badly need rest, in order to support their family.²⁷ Also it should not be overlooked that the conditions and the level of living in urban squatter areas, which comprise a significant portion of the city population, were poor even by the rural standard.

3. International Migration

Emigration of Koreans during the Colonial Period 1910–45

During the Japanese colonial period, overseas migration of Koreans was largely limited to Japan and Manchuria. Movement to Manchuria had a long history, and constituted the only significant outflow of Korean people until 1920. Most of the migrants had originated from the northern and north-eastern part of Korea (including the present territory of North Korea). They were also the poor peasants who moved across the border in search of virgin land in southern Manchuria and Far Eastern Siberia.²⁸

²⁵*Ibid.*, pp. 110–119.

²⁶E.H. Choe and J.S. Park, *Some Findings from the Special Demographic Survey* (The Population and Development Studies Center), Seoul, 1969, p. 28.

²⁷Kwon, 1972, *op. cit.*, p. 119.

²⁸Yun Kim, *The Population of Korea 1910–1945* (Unpublished Ph.D. thesis, Australian National University), 1966, p. 193.

Table II. 6
Size of Net Migration of Koreans to Japan and Manchuria,
1910–45

	Japan	Manchuria
1910	1,000	29,800
1911–15		120,200
1916–20	34,000	174,600
1921–25	138,300	24,200
1926–30	200,300	101,400
1931–35	262,400	175,500
1936–40	456,500	565,200

Source: Japan; Compiled by Jai Il Park in *Zainichi Chosenjin ni Kansuru Sogo Chosa Kenkyu* (A Study of Koreans in Japan), Tokyo, 1957, pp. 22–31.

Manchuria; Compiled by Chul Kim, *Kankoku no Jinko to Keizai* (The Population and Economy of Korea), Tokyo, 1965, p. 31.

The movement to Japan started later and was a direct outcome of the colonization of Korea by Japan. The number of Koreans in Japan however increased very rapidly in the 1920s when Japan became a strong attraction to poor Korean farmers in the southern agricultural area. With an increase of migration to Japan the flow of Koreans to Manchuria was sharply reduced. The movement to Manchuria revived again in the 1930s, prompted by a deteriorating agricultural economy in Korea and the strong restrictions imposed upon the migration of Koreans to Japan.²⁹ Unlike in the earlier stage, a majority of the migrants to Manchuria in the late 1930s originated from the densely populated south.

One of the striking differences between the two movements is found in the return movement among the migrants. In the case of Japan, more than half of the migrants appear to have returned according to the Japanese registration statistics on Koreans who entered and left Japan throughout the entire colonial period. On the other hand, most of migrants to Manchuria are known to have settled there permanently.

During the colonial period, up to 1940, the outflow of Koreans increased without interruption regardless of the changes in the main direction of the movement. A substantial jump is observed during 1935–40. Around 900 thousand people or four per cent of the Korean population emigrated in this period. This was three times larger than the movement for the same interval during the previous decade. This sharp surge of migration was accounted for largely by the increasing share of migrants to Manchuria which was

²⁹Ki-Zun Zo, 'Hanguk Keundae Kyungje Baldalsa' (History of Development of Modern Economy in Korea), *Hanguk Munwhasa Daeye II* (Cultural History of Korea II), (Korea University, Minjok Munwha Yunguso), Seoul, 1965, pp. 813–84, 898–909, and S. Tsuboe, *Zainichi Chosenjin* (Koreans in Japan), Tokyo, 1965, pp. 181–19.

accompanied by the expansion of Japanese control into China. Another important trend in migration during 1935–40 is that very conspicuous differences by province and region developed. Though some provincial and urban-rural differences can also be discerned prior to 1935 from the growth rates of population, they are not as significant. During 1935–40 the loss of population was noticeable in the southern provinces, and a big difference was observed between the industrial North and the agricultural South.

The increasing tendency towards overseas migration diminished with World War II. During the five years between 1940 and 1945, 630,000 Koreans (net) or 2.5 per cent of the total population in Korea are estimated to have moved out of the country. This is equivalent to about 70 per cent of the net migration in the previous five years. The migration during World War II showed many marked characteristics. Unlike before, a substantial part of the migrants during 1940–45 consisted of those mobilized to Japan for the war.

The migration to Japan after 1939 could be largely characterized as mobilized migration. Table II. 8 shows the proportion of mobilized labour migration and provides a rough idea of the changing pattern of migration during the war though the quality of the data is suspect. The proportion of labour migration exactly coincides with the step up of the labour draft plan taken by the Japanese government. During 1939–41 when some restrictions on Korean migration to Japan were lifted but still the labour migration was on a voluntary basis, about a quarter of the total migrants were reported as

Table II. 7
Net Emigration of Koreans for Whole of Korea from Compiled
Census Survival Ratios, 1925–40

Age	A) Numbers in hundred			B) Per Cent Rates			C) Age Distribution		
	1925 -30	1930 -35	1935 -40	1925 -30	1930 -35	1935 -40	1925 -30	1930 -35	1935 -40
Male									
0-4	98	176	422	0.6	0.9	2.1	6.3	7.3	8.2
5-9	115	233	564	0.8	1.6	3.4	7.3	9.6	10.9
10-14	57	141	304	0.5	1.1	2.2	3.6	5.8	5.9
15-19	281	496	905	2.7	4.6	7.9	18.0	20.5	17.5
20-24	489	620	991	5.7	6.5	10.9	31.3	25.6	19.1
25-29	327	441	862	4.7	5.4	10.2	21.0	18.2	16.7
30-34	97	137	401	1.4	2.1	5.5	6.2	5.6	7.8
35-39	121	139	262	2.0	2.1	4.3	7.8	5.8	5.1
40-44	54	33	223	1.0	0.6	3.7	3.4	1.4	4.3
45-49	-8	6	96	-0.2	0.1	1.9	-0.5	0.3	1.9
50-54	-9	17	100	-0.2	0.4	2.2	-0.6	0.7	1.9
55-59	-33	-13	5	-1.1	-0.4	0.1	-2.1	-0.5	0.1
60-64	-13	1	15	-0.5	0.0	0.6	-0.8	0.0	0.3
65+	-13	-4	25	-0.4	-0.1	0.7	-0.8	-0.2	0.5
Total	1562	2423	5175	1.5	2.1	4.4	100.0	100.0	100.0

Table II. 7 (Continued)

Age	A) Numbers in hundred			B) Per cent Rates			C) Age Distribution		
	1925 -30	1930 -35	1935 -40	1925 -30	1930 -35	1935 -40	1925 -30	1930 -35	1935 -40
Female									
0-4	96	171	411	0.6	0.9	2.1	12.1	11.1	10.9
5-9	124	233	569	1.0	1.7	3.6	15.7	15.2	15.1
10-14	92	186	402	0.9	1.5	3.0	11.7	12.1	10.7
15-19	113	257	604	1.1	2.5	5.4	14.2	16.7	16.1
20-24	149	213	447	1.7	2.3	4.8	18.8	13.8	11.9
25-29	109	140	375	1.6	1.6	4.4	13.7	9.1	10.0
30-34	97	149	332	1.4	2.3	4.5	12.3	9.7	8.8
35-39	14	44	133	0.2	0.7	2.2	1.8	2.9	3.5
40-44	25	60	174	0.5	1.1	2.9	3.1	3.9	4.6
45-49	-12	15	81	-0.3	0.3	1.6	-1.5	1.0	2.1
50-54	-10	21	72	-0.3	0.5	1.6	-1.3	1.3	1.9
55-59	-4	16	52	-0.1	0.5	1.4	-0.5	1.0	1.4
60-64	-6	8	35	-0.2	0.3	1.2	-0.8	0.5	0.9
65+	5	25	72	0.1	0.5	1.5	0.6	1.6	1.9
Total	791	1536	3759	0.8	1.4	3.2	100.0	100.0	100.0
Both Sexes									
0-4	194	346	833	0.6	0.9	2.1	8.2	8.7	9.3
5-9	239	466	1134	0.9	1.6	3.5	10.1	11.8	12.7
10-14	149	328	706	0.7	1.3	2.6	6.3	8.3	7.9
15-19	393	753	1509	1.9	3.6	6.7	16.7	19.0	16.9
20-24	637	837	1438	3.7	4.4	7.8	27.1	21.0	16.1
25-29	436	581	1237	3.2	3.6	7.3	18.5	14.7	13.8
30-34	194	286	733	1.4	2.2	5.0	8.2	7.2	8.2
35-39	136	184	395	1.1	1.4	3.3	5.8	4.6	4.4
40-44	78	93	396	0.7	0.8	3.3	3.3	2.3	4.4
45-49	-20	21	177	-0.2	0.2	1.7	-0.9	0.5	2.0
50-54	-19	37	172	-0.3	0.5	1.9	-0.8	0.9	1.9
55-59	-37	3	56	-0.6	0.0	0.8	-1.6	0.1	0.6
60-64	-19	8	50	-0.4	0.2	0.9	-0.8	0.2	0.6
65+	-8	21	97	-0.1	0.3	1.1	-0.3	0.5	1.1
Total	2353	3959	8934	1.2	1.8	3.8	100.0	100.0	100.0

Source: See Table II. 1, Kwon, p. 261. '—' indicates net in-migration.

labour migrants. With the introduction of the "Draft System by Recommendation" in the 1942,³⁰ which meant half-forced migration, the proportion was almost doubled to around 50 per cent. However, in 1944 when compulsory personal draft laws were enforced, every kind of voluntary migration seems to have been stopped.

The character of the migration and its changes from one period to the next directly affect the sex differentials. With the increase in the size of

³⁰Tsuboe, *ibid.*

Table II. 8
 Number of Total Korean Migrants and Labour Draftees to
 Japan, and Percentage of Labour Draftees, 1939–44

	Total migrants	Labour draftees	Percentage of draftees
1939	176,956	49,819	28.2
1940	218,027	55,979	25.7
1941	242,469	63,866	26.3
1942	219,373	111,823	51.0
1943	272,776	124,286	45.6
1944	249,888	286,432	114.6

Source: Compiled by S. Tsuboe, *Koreans in Japan*, 1965, pp. 8 & 19–20.

migration overseas, sex selectivity among migrants was significantly reduced between 1925 and 1940. As shown in Table II. 7, the masculinity ratio declined from about 200 for 1925–30 to 160 for 1930–35 and 140 for 1935–40. The ratio, however, rose to more than 200 again during 1940–45. This increase might be related in part to the decline of the volume of overseas migration in this period. But more significantly, the imbalance in sex was widened by a big increase of the proportion of forced migration. Age selectivity was also intensified during 1940–45. The share of the ages 15 to 34 to the total migrants rose from 47 per cent for 1935–40 to 64 per cent for 1940–45, similarly again to that (62 per cent) for 1925–30. This increase, was, however, due largely to the increase of the proportion of female migrants in these ages and no significant change is observed for males only.

Influx and Redistribution of Population during 1945–49

It is estimated from the Censuses of 1944 and 1949 that a net of 2.6 million people entered South Korea during the period between the liberation of Korea in 1945 and the 1949 Census. According to the estimated number of net migrants during 1945–49 as presented in Table II. 9, those repatriated from overseas into South Korea numbered 1.8 million and the returnees and refugees from the Soviet-occupied North were estimated as 740,000 at the 1949 Census. The repatriated from Japan accounted for 75 per cent of the total repatriated from overseas and 55 per cent of the total net increase of population in South Korea by migration. During 1945–49, the rate of population growth for South Korea was estimated at 60, 67 and 53 per thousand of the total, male and female populations respectively. This vast increase of population was largely attributed to the immigration from overseas. This was equivalent to 72 and 65 per cent of the growth of male and female populations separately, yielding 69 per cent for the total. The net number of migrants during 1945–49 occupies 14, 16 and 12 per cent of the total, male and female populations each at the 1949 Census. This large movement of population was one-sided to South Korea without any signi-

Table II. 9
Repatriates and Migrants into South Korea, 1945–49

Source:	Registration		Survey	Estimation	
	Ministry of Foreign Aff.	Ministry of Social Aff.	1949 Census*	Kim	Kwon*
Japan	1,118	1,407	936	1,300	1,379
Manchuria & others	423	619	270	430	416
North Korea	649	456	481	150	740
Total	2,190	2,482	1,687	1,880	2,535

*Survivors at the time of the 1949 Census.

Source: Bank of Korea, *Economic Yearbook of Korea*, 1949 (data from M.F.A.), Bank of Korean Development, *Ten Year Economic History of Korea* (data from M.S.A.), Office of Public Information, *Preliminary Report of the 1949 Census of Korea*, C. Kim, *The Population and Economy of Korea*, 1965, pp 44–56, and See Table II. 1, Kwon, p. 247.

ficant counter movement.

As in the case of out-migration during the colonial period, imbalance in sex among the immigrants was again found to be substantial during 1945–49. The number of males per 100 females among the total net immigrants was estimated at 144. The imbalance in sex was most noticeable among the repatriates from Japan while only a small fraction of male dominance was seen in the migration from North Korea. The sex ratios among the migrants to South Korea is observed to have been a function of that of the base population.

The male migrants were highly age selective. When their age distributions are compared with the 1949 Census age distributions of the total Korean population, the concentration of migrants in the ages 20–44 was profound with the peak in 25–29. Unlike males, the age distributions of female migrants were quite close to the census female age composition. But a small concentration was seen in the ages 20–39. The difference in the degree of concentration of migrants in adult working ages between men and women directly suggests a large volume of single adult migration among men. It is clear from the age patterns of migrants that virtually all the adult women return migrants were married and accompanied by their family. However, as indicated by different levels of balance in sex, the proportion of single migration of males showed marked differences by place of origin of the migrants during 1945–49. Japan is expected to have had the highest proportion of single adult migration, and North Korea the lowest.

The 1949 Census revealed a very distinctive pattern of provincial settlement of the migrants into South Korea during 1945–49. The repatriated from Japan appear to have been mostly returned to the southern provinces, Gyeongnam, Gyeongbug and Jeonnam which were the sources of migrants

Table II. 10
Per Cent Distribution of Migrants from North Korea by
Province of Destination, 1945-49

	Seoul	G.G	G.W	C.B	C.N	J.B	J.N	G.B	G.N	J.J	TOTAL
Total	45.1	24.1	9.6	2.8	4.7	3.9	3.3	3.3	3.0	0.1	100.0
Gangweon	28.6	28.4	32.2	2.5	3.1	1.0	0.9	1.8	1.0	0.0	100.0
Whanghae	40.0	47.7	1.3	1.4	2.8	2.0	1.6	1.3	1.5	0.1	100.0
Pyeongnam	59.0	16.2	2.9	2.1	5.2	3.9	4.6	3.1	2.7	0.3	100.0
Pyeongbug	63.0	15.4	3.5	3.3	3.7	2.9	2.5	3.1	2.5	0.2	100.0
Hamnam	58.6	13.4	5.1	2.7	4.9	4.6	4.1	3.2	3.4	0.1	100.0
Hambug	33.8	13.3	5.9	6.0	8.9	9.8	8.5	8.6	5.1	0.2	100.0
Unknown	30.0	14.3	6.5	3.5	11.2	8.7	5.2	7.7	12.6	0.4	100.0

Source: The 1949 Census Report

to Japan in the colonial period. Eighty-two per cent of Koreans (or 83 per cent of South Koreans) in Japan in 1937 were reported to have permanent addresses in these three southern provinces.³¹ These three provinces had received 73 per cent of the total repatriated, 68 per cent for men and 82 per cent for women. In other words, the repatriated from Japan largely returned to their previous province of residence, but they settled down in urban areas rather than in rural villages.

Many repatriates from Manchuria and others came to Seoul and the others were distributed more or less evenly in the other provinces in terms of population size of the province. The large settlement in Seoul was understandable in that most of the repatriated from Manchuria would have passed Seoul to enter the middle and southern parts of South Korea and a sizeable number of the homeless repatriated were inclined to stay in Seoul rather than go back to their former place of residence. Yet the fact that 60 per cent of the repatriated from Manchuria and others settled in the middle and the southern areas seems to point out that, though not strong as that from Japan, the repatriation from Manchuria was again largely characterized by the return movement to the places of previous origin.

Contrary to the repatriation overseas the return and refugee movement from North Korea manifested an absolute concentration in the northern provinces, Seoul, Gyeonggi and Gangweon. Seoul alone received almost a half of the total migrants from North Korea, and Gyeonggi and Gangweon pulled 62 per cent of the remainder.

The influx of migrants in Gyeonggi from North Korea during 1945-49 was mostly from two adjacent North provinces, Whanghae and Gangweon over the 38th parallel. Gangweon received most of its in-migrants from the divided North Gangweon. The migrants from North Gangweon were evenly divided into the three northern provinces in South Korea while those from Whanghae entered mostly Seoul and Gyeonggi. Seoul was the only domi-

³¹*ibid.*, p. 14.

nant receiver of the migrants from all other provinces in North Korea. This regional settlement pattern of refugees from North Korea largely coincides with the provincial distribution of life-time migrants from the North in the colonial period as is evident from the Censuses of 1935 and 1940.

Population Movement between the Two Koreas during the Korean War

Although the numbers of refugees from and migrants to North Korea are uncertain and although their detailed socio-demographic characteristics are unknown, some information about the basic pattern and characteristics of these movements could be extracted from the census statistics of 1955 and 1960 and the crude data referred to above. The consensus of opinion concerning the sizes of these two movements in opposite direction is that the North to South refugees far out-numbered the migrants from South to North Korea. According to the estimate presented in Table II.11, it might be supposed that the size of the former was two or three times larger than that of the latter. But the relative sizes of the two movements differed considerably by sex as clear from Table II. 11.

According to the 1955 Census, the sex ratio of the refugees was 120. This is almost the same as the reported sex ratio of the migrants from North Korea during 1945–49. On the other hand, civilian migrants from South Korea were reported to consist of 1273 men per 100 women. Even with our estimates, the sex ratio for the migrants to North Korea is 714. The sex ratios also shed some light upon the age composition of the migrants. With the dominance of family migration, the age distributions of the refugees are expected to have been quite close to the normal distribution of the Korean population. This is particularly the case with women.³²

Table II. 12 presents the distribution of the refugees from North Korea by province and urban-rural sectors. This table reveals the largest concentration of the refugees in Gangweon and Gyeonggi provinces bordering on North Korea particularly in rural areas. A significant proportion of the refugees were reported to go down to Gyeongnam, the far south-eastern province, Seoul received only 15 per cent, and less than 20 per cent of the

Table. II. 11
Estimated Population Changes (in thousand) due to the
Korean War 1950–1953

	Male	Female	Total
Refugees from North Korea	354	292	646
Migrants to North Korea	264	22	286
Extra deaths due to war	837	802	1,639
Total loss due to war	747	532	1,279

Source; See citation in Table II.7, Kwon, p. 291.

³²For detailed discussion, see Kwon, 1972, *op. cit.*, pp. 292–293.

Table II. 12
Percentages of Refugees from North Korea during the Korean War by Province and Percentages of Those Entered Urban Areas in Each Province, 1955

	Male		Female		Both Sexes	
	Provincial distribution	Urban share	Prov.	Urban	Prov.	Urban
Seoul	11.9	100.0	14.2	100.0	12.9	100.0
Gyeonggi	22.7	34.0	21.7	35.2	22.3	34.5
Gangweon	27.2	4.7	26.4	2.7	26.9	3.8
Chungbug	1.4	23.5	1.3	26.0	1.4	24.6
Chungnam	5.0	26.7	5.0	33.5	5.0	29.8
Jeonbug	3.4	48.9	4.6	42.2	4.0	45.3
Jeonnam	2.5	47.2	2.1	35.4	2.3	42.4
Gyeongbug	4.4	71.5	4.0	75.8	4.2	73.4
Gyeongnam	20.7	89.8	20.3	89.7	20.5	89.8
Jeju	0.7	16.9	0.3	40.3	0.5	22.4
Total	99.9	47.3	99.9	48.7	100.0	47.9

Source: The 1955 Census Report

refugees scattered into all other provinces. This provincial pattern of settlement of the refugees is clearly distinguished from that during 1945–49.

One plausible reason for the difference is the differential distribution of the migrants by place of origin. It has been observed in the previous subsection that during 1945–49, a large portion of migrants from the North provinces bordering on South Korea entered rural areas in nearby provinces in South Korea. If this observation is applied to the refugees during the Korean War, the heavy concentration in Gyeonggi and Gangweon rural areas could be interpreted as more than 60 per cent of the refugees having originated from the North Gangweon and Whanghae provinces and Gyeonggi area which was lost as a result of the war. The same conclusion could be drawn from the 1960 Census data on place of birth.

About 52 per cent of the refugees from North Korea during the war were reported to stay in rural areas in the 1955 Census. Of the refugees entering rural areas, 78 per cent stayed in the two bordering provinces, Gyeonggi and Gangweon. On the other hand, those entering urban areas were concentrated in Busan, Seoul and Incheon cities. These three cities took more than 80 per cent of the urbanward refugees, with about 36 per cent for Busan city alone. The large refugee flow into Gyeongnam province was in fact headed for Busan city. Busan alone accounted for more than 90 per cent of the refugees entered Gyeongnam province. This sizeable movement of refugees to Busan can be considered in the same light as the concentration of migrants from North Korea in Seoul during 1945–49. As the provisional capital city during the war, Busan was the centre of the nation in every

respect until Seoul recovered its functions as the national centre in the late 1950s. No sooner had the administration and economic activities returned to Seoul than the refugees again moved up to Seoul.³³ Therefore, disregarding the exceptions of Busan and Seoul, the refugee movement during the war could be regarded to be very similar in its detailed pattern to the migration from North Korea before the war which was also refugee dominant.

International Migration Since the Korean War

Since the end of the Korean War, international migration of the Korean population has almost ceased. The large population movement across the Korean border became no longer visible. According to the government statistics on immigrants and emigrants after the war, both figures together scarcely exceeded 30,000 and the net loss or gain through overseas migration was less than 10,000 a year. During the nine years 1957 through 1965, a mere 28,000 people were recorded lost through migration overseas. In other words, international migration had virtually no effect on population growth in Korea during 1955–65. It is only after 1970 that the net loss of population due to international migration exceeded the 10,000 mark. With a change in the Immigration and Naturalization Law in the United States in 1965 which abolished the national quota system to persons with skills especially advantageous to the U.S. and to kin of U.S. citizens, the number of Korean emigrants to the States has increased gradually since 1967 and reached more than 30,000 in the recent years 1972 and 1973. The size of emigration of Korean to other areas is almost negligible.

³³According to the 1960 Census data on place of birth, of those aged 9–13 born in North Korea and living in the urban sector, 22 per cent stayed in Gyeongnam including Busan and 50 per cent in Seoul.

III. POPULATION COMPOSITION

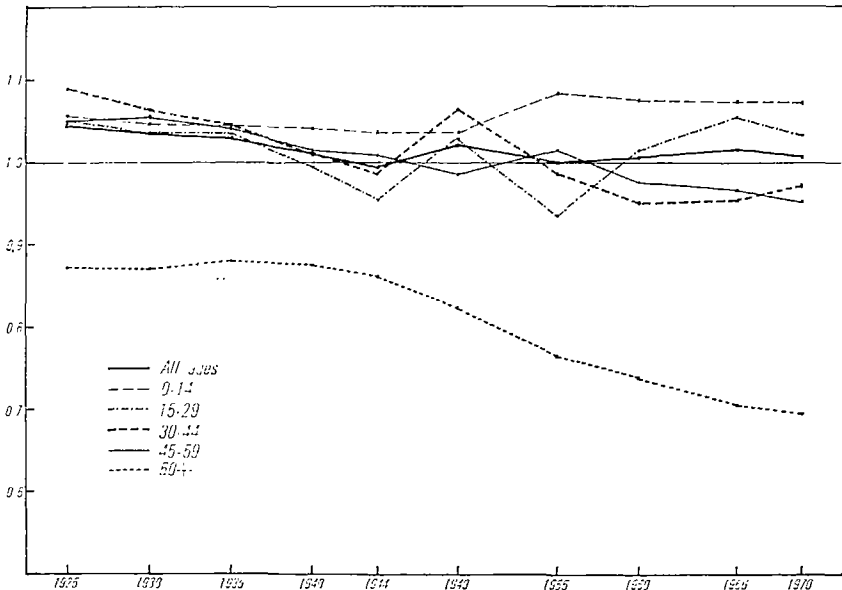
1. Age-Sex Composition

Sex Structure

The 1925 Census of Korea reported 105 male population per hundred females. The proportion of the male population was continuously reduced during the remaining colonial period, and the female population outnumbered the male population at the end of the colonial regime. The masculinity ratio, or the number of males per hundred females, increased during the intercensal years between 1944 and 1949, and dropped again in the next period 1949–1955. The ratio for the total population has slightly increased since, as is clear from Figure III-1. However, the detailed trends in sex composition of the Korean population differ greatly from one age group to another.

The general trends in the sex ratio up to 1949 were very closely related to the highly male selective pattern of international migration at that time. The degree of male dominance decreased during 1925–1944 with a continuous net loss of population by migration across the national boundary, and vice versa during 1944–1949. The changes in sex composition were also strongly associated with the volume of migration; the greater the volume of migra-

Figure III, 1 The Masculinity Ratios for the Census Population by Broad Age Groups, 1925–1970



tion, the greater the shift in the sex ratio. These observations indicate that international migration was the most important determinant of the changing sex structure of the Korean population during 1925–1949. The migration in this period particularly affected the sex ratios in the early working and reproductive ages 15–44, for its concentration in the age group with high male selectivity. Though the actual changes were much greater, the changing patterns of the balance of population between males and females in this age span were naturally identical with those for the total population.

The sex ratios were also determined to a considerable extent by the previous age-sex structure of the population involved. The changes in sex structure in the ages 15–44 after 1955 in the virtual absence of international migration can be easily taken as an evidence on this. The similar relationship were observed even before, during 1925–1955.¹ Considering that the age-sex structure was already affected by the previous trends of international migration, this can be largely regarded as a prolonged impact of migration on the balance of population by sex.

Mortality decline has persisted in Korea since 1925 except for some years between 1940 and 1955, and was greater for females than for males for all ages. This should have reduced or held down to some extent the size of the male population relative to that of the female population during the colonial period and again after 1955. The impact of this differential mortality decline by sex on the sex composition was clearly seen at infant and childhood ages under 15 and at old ages 60 onwards. During the Korean War years 1950–1953, a large number of deaths of soldiers caused a significant drop in masculinity ratio of the Korean population. However, the impact of mortality changes on the balance of sex of the total population was generally very minor throughout 1925–1970. On the other hand, fertility trends have had little effect on the sex ratio in Korea.

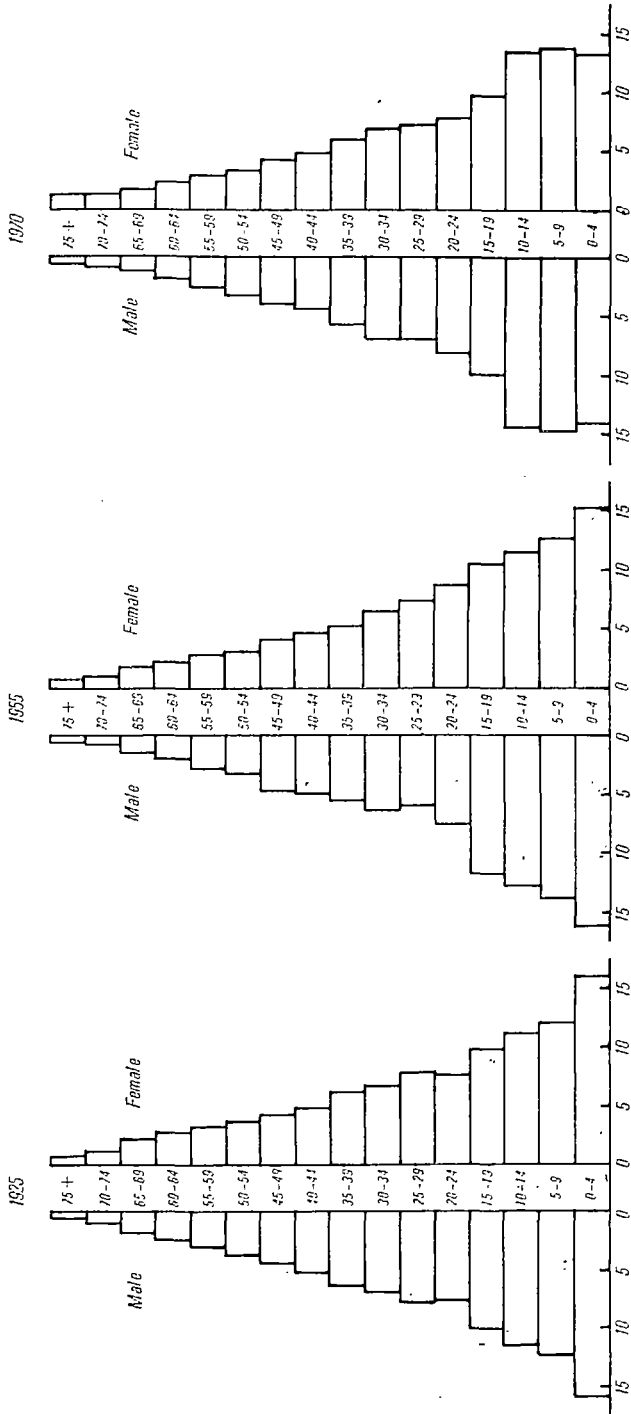
Age Structure

Although the mortality decline started in the 1910s, the age structure of the Korean population in 1925 and 1930 was near stable and showed a typical pyramid shape. This was particularly the case with the female population which was little affected by international migration until 1940. The population of Korea displays by now a bottom-wide age pyramid, which is interpreted as having a high growth potential.

During the colonial period, as is illustrated in Table III-1, very consistent shifts in age structure were observed. The proportion of the population at infant and childhood ages, say 0–14, has continuously increased, while the proportion at the working and reproductive ages 15–44 declined. For the age 45 and over, no significant changes were revealed. These shifts can be accounted for mostly by the large volume of emigration of Koreans to

¹Tai Hwan Kwon, *Population Change and Its Components in Korea 1925–66* (Ph.D. thesis, Australian National University). 1972, pp. 356–359.

Figure III.2 Age Pyramids of the Korean Population 1925, 1955 and 1970



Japan and Manchuria and mortality decline. It was already mentioned that international migration at that time was highly age selective, concentrated in the ages 15–44. The result should have been declines in the proportions of the population at ages 15–44 and increases at other ages. The mortality decline which had persisted throughout the colonial period produced the same kind of effect on the changing age structure of the Korean population as did the emigration; that is, an increasing proportional share of the population in childhood and old ages and decreasing proportions for in-between ages.

Table III. 1
Percentages of the Korean Population by Age Groups, 1925–70

	1925	1930	1935	1940	1944	1949	1955	1960	1966	1970
Both Sexes										
0–14	39.70	39.92	40.93	41.86	43.19	41.69	41.23	42.79	43.50	42.12
15–29	25.34	25.13	25.27	24.65	23.45	26.01	25.99	25.60	24.87	24.86
30–44	17.61	17.79	16.69	16.41	16.17	16.67	16.80	16.19	16.66	17.53
45–59	10.93	10.93	11.05	11.11	10.88	10.29	10.43	9.94	9.78	10.07
60+	6.42	6.22	6.05	5.99	6.30	5.34	5.55	5.48	5.19	5.42
Male										
0–14	39.87	40.16	41.20	42.47	44.09	42.02	42.87	44.19	44.72	43.42
15–29	25.38	25.11	25.30	24.46	22.98	26.08	25.11	25.66	25.32	25.15
30–44	17.96	18.02	16.81	16.39	16.12	17.01	16.69	15.72	16.14	17.21
45–59	10.95	11.02	11.11	11.12	10.96	10.11	10.50	9.78	9.55	9.78
60+	5.85	5.69	5.58	5.56	5.85	4.77	4.82	4.64	4.27	4.44
Female										
0–14	39.52	39.68	40.65	41.24	42.30	41.35	39.58	41.38	42.25	40.81
15–29	25.30	25.15	25.25	24.83	23.92	25.93	26.87	25.53	24.40	24.57
30–44	17.24	17.56	16.58	16.42	16.23	16.32	16.91	16.66	17.20	17.85
45–59	10.92	10.84	11.00	11.09	10.79	10.48	10.36	10.10	10.02	10.35
60+	7.01	6.77	6.53	6.41	6.75	5.92	6.29	6.33	6.12	6.41

Source: Censuses of 1925–70.

Immediately after liberation of the country, there was a significant influx of Koreans into South Korea from overseas countries and North Korea. This naturally caused changes in the age structure opposite to those observed during the colonial period. During the Korean War, there was a considerable number of deaths of soldiers, but the loss at military ages was largely compensated by refugee migration from the North which showed a concentration in roughly the same age bracket.

Since 1955, the impact of changing fertility on age composition became noticeable. A baby boom during 1955–1960 and subsequent fertility declines brought about a marked change in the age structure of the Korean population in later years. The most sensitive to the fertility change was the infant and early childhood ages 0–4. The decline of the proportion at ages

0–14 after 1966, though the proportion was still more than 40 per cent, is interpreted as a direct consequence of the fertility decline in the 1960s. But it should not be overlooked here that the recent changes in age structure of the Korean population were largely attributed to its past age structure which had gradually evolved over the last half century, accommodating various demographic developments and disruptions, described in detail in the previous chapter.

Now let us discuss briefly in the following paragraphs some socio-economic implications of the changing age-sex structure in recent years after 1955; the population at school ages of various stages, women at reproductive ages, and dependency burdens.

Population at School Ages

It is well known already that there was significant underreporting of the population at infant and early childhood ages in the censuses after 1955. Also, the levels of enumeration differ greatly in terms of age.² Accordingly, a caution should be paid in examining the population size at school ages and its changes based on census statistics. The age patterns of enumeration errors in the census were, however, very consistent,³ and this very fact warrants that, as far as the changing patterns and relative sizes of the population at each school age group are concerned, a fairly reliable picture may be assembled from the census.

The population at pre-school ages 0–5 was recorded to be 3,945,000 or 18.3 per cent of the total population in 1955. Both the actual number and the proportion increased substantially between the intercensal years of 1955 and 1960, as is illustrated in Figure III. 3. The actual size grew little during 1960–1966 and was even reduced slightly afterwards. When we consider the proportions only, a significant decline was observed throughout the 1960s. These trends were undoubtedly attributed to the fertility trends since 1955 namely, a baby boom during 1955–1960 and rapid fertility declines after 1960.

The changing patterns of the size and proportion of the population at primary school ages 6–11 were somewhat opposite to those for the pre-school ages 0–5. As the post-Korean War baby boom cohort progressed in, the proportion of children at secondary school ages showed a sharp increase during 1966–1970. Since 1970 rapid proportional drops are expected for pre and primary school age groups.

Women at Reproductive Ages

If there is no change in age specific fertility and marital behaviour, the

²Tai Hwan Kwon, 'Evaluation of Adequacy and Accuracy of Census Data,' Yunshik Chang, *et. al.*, *A Study of the Korean Population 1966*, Population & Development Studies Center, Seoul National University, 1974, pp. 18–41.

³See, *ibid*, pp. 26–30.

Figure III.3 Population at School Age Groups by Sex, 1955-1970

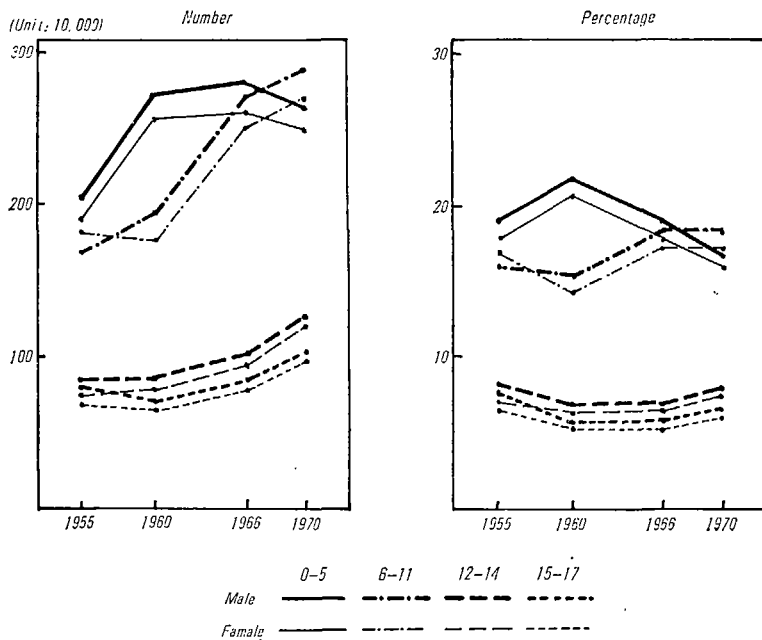
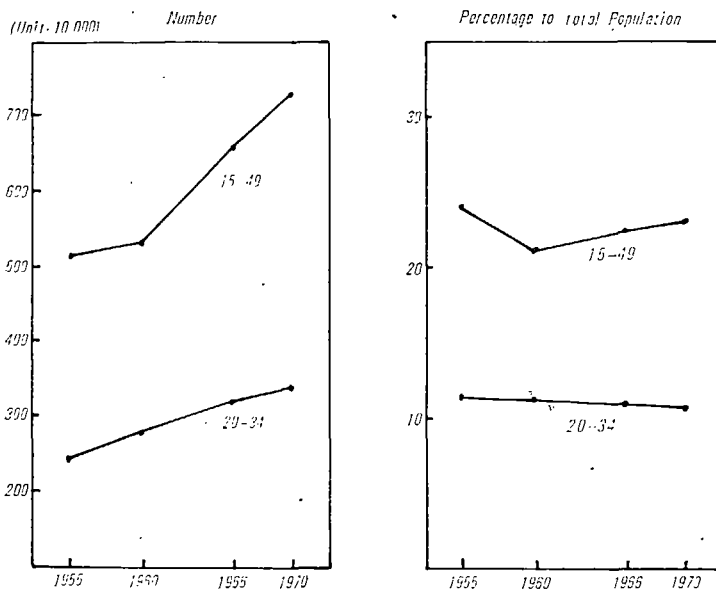


Figure III.4 Female Population at Ages 15-49 and 20-34, 1955-1970



numbers and distribution of the women at reproductive ages will determine the level of births. In recent Korea, both fertility and marital structure underwent a rapid change, and those two were actually the main determinants of the level of births. Nevertheless, the proportion of women at reproductive ages partly explains the trends of births and, more specifically and to a greater extent, differential levels of births between urban and rural areas and among various socio-economic groups.

Figure III. 4 illustrates proportional shifts of women at all reproductive ages from 15–49, and of women at crucial childbearing ages 20–34, during 1955–1970. The proportions are calculated to the total population. During 1955–1960, the proportion of women aged 15–49 reveals a significant reduction, particularly in rural areas. The reduction in the proportional distribution of women at 20–34 was very minor both in urban and rural sectors. Since 1960, very distinctive changes were observed in terms of the urban/rural dichotomy.

In the country as a whole, the proportion of women at 15–49 increased gradually, while that at 20–34 declined slightly. Increasing numbers of women in the reproductive ages 15–49 were found in both urban and rural area, except for the rural population between 1966 and 1970. But the patterns of the proportional changes of women at the crucial childbearing ages 20–34 contrasted between the two areas. In the urban sector, the proportion increased, whereas it was reduced in the rural. As a result, the urban/rural gap in the proportion of women at 20–34 widened from 1.8 per cent points in 1960 to 4.4 per cent points in 1970. This regional difference in the proportion of women aged 20–34, which played a determining role in differentiating the level of births in various geographical areas, was largely an outcome of the great number of woman migrants, mostly from rural to urban areas.

Dependency Burdens

Table III. 2 presents the total, youth and aged dependency ratios for South Korea during 1955–1970. The total dependency ratio (population at ages 0–14 and 60+ / population at 15–59) was reported to be 879 per thousand in 1955. The dependency burden increased significantly to 933 in 1960. A minor change was observed between the intercensal years 1960 and 1966, and then the ratio was reduced again to around 900 in 1970. As is suggested by the population pyramids in Figure III. 2, most of the dependency burden came from the youth. The aged population has been proportionally small in size and accordingly not constituted a serious economic burden in Korea until now.

The trends of the youth dependency ratio were almost identical with those of the total dependency ratio. It would be rather proper to say that the former determined the latter. On the other hand, the dependency burden of the

aged was little changed between 1955 and 1970. Factors determining the dependency ratio have already been identified as primarily due to increased fertility in the late fifties and early sixties, and declines in mortality which benefited the young ages and only secondarily the other age groups.

The levels as well as the trends of various dependency ratios differ greatly between urban and rural areas. Compared to rural villages, the levels in cities were considerably lower, and the urban rural gap widened rapidly during the entire period 1955–70. According to the 1970 Census, the total dependency ratio was reported to be 710 in urban areas while it was 1073 in rural sectors. Both the youth and aged dependency burdens declined in cities from 1960 onwards, whereas the tendency was reversed in rural hinterlands. These urban/rural differentials were mostly accounted for by the voluminous migration from rural to urban areas during 1955–70, which was highly selective of working ages.

Table III. 2
Youth, Aged and Total Dependency Ratios;
All, Urban and Rural Areas; 1955–70

	(%)			
	1955	1960	1966	1970
	i) Whole Country			
Youth(0–14/15–59)	77.5	82.7	84.8	80.3
Aged(60+/15–59)	10.4	10.6	10.1	10.3
Total(Youth + Aged)	87.9	93.3	94.9	90.6
	ii) Urban			
Youth	70.7	75.5	71.5	64.9
Aged	6.8	6.8	6.4	6.1
Total	77.5	82.3	77.9	71.0
	iii) Rural			
Youth	79.8	85.8	92.5	93.4
Aged	11.7	12.2	12.3	13.9
Total	91.5	98.0	104.8	107.3

Source: Censuses of 1955–70.

2. Marital Status

Age at Marriage and Proportions Single

Marriage was a universal phenomenon in traditional Korea. The norm was that both men and women ought to have married in the course of their life. Even though marital and courting behaviour has undergone a rapid transformation during the last half century, the custom of universal marriage remains intact. As shown in Table III. 3, 98 per cent of men and 99 per cent of women married by the age 45 in 1925. The corresponding figures

were more than 99 per cent for both men and women in 1970.

Traditional Korea was also marked by early marriage. According to the 1925 Census, the proportions of ever married men were 67 and 90 per cent in the age groups 20–24 and 25–29 respectively. In the case of women, more than 90 per cent married before they reached age 20. The singulate mean age at first marriage calculated by using the Hajnal method⁴ was 21.3 for men and 16.6 for women in 1925, as is shown in Table III. 4. However, unlike the custom of universal marriage age at marriage has undergone an incessant change from early to late marriage, since 1925. The pace of postponement of marriage was very gradual during the colonial period up to 1940. The definite transition in the timing of marriage took place in Korea sometime between 1940 and 1955. In this period of political, economic and social disturbances, the age at marriage rose by about three years for both men and women. The proportions single increased from 35 to 67 per cent for men at ages 20–24 and from 38 to 85 per cent for women at 15–19. Rapid postponement of marriage persisted during 1955–70. The age at marriage reached 27 and 23 for men and women in 1970. Nowadays marriage seldom occurs until the age 25 for men and the age 20 for women.

Table III. 3
Age at First Marriage by Sex, 1925–70

	1925	1930	1935	1940	1955	1960	1966	1970
Male	21.1	21.2	21.4	21.8	24.7	25.4	26.7	27.2
Female	16.6	16.8	17.1	17.8	20.5	21.5	22.9	23.3

According to Bogue's classification scheme,⁵ the age at marriage in Korea during the colonial period belongs to the earliest marriage group in the world. But the 1970 level falls in the late marriage group which consists mostly of the European and Central-South American nations. The pattern of late marriage sharply contrasts between Korea and those nations. Unlike most of the late marriage countries, marriage is still almost completely universal in Korea as mentioned above. Only some Asian countries such as Japan and Taiwan are similar in this respect.

The mean age at marriage has been greatly different between urban and rural areas throughout the entire period of 1925–70. It was higher in cities than in rural villages. This fact partly suggests that urbanization was one of the major factors in the transition from early to late marriage in Korea. As discussed earlier, there has been a considerable number of rural to urban migrants in the ages 15–24 since 1925. A large migration at marriageable

⁴J. Hajnal, 'Age at Marriage and Proportions Marrying,' *Population Studies*, Vol. 7, No. 2, 1953, pp. 129–131.

⁵Donald J. Bogue, *Principles of Demography*, John Wiley and Sons Inc., New York 1969, pp. 317–325.

ages was generally incompatible with the early marriage system and the changes toward late marriage with rapid urbanization were an inevitable outcome. Universal military conscription for men from the age 20, since the Korean War, has been another important factor. The postponement of marriage of men at least until the discharge from the service (for three years) should have affected the timing of marriage, directly or indirectly, not only for men but also for women.⁶ Military service also defers the timing of entering stable economic activity or obtaining a secure job for men which is known to be one of the most important socio-economic determinants of marriage in the case of men.

Many recent surveys⁷ disclosed significant differences in age at marriage among various socio-economic groups. The timing of marriage was strongly associated with the attainment of education and previous urban/rural residential background of individuals. The contributions from other factors such as occupation, present employment status, family structure and standard of living appear to have been secondary, and actually turn out to be very minor when controlling them by education and community background. As is discussed presently in Section 4 of this chapter, the level of educational attainment has risen noticeably since 1925, particularly since 1955, and this should have caused a considerable delay in marriage. The extension of education up to the secondary school level means the delay in marriage at least until the age 19 and university education until the age 23. This has particular importance for women. On the other hand, the tendency toward more individualistic orientation and more Westernward inclination among the more educated might also encourage them to marry relatively late.

Proportions Widowed

The proportions currently widowed are mainly determined by three demographic factors; mortality, the timing of marriage, and remarriage of the widowed. The impact of the timing of marriage upon the proportions widowed is however negligible in the age 30 and upwards, though the proportions widowed early in the cohort have more or less a cumulative effect on those for later ages. Incidentally the probability of being widowed is very low in the ages 15–29. Given that the chance of remarriage among the widowed remains little changed, mortality trends will account for most of the proportional shifts of the currently widowed men and women at late reproductive ages.

It was mentioned in the previous chapter that mortality has declined

⁶Kwon, *op. cit.*, 1972, pp. 154–155.

⁷Suggested by, for example, Ichon Surveys by Hae Young Lee (1965 and 1974) National Surveys on Family Planning by Ministry of Health and Social Affairs (1964–1968) and Surveys on Family Planning and Induced Abortion by Korean Institute for Family Planning (1969 and 1971).

Table III. 4
Marital Status, 1925-70

i) Male

	1925	1930	1935	1940	1955	1960	1966	1970
a) Proportions Single								
15-19	68.0	71.1	76.5	83.7	94.3	98.0	99.4	99.7
20-24	32.6	33.4	35.2	37.0	67.1	80.0	90.0	92.6
25-29	11.5	10.1	9.5	11.0	25.3	26.2	38.4	43.4
30-34	4.4	4.1	3.1	2.7	4.7	3.2	5.3	6.4
35-39	2.5	2.4	1.7	1.3	1.1	0.7	1.0	1.2
40-44	1.8	1.4	1.1	0.8	0.6	0.3	0.3	0.4
45-49	2.1	1.0	0.8	0.5	0.4	0.2	0.2	0.2
15-49	22.5	23.4	24.2	26.4	38.7	42.2	44.6	45.6
b) Proportions Widowed								
15-19	0.4	0.3	0.2	0.3*	0.1	0.0	0.0	0.0
20-24	1.4	1.1	0.8	1.4	0.3	0.1	0.1	0.1
25-29	2.9	2.3	1.8	2.6	0.6	0.4	0.2	0.2
30-34	4.6	3.4	2.7	3.9	0.9	0.6	0.5	0.4
35-39	6.4	5.0	3.9	5.0	1.2	0.8	0.8	0.6
40-44	8.3	7.0	5.9	6.5	2.4	1.4	1.4	1.3
45-49	10.9	9.7	8.3	8.8	3.9	2.3	2.3	2.1
15-49	4.1	3.4	2.7	3.4	1.0	0.6	0.6	0.5
c) Proportions Divorced/Seperated								
15-19	0.4	0.5	0.4	-**	0.1	0.0	0.0	0.0
20-24	1.3	1.7	1.5	-	0.4	0.3	0.1	0.1
25-29	1.9	2.3	2.3	-	1.1	0.8	0.5	0.4
30-34	2.1	2.3	2.3	-	1.7	1.0	0.8	0.7
35-39	2.0	2.3	2.2	-	1.5	1.0	0.8	0.8
40-44	1.7	2.0	2.1	-	1.5	0.9	0.8	0.8
45-49	1.5	1.7	1.8	-	1.6	0.8	0.7	0.8
15-49	1.5	1.7	1.7	-	1.0	0.6	0.4	0.4
d) Proportions Currently Married								
15-19	31.2	28.2	23.0	16.1	5.5	1.6	0.5	0.3
20-24	64.7	63.8	62.5	61.6	32.2	19.0	9.8	7.2
25-29	83.7	85.3	86.4	86.4	73.0	72.3	60.9	56.0
30-34	88.9	90.2	91.9	93.3	92.7	95.1	93.4	92.5
35-39	89.1	90.4	92.1	93.7	96.2	97.4	97.4	97.3
40-44	88.2	89.7	90.9	92.8	95.5	97.4	97.5	97.5
45-49	85.5	87.6	89.1	90.7	94.1	96.6	96.8	97.0
15-49	71.9	71.5	71.3	70.2	59.3	56.4	54.4	53.5

*: Inclusive of proportions divorced.

** : Included in the proportions widowed.

Table III. 4(Continued)

ii) Female

	1925	1930	1935	1940	1955	1960	1966	1970
a) Proportions Single								
15-19	27.8	33.2	38.0	48.5	85.2	92.7	96.1	97.1
20-24	2.6	2.3	4.3	5.5	20.8	33.5	51.6	57.2
25-29	1.2	0.6	0.7	1.9	3.0	2.9	7.7	9.7
30-34	0.6	0.2	0.3	0.4	0.7	0.4	1.0	1.4
35-39	0.5	0.1	0.2	0.3	0.3	0.2	0.3	0.5
40-44	0.7	0.0	0.1	0.2	0.3	0.1	0.1	0.2
45-49	1.0	0.0	0.1	0.1	0.2	0.1	0.1	0.1
15-49	6.7	7.5	8.6	11.5	23.2	25.7	29.3	31.5
b) Proportions Widowed								
15-19	0.6	0.3	0.3	0.6*	0.2	0.1	0.0	0.0
20-24	2.0	1.2	1.0	1.9	2.1	0.5	0.3	0.2
25-29	3.8	2.4	2.2	3.1	4.8	2.1	1.2	0.9
30-34	6.3	4.3	4.1	5.2	7.4	6.0	3.5	2.4
35-39	9.9	7.8	7.3	8.6	10.9	10.1	8.9	5.8
40-44	16.0	13.4	12.8	13.8	16.8	16.4	16.0	13.4
45-49	23.7	21.8	20.1	20.9	24.8	22.7	23.9	21.8
15-49	7.0	5.6	5.3	6.1	7.3	5.8	5.6	4.6
c) Proportions Divorced / Separated								
15-19	0.8	0.6	0.6	--**	0.3	0.1	0.0	0.0
20-24	1.5	0.9	0.9	--	2.1	0.8	0.4	0.3
25-29	1.7	0.7	0.8	--	2.5	1.6	1.3	1.0
30-34	1.5	0.6	0.7	--	2.2	1.7	1.6	1.6
35-39	1.3	0.6	0.7	--	1.8	1.4	1.6	1.8
40-44	1.1	0.6	0.7	--	1.6	1.1	1.2	1.6
45-49	1.0	0.6	0.7	--	1.4	0.8	0.8	1.2
15-49	1.3	0.7	0.7	--	1.6	1.0	0.9	1.0
d) Proportions Currently Married								
15-19	70.8	65.9	61.1	50.9	14.3	7.0	3.8	2.8
20-24	93.9	95.6	93.7	92.6	75.1	64.8	47.7	42.3
25-29	93.5	96.4	96.2	95.1	89.7	93.1	89.8	88.4
30-34	91.6	94.8	94.9	94.3	89.8	91.7	93.9	94.6
35-39	88.4	91.5	91.8	91.1	87.0	88.2	89.2	92.0
40-44	82.3	86.0	86.4	86.1	81.4	82.1	82.7	84.8
45-49	74.4	77.6	79.0	79.0	73.6	76.0	75.2	76.9
15-49	85.0	86.2	85.3	82.3	67.8	67.2	64.2	62.8

*: Inclusive of proportions divorced.

** : Included in the proportions widowed.

Source: Censuses of 1925-70.

since 1925, except for 1940–1955, in Korea. Along with these mortality trends, the proportions of currently widowed men and women declined during 1925–1940 and again between 1955–1970. The proportions increased for all age groups between 15 and 49 during the interim period 1940–1955, which largely resulted from the mortality rise due to the Korean War.

Marked differentials in the proportion widowed were observed between men and women, as is shown in Table III. 4. The male proportions were significantly lower than the female ones for all ages. The gap has greatly widened recently since 1955. These sex differentials were explained partly by higher mortality for males than for females in the reproductive and working ages 15–49 and the average age difference between husband and wife which was about 4–5 years as indicated by the comparison of the ages at marriage for men and women. But the most important cause was the differential probability of remarriage between widowed men and women. The widening gap may also be explained in the same context.

Traditionally, Korean society frowned on remarriage for women. On the contrary, widowers were socially approved, even encouraged, to marry again. This discriminating norm on remarriage between men and women was undoubtedly the prime factor responsible for the substantial sex differences in the size and proportion of currently widowed population at reproductive ages. No definite evidence is available suggesting any recent significant changes in marital behaviour of the widowed. The consensus of opinion among sociologists in this matter is, however, that remarriage is in general easier and more socially acceptable than in the past, though the normative sanction imposed on women still persists strongly. The increasing gap in the proportions of the currently widowed between men and women can be interpreted as an indication of the different pace of changes in the marital behaviour of widows and widowers; the rate of remarriage for widowers has increased more rapidly than that for widows. Though to a lesser extent, the slower mortality decline for men than for women should have contributed to the widening gap in the proportions currently widowed by sex. The marked change before and after the Korean War was ascribed to a much large number of male deaths in young reproductive ages compared to females.

Proportions Divorced and Separated

The term 'divorced' has been adopted in Korean statistics very recently, around 1960. Previously, the word 'separated' was used instead. In traditional Korean society, divorce or separation took mostly the form of desertion of a wife by the husband, unlike the conception of modern law. This suggests the high susceptibility of the response on divorce or separation in the phrasing of the question, and actual census information on this is highly dubious. For example, according to the censuses in the colonial period, the

proportion divorced or separated was higher for men than for women. But socio-economic conditions of the time lead us to the opposite conclusion: the remarriage of divorced women with children encountered strong social opposition, whereas in the case of divorced men remarriage was considered to be a proper action; and mortality was higher for males than for females.⁸ Also there is one confusion over the Korean colloquial term for divorce, *heyecita*. This often refers to the state of being separated or widowed. Special caution is therefore needed when examining the trends and levels of the divorced based on census statistics in Korea. It is unfortunate that we also have to dismiss registration statistics totally in discussing marital structure of the Korean population because of their extremely poor quality.

According to Table III. 4(c), the proportion of the currently divorced/separated was almost insignificant from 1925 through 1970. The table also suggests that even after allowing for the effect of the changing concept of the term 'divorce,' the proportion of the currently divorced is most likely to have declined since the 1940s. One of the probable reasons for this is that the custom of desertion of wife, a traditional form of divorce, is less prevalent with the rapid transformation of Korean society. When only divorced cases by law are counted, the rate of divorce is thought to have gradually increased. Another important reason may be the growing number of remarriages occurring among the divorced.

Proportions Currently Married

In Korea, there have been few births outside marriage and strong sanctions against illegitimate children. Effective fertility control through family planning and induced abortion has only a history of slightly more than a decade. In these circumstances, the level of births should largely be determined by the proportions currently married and their age composition. This was the case with Korea until recently. The proportions of the currently married women are found to have been one of the most important factors effecting the fertility transition in Korea even after deliberate fertility control methods became widely disseminated among majority of the population.

The proportions currently married at the reproductive ages 15–49 has undergone a rapid change in Korea since the 1920s. The proportion was substantially higher in the colonial period 1920–1940 than the post-Korean War years, and has also continued to decline since 1955. However when the proportions for quinquennial age groups are examined, opposite trends are observed between age groups. For women aged 15–24 and for men aged 15–29, the proportion currently married tended to decline continuously similarly to that for the population at the entire reproductive ages 15–49. But the trends from age 30 onwards for women and age 35 and older for men were reversed except for women between 1940–1955. In these age

⁸Kwon, *op. cit.*, 1972, p. 156.

groups the proportion currently married has increased. The changing patterns for young age groups were mainly ascribed to the continuous postponement of marriage described above, and thus bore a strong inverse association with those of proportions single. The trends in higher ages were governed largely by the proportional shifts of the widowed and divorced, particularly the former.

3. Household Composition

The definition and classification of households differ from census to census in Korea.⁹ Census tabulations on households are very limited and also lack comparability. In addition, little information is available for the pre-1960 period. These factors undoubtedly limit the study of the Korean households severely both in scope and period. In the following, our discussion will be focused on the size and composition of the households for the most recent intercensal decade 1960–1970.

Growth of Household Size

Traditionally Korean society favors the large family and large household. The idea that the larger the family size the better it would be was strongly prevalent until recently, and the ideal family life traditionally postulated was that of the extended family living three or four generations together under the same roof sharing cooking and living expenditures. However, the ideal was rarely realized in traditional Korea due largely to high mortality and poor economic conditions.¹⁰

As is clear from Table III. 5 and III. 6, the average size of Korean households did not exceed 5.5 persons until 1940 and reached its highest mark in 1960 when changes in attitude toward smaller families began to have attention and urbanization progressed rapidly. During the entire colonial period, except the early 1930s, the size of household showed an incessant increase. The most important factor in this increase was the continuously declining mortality, particularly of children. No significant changes in the type of family or household composition is expected to have occurred in the colonial period.¹¹ Household size continued to rise until 1960, by which time the

⁹For details, see Hae Young Lee, 'Household of Korea:1960–1966,' *Bulletin of the Population and Development Studies Center*, Vol. II, 1973, pp. 3–8, and Bureau of Statistics, Economic Planning Board (Korea), *1970 Population and Housing Census Report*, Vol. 2, 4–4, 1972, pp. 16–17. The data extracted from the Censuses of 1960 and 1966 were re-classified according to the 1970 Census definitions and classification system.

¹⁰Hae Young Lee & Tai Hwan Kwon, 'Hankuk Kachok Hyuongtae ui Han Yonku: Ichon Eup ui Kyongwu (A Study of Korean Family Types: The Case of Ichon Eup),' *Dong-A Mun-wha* (Journal of the Institute of Asian Studies.) No. 8, 1968, pp. 9–10 & 13–21

¹¹Suggested by *ibid*, pp. 13–28.

average size was 5.55 persons in ordinary households and 5.66 in the case of relative households only.¹² The trends were reversed however during 1960–1970 as is shown in Table III. 6. The changing trends in the household size in the recent years are largely identical with those in fertility, indicating

Table III. 5
Average Size of Korean Households, 1920–1940

Year	Size	Year	Size
1920	5.30	1931	5.34
1921	5.33	1932	5.31
1922	5.31	1933	5.31
1923	5.31	1934	5.32
1924	5.32	1935	5.33
1925	5.32	1936	5.33
1926	5.34	1937	5.34
1927	5.35	1938	5.35
1928	5.35	1939	5.36
1929	5.34	1940	5.42
1930	5.35		

Source: Yun Kim, *The Population of Korea 1910–1945* (Unpublished ph. D. thesis, Australian National University, 1966).

Table III. 6
Average Number of Household Members by Household Type;
All, Urban and Rural Areas; 1930, 1960, 1966 and 1970

	Ordinary Households			Relative Households		
	All	Urban	Rural	All	Urban	Rural
1930	5.26	4.71	5.30	–	–	–
1960	5.55	5.35	5.63	5.66	5.45	5.74
1966	5.49	5.11	5.70	5.62	5.27	5.81
1970	–	–	–	5.24	4.88	5.60

–: Data not available.

Source: Chosen Sotokufu, *Chosen Kokusei Chosa Hokoku, Showa Go'nen, Zensenhen, Kekka Hyo* (Census Reports for Korea, 1930, Section on All Korea, Table of Results) (Seoul, 1934), Table 60, *1960 Population and Housing Census of Korea*, Vol. 11–1, Table 7, *1966 Population Census Report of Korea*, 12–1, Table 15, and *1970 Population and Housing Census of Korea*, Vol. 1, 12–1 Population Table 6 & Housing Table 1.

¹²The ordinary household refers to a person or a group of persons who have relationship to the head of household. The relative household consists of two or more persons who have family or kinship relationships each other. Non-relative coresidents may be included in the relative household. In this sense the ordinary household is a concept inclusive of relative household. For detailed definition see sources referred in footnote 9.

that the fertility reduction was the major cause of the declining size of households in Korea as a whole in the 1960s.

A consistent pattern of urban/rural difference in the average size of households is observed in Korea from 1930 through 1970; smaller households in cities than in rural villages. The differential is largely accounted for by the selectivity of the rural to urban migrants among singles, widowed and couples with smaller families. However, the difference appears to have been partly interpreted as the effects of urbanization and industrialization on household size. As is clear from Table III. 6, the gap in the average household size between urban and rural areas widened during 1960–1970, in particular during the intercensal period 1960–1966 and this observation is considered to suggest some effects of urbanization on household size.¹³ The same trend is seen with the farm/non-farm distinction in the average number of household members.

Table III. 7 illustrates more detailed changing patterns in the size of households during 1960–1970 for the whole country, urban and rural areas respectively. According to this table, the proportion of households with less than 5 persons increased for the country as a whole, and that of more than 6 persons showed a gradual decline. The change was especially marked during 1966–1970. The changing patterns of household size differ between urban and rural areas. The rural pattern is somewhat irregular, while the urban trend is highly consistent. Inconsistencies in the rural pattern are noticed in the proportions of households with 3–5 and 6–9 person categories between 1960 and 1966. This indicates that the changes in household size during 1960–1966 in rural villages were caused mainly by the differential rural to urban migration in terms of household size and the effects of fertility reduction were rather insignificant. On the other hand, the rural patterns between 1966 and 1970 were an obvious reflection of the rapidly declining fertility in the area. Those rural trends are observed to be highly consistent with the pace of fertility declines in the rural area in the 1960s; little change during 1960–66 and a substantial drop during 1966–70.

Table III. 7
Percentages of Relative Households by Household Size,
All, Urban and Rural Areas; 1960, 1966 and 1970

Household Size	Whole Country			Urban			Rural		
	1960	1966	1970	1960	1966	1970	1960	1966	1970
2–	7.22	7.95	9.67	8.28	9.89	11.49	6.79	6.88	8.32
3–5	43.43	43.02	46.53	46.02	46.49	52.45	42.40	39.57	42.13
6–9	43.25	45.24	41.11	40.36	40.33	34.47	44.41	47.94	46.06
10+	6.10	4.79	2.69	5.34	3.29	1.59	6.40	5.61	3.49
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: See citation in Table III. 6.

¹³ For the trends of urbanization, see Chapter IV.

The waning emphasis on the large extended family also explains, though to a smaller extent, the observed rural patterns in household size during 1966–1970, as discussed presently. One of the salient trends in the household composition through the 1960s is the continuous rapid decline in the proportion of households with more than 10 persons. On the contrary, the proportions of households with less than 2 persons increased gradually.

Household Types

Relative households accounted for more than 95 per cent of the total number of households in Korea as a whole until 1970. In other words, almost every Korean household was organized around some kind of family relationship or tie. The pattern was stronger in the earlier years and the proportion of relative households was higher in rural areas than in the urban throughout the 1960s though the differences were minor. Considering the large volume of single rural to urban migration in the recent period, this urban/rural gap in the proportion of relative households appears to be far less pronounced than expected. This rather slight difference can be understood by the fact that many young migrants, in particular young girls, tended to be employed as housemaids or to live with their relatives in the cities thus becoming members of relative households rather than creating new single households. This also lead us to a conjecture that relative households in cities would have a larger number of nonrelative coresidents or remote relatives on average than in rural hinterland.

Table III. 8
Percentages of Relative Households; All, Urban and Rural Areas;
1960–70

	1960	1966	1970
Whole Country	97.3	95.5	95.2
Urban	96.0	93.4	94.1
Rural	97.9	96.7	96.0

Source: See citation in Table III. 6.

Household Composition by Generation Type

It was already well documented that the family system of Korea underwent a profound transformation during the overall societal change in the 1960s. The nuclear family ideal has been disseminated widely among the young generation. Various traditional norms on family building and family living have been gradually weakened. Marital behaviour, particularly age at marriage and courtship behaviour, has been greatly altered. Those changes are expected to have some impacts on the household composition by generation type during the 1960s.

Table III. 9 presents the composition of relative households by the

Table III. 9
 Percentages of Relative Households by Household Type(Generation),
 All, Urban and Rural Areas; 1960, 1966 and 1970.

Household Type	Whole Country			Urban			Rural		
	1960	1966	1970	1960	1966	1970	1960	1966	1970
One Generation Households	5.30	5.67	6.75	7.07	8.09	9.16	4.59	4.34	4.96
Two Generation Household	65.39	67.68	70.04	73.19	74.28	75.44	62.23	64.06	66.03
Three Generation Households	27.62	24.05	22.06	18.98	15.93	14.88	31.11	28.51	27.40
More than Four Generation Households	1.63	2.60	1.15	0.56	1.71	0.52	2.07	3.09	1.61
Unknown	0.06	—	—	0.20	—	—	0.00	—	—
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: See citation in Table III. 6.

number of generations at the Censuses of 1960, 1966 and 1970 with urban/rural distinction. Unlike the traditional ideal of the multi-generation extended family, the two generation household was the dominant type of relative household in Korea in 1960. It is not clear whether the 1960 observation can be taken as representing the traditional pattern. But considering the traditional mortality conditions and poverty persisted before 1960, we can expect that only a minor fraction of the population lived in the extended families and the two generation family constituted the major form of household in traditional Korea. A study on family type in a Korean middle sized town also supports this argument.¹⁴ A significant portion of relative households is also accounted for by three generation families.

During the decade 1960–1970, the proportions of one and two generation households show marked increases both in urban and rural areas. On the other hand, those of three generation households declined substantially. The change was more pronounced in urban areas than in rural areas. Clear differentials in the proportional distribution of relative households by generation type are shown between urban and rural areas through the 1960s. For all the three census years, the proportions of one and two generation households are greater in the cities than in rural villages. The pattern is reversed with three and more generation households. These observations suggest that the family system of Korea in general and the generation com-

¹⁴ Lee & Kwon, *op. cit.*, pp. 13–28.

position in particular have been affected to a considerable extent by the recent rapid urbanization which is discussed in Chapter IV of this monograph. In this light, we can expect that the present patterns and trends of the household composition by generation type will persist for the time being.

The Structure of Relations within Households

Closely related to the generation composition of relative households are the structure of relations within household and the family types. The most recent Censuses of 1966 and 1970 provide some partial information on this relationship. Table III. 10 shows the structure of relations within households by generation type. This table was rearranged in terms of the type of family as is presented in Table III. 11.

Among one generation households, the typical was the household with married couple only. More than 90 per cent of one generation households was of this type in rural areas. In urban areas however, the proportion of other types of one generation household approaches 30 per cent. This

Table III. 10
Percentages of Households by Generation Type and Composition
for Whole Country, Urban and Rural Areas, 1966 and 1970

	1966			1970		
	Whole Coun- try	Urban	Rural	Whole Coun- try	Urban	Rural
(1) One Generation Households	5.67	8.09	4.34	6.75	9.16	4.96
Married Couple Only	4.57	5.72	3.94	5.45	6.60	4.59
Other	1.10	2.37	0.40	1.30	2.56	0.37
(2) Two Generation Households	67.68	74.28	64.06	70.04	75.44	66.03
Married Couple with Child(ren)	54.18	57.24	52.50	55.46	58.78	52.99
Married Couple with Child(ren) and Brother(s)and/or Sister(s)	2.08	3.49	1.31	1.96	3.29	0.98
Husband and Child(ren) or Wife and Child(ren)	8.05	9.45	7.28	10.62	11.52	9.96
Married Couple without Child(ren) and Their Parent(s)	1.42	1.16	1.57	1.39	1.22	1.51
Other	1.95	2.94	1.40	0.61	0.63	0.59
(3) Three Generation Households	24.05	15.92	28.51	22.06	14.88	27.40
Married Couple with Child(ren) and Their Parent(s)	19.83	13.03	23.55	17.39	11.72	21.61
Other	4.22	2.89	4.96	4.67	3.16	5.79
(4) Four Generation and More	2.60	1.71	3.09	1.15	0.52	1.61
Total	100.00	100.00	100.00	100.00	100.00	100.00

Source: See citation in Table III. 6.

Table III. 11
Household by Family Type for Whole Country,
Urban and Rural Areas, 1966 and 1970

	1966			1970		
	Whole Country	Urban	Rural	Whole Country	Urban	Rural
(1) Nuclear Family	66.80	72.41	63.72	71.53	76.90	67.54
(2) Stem Family	21.25	14.19	25.12	18.78	12.94	23.12
(3) Others	11.95	13.40	11.16	9.69	10.16	9.34

Source: See citation in Table III. 9.

difference between urban and rural areas can be largely attributed to a large number of migrant families consisting of only brothers and sisters in urban areas. Anyway, the one generation household in Korea is properly considered as transitory type which lasts only one or two years and as consisting mostly of the newly wed and siblings before marriage. It would be probable to assume that the postponement of marriage and growing incidence of couples' adopting contraceptives before the first birth increase the proportional share of one generation households.

The typical nuclear family comprised of married couple and their children was the dominant type of two generation household. Those families accounted for around 80 per cent of two generation households both in 1966 and 1970. More than 10 per cent was made up of the ever married, but not currently, with their children. Including the latter the nuclear family constituted more than 90 per cent of two generation households, while the stem family¹⁵ accounted for less than two per cent. The urban/rural difference in the structure of relations in two generation household was negligible. As the case with the one generation household, the family in which the household head lived together with brothers and sisters was proportionally much greater in urban areas than in rural areas in the two generation household. Of three generation households, the predominant type was the family consisting of married couple with children and parents.

In summary, the most prevalent type of households in recent Korea is the two generation household with married couple and their children. Its proportional share among total households ranged 50 to 60 per cent in various regions during the 1960s. The next is the three generation household with married couples, their children and parents. However, the proportion of the two generation household with the head (either husband or wife) and children has increased rapidly and, as a result, its urban proportion became almost tied with the typical three generation household consisting of

¹⁵In this study, stem family refers to the family consisting of two or more family nuclei in a direct lineage relation without any kinds of fraternal or remote kinship relations to each other.

married couple with children and parents. The main reasons for the growing proportion of such two generation household which consists of the household head and children are not clear. But increasing incidence of divorce, particularly in urban areas, might explain the trend partly.

If we group relative households into three main family types, nuclear, stem and other types of families, as presented in Table III. 11, marked differentials in the household composition are observed with urban/rural distinction. The proportion of nuclear families was much greater in urban areas in both 1966 and 1970 Census. The pattern in the stem family was naturally the reverse. During the intercensal period 1966–1970, a shift in the household composition by family types was observed toward more nuclear families in proportion to stem families. In 1970, the proportion of nuclear families in urban areas reached 77 per cent. This transformation of family type is expected to continue in the near future.

4. Growth of Education

Public school education was first established in Korea during the early

Table III. 12
Percentages of the Population Attending School at Ages
6–24 by Age Groups and Sex, 1925–70

age	1925	1930	1935	1940	1955	1966	1970
			Both	Sexes			
Total 6–24	5.54	6.06	8.73	15.60	37.7	58.1	62.7
6–12	12.33	13.53	19.18	32.74	65.9	87.5	89.8
13–18	0.78	1.06	1.47	2.39	26.1	47.2	58.6
19–24	0.06	0.09	0.13	0.17	4.4	9.3	9.7
			Men				
Total 6–24	—	—	—	—	46.0	62.2	66.5
6–12	20.24	21.72	29.72	46.96	73.3	88.9	90.4
13–18	1.35	1.71	2.37	3.92	36.8	56.8	67.2
19–24*	—	—	—	—	7.9	13.2	12.7
			Women				
Total 6–24	—	—	—	—	28.9	55.5	58.7
6–12	3.85	4.84	8.13	17.97	57.8	86.1	89.2
13–18	0.17	0.36	0.51	0.81	14.2	42.0	49.5
19–24*	—	—	—	—	1.3	5.1	6.5

Data for 1960 are not available in a comparable form.

Those enrolled at colleges or universities for 1925–40 were not broken down by sex
Source: For 1925–40, Yunshik Chang, *Population In Early Modernization: Korea* (Unpublished Ph. D. thesis, Princeton Univ., 1966), p. 85, 1955, *Population Census of Korea*, pp. 26–27. 1966 *Population Census Report of Korea*, pp. 74–79, and 1970 *Population and Housing Census Report of Korea*, Vol. 1, 12–1, pp. 22–23 & 164–167.

colonial period, and spread gradually under the alien regime. The regime however carefully avoided the production of qualified manpower who would compete with skilled manpower imported from Japan for developmental efforts in Korea. During the colonial period, primary education was diffused to some extent but education beyond this level was highly selective and thus limited to a small fraction of the Korean population, as is suggested by Table III. 12.

Even though it was a continuation of the previous growth, the expansion of education after Liberation in South Korea was a truly remarkable achievement, at least in quantity. Primary education was made compulsory at the

Table III. 13
Educational Attainment of the Korean Population, 1970

	Total	Never Attend- ed	Primary but not com- pleted	Primary ♂ above	Middle ♂ above	High School ♂ above	Junior College ♂ above	Univer- sity ♂ above
Men								
Total	100.0	17.7	1.5	80.8	41.5	23.6	7.8	5.0
14	100.0	3.6	4.5	91.9	0.1	—	—	—
15-19	100.0	2.1	2.0	95.9	36.8	9.3	0.1	0.0
20-24	100.0	1.8	1.0	97.2	63.2	37.4	7.1	2.3
25-29	100.0	3.2	1.1	95.8	60.1	37.4	12.7	8.7
30-34	100.0	4.7	1.3	93.9	54.9	36.0	13.8	10.3
35-39	100.0	8.4	1.5	89.9	47.5	31.1	12.8	9.4
40-44	100.0	16.7	1.6	81.7	37.7	21.8	9.8	6.8
45-49	100.0	29.5	1.8	68.8	28.1	14.5	6.6	4.1
50-54	100.0	43.2	1.8	55.0	19.6	9.2	4.2	2.4
55-59	100.0	53.9	1.7	44.4	14.5	6.3	2.7	1.4
60+	100.0	74.5	0.9	24.6	7.9	3.7	1.8	0.8
Women								
Total	100.0	33.1	1.8	65.1	19.9	8.2	1.8	1.1
14	100.0	4.1	4.4	91.5	0.0	—	—	—
15-19	100.0	2.8	2.1	95.1	25.7	5.3	0.1	—
20-24	100.0	3.7	1.2	95.1	42.3	20.5	3.7	2.0
25-29	100.0	8.4	1.7	89.9	34.7	16.9	4.6	3.2
30-34	100.0	16.1	2.5	81.4	24.3	11.3	2.7	1.9
35-39	100.0	28.1	2.6	69.3	17.7	8.1	1.6	1.0
40-44	100.0	43.9	2.3	53.8	11.9	5.1	1.0	0.6
45-49	100.0	58.4	2.1	39.6	7.5	3.1	0.7	0.3
50-54	100.0	70.9	1.7	27.5	4.5	1.8	0.5	0.2
55-59	100.0	78.8	1.2	19.9	3.1	1.3	0.4	0.1
60+	100.0	91.6	0.5	7.9	1.1	0.5	0.2	0.1

*: Those who are currently attending school are excluded.

Source: See citation in Table III. 12.

inception of the Republic of Korea and this was almost completed two decades later. Secondary education was no longer limited to a small minority but reached the point of achieving mass education. Higher education expanded to a level beyond which further expansion may not be desirable.

Table III. 13 summarizes its effects on the population expressed in terms of educational attainment in 1970. As this table shows, the proportion of each group who have attended school at various stages has been steadily increasing but at a faster pace as the level of education rises. The enrollment ratio increased much more rapidly among those who went to school after liberation than those who went to school during the colonial period.

Another noticeable trend is the rapidly narrowing gap between boys and girls in school attendance up to the level of middle school. With the virtual completion of compulsory education at the primary education level, discriminatory attitudes toward public education enmeshed in status and sex differentials which were prevalent in the traditional society and remained throughout the colonial period are now being replaced with egalitarianism. Even though the actual proportions of not completing the course of elementary school after the entrance are slightly higher for girls than for boys because of a strong boy preference in Korean society, there seems to be universal consensus nowadays that children regardless of sex should attend at least elementary school. At the level of secondary and higher education, the increasing participation of girls has been noteworthy, although dominance of boys over girls is still the case.

The general expansion of education is, to a large extent, attribute to the strength of parental aspirations for children's education, an aspiration backed by a willingness to assume partial direct financial responsibility, and to high valuation on education in traditional Korea as a unique and universal normative way of upward mobility for commoners. Under the democratic ideal, the government has done fairly well in expanding schools, but unfortunately the growth was also attended by overcrowding and deterioration in the quality of education.

IV. POPULATION DISTRIBUTION, INTERNAL MIGRATION AND URBANIZATION

1. Historical Overview

Until 1910, when Japan annexed the country, Korea had remained basically an agrarian society characterized by the traditional stability of a peasant population. The Japanese colonial policy to exploit Korea in order to meet consumption and industrial needs for Japan completely shaped the pattern of population redistribution in Korea during the pre-liberation (1945) period. Cities grew as administrative centers for colonial exploitation, assembly points of agricultural products to be exported to Japan, and production sites of raw materials and cheap manufactured goods destined to the Japanese factories and consumers.

The headcount of 1920 revealed that 3.2 percent, or 563,000 persons, were living in administratively defined urban (Bu) areas with 20,000 population or over. There were eight cities of such size: Seoul(250,000), Busan(74,000), Pyeongyang(72,000), Daegu(45,000) Gaeseong(37,000), Incheon(36,000), Wonsan(28,000), and Jinnampo(21,000).¹ These cities were either centers for the colonial administration or ports for the export of goods to Japan.

As the Japanese penetration began to extend into Manchuria in the early 1930's, Korea became a base for continental expansion, and the urban and industrial transformation of Korea was intensified.² Table IV. 1 shows the

Table. IV. 1
Population in Korea, Total and Urban, 1925–1940

Year	Total population		Urban population*		Percent in urban areas
	Number (in 1000)	Intercensal Inc. (%)	Number (in 1000)	Intercensal inc. (%)	
1925	19,523	13.1	931	65.4	4.8
1930	21,058	7.9	1,452	56.0	6.9
1935	22,899	8.7	2,115	45.6	9.2
1940	24,326	6.2	3,895	84.2	16.0

*Administrative areas with 20,000 or more inhabitants.

Source: Government-General of Korea, Censuses of 1925, 1930, 1935, and 1940.

¹Bertrand Renaud, "The Evolution of the Urban System in Korea 1910–1970: An Economic Interpretation," *Bulletin of the Population and Development Studies Center*, Vol. III, Seoul, September 1974, p. 26. Appendix Table.

²Irene B. Taeuber, "Korea in Transition: Demographic Aspects," *Population Index*, Vol. 10, No. 4, 1944, pp. 232–234.

total and urban (administrative areas of 20,000 population and over) population of Korea for the census years during the 1925–1940 period. For each intercensal period, the urban population increase was many times greater than the total population increase. By 1940 the urban population constituted 16 percent of the total Korean population.

During this period the population increase was greatest in the largest size categories. Between 1925 and 1940 the total Korean population increased by 25 percent. On the other hand, the population in areas of 20,000 or more increased by 248 percent; areas of 50,000 or more by 308 percent, and those of 100,000 or more by 374 percent. More than 70 percent of the total population growth was accounted for by the increase of population in towns and cities with at least 20,000 population.

Not only the size of the urban population, but also the number of towns and cities increased at an accelerating rate during the 1920–1940 period. The number of areas with 20,000 persons or more increased from eight in 1920 to 90 in 1940. There was only one city with 100,000 population or more (Seoul) in 1920. In 1940 there were seven cities of this size class.

The speed of urbanization was especially pronounced in a few provinces, mostly in the central and northern parts of Korea. By 1940 the proportion of urban population reached 41 percent in Gyeonggi, 21 percent in Hamgyong, and 21 percent in Pyeongnam. The rapid growth of urban population in these provinces is due to the development of industrial centers; the Seoul-Incheon industrial belt in Gyeonggi, the Pyeongyang-Jinnampo industrial belt in Pyeongnam, and the Chungjin-Sungjin industrial belt in Hamgyong. Due to the location of the major port city of Busan, the urban population in

Table IV. 2

Intercensal Percentage Change of Population by Province, 1925-1944

Province	Region	1925-30	1930-35	1935-40	1940-44
Total		7.9	8.7	6.2	6.5
Gyeonggi	Central	6.8	13.7	16.8	7.9
Gangweon	Central	11.7	7.9	10.2	5.1
Chungbug	Southcentral	6.2	6.6	-1.4	3.7
Chungnam	Southcentral	7.9	10.4	3.2	6.2
Jeonbug	South	9.9	6.8	-0.5	4.6
Jeonnam	South	8.1	7.5	5.2	4.2
Gyeongbug	South	3.6	6.0	-3.7	5.3
Gyeongnam	South	5.6	5.2	-0.3	7.8
Whanghae	Northcentral	4.2	9.8	8.3	11.0
Pyeongnam	North	7.2	10.4	13.1	9.9
Pyeongbug	North	10.3	9.4	3.4	6.4
Hamnam	North	11.7	9.1	9.1	7.2
Hambug	North	19.0	14.5	29.2	2.0

Source: Data for 1925–1940: Same as Table IV. 1.

Data for 1944: Bank of Chosen. *Annual Economic Review of Korea* 1948.

Gyeongnam constituted 15 percent of the total population. The urban population constituted less than 10 per cent in all other provinces.

Another important feature of population redistribution in Korea during the colonial period is a population shift away from the densely settled agricultural southern provinces. As the Japanese exploitation intensified and living conditions on farms became intolerable to the Korean farmers, massive outmigration from the agricultural regions became inevitable. Table IV. 2. shows the intercensal percentage change of population by province during the 1925–1944 period. Throughout the entire Japanese period, the northern and central provinces grew comparatively faster than the southern provinces. Between 1935 and 1940, the population in the four agricultural provinces of the south actually declined, while the provinces containing major industrial and mining sites—Gyeonggi, Pyeongnam, Gangweon, and Hambug—experienced growth rates far above the national average. Farmers uprooted by the Japanese exploitation not only headed for the colonial and industrial cities and towns in the central and northern provinces of Korea, but also many of them left Korea and emigrated to areas controlled by the Japanese.

Korea was partitioned into two parts along the thirty-eighth parallel at the end of World War II. The remainder of this discussion will be confined to the southern half of Korea for the post-World War II period. Despite the problem of comparability of statistics due to the varying levels of accuracy and the boundary changes caused by the partition of the country, percentage changes in provincial populations reveal an interesting pattern of regional population shifts. Population redistribution during this period was heavily influenced by international and refugee movements, as shown in Chapter II. 3.

Between May 1944 and September 1946, all provinces of South Korea including Seoul experienced a relatively high rate of population increase as a result of receiving a large number of repatriates and refugees. The highest growth rates were observed in Gyeongnam and Gyeongbug provinces where the majority of the more than one million Korean repatriates from Japan were believed to have settled. Relatively high growth rates in Jeonbug and Jeonnam imply that a significant number of repatriates from Japan also settled in the Honam (Jeonbug plus Jeonnam) region.

Seoul, despite the large exodus of Japanese population, showed a sizable increase of population between 1944 and 1946. Gyeonggi province also showed a significant growth despite a heavy loss of Japanese population from Incheon and the areal loss to North Korea. The rapid increase of population in Seoul and Gyeonggi is mainly due to the influx of the North Korean refugees and repatriates from Manchuria during the post-liberation period. The decline of population in Gangweon province is caused directly by the loss of territory. Approximately half of the land in Gangweon province fell into North Korea due to the partition. Within the southern part of the province, population must have risen during the post-liberation period

since a sizable number of North Koreans is believed to have moved south and settled in southern portion of the province.

The pattern of population redistribution among provinces after the initial stage of settlement for refugees and repatriates drastically changed. Between 1946 and 1949 Seoul continued to grow at the fastest rate among all provinces. Gyeonggi also grew at a rate significantly higher than average. The high growth rates in these two areas may signify a considerable inflow of refugees and southern migrants since 1946.

By contrast, southern provinces that had received a large volume of repatriates in the immediate post-liberation period grew very little. One province, Gyeongnam, actually declined in size between 1946 and 1949. Some of the repatriates from Japan who initially had settled in the Yeongnam and Honam regions probably moved north to Seoul and its vicinity. At the same time major political disturbances occurred in many areas of the southern provinces. A strong counter campaign was launched by the government to put down guerrilla activities and communist uprisings in

Table IV. 3
Population of South Korea by Province, 1944-60

Province	(Number of Persons in 1,000)				Percent Increase			
	1944	1946	1949	1955 ^{***}	1960	1944-46	1946-49	1955-60
Seoul	948	1,141	1,446	1,590	2,445	20.4	26.7	53.8
Gyeonggi	2,142	2,486	2,741	2,273	2,749	16.0	10.2	20.9
Gangweon	1,857	1,116	1,139	1,297	1,637	-39.9	2.1	26.2
Chungbug	980	1,112	1,147	1,226	1,370	13.5	3.1	11.7
Chungnam	1,673	1,909	2,028	2,238	2,528	14.1	6.2	13.0
Jeonbug	1,673	2,019	2,050	2,177	2,395	20.5	1.7	10.0
Jeonnam	2,748 [*]	3,220 [*]	3,297 [*]	3,201	3,553	17.2 [*]	2.4 [*]	11.0
Gyeongbug	2,604	3,178	3,206	3,425	3,848	22.0	0.9	12.4
Gyeongnam	2,414 ^{**}	3,185 ^{**}	3,135 ^{**}	3,813 ^{**}	4,182 ^{**}	31.9 ^{**}	-1.6 ^{**}	9.7 ^{**}
Jeju				262	282			7.6
Total	17,041	19,369	20,189	21,502	24,989	13.7	4.2	16.2

* Jeju Included

** Busan Included

*** Ministry population reassigned to their pre-induction provinces of residence (see footnote 7).

Between 1944 and 1946, Gyeonggi lost some part of its northern section and gained a small portion of Whanghae province due to the partition of the country along the thirty-eighth parallel. At the same time, Gangweon province lost more than half of its total land area due to the partition. The 1944 population in the table shows those in original boundaries before the partition. The figures for 1944-49 are inclusive of foreigners.

Source: Bank of Chosen, *Annual Economic Review* 1948.

Ministry of Home Affairs, *Korea Statistical Yearbook 1955* and 1955 Consus, Economic Planning Board, 1960 Consus.

provinces of the Youngnam and Honam regions. Many civilians became victims in the clash between the government forces and guerrillas. In this time of political chaos, it is quite conceivable that some of the repatriates might have returned to Japan along with some natives. For example, the population of Jeju island (part of Jeonnam at the time), being one of the areas most severely affected by the guerrilla warfare, declined from 276,000 to 255,000 between 1946 and 1949. Apparently a large number of people was killed during the clash, and some probably went back to Japan.

The growth of cities³ in the post World War II period was largely determined by the political situation. Table IV. 4 shows population trends in 14 cities of South Korea between 1943–1946 and 1946–1949. All cities except Incheon, where a large exodus of Japanese population seemed to have caused a population decline, experienced a sizable gain of population immediately after World War II due to the influx of the refugees and repatriates. The growth was exceptionally high in cities in the southern coastal region. Political upheavals in the southern provinces, however, seem to have affected the growth pattern of the Korean cities between 1946 and 1949. Cities in the northern provinces and major administrative centers of the south, where it was politically safe and where the benefits of post-War relief activities were more easily available, continued to grow at a rapid rate. Small size cities in the politically unstable Youngnam and Honam regions showed a much lower than average growth rate. Jinju city, located right below the guerrilla-infested Jirisan mountain region, showed an absolute decline of population during this period.

The 1950–1953 Korean War was the major factor in determining the pattern of population redistribution in Korea during the 1950–1955 period. The Korean War brought the second wave of North Korean refugees. A report by the U.N. Korea Reconstruction Agency shows that 720,000 refugees from North Korea streamed into South Korea as a result of the Korean War.⁴ The number of persons taken or fled to North Korea has never been determined, although it is presumed to be quite significant. Some Koreans are also believed to have fled to Japan during the Korean War, even though the number has never been known due to the illegal nature of such escape.

Within the country, massive southward movements of refugees from the northern provinces of South Korea, from the occupied provinces of North Korea during the War, and large scale return movements of population from the southern provinces after the War, characterized the pattern of population redistribution between 1950 and 1955. The refugee movements also shaped

³ A city in the post World War II period is defined as an administratively defined Shi area with a population of 50,000 or over.

⁴Robert C. Cook, "World Migration, 1946–1955" *Population Bulletin*, 13, August 1957, p.82.

Table. IV. 4.
City Population of South Korea, 1943-55

City	Province	(Number of Persons in 1,000)					Per cent Increase		
		1943* (Dec. 31)	1946* (Dec. 31)	1949* (May 1)	1949 (May 1)	1955 (Sept. 1)	1943-46	1946-49	1949-55
Seoul	Special City	1,078	1,141	1,446	1,555 ^{**}	1,590	5.8	26.7	2.3
Incheon	Gyeonggi	241	236	266	261	319	-2.1	12.7	22.2
Chuncheon	Gangweon	39	47	54	54	63	20.5	14.9	16.7
Cheongju	Chungbug	43	52	65	64	83	20.9	25.0	29.7
Daejeon	Chungnam	76	96	127	127	173	26.3	32.3	36.2
Jeonju	Jeonbug	68	83	101	100	127	22.1	21.7	27.0
Gunsan	Jeonbug	58	67	74	74	88	15.5	10.4	18.9
Iri	Jeonbug	27	36	47	46	68	33.3	30.6	47.8
Gwangju	Jeonnam	84	100	139	177 ^{***}	214	19.0	39.0	20.9
Mogpo	Jeonnam	73	103	111	111	117	41.1	7.8	5.4
Daegu	Gyeongbug	212	269	313	313	483	26.9	16.4	54.3
Busan	Gyeongnam	325	400	474	473	1,047	23.1	18.5	121.4
Masan	Gyeongnam	53	82	91	91	130	54.7	11.0	42.9
Jinju	Gyeongnam	55	87	77	77	80	58.2	-11.5	3.9
Total		2,432	2,799	3,385	3,523	4,582	15.1	20.9	30.1

* Foreigners Included

** Annexation took place on August 13, 1949 in Seoul.

*** Annexation took place on August 13, 1955 in Gwangju.

Source: Ministry of Home Affairs, *Korea Statistical Yearbook 1952*.

the course of urbanization in Korea during and after the Korean War period. At the peak of the War, for example, the population of Seoul was cut in half from the pre-War level of 1.5 million. Seoul regained this level in 1955.⁵ On the other hand, the major receiving area of war refugees, Busan, more than doubled its population at that time. The population of Busan remained more or less stable at one million through 1955. Apparently many of those who fled to Busan, especially those from North Korea, stayed on even after the War.⁶

During this period, eleven towns (Eups) obtained urban (Shi) status, having reached the population size of 50,000. Thus the number of cities (Shis) had increased to 25 by the time of the 1955 Census. One of the 14 Shis in South Korea before the Korean War, Kaesung, fell into North Korea during the War. The urban (Shi) population, which comprised 17 percent of the total population before the War increased to 24 percent by 1955. The corresponding figures for areas over 20,000 (Shis and Eups) increased from 20 percent in 1949 to 31 percent in 1955. The 14 original Shis ab-

⁵City of Seoul, *Seoul Statistical Yearbook 1970*, p. 13, Table 7.

⁶City of Busan, *Busan Statistical Yearbook 1962*, p. 9, Table 3.

sorbed 88 percent of the total population growth of South Korea between 1949 and 1955. The growth of population in areas over 20,000 was twice that of the nation. The national population growth of 1,337,000, was accounted for by 2,696,000 added to areas over 20,000 and a decline of 1,359,000 persons between 1949 and 1955 in smaller areas.

Despite the War and the destruction of the urban economic base by the War, Korean cities (Shis) and towns (Eups) grew at an amazingly rapid rate, averaging 14 percent a year during the 1949–1955 period. This rapid urbanization process was not caused by the development of a stable urban industrial structure but was almost exclusively due to external factors such as refugee movements within South Korea and the influx of North Korean refugees.

2. Recent Trends, 1955-1970

For the first time since the beginning of the modern era at the turn of the century, movement of the Korean population was confined to the national boundaries and population increase was almost entirely attributable to natural increase during the 1955–1960 period. The political situation was relatively stabilized and guerrilla activities had been terminated. Without external checks, the Korean population had a record high increase rate, approximately 3 percent a year. The fertility rate of the Korean population remained high, while the mortality rate fell significantly owing to the stabilization of the political situation and massive application of antibiotics and pesticides. The population in South Korea thus increased from 21,526,000 in 1955 to 24,989,000 in 1960, an increase of 16 percent in five years.

Some of the factors which influenced population redistribution during the time are return of soldiers from military camps near the demilitarized zone to their home provinces, continued resettlement of remaining refugees from southern provinces to Seoul and other northern provinces, and rural outmigration on a significant scale from southern provinces to the major administrative, military, and service oriented cities and towns.

Table IV. 3 presents the population distribution by provinces. Seoul's growth rate continued to be exceptional, showing a 54 percent increase during 1955–60. Two northern provinces also showed relatively high increase rates: 21 percent in Gyeonggi and 26 percent in Gangweon. The Gyeonginter censal increase rates were lowest in the two southern provinces, nam and Jeju, where refugees had been concentrated during the Korean War. Lower than average rates were observed in provinces of southern and central regions which had traditionally been areas of out-migration.

Another salient feature of population redistribution in Korea during this period is the rapid increase of population in large administrative centers of the nation and provinces despite the significant slow-down in overall

urbanization rate as compared with the previous intercensal period. Seoul, the national capital had the highest increase rate. The population increase in Seoul accounted for more than half of the total urban population increase of 1,740,000 persons between 1955 and 1960. While other provincial capitals in general showed a remarkable gain of population between 1955 and 1960, Busan and Jeju did not grow as rapidly as others. These two cities were major receiving areas of war refugees during the Korean War, and the return movements of these refugees to their home provinces continued during the 1955–1960 period.

On the other hand, small cities that had originally developed as commercial ports or agricultural assembly points grew very little or declined in size between 1955 and 1960. Of the 25 cities having Shi status in 1960, 14 showed a growth rate less than the national average. The rapid increase of population in administrative centers and the stagnant growth patterns of other cities imply again that the relatively high pace of urbanization in Korea during this period was not caused by the stable development of urban industries, but was largely induced by temporary service-related work opportunities and relief activities more easily available in large administrative centers, especially in Seoul.

Examination of census data also reveals that service oriented towns near the U.S. military camps in the vicinity of Seoul experienced exceptionally high rates of increase during the 1955–1960 period; 116 percent in Dongducheon, 35 percent in Pyeongtaek, 80 percent in Songtan, 42 percent in Anyang, and 76 percent in Sosa. Service-type activities created by the location of the U.S. military camps probably attracted a large number of migrants to these areas.

Mining and fishing towns of Gangweon province such as Yeongweol, Samcheok, Jangseung, and Mukho also showed a considerable gain of population during this period. Recaptured areas of the Gangweon province near the demilitarized zone began to attract settlers in large numbers. Consequently Gangweon showed the highest percentage increase of population among all the provinces except the special city of Seoul during the 1955–1960 period.

Tai Hwan Kwon made census survival ratio estimates of net migration for urban and rural areas of Korea for the 1955–1960 intercensal period. He reassigned the 1955 *de facto* census military population to the places of pre-induction residence in order to ensure the comparability of the data between the 1955 and 1960 censuses.⁷ Table IV. 5 presents Kwon's net intercensal migration estimates for urban areas of each province. Seoul's absolute dominance in the process of internal migration during this period is clearly shown. Of the total net migration gain of 588,000 for all urban

⁷Tai Hwan Kwon, "Net Migration Estimates: 1955–1970," to be published in *Bulletin of the Population and Development Studies Center*, Vol. IV, Seoul, 1975.

Table. IV. 5.
 Net Intercensal Migration for 25 Cities and Urban Areas of
 Each Province, 1955-60

City	Number	Rate*	Percent of the total urban net migration
Seoul	553,300	22.9	94.1
Busan**	-48,800	-4.2	-8.3
Gyeonggi Urban	21,100	4.3	3.6
Incheon	23,600	5.9	4.0
Suweon	-2,500	-2.8	-0.4
Gangweon Urban	12,200	5.6	2.1
Chuncheon	6,000	7.2	1.0
Weonju	6,200	8.0	1.1
Gangneung	—	—	—
Chungbug Urban	-2,800	-3.0	-0.5
Cheongju	-2,800	-3.0	-0.5
Chungnam Urban	23,300	10.2	4.0
Daejeon	23,300	10.2	4.0
Jeonbug Urban	-18,700	-5.4	-3.1
Jeonju	-2,000	-1.1	-0.3
Gunsan	-9,600	-10.6	-1.6
Iri	-7,100	-10.8	-1.2
Jeonnam Urban	17,300	2.9	3.0
Gwangju	22,400	7.1	3.8
Mogpo	-3,700	-2.8	-0.6
Yeosu	1,200	1.4	0.2
Suncheon	-2,600	-3.7	-0.4
Gyeongbug Urban	44,900	5.2	7.7
Daegu	44,000	6.5	7.5
Pohang	1,700	2.8	0.3
Gyeongju	1,600	2.1	0.3
Gimcheon	-2,400	-4.7	-0.4
Gyeongnam Urban	-13,300	-3.2	-2.3
Masan	7,900	5.0	1.3
Jinju	-3,400	-3.9	-0.6
Chungmu	-20,300	-42.5	-3.4
Jinhae	2,500	3.7	0.4
Jeju Urban	-600	-0.9	-0.1
Jeju	-600	-0.9	-0.1
Total	587,900	8.4	100.0

* Percent of 1960 Population

** Busan became a special city in 1963. At the time of the 1960 Census, it belonged to Gyeongnam province.

areas between 1955 and 1960, Seoul took up 553,000 or 94 per cent. The remaining six per cent was divided by urban areas of selected provinces.

Chungbug, Jeonbug, Gyeongnam, and Jeju showed a net migration loss respectively. Seoul was the final destination for most interprovincial migrants throughout the whole country during this period.

According to Kwon's estimates of net migration for individual cities for the 1955–1960, of the 25 cities having Shi status both in 1955 and 1960, 12 showed net migration loss, 12 experienced net migration gain, and one city neither gained nor lost by migration. Cities showing a significant migration gain outside of Seoul are Incheon, Daejeon, Gwangju, and Daegu, all provincial capitals. However, to highlight the importance of Seoul as a receiving area, it should be noted that the net migration gain in each of these cities was less than 10 percent of the gain in Seoul.

Rural areas in general lost population by migration during the 1955–1960 period according to Kwon's estimates. Exceptions are rural areas of Gyeonggi and Gangweon provinces, which showed some net migration gain. The gain in these areas is largely caused by the movement of population into the resettlement areas of the U.S. and R.O.K. army concentrations in the two provinces. The net out-migration for rural areas was greatest in the densely settled agricultural south.

On the whole, while the national population increased by 3,463,000 between 1955 and 1960, urban (Shi) population increased by 1,740,000 comprising 50 per cent of the total growth. The cities (Shis) and towns (Eups) over 20,000 grew by 2,613,000 at an average annual rate of 7.9 percent and took up 75 percent of the total increase. Thus in 1960, cities and towns of such size class constituted 37 per cent of the national population.

The already crowded rural areas of Korea apparently could not withstand the pressure caused by the record high growth rate of population during the 1955–1960 period. Material losses caused by the Korean War were not fully recovered. Many small provincial cities lost major urban functions and could no longer attract people from surrounding rural areas. Overcrowded people from rural areas, small towns, and small cities of the agricultural south thus migrated to Seoul, other large provincial capitals, and areas of military concentrations.

The period 1960–1970 marks a rapid transformation of the Korean society under the government policies to achieve maximum economic growth rates. The nation's economy as measured by Gross National Product grew at a record high rate, averaging about 9.9 per cent a year between 1962 and 1970. During the same period, the manufacturing sector of the Korean economy grew at an average annual rate of 18.6 per cent, while the agricultural sector grew only at 3.8 per cent a year.⁸ Population continued to grow at a relatively high rate, even though the growth rate slowed down significantly from

⁸Economic Planning Board, *Major Statistics in Charts 1972*, Seoul, 1973, p. 68, Table 56.

about 3.0 per cent a year in 1960 to about 2.0 per cent a year in 1970. Thus the total population of South Korea increased by 25 per cent during the decade, reaching 31,469,000 in 1970. The concentrated growth of the urban-industrial sector of the economy acted as a magnet to the overcrowded rural farm population and accentuated the speed of urbanization. The nation's non-farm population increased by 69.0 per cent from 10,430,000 in 1960 to 17,624,000 in 1970, while the absolute size of the farm population showed a slight decline of 1 per cent (127,000 persons), comprising 45 per cent of the nation's population by 1970.

While the urban-industrial sector of the economy prospered, conditions in rural areas did not improve very much. The average size of farm households remained high and declined only slightly in the latter part of the decade: 6.20 in 1960, 6.21 in 1966 and 5.80 in 1970. Cultivated area per farm household remained at about 2.1 acres throughout the decade, despite the absolute decline in farm population.⁹ The crowded condition of rural Korea simply could not absorb the additional increment of population. Small landholders responded to the demographic pressure by reducing fertility and moving out toward large urban centers. Even though the Korean fertility declined significantly, it was still high and continued to add

Table IV. 6
Population by Province, 1960, 1966, and 1970 within
the 1970 Constant Boundaries

Province and Special Shi	1960		1966		1970		Annual increase rate (%)	
	Number (in 1000)	%	Number (in 1000)	%	Number (in 1000)	%	1960 -66	1966 -70
Seoul	2,600	10.4	3,850	13.0	5,536	17.6	6.5	9.4
Busan	1,207	4.8	1,430	4.9	1,881	6.0	2.9	6.9
Gyeonggi	2,599	10.4	3,107	10.6	3,358	10.7	3.1	1.9
Gangweon	1,528	6.1	1,832	6.3	1,867	5.9	3.1	0.4
Chungbug	1,371	5.5	1,551	5.3	1,481	4.7	2.1	-1.1
Chungnam	2,660	10.7	2,913	10.0	2,860	9.1	1.6	-0.4
Jeonbug	2,267	9.1	2,524	8.6	2,434	7.7	1.9	-0.9
Jeonnam	3,549	14.2	4,052	13.9	4,007	12.7	2.3	-0.3
Gyeongbug	3,950	15.8	4,479	15.3	4,559	14.5	2.2	0.4
Gyeongnam	2,975	11.9	3,178	10.9	3,120	9.9	1.2	-0.4
Jeju	282	1.1	337	1.2	366	1.2	3.1	2.0
Total	24,989	100.0	29,208	100.0	31,469	100.0	2.7	1.9

Source: Bureau of Statistics, Economic Planning Board. *Ingoo Boonpo mit Choose 1960/12/1-1966/10/1* (Population Dec. 1. 1960-Oct. 1. 1966), Seoul, 1967. Economic Planning Board, Censuses of 1960, 1966, and 1970.

⁹*Ibid.*, Table 25.

pressure on farm areas. Migration toward large urban centers, especially toward Seoul, was therefore the major means of relieving the population pressure in rural areas.

During the 1960–1970 decade, the Korean population grew at an average annual rate of 2.3 per cent, the Shi population at 5.5 percent a year, and the Gun population at 0.6 per cent a year. The increase of Shi population 5,479,000, within the 1970 constant boundaries constituted 85 per cent of the total growth between 1960 and 1970. An additional 4 per cent of the total growth was accounted for by the increase in other administrative areas with 50,000 population or more in 1970 (9 Eups and 1 Myun). By 1970, 43 per cent of the total population were living in administrative areas of such size class (32 Shis, 9 Eups, and 1 Myun). The Shi population alone constituted 41 per cent of the nation's total population in 1970. Only 11 per cent of the total population increase was accounted for by the increase in Eups and Myuns with less than 50,000 persons.

The most conspicuous feature of population redistribution in Korea during the 1960–1970 period is an acceleration in the predominant movement of population toward Seoul and its vicinity from all over the country. As shown in Table IV. 6, Seoul is the only area that gained a significant share of national population as a result of the population shift among 9 provinces and 2 special cities.

The proportion of the national population residing in the constant boundaries of Seoul Special City increased by 7.2 percentage points, from 10.4 in 1960 to 17.6 in 1970. The percentage share of Busan Special City increased only slightly, from 4.8 in 1960 to 6.0 in 1970. In seven other provinces, the percentage share declined. In the remaining two provinces of Gyeonggi and Jeju, the percentage share remained at about the same level throughout the decade.

The population growth rate of Seoul was exceptionally high. Its annual increase rate was 6.5 per cent during the 1960–1966 intercensal period and 9.4 per cent during the 1966–1970 period. There were more than 5.5 million people in Seoul at the time of the 1970 Census. In 1974 the population of Seoul is probably well over 6.5 million.

The same dramatic growth pattern was observed in the towns and rural-urban fringe near Seoul. In fact, two Eups and one Myun (Dongducheon, Anyang and Sindo) near Seoul grew even faster than Seoul during the 1960–1966 period. During the subsequent period, one Eup (Anyang) and two Myuns (Sindo and Joongbu) also surpassed the growth rate of Seoul. Anyang Eup, Sindo Myun, and Joongbu Myun all had growth rates far greater than any other city, town, or Myun in the nations. The same pattern is experienced in satellite cities of Seoul. The annual growth rates were 4.7 per cent in Incheon, 2.9 per cent in Suweon and 6.4 per cent in Euijeongbu during the 1960–1966 period. The growth rate of Euijeongbu, which ranked second among 32 Shis, was almost identical with the rate of

6.5 per cent recorded for Seoul. The annual growth rates in these cities during the following intercensal period are 5.0 in Incheon, 7.1 in Suweon, and 5.9 in Euijeongbu. These rates are much higher than those of other cities for the same period. The rate for Suweon ranked third among all Shis, next to Seoul and Ulsan.

Within the city of Seoul, suburban districts grew fastest and the two central districts, Jung-Gu and Jongro-Gu, showed an absolute decline in size during 1960–1970. The annual growth rates have accelerated in all fringe districts and decelerated in the intermediate districts. The population in Seongbug-Gu and Youngdeungpo-Gu have more than tripled within the decade. The population size of Youngdeungpo-Gu (1.2 million) in 1970 was even greater than that of the third largest city, Daegu. Those fringe districts of Seoul, plus immediate surrounding towns and rural-urban fringe areas, thus constituted the fastest growing areas in Korea during the 1960–1970 decade.

Another important characteristic of population redistribution during the 1960–1970 decade is a rapid population growth in the cities in the largest size classes. Table IV. 7 shows annual growth rates by size-class of cities during the intercensal periods of 1960–1966 and 1966–1970. In both periods, the largest cities generally grew fastest. The relationship between the size-class and annual growth rate is less clear for the 1960–1966 period due to the stagnant growth of Busan, the second largest city. However, a positive relationship is definitely established for the subsequent intercensal period of 1966–1970. Busan's growth rate showed a remarkable jump in this period, 6.85 per cent a year. During the previous period, its annual growth rate was only 2.90 per cent. Durin g1966–1970 Myun (rural farm) areas lost population at a rate of 1.69 per cent a year.

Contrary to the rapid increase of population in large cities, small cities and

Table IV. 7
Population Increase Rate of Administrative Areas by Size Class, 1960–1970 within the 1970 Constant Boundaries

Administrative Areas (1970 Population)	Annual Intercensal Increase Rate (%)	
	1960–1966	1966–1970
Seoul (5,536,000)	6.53	9.37
Busan (1,881,000)	2.90	6.85
Daegu (1,083,000)	5.10	6.12
Other Shis:		
500,000–999,999	5.18	5.20
100,000–499,999	3.01	4.85
Less than 100,000	2.80	3.02
All Eups	2.03	2.01
All Myuns	1.47	–1.69

Source: Same as Table IV. 6.

towns (Eups) generally showed either a stagnant growth pattern or an absolute decline in population. During the 1960–1966 period, 13 of the 32 Shis showed an annual growth rate lower than the national rate of 2.65 per cent. In contrast, there were only three Shis showing a growth rate less than the national rate of 1.88 per cent a year during the 1966–1970 period. Other Shis generally increased at a faster rate than the previous intercensal period. During the 1966–1970 period, thirty-one of the 91 Eups actually declined in population. Most of these declining towns are in the agricultural provinces of the south, which had traditionally been areas of out-migration. Towns in Gyeonggi (near Seoul) and Gyeongbug (near Daegu) along the major Seoul-Busan transportation routes and mining and industrial towns in the Taebaig mountain region continued to grow faster than the national rate throughout the decade.

As a result of the differential growth patterns of cities, towns and rural farm areas, the provincial balance of population has changed significantly during the decade. Provinces containing large farm areas have been losing population by migration. Migration losses in these provinces were compensated by rapid natural increase, and the population size of each province continued to increase during the 1960–1966 period. During the subsequent intercensal period, however, natural increase could not make up the losses created by accentuated out-migration from rural-farm areas and small towns in agricultural provinces, and five provinces showed an absolute decline in population. In 1960 there were four provinces larger than Seoul in population size. By 1970 Seoul became the largest administrative area, containing 18 per cent of the national population.

Another important feature of population redistribution in Korea during the 1960–1970 decade is the beginning of a polarization pattern of urban growth; that is, Busan and cities near it began to develop as a metropolitan region in the last four years of the decade. Busan and its nearby cities taken as a whole grew at about the national rate during 1960–1966. The annual growth rate for the whole region during 1966–1970 (6.6%) was more than three times as great as the national rate. The growth rate in this region during the last four years of the decade was second only to that of the Seoul metropolitan region.

Many provincial capitals, Daegu, Daejeon, Gwangju, Chuncheon, Jeju, and Jeonju, grew at a rapid rate toward the end of the decade. The rapid increase in these cities however was confined to their boundary lines, and no clear sign of metropolitan development was observed in any provincial capital.

Table IV. 8 presents census survival ratio estimates of net migration for urban areas of each province and for 32 Shis for the two intercensal periods of 1960–1966 and 1966–1970. The net migration gain for all urban areas during the 1960–1966 period was 1,312,000 which amounts to 12 per cent of the total urban population in 1966, and also accounts for 49 per cent of

the urban population increase during the period. The net gain by migration for urban areas in the subsequent intercensal period of 1966–1970 was 2,313,000, which is equivalent to 18 percent of the total 1970 urban population, and accounts for 73 percent of the urban population increase during this four year period. In other words, natural increase and net migration contributed about equally to the increase of urban population during 1960–1966, but net migration became dominant in urban population growth during 1966–1970.

Table IV. 8
Net Migration for 32 Shis, 1960–1966 and 1966–1970 within the 1970
Constant Boundaries

Shi	1960–1966			1966–1970		
	Net migration		Percent inc. due to net m.	Net migration		Percent inc. due to net m.
	Number	Rate (%)		Number	Rate (%)	
Seoul	784,203	20.7	65.7	1,400,564	25.4	80.9
Busan	42,268	3.0	19.3	321,624	17.1	71.4
Gyeonggi Urban	72,369	9.9	43.3	119,213	13.1	66.5
Incheon	56,695	10.8	45.6	74,127	11.5	63.1
Suwon	1,019	0.8	5.3	31,684	18.6	75.0
Euijeongbu	14,655	19.6	62.9	13,402	14.2	68.5
Gangweon Urban	22,550	6.8	33.0	22,690	5.9	45.8
Chuncheon	3,204	3.2	18.3	14,345	11.7	64.0
Weonju	13,477	13.0	50.2	—329	—0.3	—4.1
Gangneung	—3,681	—5.6	—56.7	3,817	5.1	42.0
Sogcho	9,550	15.1	54.7	4,857	6.6	48.8
Chungbug Urban	295	0.1	1.1	12,557	5.4	45.7
Cheongju	—468	—0.4	—2.9	10,946	7.6	54.7
Chungju	763	1.0	6.7	1,611	1.8	21.6
Chungnam Urban	22,492	5.8	30.8	73,157	14.9	69.2
Daejeon	22,223	7.1	35.4	72,219	17.4	73.1
Cheonan	269	0.4	2.7	947	1.2	13.6
Jeonbug Urban	3,848	1.0	6.8	26,972	5.8	45.1
Jeonju	3,428	1.6	10.6	23,797	9.1	56.8
Gunsan	—1,943	—1.9	—16.3	1,318	1.2	13.6
Iri	2,364	3.0	19.0	1,856	2.2	22.4
Jeonnam Urban	66,974	9.0	41.2	78,387	8.9	58.4
Gwangju	68,033	16.9	59.0	66,616	13.3	67.7
Mogpo	124	0.1	0.5	2,752	1.5	17.6
Yeosu	372	0.4	2.5	3,704	3.3	31.6
Suncheon	—1,555	—2.0	—15.8	5,279	5.8	45.8
Gyeongbug Urban	115,307	10.3	46.5	181,113	13.0	66.3
Daegu	119,814	14.2	55.6	165,986	15.4	70.4
Pohang	—2,675	—4.1	—41.8	7,912	10.0	59.3
Gyeongju	—1,791	—2.1	—18.3	—768	—0.8	—12.2
Gimcheon	—2,105	—3.7	—37.0	481	0.8	9.3
Andong	2,064	3.2	20.2	7,513	9.8	59.0

Gyeongnam Urban	-5,722	--1.0	-8.6	67,224	10.0	58.6
Masan	-26,519	-17.2	-777.7	23,011	12.1	63.6
Chungmu	-4,254	-8.4	-155.6	115	0.2	2.6
Jinhae	2,930	3.6	22.8	4,451	4.8	39.4
Jinju	7,185	6.7	36.1	5,392	4.4	37.2
Samcheonpo	-4,571	-8.6	-163.6	-2,692	-4.9	-147.3
Ulsan	19,507	17.3	62.1	36,981	23.2	79.0
Jeju Urban	7,128	8.2	36.8	9,342	8.8	49.4
Jeju	7,128	8.2	36.8	9,342	8.8	49.4
Total Shis	1,131,713	11.6	49.2	2,312,813	17.9	73.5

Note: The rate is computed as the number of net-migration divided by the terminal year population in each city for each period.

Seoul dominated the migration picture of Korea in both intercensal periods of the 1960–1970 decade. The net migration gain for Seoul accounted for 69 per cent of the total net urban migration gain during the former six year period and 60 per cent of the total net rural-urban migration during the latter four-year period. Net migration also played a major role in the population growth of Seoul itself. Net migration contributed 66 per cent of the total population increase in Seoul between 1960 and 1966 and 81 per cent of the increase between 1966 and 1970.

Other areas where migration played a major role in population increase during 1960–1966 are regional administrative centers and cities of major military concentration, especially areas of the U.S. Armed Forces installation, such as Euijeongbu, Weonju, Sogcho, Gwangju, and Daegu. It is interesting to note that migration contribution in Busan, the second largest city, was rather small. Net migration gain accounted for only 19 per cent of the total population increase in Busan, and its net migration rate ranked it as 14th among the nation's 32 cities during this period. On the other hand, Ulsan, a neighboring city of Busan, drew a large number of migrants as a result of the government effort to develop Ulsan as a major industrial complex of the nation. Net migration contributed 62 per cent of the total population increase in Ulsan between 1960 and 1966.

Migration was a more important factor than natural increase in the growth of population in seven of 32 Shis during the 1960–1966 period. On the other hand, ten of 32 Shis, mostly small and located in agricultural regions, showed a net migration loss during the same period. Net out-migration was heaviest among the cities of Gyeongbug and Gyeongnam provinces. Three of five cities in Gyeongbug and three of six cities in Gyeongnam showed migration losses.

Thus Korean urbanization during 1960–1966 was characterized by the dominant growth of Seoul and its surroundings due to net migration. Migrants were attracted to Seoul from all over the country, from both rural and urban areas, and from nearby as well as distant provinces. The 1966 Special Demographic Survey, a nationwide sample survey conducted along

with the 1966 Post Enumeration Survey, reveals that, among the five-year in-migrants to Seoul between 1961 and 1966, 61 per cent of males and 64 per cent of females were living in rural areas before they moved into Seoul. The same data also show that only 18 percent of in-migrants to Seoul were from the contiguous province of Gyeonggi.¹⁰ By contrast, other cities that gained a significant amount of net migration attracted people mostly from their immediate surrounding regions. Many small cities in agricultural regions lacked both major administrative and service bases and experienced net out-migration during this period.

Although Seoul continued to receive the largest portion of rural-urban net migration gain during 1966–1970, net migration played a major role in the growth of population for many other cities. Net migration contributed higher proportions than natural increase to the growth of population in 15 of the 32 Shis during the period. In all three satellite cities of Seoul, over 60 percent of the population growth was due to net migration gain. Cities that had shown net out-migration or negligible migration gain during the previous period generally experienced a significant gain in net migration. Only three Shis showed a net out-migration during the 1966–1970 period, whereas 10 Shis lost population by net out-migration during the 1960–1966 period.

Busan emerged as a major attracting area of rural-urban migrants during the latter period. Net migration contributed only 19 percent of the population increase in Busan during 1960–1966, whereas it accounted for 74 percent during 1966–1970. Net migration contributed 79 percent of the population increase in Ulsan, a neighboring city of Busan, during 1966–1970.

Other cities of the largest size class, such as Daegu, Incheon, Gwangju and Daejeon, also experienced remarkable gains in net migration toward the end of the decade. Net migration accounted for over 60 per cent of the total population increase in each of these cities during 1966–1970.

Thus it appears that the period 1966–1970 may have witnessed the beginning of stabilized urban development in Korea, although Seoul and its satellite cities and towns still dominated the nation's overall urbanization picture. As the nation's economic policy continues to direct itself toward development of regional industrial cities, urban growth is expected to diverge from the hitherto dominant growth pattern of Seoul.

¹⁰E. H. Choe & J. S. Park, *Some Findings from the Special Demographic Survey* (The Population and Development Studies Center Publication Series No.3), Seoul, 1966, Table 39.

V. THE LABOR FORCE

This chapter deals with that portion of population primarily responsible for national production. A focus will be placed upon the nature and scope of labor force participation and the substance of economic activity. We will begin with a brief review of the structure of and change in gainful activities during colonial period.

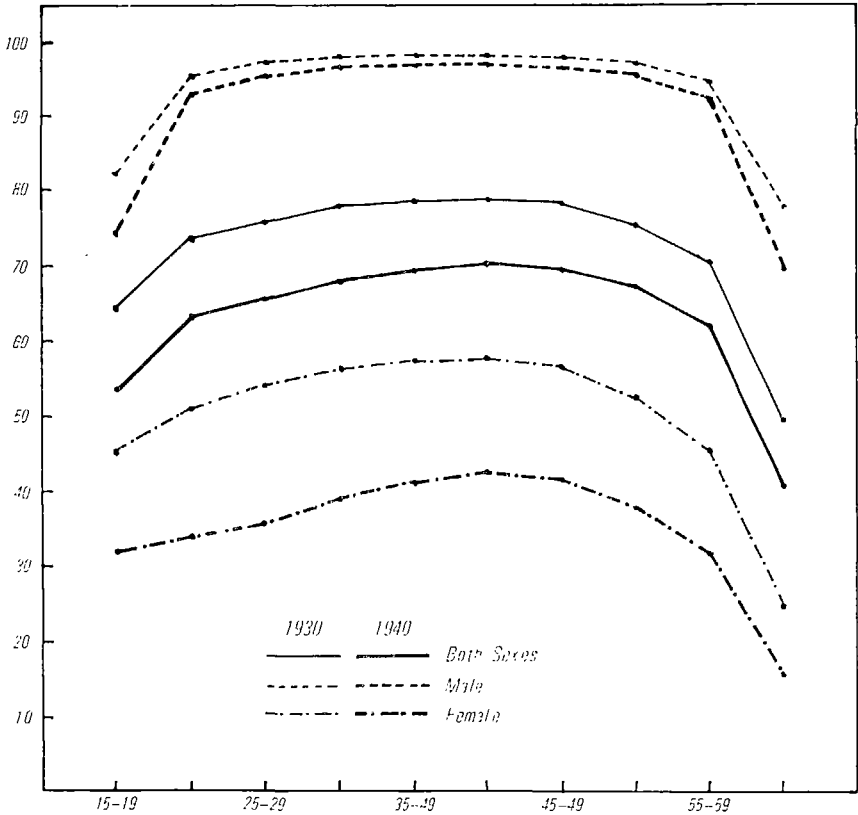
1. The Colonial Period 1910-1945

Only limited data on gainful activities were made available during the Japanese period. Change in the degree of total labor participation, for which three censuses, 1930, 1940 and 1944, provide relevant information, reflects the economic transformation which Korea went through under the colonial authorities.¹ The overall trend during the fourteen-year period, 1930–1944, is one of decline, but the two intercensal periods, viewed separately, indicate somewhat different patterns. The per cent of the total population aged 15 and above reported as gainfully occupied declined substantially during the period from 1930 to 1940, from 71.7 to 62.0. Even the total number of the gainfully occupied decreased by 3.2 per cent during the same period, from 9.6 million to 9.1 million. This decline is ascribed to the fact that the industrial change in the late 1930s attracted a large number of rural surplus population into the urban areas where the employment situation was much less accommodating than in the rural areas. While a massive influx of peasants into the cities occurred not all of them found economic opportunities. The negative effect of industrial change on the utilization of labor was much more strongly felt among women than among men. In the last intercensal period, 1940–1944, the participation rate increased from 62.0 per cent to 67.7 per cent, but not to the 1930 level. This increase must have been due to the increased demand for manpower in the war situation as the Japanese entered the Pacific War in 1941. The increase in the labor participation during this period is almost solely accounted for by increased utilization of women labor. The scope of male participation, in fact, remained stable. It appears that the war mobilized a large number of Korean women for the economy while an equally large number of Korean men, mostly in the prime ages, 20–29, were drafted into or to help the Japanese armed forces.

Change in the general picture of the Korean occupational structure was

¹Yunshik Chang, "Colonization as Planned Change: The Korean Case," *Modern Asian Studies*, Vol. 5, No. 2 (1971), pp. 161–186.

Figure V. 1 Gainfully Occupied Population as a Proportion of the Total Population, by Age and Sex. 1930 and 1940



rather slight. The intercensal period, 1930–1940, witnessed a substantial reduction of the total size of the gainfully occupied in the agricultural sector, about a million but, the same sector still accounted for a good majority of the total work force, 74.8 per cent in 1940. The manufacturing industry which grew substantially in the late 1930s, contributing almost the equal proportion to the national income as the agriculture, had a negative effect on labor absorption. It is worth noting that the commerce constituted the largest proportion, 6.0 per cent, in the occupational structure apart from colonial agriculture.

If we look at the effect of the colonial economic transformation on the female labor participation alone there emerges an interesting pattern: non-agricultural participation declined while agricultural participation increased. The decline of women in the non-agricultural sector must have been due to the fall of household industry to which women have traditionally contributed handsomely. The increased female participation in farming,

Table V. 1
Industrial Distribution of Gainfully Occupied
Workers, Koreans Only, 1930-1940

Industrial Category	1930		1940	
	Number	%	Number	%
Agriculture	7,632,666	80.7	6,670,360	74.8
Fishery	114,495	1.2	129,408	1.5
Mining	30,594	0.3	165,825	1.9
Manufactured Industry	525,605	5.6	423,397	4.8
Commerce	478,506	5.0	536,602	6.0
Transportation	81,276	0.9	109,141	1.2
Government and Professions	109,223	1.1	170,665	1.9
Domestic Service	116,751	1.2	168,620	1.9
Others	375,021	4.0	537,823	6.0
Total	9,463,666	100.0	8,913,840	100.0

Source: *Census Reports for Korea, 1930* (Section on all Korea), Table 41, p. 134.
Census Reports for Korea, 1940 (Summary), Table 17, pp. 112-127.

on the other hand, may be attributed to the increased manpower demand necessitated by an exodus of male agricultural labor force.

The most conspicuous index of the occupational emancipation of women can be seen in the changing proportion of the gainfully occupied women in such areas as manufacturing, government and professions, and transportation. These categories were open mostly to young women in late adolescence before marriage.

For the Japanese in Korea the picture appears to be quite different. Inasmuch as the economic development in Korea in the late 1930s was initiated and dominated by the Japanese, a large portion of the new industrial sectors was occupied and controlled by them. Most Japanese in Korea who reportedly gainfully occupied were born and brought up in Japan, and theirs was a highly selective migration. For both census years, more than 80 per cent of the Japanese gainfully occupied were in non-agricultural sectors such as manufacturing, commerce, transportation, civil service and professions. While the Japanese manpower comprised only about 3 per cent of the total work force, they accounted for almost 20 per cent of the total gainfully occupied in non-agricultural categories of occupation in Korea.

2. The Labor Force Since 1955: Age and Sex Composition

According to the 1970 Census report, just over 10 million persons were classified as economically active constituting a little over half, 55 per cent, of the population aged 14 years and over in all about one third of the total

population. Of the economically active population, about 98 per cent are employed; two per cent are unemployed.

The proportion of economically active males has been approximately double that of females—73 per cent and 38 per cent. Women account for 35 per cent of the total labor force—more than that of the female labor force in most industrialized countries. However, the Korean figure is not directly comparable to the labor market participation of women in the context of industrial societies. This figure is partly an artifact of the conceptual approach adopted in collecting labor force data and partly results from social customs of work participation prevalent in a predominantly agricultural country.²

About 8 million persons aged 14 years and above are not in the labor force as they are staying home attending to domestic affairs, going to school, or engaging in other activities. Housekeeping duties fall largely on women. Of the women 14 years and above who are not in the labor force, 80 per cent are keeping house while only 20 per cent are either attending school or are engaged in other activities. In contrast, about 80 per cent of the male population 14 years and above is accounted for by those who are attending school or other reasons. Most of the 600 thousand men in the working ages categorized as unknown in the 1970 Census report are accounted for by the armed forces which is reportedly of the same magnitude.

Information on labor force participation as derived from the two main sources, census and annual survey, is summarized in Table V. 2. Since the four censuses under consideration were taken in different months of different years, the 1955 Census in September, the 1960 Census in December, and the 1966 and 1970 Censuses in October, the seasonal characteristics of economic activity or labor force participation makes the exact enumeration of the economically active population and assessment of trends over time on the basis of the census figures appear to be somewhat unrealistic. However, if we consider that the 1960 Census figure is likely to be an underestimation as the census was taken in December, both sources, with some discrepancies in estimates, clearly indicate a trend which could be generalized over the 1960s, namely that the size of the labor force increased almost parallel to the increasing size of the population in working ages, maintaining more or less the same participation rate. This relative stability of the participation rate during the period should not underrate changes within the labor force.

If we look at the numbers of the economically active men and women separately in relation to population growth, women responded more than men by entering the labor market under increasing population pressure. While the male labor force increased at a rate slightly lower than that of the men 14 years old and above, the female labor force grew much faster than the increase in women 14 years and above. This trend is a result of the

²See W. Arthur Lewis, "Unemployment in Developing Countries," Proceedings of the Third Biennial Midwest Research Conference of Underdeveloped Areas, Chicago, 1965.

Table V. 2.
The Growth of Population and the Economically Active Population 1955-70

Year	(in thousand)														
	Both Sexes					Men					Women				
	Pop. 14yrs. & above	Econ. Active Pop.	Percent of E.A.P.	Pop. 14 yrs & above	Econ. Active Pop.	Percent of E.A.P.	Pop. 14yrs & above	Econ. Active Pop.	Percent of E.A.P.	Pop. 14yrs & above	Econ. Active Pop.	Percent of E.A.P.			
Census															
1955	13,189	9,832	74.6	6,434	5,526	85.9	6,755	4,305	63.7						
1960*	14,778	7,615	51.5	7,251	5,551	76.6	7,527	2,064	28.4						
1966*	17,134	9,401	54.9	8,457	6,667	78.8	8,677	3,734	31.5						
1970*	18,943	10,373	54.8	9,313	6,752	72.5	9,630	3,621	37.6						
Survey															
1963	15,685	8,653	55.2	7,375	5,634	76.4	8,310	3,019	36.3						
1964	16,348	8,893	54.4	7,718	5,839	75.7	8,630	3,054	35.4						
1965	16,591	9,199	55.4	7,835	6,001	76.6	8,756	3,198	36.5						
1966	16,840	9,325	55.4	8,010	6,130	76.5	8,830	3,195	36.2						
1967	17,169	9,504	55.4	8,117	6,173	76.1	9,052	3,331	36.8						
1968	17,433	9,757	56.0	8,164	6,216	76.1	9,269	3,541	38.2						
1969	17,579	9,818	55.9	8,246	6,318	76.6	9,333	3,500	37.5						
1970	17,936	10,020	55.9	8,512	6,394	75.1	9,424	3,626	38.5						

*Estimated by multiplying the percentage of the economically active population derived from the sample tabulation to the complete tabulation population.

Source: 1955 Population Census of Korea, pp. 4-11 and 94-95, 1960 Population and Housing Census of Korea, Vol. 1, 11-1, pp. 76-79 and Vol. 2, 11-1, pp. 110-111, 1966 Population Census Report of Korea, 12-1, pp. 44-45 and 110-111, 1970 Population and Housing Census Report, Vol. 1, 12-1, pp. 22-23 and Vol. 2, 4-1, p. 20, and 1970 Annual Report on the Economically Active Population, p. 16.

increasing participation of women in the farm areas, a response to the rapid exodus of the male farm labor force. During the period under consideration, the male labor force participation rate for non-farm households rose slightly while the rate for farm households decreased substantially. In fact, in 1970, the labor force participation rate in the two categories had become the same, whereas it was much higher among farm workers than non-farm workers in 1963. This notable decrease in the labor force participation rate of farm men which took place while the actual number of working age population in the same category was also decreasing appears to have been due to a selective migration of the rural labor force concentrated in prime working ages and an increased participation rate at other ages.

3. Employment and Unemployment

In the face of increasing population pressure upon the labor force, gainful opportunities appear to have expanded or accommodated rather well. Table V. 3 summarizes the employment data derived from both the census and annual survey.³ Although the census estimates of the employment figures for the earlier period are not exactly comparable to the latter years, the general picture emerging from the table is that not only the size of the employed population but also the employment rate increased steadily over the years. The last intercensal period from 1966 to 1970, in particular, witnessed an unusually sharp increase in the number of the employed population and the rate of employment. The increase in the size of the employed population is largely accounted for by the increase in the employed population in urban industrial areas. The increase of the urban employed population to approximately 40 per cent of the total employed population in 1970 constitutes more than 60 per cent of the increase of the total employed population in the sixties. The annual survey data indicate that the gain in the non-farm employed was larger than that of the entire employed population. As shown in Table V. 3 the number of non-farm men employed increased by more than a million between 1963 and 1970 and the number of non-farm women employed increased by more than five hundred thousand. On the other hand the size of the employed population in the farm sector fluctuated while maintaining an unchanging employment rate.

One important aspect of the increase of the employed population during the intercensal period from 1966 to 1970 is that employed women made a much larger contribution than in other intercensal years. The number of employed women increased by more than a million, a figure approximately

³The considerable difference of the size of the employed population between the census estimate and the survey estimate should be accounted for by the element of seasonal variations which affect the former, and also by sampling errors.

Table V. 3
 Employed Population, Size and Rate, 1955-1970,
 By Shi and Gun, Non-farm and Farm, and Sex

year	Employed Population(in thousand)			Employment (per cent)		
	Both Sexes	Men	Women	Both Sexes	Men	Women
All Korea (Census)						
1955	8,052	4,833	3,219	81.9	87.5	74.8
1960	7,005	4,995	2,010	93.2	93.0	93.8
1966	7,963	5,425	2,538	92.0	90.8	94.7
1970	10,153	6,578	3,575	97.8	97.4	98.6
Shi						
1955	1,178	957	221	50.6	74.9	35.9
1960	1,522	1,146	376	82.9	82.6	83.9
1966	2,364	1,723	641	83.4	82.6	85.9
1970	3,742	2,683	1,059	95.4	95.1	96.2
Gun						
1955	6,875	3,876	2,999	86.6	91.3	81.3
1960	5,482	3,848	1,634	96.5	96.6	96.4
1966	5,599	3,702	1,897	96.2	95.2	98.1
1970	6,410	3,895	2,515	99.3	99.1	99.7
All Korea (Annual Survey)						
1963	7,947	5,146	2,801	91.8	91.3	92.8
1964	8,210	5,327	2,883	92.3	91.2	94.4
1965	8,522	5,499	3,023	92.6	91.6	94.5
1966	8,659	5,634	3,025	92.9	91.9	94.7
1967	8,914	5,763	3,151	93.8	93.4	94.6
1968	9,261	5,867	3,394	94.9	94.4	95.8
1969	9,347	5,998	3,349	95.2	94.9	95.7
1970	9,574	6,052	3,522	95.5	94.7	97.1
Non-farm						
1963	2,818	1,911	907	83.6	83.5	83.7
1964	2,915	2,007	948	85.6	84.5	88.1
1965	3,252	2,191	1,061	86.5	85.5	88.3
1966	3,401	2,360	1,041	87.2	86.7	88.5
1967	3,723	2,574	1,147	88.9	88.8	88.9
1968	4,038	2,759	1,279	91.2	90.7	91.9
1969	4,232	2,933	1,299	92.2	92.5	91.6
1970	4,545	3,140	1,405	92.5	91.5	94.9
Farm						
1963	5,129	3,235	1,894	97.1	96.7	97.9
1964	5,255	3,320	1,935	96.6	95.9	97.8
1965	5,270	3,308	1,962	96.9	96.2	98.2
1966	5,258	3,274	1,984	96.9	96.1	98.3
1967	5,191	3,189	2,002	97.7	97.3	98.2
1968	5,233	3,108	2,115	98.1	97.9	98.4
1969	5,115	3,065	2,050	97.8	97.4	98.5
1970	5,029	2,912	2,117	98.4	98.2	98.7

Source: See citation to Table V. 2.

The same as the increase of employed men between 1966 and 1970,

making the proportional increase much higher for women than for men. It is also worth noting that the same as the increase of proportional increase of employed men was substantial only in the urban areas whereas that of employed women was so in both urban and the rural areas.

The increased employment rate for both sexes, between 1966 and 1970 implies an increased participation in the labor force of those who remained unemployed or were not in the labor force at all. The trend in the past was generally that recruitment to the employed population was completed at very early stages of the working ages, and additional recruitment at later ages was minor compared to the new recruitment of youth entering the labor force.

Estimation of the net increase or decrease of the employed population during the intercensal period from 1966 to 1970 by age and sex indicates that, except for the last age group, 60 and above, in which persons are more likely to retire than leave employment temporarily, each age group experienced a net gain with varying proportions. The net increase of employed males is considerably higher than that represented by the newly entered male labor force aged 15–19; the net increase of the employed female workers is about the same as that represented by the newly entered female labor force aged 15–19.

The general trend in the growth of the employed population during the 1960s, as shown above, clearly reflects the way the system of employment is responding to the economic growth witnessed during the decade. The growth of national productivity, largely based on non-agricultural industry, had the effect of releasing a large number of surplus rural male workers, and to some extent opening up employment opportunities to women. An interesting side effect is that the agricultural sector had to recruit more female workers to maintain the stability of farm employment which was disturbed by industrial growth.

Paradoxically, the labor force approach, though originally designed for the measurement of unemployment, does not produce reliable measures when applied to a population largely dominated by agriculture. In rural-farm areas, where people do not work for wages, it is not easy to measure the size of labor force. Although the increasing population creates a pressure on the labor market, its expansion is more closely affected by actual labor demand. Furthermore not all the unemployed are employable. Those who report themselves as unemployed in one area do not necessarily make themselves available for work opportunities created in another town.⁴ The unemployed in the sense defined here do not really exist in the rural areas. "Countries with high population pressure learn over the centuries how

⁴Gunnar Myrdal, *Asian Drama*, (Pantheon), New York, 1968, Vol. 2. Chap. 21.

⁵W. Authur Lewis, "Unemployment in Developing Countries," Lecture to Mid-West Research Conference, October, 1964.

to provide some work for everybody."⁵

Under these circumstances, not all the employed work to their fullest capacities, for there are usually more laborers in industries, especially in agriculture, than are actually needed, and hence some of the employed may be disposed of without affecting productivity. A substantial proportion of the employed labor force is said to be underemployed or employed in disguise.

The above issues have led some economists to cast serious doubt as to the applicability of the labor force approach to measure employment rate in non-industrialized countries.⁶ It may be unsatisfactory to talk unemployment without being able to define the unemployed precisely.⁷ But it is equally unsatisfactory to disregard it.

In Korea, large cities are growing rapidly: the proportion of the population residing in urban areas is approaching almost fifty per cent. In the cities, a great majority of the people in the working ages are engaged in non-agricultural activities, and employment practice is taking different forms than in the rural areas. Secondary industry pays wages for workers recruited, and requires them to have certain amounts of technical skills. Due to the massive influx of rural farmers in the cities, the number of persons in the labor force is growing much faster than the number of jobs created by the secondary industry. The service industry may recruit more labor than it needs at a lower wage rate, but it can not develop the social customs to absorb the surplus labor in the flexible manner that prevails in the rural areas. While in rural areas additional or surplus labor is absorbed by one's own family, in the cities there are many individuals for whom no family feels responsible. For them employment becomes a matter of surviving and unemployment becomes a serious social problem.

In non-agricultural industries where technology is rapidly developing, the wage scale tends to differentiate widely in terms of level of skill or training, and those who are qualified for a high wage are not likely to commit themselves to a job which requires few skills and pays a low wage.

With the expansion of education, the population in the working ages has been differentiated in terms of qualification for jobs, and the growing non-agricultural industry with its attendant division of labor makes more complex the rule of demand and supply of manpower in each sector. While education provides work training, it also makes the educated person selective in the choice of occupation, as shown in Table V. 4. As the level of educational attainment is directly equated with the scale of prestige an educated person has a strong tendency to seek a prestigious occupation. Traditionally, prestigious occupations have been rather narrowly defined, and opportunities for them have not increased in proportion to the expansion of education, Public school education has grown rather rapidly at each level; the supply

⁶Myrdal, *op. cit.*, p. 1022.

⁷Lewis, *op. cit.*

Table V. 4
 Educational Attainment of Employed Population, by Occupational Category and Sex, 1970

Occupational Category	Occupation by Education				Education by Occupation				
	Total	No Schooling	Primary School	Secondary School	College or more	No Schooling	Primary School	Secondary School	College or more
		Both Sexes							
Total	100.00	23.79	43.64	26.44	6.13	100.00	100.00	100.00	100.00
Professional technical and related workers	100.00	1.26	5.45	37.70	55.59	0.17	0.40	4.53	28.83
Administrative and managerial workers	100.00	1.23	14.09	44.84	39.84	0.05	0.31	1.60	6.13
Clerical and related workers	100.00	0.41	9.28	58.76	31.55	0.10	1.24	12.99	30.09
Sales workers	100.00	13.25	39.55	39.96	7.24	5.64	9.18	15.30	11.96
Service workers	100.00	9.93	50.70	35.54	3.83	2.79	7.76	8.98	4.17
Agricultural and related workers	100.00	38.90	49.05	11.49	0.56	82.93	56.98	22.04	4.61
Production and other workers	100.00	8.99	48.11	39.93	2.97	8.19	23.86	32.69	10.49
Not adequately described	100.00	3.47	12.56	57.04	26.93	0.11	0.23	1.71	3.48
Unknown	100.00	5.83	23.16	52.54	18.47	0.02	0.04	0.16	0.24
		Men							
Total	100.00	17.31	41.30	32.76	8.63	100.00	100.00	100.00	100.00
Professional technical and related workers	100.00	0.81	5.26	35.20	58.73	0.18	0.48	4.07	25.77
Administrative and managerial workers	100.00	1.08	13.55	44.58	40.79	0.09	0.46	1.91	6.64
Clerical and related workers	100.00	0.40	9.05	54.73	35.82	0.17	1.64	12.52	31.11
Sales workers	100.00	6.36	34.05	49.29	10.30	3.82	8.58	15.65	12.42
Service workers	100.00	3.50	39.88	48.75	7.87	0.90	4.30	6.63	4.07

Table V. 4(Continued)

Occupational Category	Occupation by Education				Education by Occupation				
	Total	No Schooling	Primary School	Secondary School	College or more	No Schooling	Primary School	Secondary School	College or more
Agricultural and related workers	100.00	31.43	51.19	16.47	0.91	83.17	56.78	23.02	4.87
Production and other workers	100.00	7.84	44.54	43.85	3.77	11.51	27.41	34.01	11.10
Not adequately described	100.00	1.97	10.95	58.50	28.58	0.13	0.30	2.03	3.97
Unknown	100.00	4.80	19.42	53.94	21.95	0.03	0.05	0.16	0.25
Women									
Total	100.00	35.71	47.96	14.80	1.53	100.00	100.00	100.00	100.00
Professional technical and related workers	100.00	2.78	6.11	46.41	44.97	0.16	0.26	6.43	60.56
Administrative and managerial workers	100.00	5.21	29.02	52.10	13.67	0.01	0.06	0.33	0.84
Clerical and related workers	100.00	0.44	10.08	75.96	10.28	0.05	0.61	14.94	19.54
Sales workers	100.00	26.97	50.51	21.37	1.14	7.26	10.13	13.89	7.18
Service workers	100.00	14.83	58.92	25.50	0.75	4.48	13.24	18.58	5.29
Agricultural and related workers	100.00	49.46	46.04	4.45	0.05	82.70	57.31	17.96	1.92
Production and other workers	100.00	12.68	59.42	27.47	0.43	5.23	18.24	27.34	4.11
Not adequately described	100.00	24.22	34.85	36.87	4.06	0.10	0.11	0.38	0.40
Unknown	100.00	9.83	38.00	47.11	5.06	0.01	0.04	0.15	0.16

Source: 1970 Population and Housing Census Report Vol. 2, 4-1, pp. 328-329.

of educated manpower has tended to exceed the demand for adequate work opportunities.

Limited data from both the 1960 and the 1966 Censuses indicate that those who received any education are more likely to be unemployed than those who received no education at all. Among the educated, the proportion unemployed increases steadily as the level of education goes up until that of high school, and then drops somewhat. The proportion unemployed with college education, however, is slightly higher than those with primary education only. Unemployment is thus gradually becoming a real issue in non-agricultural sectors and/or in urban areas.

Urban unemployment rates for the recent years, as the census estimates indicate, point to a sharp decline: from almost 20 per cent in 1966 to less than five per cent in 1970. This decline may be partly attributable to the recent industrial growth concentrated in the urban areas. However, the reduction of unemployment figures cannot be adequately accounted for the actual scope of the expansion of the manufacturing industry. A more plausible hypothesis is that the massive city-ward migration which took place in the early 1960s first created the unemployment problem and then forced its alleviation through the creation of new jobs in the service sector in the cities.

4. Work Activity Status

The decline of agricultural dominance in the Korean economy seems to be reflected also in the decreasing significance of the family in economic

Table V. 5
Work Activity Status of Employed Population, 1960,
1966 and 1970 by Sex

Year	Total	Self employed	Family Worker	Employee
Both Sexes				
1960	100.0	47.1	30.6	22.2
1966	100.0	40.5	27.3	32.2
1970	100.0	34.8	26.2	39.0
Men				
1960	100.0	57.1	18.3	24.6
1966	100.0	49.4	14.0	36.6
1970	100.0	44.1	12.0	43.9
Women				
1960	100.0	22.4	61.3	16.3
1966	100.0	21.6	55.7	22.7
1970	100.0	17.7	52.2	30.1

Source: *1960 Population and Housing Census of Korea*, Vol. 1, 11-1, pp. 136-237. *1966 Population Census Report of Korea*, 12-1, pp. 150-151 and *1970 Population and Housing Census Report*, Vol. 2, 4-1, p. 312.

activity. Those workers in the domestic setting, self-employed and unpaid family workers, decreased considerably during the decade from 78 per cent in 1960 to 61 per cent in 1970, while those workers categorized as employee increased from 22 per cent to 39 per cent. As it is, the employed population in 1970 was still largely represented by family workers, indicating the persistence of the customs of the old economy in the rural farm areas.

Furthermore, those workers categorized as employees are not fully in regular employment outside of the domestic production work setting. Daily workers, who secure their means of livelihood by selling labor in a daily open labor market, constitute no less than one-fourth of all employees.

The recent economic development which emphasized the expansion of non-agricultural industries has had relatively little effect on the industrialization of agriculture. The great majority of the labor force in the primary sector, more than 80 per cent of men and 90 per cent of women, is represented by self-employed and family workers; see Table V. 6 for more detailed information.

Lack of entrepreneurship characterizes Korean agriculture. And given the use of unpaid family workers in farming, it is worth noting that almost 11 per cent of the agricultural workers are categorized as employees; and 70 per cent of these employed farmers are daily workers without land to support their livelihood. This trend may indicate the resulting interplay of the two forces of increasing population pressure and changing land ownership which combine to drive farmers off self-owned land.

The position of women in agriculture has been and is still, that of subordination—helping farm activities of the family. That there is a substantial proportion of women enjoying the status of self-employed does not necessarily mean an advancement of women in the world of work in place of men, but rather, indicates a trend of filling up vacancies left by men.

The family as the unit of production has declined considerably in both the secondary and tertiary sectors. In general, labor for wages or salaries characterizes the new economy concentrated in the urban areas. The rapid expansion of the manufacturing industry in the past decade, as shown in Table V. 7, is also followed by a transformation in economic activity away from the importance of unpaid family workers. This trend has affected both sexes to a similar degree. Unlike the manufacturing men, however, this change is confined largely to young women in the late teens or in the twenties, before marriage.

In Manufacturing employment, however, the household still plays an important role. Workers in the cottage industries including self-employed and unpaid family workers represent almost 20 per cent of the manufacturing workers. Employers, on the other hand as distinguished from self-employed persons, accounts for only 1.2 per cent or 57 thousand persons—mostly male. Given 1.1 million employees, an employer engages an average of 20 workers. This figure will be further scaled down if we take

Table V. 6

Work Activity Status of Employed Population by Industrial Category and Sex, 1970

Industrial Category	Total Number (in thousand)	Employed	(per cent)		
			Regularly Employed	Temporarily Employed	Daily Employed
Both Sexes					
Total	10,153	39.0	22.6	6.2	10.2
Agriculture and others	5,157	10.7	1.3	1.9	7.5
Mining and Quarrying	100	90.8	45.8	19.6	25.4
Manufacturing	1,448	76.8	52.9	13.5	10.4
Electricity, Gas and Water	31	94.3	79.5	8.7	6.1
Construction	462	86.0	16.8	13.0	56.2
Wholesale and others	1,280	27.5	15.3	7.2	5.0
Transportation and others	329	87.4	70.2	12.0	5.2
Financing and others	97	70.9	63.3	5.1	2.5
Social and Personal Service	1,222	87.5	67.1	10.0	10.4
Not adequately described	21	77.5	62.6	10.5	4.4
Men					
Total	6,578	43.9	26.0	6.7	11.2
Agriculture and others	3,021	12.4	2.0	2.8	7.6
Mining and Quarrying	93	91.1	47.4	20.0	23.7
Manufacturing	928	77.7	56.4	13.3	8.0
Electricity, Gas and Water	29	94.4	79.7	8.4	6.3
Construction	441	86.0	16.6	13.1	56.3
Wholesale and others	791	28.5	17.4	6.5	4.6
Transportation and others	304	86.7	69.2	12.2	5.3
Financing and others	80	66.2	58.8	4.7	2.7
Social and Personal Service	869	86.4	67.5	7.0	11.9
Not adequately described	16	79.5	65.5	10.1	3.9
Women					
Total	3,575	30.1	16.3	5.4	8.4
Agriculture and others	2,136	8.2	0.3	0.5	7.4
Mining and Quarrying	7	86.1	22.8	14.3	49.0
Manufacturing	520	75.2	46.6	13.8	14.8
Electricity, Gas and Water	2	93.2	77.1	13.9	2.2
Construction	20	84.5	21.0	10.2	53.3
Wholesale and others	489	26.0	12.4	8.2	5.4
Transportation and others	25	95.9	82.7	9.7	3.5
Financing and others	17	93.5	85.3	6.9	1.3
Social and Personal Service	353	90.0	65.9	17.3	6.8
Not adequately described	5	68.4	49.8	12.0	6.6

Source: 1970 Population and Housing Census Report, Vol. 2, 4-1, pp. 312-313.

into account that one third of employees is employed either only temporarily or on a daily basis. In general, manufacturing employment therefore

Table V. 7
 Manufacturing Enterprises by Size, 1958-1969

size	(per cent)					
	1958	1963	1966	1967	1968	1969
Total	100.0 *(260,427)	100.0 (401,981)	100.0 (566,665)	100.0 (648,811)	100.0 (748,307)	100.0 (829,044)
5— 9	16.9	—	13.6	14.1	11.5	12.5
10— 19	15.7	56.8	12.0	11.3	10.6	7.2
20— 49	21.1	—	13.9	13.0	12.8	11.9
50— 99	13.0	—	10.5	10.2	9.4	9.3
100—199	11.0	9.6	10.3	10.3	9.8	10.9
200—499	10.4	33.6	13.8	13.6	14.6	15.2
500+	11.9	—	25.9	27.5	31.3	33.0

* Numbers in thousand

Source: Economic Planning Board, *Report on Mining and Manufacturing Survey*, 1958, pp. 306-309; 1963, pp. 142-143; 1966, pp. 156-157; 1967, pp. 64-70; 1968, Vol. 1, pp. 224-229; and 1969, pp. 196-199.

appears to be characterized by small enterprise. The recent growth of the manufacturing industry, however, tends to create a dual structure. A 1969 survey on the mining and manufacturing enterprises indicates that 30 per cent of the workers in the enterprises hiring 5 or more persons are accounted for by those hiring 50 persons and less, while almost one half are in firms hiring 200 persons and more. The trend, as is made apparent in Table V. 7, is that of a growing proportion of the workers in large-scale enterprises. While in 1958, the enterprises with less than 100 persons accounted for 67 per cent and those with more than 200 workers, only 22 per cent; in 1969 almost half the workers affiliated with enterprises were working for enterprises having more than 200 workers.

In the tertiary sector, while the good majority of workers are in extra-familiar employment, one should not also underestimate the importance of family production, considering as much as 30 per cent of the workers are still self-employed or unpaid family workers. This relatively higher degree of the persistence of unpaid labor force in the tertiary sector is closely related to the predominance of family labor in commerce. Within the tertiary sector all the categories other than commerce are characterized by labor for wages and salary. In view of the fact that commerce is the largest category of the tertiary sector and has expanded faster than others one may infer that the traditional customs of the old economy continue to persist in the process of industrialization as well as of urbanization, reflecting discrepancies between opportunities of industrial employment and the supply of labor. One should not, however, underestimate the importance of family production in both sectors.

5. Occupational and Industrial Structure

While industry refers to the kind of goods and services rendered through labor production, occupation refers to the kind of work or business involved in the production of goods and services. If change in industrial composition of the employed persons from agricultural to non-agricultural implies changing types of production methods with the increasing use of inanimate source of power, changing occupational composition refers to the manner in which the use of these sources is changing.

The four census volumes between 1955–70 contain a fairly detailed set of information on occupation categorized by the standard classification system. However, the unusually high number of the farm women in the 1955 Census makes it difficult to compare the occupational figures of the same year with those of other census years. We therefore concentrate on the data for the 1960s mainly although the 1955 estimates are presented along with them.⁸

Transformation of the Korean economy from an agricultural to an industrial stage also has significant implications for the occupational structure of the employed population. The decrease of the percentage of the employed population categorized as farmers, fishermen and related workers resulted in proportional increase of most of other occupational categories. The decline of agricultural workers thus has the direct effect of differentiating further the occupational structure.

The proportional change as shown in Table V.8 is more notable among the less skilled and unskilled workers such as craftsmen and sales workers, than

⁸The occupational data suffer from inconsistencies in subclassification of each category. For instance, in the 1966 occupational category of workers in transport and communication a number of subcategories such as conductor, dispatcher and inspector which were included in this category in 1960 were dropped. The above subcategories apparently fell under the category of craftsman, which partially accounts for the sudden increase of employed persons in terms of absolute number and percentage in the same category and the decrease of the previous category. It should also be noted that the decrease in the service workers category from 1960 to 1966 does not appear to reflect an actual trend so much as a changed definition of this category. There is no reason to expect this trend of decline as the service industry, as shown above, experienced a substantial proportionate increase during the last intercensal period. In the case of women, a similar definitional inconsistency is witnessed with the clerical workers category. In 1960 there were some 17 thousand employed women categorized as administrative workers, whereas in 1966, this figure dropped to 1.3 thousand. Lacking external evidence against which these presumed inconsistencies may be checked, we can only infer the general trends in the changing occupational structure with these points in mind. An additional note is in order. In the 1970 Census three occupational categories used in previous censuses, miners and quarrymen, transportation and communication workers, and craftsmen, production process workers and laborers were collapsed into one single category, production and related workers, transport equipment operators and laborers.

among the skilled such as professional or technical workers. A noteworthy feature is the proportional decrease in that of administrative workers. This tendency, although further detailed investigation is needed, appears to point to the gradual increase of more highly skilled, and hence more educated, persons moving into industry than into administration. Should this trend continue, and there is reason to believe it will, the traditional occupational ideology which tended to emphasize the supremacy of administrative work over actual productive work no matter how skilled may have to be altered. Administrative work is still highly valued among educated job aspirants but the mere fact that more people are moving into professional or technical work will in fact establish a basis for a new status hierarchy, threatening the legitimacy of the traditional status system.

On the surface, occupational structure of employed women also went through a substantial change during the 1960s, notwithstanding 60 per cent of them are still represented by farmers and related workers. The ratio of women to men in each non-agricultural category increased considerably, and proportional distribution of employed women by occupation became closer to that of men. Like the employed men the most notable proportional increase was made at the lower level of the occupation distribution—production process and related workers. Clerical women also increased sharply during the decade, but this category accounts for only a small proportion of the total employed women. Since 1966 female service workers outnumber their male counterparts.

The occupational trends of women into the non-agricultural categories, however, have limited implications for the general status of women if we consider the fact that the development of non-agricultural sectors, as indicated above, largely favors young, single women; married women, in general, are not yet meaningfully subject to occupational change.

Since the recent economic growth based on non-agricultural industries is closely related to the development of the cities it is the more meaningful to look at the increasing degree of differentiation of the occupational structure—associated with the decline of agriculture—primarily in the urban setting. The occupational composition of the urban employed population as shown in Table V.8 reveals a rather clear picture of the change. The urban occupational structure is largely distinguished by a high degree of concentration in the category of production and related workers which is at the lower end of the occupational scale measured in terms of skill or technology; and the proportion of this category has been steadily increasing during the 1960s. It should also be noted that the proportional increase of the above category has been juxtaposed by the decreasing proportion of farmers and related workers. Among the other categories only the clerical workers indicate a steady increase; in the remaining categories, there is only minor change without any definite trend.

The most notable aspect of industrial change in the 1960s is a steady

Table V. 8
The Occupational Composition of Employed Population 1955, 1960, 1966 and 1970, by Sex

Occupational Category	All Korea				Shi			
	1955	1960	1966	1970	1955	1960	1966	1970
	Both Sexes							
Total	100.0 *(8,052)	100.0 (7,028)	100.0 (7,963)	100.0 (10,153)	100.0 (1,192)	100.0 (1,526)	100.0 (2,364)	100.0 (3,742)
Professional & Technical Workers	1.6	2.4	2.8	3.2	5.4	5.3	5.2	5.5
Administrative Workers	1.2	1.3	0.9	0.9	4.2	3.3	2.3	2.1
Clerical Workers	2.4	2.6	4.3	5.8	9.6	7.7	10.1	11.8
Sales Workers	4.5	8.2	10.7	10.1	16.4	20.3	21.7	19.4
Farmers, Fishermen & Related Workers	79.5	65.6	56.8	50.7	23.6	11.6	10.5	7.3
Miners and Quarrymen	0.2	0.6	0.8		0.1	0.2	0.3	
Transportation & Communication Workers	0.7	3.2	1.4	21.7	3.1	9.0	3.3	39.6
Craftsmen, Production Process Workers & Laborers	7.8	9.4	17.0		29.5	25.0	34.5	
Service Workers	2.1	5.9	5.3	6.7	8.1	16.5	12.1	12.9
Activities not adequately described	—	—	—	0.8	—	—	—	1.3
Unknown	—	0.8	—	0.1	—	1.1	—	0.2
	Men							
Total	100.0 *(4,833)	100.0 (5,006)	100.0 (5,426)	100.0 (6,578)	100.0 (967)	100.0 (1,147)	100.0 (1,724)	100.0 (2,683)
Professional & Technical Workers	2.3	2.7	3.3	3.8	5.6	5.7	5.5	5.8
Administrative Workers	1.9	1.5	1.3	1.4	5.1	3.5	3.0	2.8
Clerical Workers	3.8	3.4	5.6	7.5	10.8	9.4	12.1	13.5
Sales Workers	5.3	7.7	10.1	10.4	15.6	19.4	20.4	19.0
Farmers, Fishermen & Related Workers	72.4	64.0	54.7	45.8	22.0	11.8	10.8	6.9

decline of agriculture, forestry and fishery; the per cent of the employed population in the primary sector decreased from 66 in 1960 to 51 in 1970. (Table V.9) The actual number of agricultural workers increased about 10 per cent while the total employed population increased by 44 per cent. This slight increase in the absolute number understates changes that were occurring: the actual size of the male agricultural work force decreased, thus reducing its proportional contribution to the total figure drastically; however, the female counterpart increased by 50 per cent during the decade. In 1970 less than one half of the employed men were engaged in primary industry. That the industrial structure still appears largely agricultural in 1970 is due to employed women who remain agricultural.

The overall decline of primary industry seems to reflect a relative stagnation in productivity itself. Although agricultural products increased slightly during the past decade, the proportional contribution to the gross national product decreased substantially, from 40.1 per cent in 1961 to 28.2 per cent in 1970 in the face of the growth in the manufacturing and wholesale and retail trade. The portion of the gross national product attributable to manufacturing increased by over 12 times during the decade; in 1970 it accounted for 21 per cent.⁹

The increasing importance of manufacturing industry in the national product also became apparent in the industrial structure of the employed population.

Secondary industry, as conventionally represented by the manufacturing and the mining industry in Korea, began to absorb an increasingly large proportion of the labor force. The size of the employed population in manufacturing tripled during the 1960s, becoming the second largest single industrial category in 1970. It should also be noted that the number of women engaged in manufacturing more than quadrupled during the same period, upgrading the sex ratio from roughly three to one to two to one.

Impressive as it may appear, the expansion of the secondary—largely manufacturing—sector should not be interpreted directly as an industrialization of the labor force in the sense the term is defined from the Western experience. The increasing importance of manufacturing industry does not imply a radical departure from the traditional mode of production. Workers in this modern sector are to a large extent characterized as technically unskilled or semi-skilled. Only about one per cent of the manufacturing workers is classified as professional or technical workers.

Although secondary industry expanded sharply in the 1960s, it represents a much smaller proportion of the employed population in the non-agricultural sector than does tertiary industry. In 1970, this sector which grew parallel to, though not as fast as, secondary industry, accounts for more than

⁹See *1970 Korea Statistical Yearbook* (Economic Planning Board, Korea), 1971, p. 65.

Table V. 9
The Industrial Composition of Employed Population,
1960 and 1970, by Sex

Industrial Category	per cent		
	1960	1966	1970
Both Sexes			
Total	100.0 *(7,027)	100.0 (7,962)	100.0 (10,153)
Agriculture, Forestry and Fishery	65.9	57.2	50.8
Mining and Quarrying	0.7	1.2	1.0
Manufacturing	6.8	12.0	14.3
Construction	1.7	2.4	4.5
Electricity, Gas, Water and Sanitary Service	0.2	0.3	0.3
Commerce	8.3	10.5	12.6
Transportation, Warehousing and Communication	2.1	2.1	3.2
Service	13.4	14.3	13.0
Activities not adequately described	0.0	0.0	0.2
Unknown	0.9	0.0	0.1
Men			
Total	100.0 *(5,005)	100.0 (5,425)	100.0 (6,577)
Agriculture, Forestry, and Fishery	64.4	55.1	45.9
Mining and Quarrying	0.9	1.6	1.4
Manufacturing	7.0	11.7	14.1
Construction	2.4	3.4	6.7
Electricity, Gas, Water and Sanitary Service	0.3	0.5	0.5
Commerce	7.9	10.6	12.0
Transportation, Warehousing and Communication	2.9	2.8	4.6
Service	13.5	14.3	14.4
Activities not adequately described	0.0	0.0	0.3
Unknown	0.7	0.0	0.1
Women			
Total	100.0 *(2,023)	100.0 (2,537)	100.0 (3,574)
Agriculture, Forestry and Fishery	69.6	61.5	59.7
Mining and Quarrying	0.1	0.2	0.2
Manufacturing	6.3	12.7	14.5
Construction	0.1	0.2	0.6
Electricity, Gas, Water and Sanitary Service	0.0	0.0	0.1
Commerce	9.3	10.4	13.7
Transportation, Warehousing and Communication	0.2	0.5	0.7
Service	13.1	14.5	10.4
Activities not adequately described	0.0	0.0	0.1
Unknown	1.3	0.0	0.0

*Employed Population in thousand

Source: 1960 Population and Housing Census of Korea, Vol. 2, 11-1, pp. 168-170,
1966 Population Census Report of Korea, 12-1, pp. 120-121 and 1970
Population and Housing Census Report, Vol. 2, 4-1, pp. 62-63.

one-third of the employed population.

The growth of tertiary industry appears to show a weak functional linkage to the development of the manufacturing industry. Industrialization in the West was generally followed by the growth of the tertiary sector as necessitated by the specialized nature of manufacturing production. The expansion of the tertiary industry in Korea, on the other hand, does not appear to be closely related to the manufacturing industry. Although those industrial categories such as construction, transportation and communication, and electricity and related industries, are growing in terms of employment, a good proportion of this sector consists of workers in such categories as small retail business, inn-keeping, domestic service, government administration, military service and so on, which have existed, and still exist, largely independent of the secondary industry.

One interesting aspect of the expanding tertiary industry is that the major categories, *commerce and service, constituting two-thirds of the workers in the tertiary sector* show opposing trends. The per cent of the employed persons in commerce increased substantially during the decade whereas that in service decreased steadily. In 1960 the service category occupied the largest portion of the employed women outside the primary industry; in 1970 it was considerably behind commerce. As shown in Table V.9 the proportional decline of the service category is directly related with the relative stability of the size of the female labor force in the latter part of the 1960s. Note that the size and proportion of the male counterpart to this category increased slightly during the same period. It appears as if the service section of industry which expanded rapidly with city growth up to the beginning of the 1960s is approaching a saturation point. The category of domestic service work, i.e., household assistance, shows a clear decline in recent years, and extra-domestic service work including helping hands at small scale enterprise is no longer expanding. Commerce activities which are still largely set in the household context continue to accommodate increasing job claimants, mostly in the urban areas. A further investigation on this point is in order.

The status of women in the world of work, in general, changed markedly during the 1960s. Agricultural dominance which had characterized the employment of women at the beginning of the period decreased sharply toward the end. Three major categories outside agriculture, manufacturing, commerce, and service explain 38.5 per cent of the employed women. This trend away from agriculture should not, however, be overstated as a direct impact of recent economic growth as the majority of employed women in these categories are engaged in the work in the household context. Modern sectors including such categories as textile industry, sales work, banking, commerce, service work in public organization are largely confined to single women in the late teens or early twenties. Outside agriculture, married women make little contribution to the national productivity, and few

economic opportunities have been made available to them.

VI. POULATION PROJECTION

In this chapter, our discussion is limited to population projections for the Republic of Korea by age and sex for the twenty year period from 1970 to 1990, and the patterns of growth and composition of the projected populations.

1. Assumptions and Method Adopted

The following discussions on the prospects of population growth in the Republic of Korea are based on a set of medium population projections by the auther for the twenty year period 1970–90. The projection was proceeded by taking the 1970 Census population as the base population. Actually the total coverage of population enumeration in the 1970 Census was found to range from 96 to 98 per cent and to be quite different by sex.¹ In this projection, however, we have postulated that the population enumeration was complete for both males and females. In other words the projected population totals, which are presented in Table VI. 2, should be treated as having approximately the same quality as the 1970 Census population totals.

As for the age distributions, we have utilized graduated quinquennial age distributions² rather than those reported in the 1970 Census. It has been well demonstrated already that age distributions from the Censuses of 1955–70 were subject to very systematic misreportings and enumeration errors.³ The extent of errors was such that the projections based on raw census data would produce very unlikely age-sex structure of the projected populations. The graduated population for 1970 is presented in Table VI. 2.

¹Tai Hwan Kwon, 'Evaluation of Adequacy and Accuracy of Census Data,' Chang, *et al.*, *A Study of the Korean Population 1966* (The Population and Development Studies Center Publication Series No. 12:Seoul), 1974, pp. 1–60.

²The following formulas were adopted for graduation:

i) when $x \geq 3$

$$P'_1 = \frac{1}{2}P_x + \frac{3}{16}(P_{x-1} + P_{x+1}) + \frac{1}{16}(P_{x-2} + P_{x+2});$$

$$\text{ii) } P'_2 = \frac{1}{4}P_1 + \frac{1}{2}P_2 + \frac{3}{16}P_3 + \frac{1}{16}P_4; \text{ and}$$

$$\text{iii) } P'_1 = \frac{11}{16}P_1 + \frac{1}{4}P_2 + \frac{1}{16}P_3;$$

where P_x stands for the census population at quinquennial age group x and P'_x for the graduated population at age group x , and P_1 was inflated by 5% as to adjust for underenumeration

³Kwon, *op. cit.*, pp. 26–30, and Tai Hwan Kwon, *Population Change and Its Components in Korea 1925–66* (Ph. D. thesis, Australian National Univ.), 1972., pp. 25–29.

As discussed in Chapter II, the opinions on the levels of fertility and mortality in recent Korea are too diverse to be easily reconciled. Mortality patterns in Korea are also very obscure and have been given little attention. The major problems in the study of fertility and mortality stem basically from poor registration statistics, and as an alternative, census data have been utilized in most cases for the estimation of fertility and mortality in Korea. The census revealed some unique patterns of mortality by age, but it is highly questionable whether they are true patterns or the ones caused by the systematic enumeration errors in the census.⁴ Considering all these facts, we have made assumptions on fertility and mortality for the entire projection years based on the census estimates of age specific fertility and mortality rates for the intercensal periods 1955–70 and their observed trends.⁵

The fertility assumption made for the current projection is that the age specific fertility rates for the entire nation will decline in twenty years to the level of Seoul as observed in the most recent intercensal period, 1965–1970. Seoul recorded the most marked reduction in fertility among other areas in Korea during the 1960s reaching a level near the bare population replacement without migration at the end of the decade. Linear changes were assumed in estimating the fertility rates for quinquennial age groups between 1970 and 1985. For the mortality component an assumption was made in relation to the expectation of life at birth, again based on the levels and trends of the life expectancy discerned from the Censuses of 1955–1970; the assumption is that the expectation of life at birth will increase 2.5 years in every five years between the decade from 1970 to 1980 for both males and females, and 2.0 years for each quinquennial period in the next decade 1980–1990. After determining the expectation of life at birth, we have selected corresponding five year survival ratios for each quinquennial age group from the regional model life tables.⁶ Then the ratios were adjusted for the apparent Korean mortality patterns observed from the Censuses of 1925–1970 and the graduated census populations of 1955–1970. These adjusted survival ratios were applied for the projection, instead of the estimates of age specific death rates.

Another important assumption the projection is also involved in is that of a closed population. It has been discussed earlier in Chapter II that international migration of Koreans in net terms was almost insignificant during 1955–1970, but has since increased to an extent to effect a reduction in the annual rate of the total population growth by one point. At the present moment however, future prospects on international migration for the next

⁴See, *ibid* (1972), pp. 46–52.

⁵See, *ibid*, pp. 76–77 & 201–202, and also Table II. 2 and II. 5 in Chapter II in this monograph.

⁶For details, see *ibid*, pp. 54–58.

twenty years are unforeseen, nor can we know its demographic characteristics. Therefore, the assumption of closed population is accepted.

2. Projected Population Growth, 1970-1990

The projected size of the total population in the Republic of Korea up to 1990 are presented in Table VI. 2. Table VI. 1 illustrates the projected annual rates of population growth, crude birth rates and crude death rates for five year periods between 1970-1990, provided the assumptions involved are correctly met. The assumed expectations of life at birth, total fertility rates and net reproduction rates for each period are also presented.

As is shown in Table VI. 2, the population in the Republic of Korea is expected to pass the mark of 40 million by 1985 with an increase of 890,000 people in fifteen years from 1970. The density is likely to rise to 380 persons per square kilometer in 1980 and 440 in 1990. The annual rate of population growth for 1985-1990 is projected to decline by 5 points to 14 per thousand from the level for 1965-1970.

Table VI. 1
Estimated or Projected Rates of Population Growth,
Fertility and Mortality, 1965-90

	(per thousand)				
	1965-70	1970-75	1975-80	1980-85	1985-90
Annual Growth Rate	19	17.0	16.6	15.8	14.2
Crude Birth Rate	32	29.1	27.7	26.3	24.2
Crude Death Rate	13	12.1	11.1	10.5	10.0
Total Fertility Rate	4.63	4.23	3.82	3.42	3.01
Gross Reproduction Rate	2.26	2.06	1.87	1.67	1.47
Net Reproduction Rate	1.77	1.68	1.58	1.45	1.31
Expectation of Life at Birth					
Male:	51.0	53.5	56.0	58.0	60.0
Female:	56.5	59.0	61.5	63.5	65.5

3. Projected Population Composition, 1970-1990

If the present differentials in mortality by sex continue, the sex ratio of the total population is expected to reach near unity around 1980. After that point, the number of females in the population will exceed that of the male population. Owing to the incessant fertility reduction since 1960 and the assumption of further continuous declines during 1970-1990, a series of declines in the proportion of population aged fifteen and under can be expected. On the contrary, the proportions for the age group 25-29 onwards show continuous increases, and this can be explained by improving

Table VI. 2
 1970 Graduated Population and Projected Populations for 1975-90 by
 Age and Sex, and Their Age Distributions and Sex Ratios

	Population			Age Distribution(%)			
	Both Sexes	Male	Female	Both Sexes	Fe- male	Sex Ratio	
1970							
0-4	4,611,952	2,385,674	2,226,278	14.54	14.97	14.10	107.16
5-9	4,369,350	2,259,408	2,109,942	13.77	14.18	13.36	107.08
10-14	3,987,810	2,060,444	1,927,366	12.57	12.93	12.21	106.90
15-19	3,311,283	1,700,798	1,610,485	10.44	10.68	10.20	105.61
20-24	2,680,255	1,364,493	1,315,762	8.45	8.56	8.33	103.70
25-29	2,313,674	1,167,401	1,146,273	7.29	7.33	7.26	101.84
30-34	2,089,319	1,045,328	1,043,991	6.59	6.56	6.61	100.13
35-39	1,834,181	906,034	928,147	5.78	5.69	5.88	97.62
40-44	1,541,623	751,624	789,999	4.86	4.72	5.00	95.14
45-49	1,280,410	623,209	657,201	4.04	3.91	4.16	94.83
50-54	1,061,523	517,170	544,353	3.35	3.25	3.45	95.01
55-59	862,930	412,159	450,771	2.72	2.59	2.85	91.43
60-64	668,203	305,163	363,040	2.11	1.92	2.30	84.06
65-69	482,741	205,985	276,756	1.51	1.29	1.75	74.43
70-74	321,689	125,721	195,968	1.01	0.79	1.24	64.15
75-79	187,372	66,996	120,376	0.59	0.42	0.76	55.66
80+	116,491	33,791	82,700	0.37	0.21	0.52	40.86
Total	31,720,806	15,931,398	15,789,408	100.00	100.00	100.00	100.90
1975							
0-4	4,468,185	2,283,798	2,184,387	12.94	13.20	12.68	104.55
5-9	4,386,959	2,280,967	2,105,992	12.70	13.19	12.22	108.31
10-14	4,245,633	2,195,128	2,050,505	12.29	12.69	11.90	107.05
15-19	3,791,883	1,942,999	1,848,884	10.98	11.23	10.73	105.09
20-24	3,132,047	1,584,838	1,547,209	9.07	9.16	8.98	102.43
25-29	2,597,383	1,305,765	1,291,618	7.52	7.55	7.50	101.10
30-34	2,292,248	1,155,260	1,136,988	6.64	6.68	6.60	101.61
35-39	2,071,076	1,041,523	1,029,553	6.00	6.02	5.98	101.16
40-44	1,795,424	888,040	907,384	5.20	5.13	5.27	97.87
45-49	1,489,608	722,393	767,215	4.31	4.17	4.45	94.16
50-54	1,216,919	584,869	632,050	3.52	3.38	3.67	92.54
55-59	981,449	466,099	515,350	2.84	2.69	2.99	90.44
60-64	761,241	349,498	411,743	2.20	2.02	2.39	84.88
65-69	550,803	237,627	313,176	1.59	1.37	1.82	75.88
70-74	364,036	143,055	220,981	1.05	0.83	1.28	64.74
75-79	210,935	74,859	136,076	0.61	0.43	0.79	55.01
80+	178,528	47,331	131,197	0.52	0.27	0.76	36.08
Total	34,534,357	17,304,049	17,230,308	100.00	100.00	100.00	100.43

Table VI. 2(Continued)

	Population			Age Distribution(%)			
	Both Sexes	Male	Female	Both Sexes	Male	Female	Sex Ratio
1980							
0-4	4,687,235	2,393,883	2,293,352	12.49	12.77	12.22	104.38
5-9	4,278,935	2,197,105	2,081,830	11.40	11.72	11.09	105.54
10-14	4,273,054	2,220,681	2,052,373	11.39	11.84	10.94	108.20
15-19	4,045,709	2,074,374	1,971,335	10.78	11.06	10.50	105.23
20-24	3,595,683	1,814,819	1,780,864	9.58	9.68	9.49	101.91
25-29	3,042,919	1,519,955	1,522,964	8.11	8.11	8.11	99.80
30-34	2,579,426	1,294,770	1,284,656	6.87	6.91	6.85	100.79
35-39	2,278,286	1,153,816	1,124,470	6.07	6.15	5.99	102.61
40-44	2,036,811	1,027,108	1,009,703	5.43	5.48	5.38	101.72
45-49	1,741,265	857,092	884,173	4.64	4.57	4.71	96.94
50-54	1,421,760	681,144	740,616	3.79	3.63	3.95	91.97
55-59	1,131,100	529,938	601,162	3.01	2.83	3.20	88.15
60-64	871,943	397,867	474,076	2.32	2.12	2.53	83.92
65-69	633,437	274,552	358,995	1.69	1.46	1.91	76.48
70-74	419,709	166,992	252,717	1.12	0.89	1.35	66.08
75-79	243,268	86,550	156,718	0.65	0.46	0.84	55.23
80+	236,229	58,621	177,608	0.63	0.31	0.95	33.01
Total	37,516,879	18,749,267	18,767,612	100.00	100.00	100.00	99.90
1985							
0-4	4,856,638	2,479,183	2,377,455	11.96	12.26	11.67	104.28
5-9	4,511,290	2,313,640	2,197,650	11.11	11.44	10.79	105.28
10-14	4,175,429	2,142,397	2,033,032	10.29	10.59	9.98	105.48
15-19	4,078,378	2,101,963	1,976,415	10.05	10.39	9.71	106.35
20-24	3,843,670	1,941,095	1,902,575	9.47	9.60	9.34	102.02
25-29	3,500,033	1,743,478	1,756,555	8.62	8.62	8.63	99.26
30-34	3,027,421	1,509,528	1,517,893	7.46	7.46	7.45	99.45
35-39	2,568,886	1,295,586	1,273,300	6.33	6.41	6.25	101.75
40-44	2,243,128	1,137,639	1,105,489	5.53	5.62	5.43	102.91
45-49	1,981,009	994,590	986,419	4.88	4.92	4.84	100.83
50-54	1,667,146	811,169	855,977	4.11	4.01	4.20	94.77
55-59	1,326,725	619,807	706,918	3.27	3.06	3.47	87.68
60-64	1,010,775	454,766	556,009	2.49	2.25	2.73	81.79
65-69	731,487	314,765	416,722	1.80	1.56	2.05	75.53
70-74	487,862	194,786	293,076	1.20	0.96	1.44	66.46
75-79	284,487	102,329	182,158	0.70	0.51	0.89	56.18
80+	298,026	70,875	227,151	0.73	0.35	1.12	31.20
Total	40,592,390	20,227,596	20,364,794	100.00	100.00	100.00	99.33

Table VI. 2(Continued)

	Population			Age Distribution (%)			
	Both Sexes	Male	Female	Both Sexes	Fe- male	Sex Ratio	
1990							
0-4	4,829,164	2,463,878	2,365,286	11.08	11.38	10.79	104.17
5-9	4,696,068	2,406,270	2,289,798	10.78	11.12	10.44	105.09
10-14	4,409,699	2,259,408	2,150,291	10.12	10.44	9.81	105.07
15-19	3,992,022	2,031,142	1,960,880	9.16	9.38	8.94	103.58
20-24	3,881,516	1,970,422	1,911,094	8.91	9.10	8.72	103.10
25-29	3,748,211	1,867,896	1,880,315	8.60	8.63	8.58	99.34
30-34	3,488,300	1,734,116	1,754,184	8.01	8.01	8.00	98.86
35-39	3,020,843	1,513,211	1,507,632	6.93	6.99	6.88	100.37
40-44	2,535,409	1,280,674	1,254,735	5.82	5.92	5.72	102.07
45-49	2,187,899	1,105,216	1,082,683	5.02	5.11	4.94	102.08
50-54	1,902,357	944,781	957,576	4.37	4.36	4.37	98.66
55-59	1,561,083	741,271	819,812	3.58	3.42	3.74	90.42
60-64	1,191,885	534,720	657,165	2.74	2.47	3.00	81.37
65-69	854,864	362,335	492,529	1.96	1.67	2.25	73.57
70-74	569,496	225,450	344,046	1.31	1.04	1.57	65.53
75-79	335,522	120,900	214,622	0.77	0.56	0.98	56.33
80+	370,323	86,095	284,228	0.85	0.40	1.30	30.29
Total	43,574,661	21,647,785	21,926,876	100.00	100.00	100.00	98.73

Figure VI. 1 Population Pyramids for 1970 and 1990

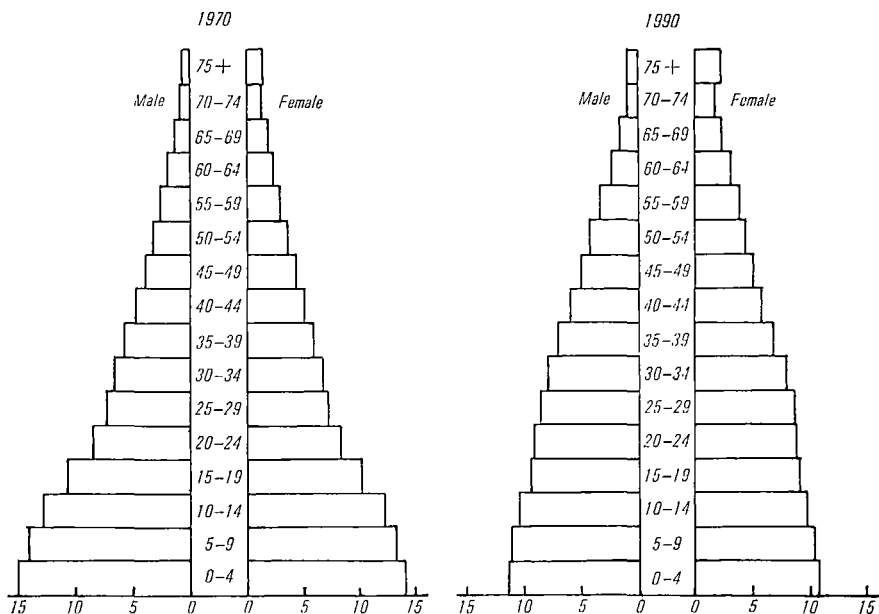


Figure VI. 2 Projected Population at School Age Groups by Sex, 1970—1990

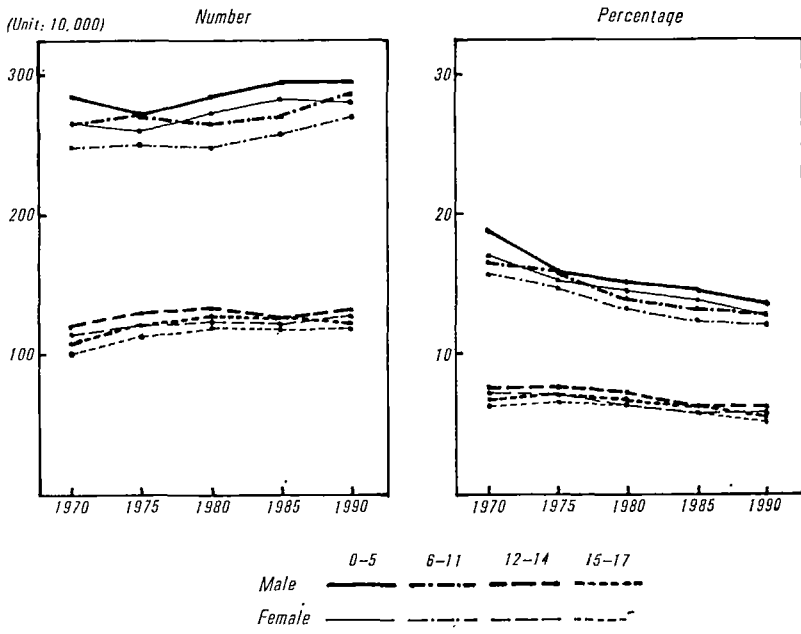
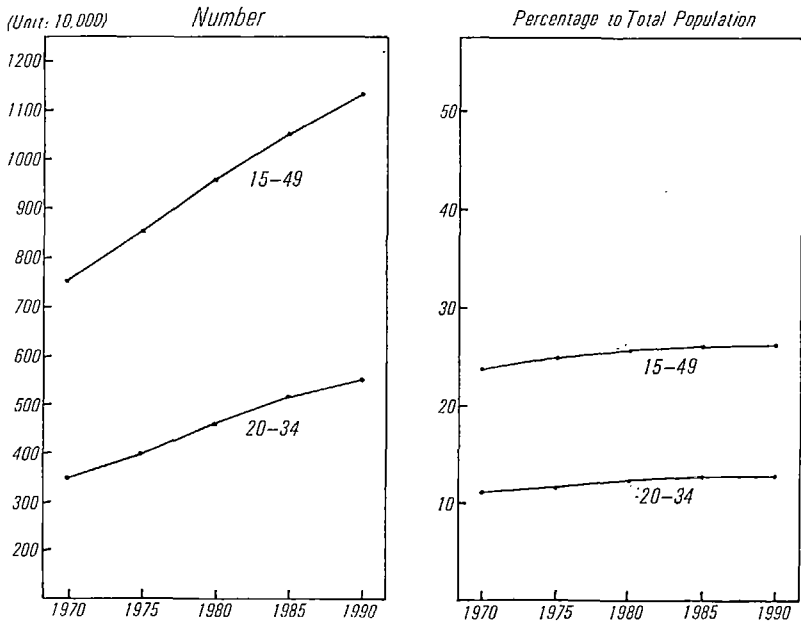


Figure VI. 3 Projected Female Population at 15—49 and 20—34, 1970—1990



health and medical conditions expected in the coming years as was the case in the past. Those expected trends clearly suggest that the age structure of the Korean population would undergo a substantive and consistent transformation in the next twenty years at least. The degree and patterns of changes can be amply exemplified by the comparison of age pyramids for 1970 and 1990 as given in Figure VI. 1.

The proportions of the population at preschool ages 0–5 and primary school ages 6–11 will decline substantially during 1970–1990 to the extent that the present demographic trends continue. On the other hand, a slightly upward trend in the proportion of the population at secondary school ages 12–17 are expected during 1970–80 as the post-Korean War baby boom generation enters this age group. As shown in Figure VI. 2, subsequent declines will be observed during 1980–90 with the replacement of the age group by the post-1960 birth cohorts.

Although the crude birth rate is projected to drop, the proportion of women at reproductive ages 15–49 in the total population is expected to increase without interruption during the entire twenty year period. In other words, if age specific fertility rates are constant, this would result in a rise in the crude birth rate. Similar trends are expected with women in the crucial reproductive ages 20–34.

Table VI. 3
Youth, Aged and Total Dependency Ratios of the Projected
Populations, 1970–90

	(per thousand)				
	1970	1975	1980	1985	1990
Youth (0–14/15–59)	764	676	605	559	530
Aged (60+/15–59)	105	107	110	116	126
Total (youth + aged)	869	783	715	675	656

As illustrated in Table VI. 3, the dependency burden of the population at working ages (15–59) will be lessened to a significant degree during the period. The expected drops in the total dependency ratio are mostly accounted for by continuous declines in the youth dependency ratio. The extent of change in aged will be very minor in the next twenty years.

VII. POPULATION POLICY

1. The Inception of the National Family Planning Program

Population policy in Korea was conceived and formulated in close connection with her economic development plan which was an ambitious attempt of the new military government early in the 1960's. By 1960, advancements in public health services and easy availability of newly developed medicines reduced the mortality rate to an all-time low. At the same time the population was known to grow at a rate of approximately 3 per cent per year, according to an estimate based on the 1960 Census.

Despite the development of keen awareness about population trend and discussions on how to deal with this serious problem among individuals and representatives of various agencies concerned, there was little organized movement to meet the problem effectively until 1960. The government also was either indifferent or took a negative attitude toward any measures of population control.

Generally speaking, the readiness of the Korean people for the acceptance and practice of contraceptives seemed to be fairly matured in the early 1960's and at the same time the socio-economic conditions became favorable for the family planning program, compared to other developing countries. Korea had a very low illiteracy rate which is largely attributed to the people's strong motivation for higher education. Korea encountered no religious or ethnic obstacles to family planning, and the mass-media system such as radio and newspaper was well developed. Urbanization and secularization spread to some extent and, more than anything else, aspiration for economic development and better life prevailed among all the strata of the Korean people. However, the deeply rooted traditional attitudes toward the family and the desired number of children remained almost intact.

When the First Five Year Economic Development Plan was finally formulated in 1962, it asserted that "a measure to control population will be needed" because of the rapidly increasing rate of population growth due to improved health conditions. This was an obvious reflection of the deeply felt necessity among policy makers of birth control for the successful implementation of the development plan. In 1963, the Ministry of Health and Social Affairs arrived at a compilation of a Ten Year Plan for Family Planning whose target was to reduce the natural annual growth rate to 2.5 and 2.0 per cent by the end of 1966 and 1971 respectively. In order to reduce the growth rate down to 2.0 per cent by 1971, the Ministry set the following targets among others.

- a) The proportion of those practicing some form of contraceptive methods among the currently married women of ages 20–44 should be raised to a 45 per cent level by the end of 1971. The rate of family planning practice at the end of 1961 was estimated as 5 per cent or less.
- b) The government will bear the family planning expenses of 1,300,000 couples which correspond to about 32 per cent of the total women eligible for family planning, or to about 70 per cent of those expected to adopt some form of family planning methods by 1971. The 1,300,000 couples to be supported by the government are broken down into the following categories:
 1,000,000 IUD (Intra Uterine Device) wearers
 150,000 cases of vasectomy
 150,000 adopters of traditional methods
- c) The expenditures for approximately 550,000 couple, equivalent to about 13 per cent of the total eligible or 30 per cent of those expected to practice contraceptives by 1971, will not be subsidized at all.¹

The goals and the expected effects of the program during the Ten Year

Table VII. 1
 Program Goals and Effects Expected by Year

(unit: 1,000)

Calendar Year	IUD		Vasectomy		Traditional Methods		Total		Expected fertility repression	
	Insertion	Yearly Total	Yearly Cases	Yearly Total	Yearly Effect	Yearly Users	Yearly Effect	Yearly Cases	Yearly Total	Yearly Effect
1962			3	3		50		53		
1963			20	23	0.75	100	3.75	123	4.5	0.17
1964	100	80	27	50	5.75	150	7.5	280	13.25	0.48
1965	200	232	20	70	12.5	150	11.25	452	48.75	1.54
1966	350	409	58	90	17.5	150	11.25	729	86.75	2.98
1967	250	640	123	110	22.5	150	11.25	700	156.75	5.24
1968	300	816	160	130	27.5	150	11.25	1,096	198.75	6.47
1969	200	894	204	150	32.5	150	11.25	1,194	247.75	7.86
1970	200	965	224	150	37.5	150	11.25	1,265	272.75	8.43
1971	200	1,028	241	150	37.5	150	11.25	1,328	289.75	8.73
1972			257	150	37.5		11.25		305.75	8.97

Note: *Effect is represented by the repression in birth as a result of program input.

Source: Tak Il Kim: "Basic Steps in Development of The Ten Year Family Planning Program in Korea," Table I.

¹ Taek Il Kim, 'Basic Steps in Development of the Ten Year Family Planning Program in Korea,' *Population and Family Planning in the Republic of Korea*, Vol. 1, The Ministry of Health and Social Affairs (MHSA), Republic of Korea (ed.), Seoul, March 1970.

Family Planning Program period were estimated as shown in the following table.

Several measures were necessary to carry out the successful implementation of the Ten Year Program which covered 1962 through 1971. The budget allocation was in urgent need, and for this the government swiftly established a new budgetary system. In 1964, the budget for the program was incorporated into the Economic Development Special Account allocated from the General Account in the year 1962 and 1963. The Korean government investment to family planning during the First Five Year Economic Development Plan period (1962–1966) amounted to 1,148,200 thousand Won which is equivalent to US\$5,300,000.

An organizational arrangement was quickly followed by the staffing and recruitment of family planning workers both in the central and local government. In 1963, the Maternal and Child Health (MCH) Section was newly formed within the Bureau of Public Health, Ministry of Health and Social Affairs, with assigned responsibility for carrying out the program in collaboration and coordination with various related national as well as international organizations. The MCH section consisted of two sub-sections; one for Family Planning and the other for Maternal and Child Health. The Family Planning Sub-section was created particularly for the implementation of the National Family Planning Program.

The Republic of Korea is administratively divided into nine provinces and two special cities (Seoul and Busan) and these in turn are composed of 189 counties, cities, and districts within large metropolitan cities, each of which has a Health Center of its own. The Ministry of Health and Social Affairs works with the Ministry of Home Affairs which directly controls the nine provincial and all the city governments except Seoul Special City. The targets and detailed action programs set by the central government were passed to Family Planning Sub-section in the Public Health and Social Affairs Section of the local government. The assigned goals and activities were allocated in turn to the county and district health centers, and finally to the township and field workers. Thus the program was implemented through the already existing national and provincial health centers.

In order to make the whole network of administrative machinery move effectively, the government appointed 11 lay administrators as Chiefs of Family Planning Sub-sections in the local governments in 1968. Each Sub-section was staffed with 3 to 4 administrators. As of 1968 the number of family planning workers totaled 2,384 and there were 1,600 private medical practitioners designated by the government to assist family planning activities. Family planning field workers comprised of 22 nurse supervisors stationed at the provincial and city governments, 889 senior family planning workers who were either nurses or midwives stationed at the city, county or district Health Centers, and 1,473 assistant in town/township

offices or branch officers of the county level Health Centers.²

From 1964 to 1968, the IUD had received primary emphasis among other contraceptive and family planning methods, and so-called traditional methods and vasectomy played only supplementary roles. In 1968, the oral pill was added to the program with an intention to assist women who were discontented with the IUD. This policy was changed, however, in the summer of 1969, and the pill is now made available to all women who wish to use this method.

Along with the increasing adoption and practice of various contraceptive methods, the incidence of induced abortion has risen continuously since the inception of the family planning program in 1962, although until recently abortion was illegal in Korea under a penal code carried over from the Japanese colonial era. For several years from the late 1960's to the early 1970's there were hot debates going on as to whether abortion should be legalized or not. Finally in August 1973, the Maternal and Child Health law was enacted by the National Assembly which meant the practical liberalization of induced abortion.

So far, we have briefly reviewed some important measures taken by the government to initiate and implement the national family planning program. In summary, the program can be characterized as follows:

- 1) The program was first introduced by the government as a national population policy, which was almost completely unknown to the Korean people beforehand.
- 2) From the beginning, the program was closely connected with the national economic development plan or was rather an integral part of the development plan.
- 3) Finally, this was the first attempt for a "planned change" in fertility-related attitudes and behavior patterns of Koreans.

2. Present Status of the Family Planning Program

This is not an appropriate place to make a detailed discussion about the program and a comprehensive evaluation of its achievements during the past ten years. Generally speaking, the Korean Family Planning Program has been regarded as an example of success in the today's world-wide efforts to curb rapid population growth. Actually success can not be denied in terms of the original goal to reduce the growth rate from 3 per cent during 1955-60 to 2 per cent by the end of 1971. The government set a new target to reduce the present growth rate to 1.5 per cent by 1976. In order to identify critical problems in the current population policy, a quick glance at the present status of the Family Planning Program in Korea seems to be necessary. Some highlights of the recent findings from the 1973

² Dae Woo Han, 'Administration—Overview,' MHS, *ibid.*

family planning and fertility survey are summarized below:³

1. The mean ideal number of children for the currently married women aged 15–44 was 3.1 for the whole country in 1973; the number was 2.8 in Seoul, 2.9 in other cities, and 3.4 in rural areas. There was a 0.6 point decline in the ideal number of children between 1971 and 1973.
2. The mean ideal number of sons was 1.9 in 1973; the number was 1.8 both in Seoul and in other cities, and 2.1 in rural areas. The reported decline in the ideal number of sons was 0.3 point between 1971 and 1973.
3. The expected number of children (the number of living children plus the additionally wanted number of children) was 3.7 in 1973; 3.0 in Seoul, 3.4 in other cities and 4.2 in rural areas. The mean number of living children was 3.1 for the whole country; 2.5 in Seoul, 2.8 in other cities, and 3.6 in rural areas. The mean wanted number of children was 0.6.
4. The proportion ever using contraceptives for currently married women aged 15–44 was 55 per cent in 1973; 58 per cent in Seoul, 55 per cent in other cities, and 54 per cent in rural areas. The proportion was 12 per cent in 1964, 28 per cent in 1967, 44 per cent in 1971.
5. The ratio of current users to ever-users was 66 per cent, while the ratio was 75 per cent in 1964, 72 per cent in 1967, and 57 per cent in 1971.
6. The main reasons for the approval of family planning were “good child care” (53 per cent) and “raising standard of family living” (27 per cent). On the other hand, the main reasons for non-contraception practice were “wanting more children” (66 per cent) and “naturally prolonged birth interval” (11 per cent). The proportion of women who did not know any contraceptive methods among non-practice women was only 4 per cent.
7. Of the contraceptive methods first used, the oral pill accounted for 37 per cent and the loop for 33 per cent.
8. The mean age at first use of contraceptives was 29.3; 28.6 in urban areas and 30.0 in rural areas. The mean age was 37.1 years for women with no schooling and 27.4 years for women with college education.
9. The mean number of living children at first use of contraceptives was 3.1, and that for living sons was 1.7; the equivalent were 2.7 and 1.5 in urban areas and 3.5 and 2.0 in rural areas.
10. The proportion of contraceptive users at the time of the survey for

³ Korean Institute for Family Planning, *1973 National Family Planning and Fertility Survey—A Comprehensive Report* (text in Korean), KIFP, Seoul, December 1974, pp. 255–262.

currently married women aged 15–44 was 36 per cent in 1973, while it was 9 per cent in 1964, 20 per cent in 1967, and 25 per cent in 1971. Compared to the current users in 1971, the proportion increased from 27 per cent to 39 per cent in urban areas and from 23 per cent to 34 per cent in rural areas.

11. Among the current users, 13 per cent began contraception in 1971, 22 per cent in 1972, and 40 per cent in 1973.
12. Oral pill and IUD users constituted a large proportion of the current users, 8 per cent each. Condom users accounted for 7 per cent, sterilization 5 per cent, and others (rhythm and withdrawal) 9 per cent. Compared to 1971, there was a significant increase in condom use, sterilization and other methods.
13. The estimated number of induced abortions was 390,000 in 1973, while it was 139,000 in 1963. The crude induced abortion rate per thousand population was 12 in 1973, while it was 5 in 1963.
14. The proportion of women having had at least one induced abortion among the currently married women aged 15–44 was 30 per cent in 1973, but was only 6 per cent in 1963.
15. Among women who wanted no more children, 6 per cent had induced abortion only; 34 per cent had induced abortion and also adopted contraception; 37 per cent practiced contraception only; and 24 per cent had not used any fertility regulating methods.
16. The mean age at first marriage (for female) was 22.8 years in 1973. The increase has been slow since 1965. The mean age for the 1970–73 period was 23.3 years in urban areas and 22.2 years in rural areas. The age had little changed in urban areas since 1965, but a little increase was observed in rural areas. The mean age at first marriage for women with primary school background was 22.2 years in the 1970–73 period, and 24.3 years for college educated women.
17. In 1973, the mean number of live births for the 40–44 age group was 5.2; the equivalent was 4.2 in Seoul, 4.8 in other cities, and 5.7 in rural areas.
18. The total fertility rate was 3.9 in 1973 (4.8 in 1971); the rate was 3.3 in urban areas and 4.7 in rural areas.

The above findings suggest the important features and problems of the National Family Planning Program. There is no doubt that the program was highly successful during the first 12 years of family planning up to 1973. Circumstances have grown favorable to family planning; attitudes toward smaller family size, little resistance to the idea of fertility control, and fairly good knowledge on contraceptives among married women regardless of their personal background are examples. However when considering urban and rural areas separately, a discrepancy in the effect of the program is observed. Besides fertility and birth control, however, the rising age at

marriage and increase in induced abortion are considered equally important factors in fertility decline during the last ten years.⁴ It was already well documented that the urban fertility reached a stalemate since 1967. On the other hand, the fertility reduction in rural areas was rather gradual, and there is no clear evidence of any hastening of the reduction. These observations naturally lead us to two contradictory views on the prospects of the national family planning program. One is an optimistic view giving credit to the present Family Planning Program based on its past achievements; the other is a pessimistic view which asserts that the program already reached a plateau, judging from the trends and patterns in differential fertility by regions and various socio-economic groups.

The controversy concerning the family planning program as an effective means for fertility control is considerable. Disputes over policies of "within family planning" and "beyond family planning" have not yet been settled, and sometimes "better family planning" is argued as the third alternative alongside the current "family planning" and the non-family planning approaches.⁵ Let us review briefly the two opposing positions on this question, one represented by Bogue and the other by Davis, since both of them, interestingly enough, take the Korean case as a relevant example for their argument.

Bogue's optimism is clearly illustrated when he states that "it is quite reasonable to assume that the world population crisis is a phenomenon of the 20th century, and will be largely if not entirely a matter of history when humanity moves into the 21st century." The year 1960, according to him, marks a drastic turning point in the world demographic transition. The developments in the field of population control are so new and so novel that "population trends before 1960 are largely irrelevant in predicting what will happen in the future." What is so new and so novel? Bogue lists 1) grass-roots approval of the family planning programs 2) aroused political leaderships accepting family planning as a moral and rational solution for the population problems, 3) accelerated professional and research activity, 4) the slackening of progress in death control, 5) a variety of sociological and psychological phenomena, previously unknown or underappreciated, for the promotion of the rapid adoption of family planning by the mass of the people, and 6) improved technology in contraception.

For an illustration of the above argument, Bogue summarizes the experience of the Republic of Korea, thereby suggesting the prospects that "instead of a population explosion the world is on the threshold of a con-

⁴ Byung Moo Lee, 'The Impact on Fertility of Age at First Marriage, Induced Abortion, and the Family Planning Program,' *The Korean 1970 Annual Report of Family Planning*, Vol. I. The National Family Planning Center, Seoul, 1971.

⁵ John A. Ross and Oliver D. Finnigan 3rd, 'Within Family Planning—Korea,' *Demography*, Vol. 5, No. 2, 1968.

traception adoption explosion.”⁶

On the opposite pole, Davis presents the most critical evaluation of the current population control. An examination of the goals of family planning programs indicates that the current policy does not undertake to influence most of the determinants of human reproduction. Also despite its emphasis on technology, the current policy does not utilize all available means of contraception, much less birth control measures. In addition, the current policy in developing countries aims at reducing the fertility rate to the same level that the industrial nations now have. In the light of the fact that the average level of reproduction has been high enough to give most industrialized countries a rapid population growth since 1940, the goal set by developing countries will eventually result in a rapid population increase for already over-populated areas.

The second point raised by Davis is the problem of motivation. Of course, the family planners do not ignore motivation but they pose the issue in terms of the “acceptance” of birth control devices, thus reducing the motivation problem to a technological question. Davis argues, however, that changes in social structure and economy are necessary preconditions for fertility decline because reproductive behavior, like other forms of human behavior, is socially motivated. Ignoring this fact allows people to feel that “something is being done about the population problem without the need for painful social changes.” It also allows population to become a disease, “to be treated by a pill or a coil.” As far as the current policy pursues this approach, any family planning program may fail in the long run including the Korean one. What is the most embarrassing is the fact that the current program simply blocks alternative thinking and experimentation, and this makes the emphasis on family planning a major obstacle to population control. Thus, Davis’s answer is “not to abandon family planning programs but to put equal or greater resources into other approaches.”⁷

We do not intend to enter into this controversy anew, nor to evaluate the merits and demerits of the Korean Family Planning Program as a means for population control. What we intend to say is that, though duly appreciating the achievements of the program made in Korea during the past decade, we cannot be too optimistic about future population trends in Korea if we do not make a realistic reappraisal of the present status of the Family Planning Program in Korea. Nor can we be too pessimistic about the program. We also cannot lend ourselves to such simplistic arguments on the causal link between social and economic development and rapid demographic transition though we do not agree with the opinion which regards family planning as something like a “miracle drug,” ignoring “the need for painful social

⁶ Donald J. Bogue, ‘The End of the Population Explosion,’ *The Public Interest*, No. 7, Spring 1967.

⁷ Kingsley Davis, ‘Population Policy: Will Current Programs Succeed?’, *Science*, Vol. 158, February 1969.

changes.”

3. Need for New Population Policy

The Five Regional Seminars in search of a population policy for the developing world in 1973 disclosed an interesting, dominant view which is in sharp contrast with the general view on population in the Western world. For the developing nations, “global population problems in terms of sheer numbers, and growth of the world population in relation to global resources were thought less important than a wide range of other problems” such as reducing mortality and morbidity, strains of urban growth, expanding social services, rights and welfare of women and children, and employment and unemployment.⁸ This clearly shows how developing nations perceive population problems they are currently facing. The perception is undoubtedly bound up with their culture and normative system, which, in turn, are influenced by prevailing social, economic, political, ideological and demographic conditions. It is natural that the developing nations see population issues from their national standpoints rather than a global point of view. In search of a new population policy for Korea, it is necessary to examine briefly the recent trends of demographic transition in Korea and the major population characteristics in comparison to other nations.

The estimated level of current mortality in Korea is now one of the lowest in Asia. Owing to the “miracle drugs” and improvement of health and sanitary services since the end of World War II, particularly after the Korean War, the level of mortality dropped very rapidly. The crude death rate which was estimated as 16 per thousand for the period 1955-60 declined to around 10 for the post-1970 years. However, the consensus of opinion among Korean demographers is that a further substantial reduction in mortality is not likely.

Turning to fertility, the crude birth rate was very high until the end of the Japanese colonial period, ranging from 40 to 45 per thousand. A slight decline was observed for some years after World War II, particularly during the Korean War. Owing to a baby boom after the Korean War, the level of fertility and births rose sharply again. The crude birth rate was estimated as 45 for the period 1955-60, and decline to 41 and 32 for the periods 1960-65 and 1965-70 respectively. The rate for 1972-73 was approximated as 28 to 30 per thousand.¹⁰

⁸ National Academy of Sciences, *In Search of Population Policy: Views from the Developing World*, Chapt. VII, Washington D.C., 1974.

⁹ Tai Hwan Kwon, ‘Population Growth in Korea; A Historical Sketch,’ draft paper presented before the conference on Population and Development in Korea, sponsored by the Joint Committee on Korean Studies of the Social Science Research Council, N.Y. and the American Council of Learned Societies, and the Population and Development Studies Center of Seoul National University, Seoul, January 1975, pp. 47-48.

¹⁰ *Ibid.*, p. 29.

Since international migration of the Korean people has been almost negligible during the last 20 years, the recent demographic transition since 1960 can be accounted for solely in terms of the difference between births and deaths. The annual growth rate, which is interpreted as the natural increase rate, was recorded to be about 20 per thousand for the most recent intercensal period 1966–70. This rate, if continued, means that the Korean population will double, from the present 35 million to 70 million in 35 years.

Korea's urban growth has been much more phenomenal than the national population increase. During the 10 year period from 1960 to 1970, the population living in administratively defined "Shi" (city with population 50,000 and more) areas increased by nearly 6 million, absorbing more than 90 per cent of the total increase of the national population during the same decade. If we add the population of large towns "Eups" to this and if an allowance is made for the greater census undercounting in urban areas, we can safely assume that the urban population in Korea already passed the 50 per cent mark by 1970. The population of Seoul, the largest and capital city of Korea, doubled during the decade 1960–70 and is expected to have reached at least 6.5 million in 1975. Along with this explosive growth of Seoul, the population of Busan, the second largest city, and that of Daegu, the third largest, already passed the 2 million and 1 million mark respectively.

An intensive component analysis of urban growth by Yu shows that net migration accounted for 73 per cent of the total urban population increase between 1966 and 1970, thus showing migration is a far more important factor to the growth of urban population than natural increase. The importance of net migration was strengthened during 1966–70 compared to the previous period. Particularly, in Seoul, net migration constituted more than 80 per cent of the total increase between 1966 and 1970, far exceeding the corresponding 58 per cent for the previous intercensal period.¹¹

Undoubtedly, the extremely rapid growth of the urban population, particularly in Seoul, has brought about a serious challenge to be met immediately. Also, this urban crowding is a reflection of differential impact of economic development on income and job opportunity between rural and urban areas.

As was mentioned already, the population policy to promote family planning was an integral part of Korea's economic development plan from the beginning. Since 1963, economic development has been noticeable and the achievement of the Family Planning Program has been praised as one of the world models. The annual growth rate of domestic production increased from 4 to 9 per cent between the period 1953–55 to 1960–62

¹¹ Eui-Young Yu, 'Components of Population Growth in Urban (Shi) Areas of Korea: 1960–1970,' *Bulletin of the Population and Development Studies Center*, Vol. II, No. 1–2, Seoul National University, Seoul, April 1973, p. 39.

and the period 1960–62 to 1970–72. Accompanying this rapid growth was a radical change of economic structure. Agricultural share of the total domestic production dropped from 50 per cent in 1953–55 to 30 per cent in 1970–72, while the industrial sector's share increased from 11 per cent to 35 per cent. This rapid growth and structural change of economy was similar to that experienced previously by such countries as Japan (from 1878–1882 to 1923–1927) and Sweden (1861–1865 to 1901–1905), but "whereas the process lasted 40 to 45 years in these countries, it took only 20 years in Korea."¹² During the same period, the natural rate of population increase declined from about 3 per cent to 2 per cent and the proportion of the urban population increased from 20 per cent to well over 50 per cent. However, this rapid change brought about new stresses and strains with it. As Whitney correctly points out, "growth and change are not without cost, as well as benefit, since all change requires adaptation to the altered conditions, and rapid change requires both more rapid and more substantial kind of adaptation."¹³

According to the United Nations, a population policy is defined as follow:

* * * * * measures and programmes designed to contribute to the achievement of economic, social, demographic, political and other collective goals through affecting critical demographic variables, namely the size and growth of the population, its geographic distribution (national and international) and its demographic characteristics * * * * * .")¹⁴

Thus, it is now generally agreed upon that the ultimate aim of any population policy should be measures and programs which bring about all aspects of development through affecting critical demographic components. In other words, the final goal of a population policy must be the measures for improvement of the quality of human life.

Population policy should aim at not only reducing fertility, but also reducing mortality, widening the employment opportunities, raising the level of living, narrowing the gap between the rural and the urban, facilitating adjustment of migrants, and so forth. In the search for a new popula-

¹² P.W. Kunznets, 'Accelerated Economic Growth and Structural Change in Korea,' draft paper presented at the Conference on Population and Development in Korea, Seoul, January 1975, p. 10.

¹³ Vincent H. Whitney, 'Population Transition in Korea in Comparative Asian Perspective,' draft paper presented at the Conference on Population and Development in Korea, Seoul, January 1975, p. 4.

¹⁴ United Nations Economic and Social Council, Population Commission, Report of the ad hoc Consultative Group of Experts on Population Policy (E/CN.9/267), May 1972, p.6, Requouted from *In Search of Population Policy*, p. 86.

tion policy, the basic question, ideally speaking, should be whether the welfare of one sector should increase at the expense of the others, or the quality of life of a nation as a whole should be improved without affecting anyone's well-being.

In Korea, as in many developing countries, development meant economic development, which was conceived as the increase of gross national product in terms of the amount of goods and services produced. However, the welfare of population depends not only on the increase of production but also on the distribution of goods and services produced. On the other hand, population policy in Korea has evolved in response to the serious problems posed by the extremely high rate of population increase. Thus population policy has become identified with population control and synonymous with family planning. Recalling the demographic situation in the early 1960's in Korea when the crude birth rate was well over 40 per thousand and the annual rate of natural growth was incompatible with the object of economic development, the adoption of a family planning program as a national policy was undoubtedly a timely and right decision. In spite of its remarkable achievements during the last decade, the Korean Family Planning Program is already reported to have reached a kind of saturation point. If the present approach with the main emphasis on the so-called clinical methods is to continue, it is very unlikely that the growth rate can be reduced to 15 per thousand by the end of 1976. Considering various problems accumulated during the past decade, it is very unlikely that a further substantial reduction of fertility is possible simply through the distribution of contraceptives and insertion of IUD's by health centers and private doctors. What is urgently needed is a more effective and comprehensive approach which could easily translate people's desire into action.

A review of the studies on fertility suggests that the reproductive behavior of the rural folk and the urban poor is largely determined by access to health service, which is in some way related to the level of mortality of children, the housing situation particularly in urban areas, the opportunity for higher education and employment, and, not the least, the prevailing value and attitudes toward sex preference and the desired number of children, which are changing but not yet completely transformed. From these observations some policy implications emerge and population policy in Korea must be considered in this context. New population policy should be more comprehensive.

APPENDIX TABLES

Appendix I. Distributions of the Korean Population by Age Group, Sex, and Province

1925	Whole Country	Province																
		Seoul	Buen	Gyeonggi	Gangwon	Chungbuk	Chungnam	Jeonbuk	Jeonnam	Gyeongbuk	Gyeongnam	Jeju	Whanghe	Pyeongbuk	Pyeongnam	Honbuk	Hannam	
Both Sexes																		
0-4	3,069,586	285,225	202,682	130,086	200,866	212,145	346,583	372,533	323,842	231,435	229,163	202,399	59,816	232,811				
5-9	2,324,093	221,995	162,772	100,305	156,689	168,762	251,292	294,704	228,781	175,937	162,715	145,368	76,957	177,816				
10-14	2,157,223	217,811	150,219	94,479	144,569	144,798	229,791	272,302	217,874	158,623	160,746	133,704	68,460	163,847				
15-19	1,877,067	195,131	132,449	83,468	122,690	132,280	202,105	232,416	189,175	139,468	137,663	117,440	53,290	134,492				
20-24	1,470,283	147,845	99,163	64,780	101,284	105,833	166,352	163,712	145,898	112,631	110,869	95,928	47,893	108,365				
25-29	1,472,542	135,030	97,568	61,253	96,248	108,669	176,945	172,363	159,186	108,101	109,029	93,190	45,824	109,136				
30-34	1,259,397	128,417	87,240	55,036	87,314	101,104	157,291	137,056	124,366	94,669	86,840	73,376	39,328	87,340				
35-39	1,139,847	116,504	80,777	53,713	76,618	83,204	129,000	144,746	120,883	83,085	76,195	65,481	31,539	76,102				
40-44	949,548	102,395	70,122	45,125	66,730	65,941	104,443	105,746	85,534	76,415	70,188	61,632	28,261	67,016				
45-49	817,690	83,778	62,059	39,125	54,911	56,890	87,561	95,543	76,604	65,674	60,574	52,658	24,486	57,827				
50-54	673,697	73,780	50,782	33,889	46,254	43,615	70,741	83,304	64,473	56,046	45,219	42,177	18,729	44,638				
55-59	588,370	63,417	43,179	27,921	38,427	39,897	60,008	72,866	62,001	50,194	43,636	39,494	12,315	35,015				
60-64	480,125	45,137	32,256	21,669	27,906	33,853	58,170	60,808	57,148	35,246	33,920	30,220	13,412	30,380				
65-69	389,454	38,484	26,231	15,577	20,494	25,015	44,994	45,315	43,631	29,375	31,820	27,305	11,847	29,366				
70-74	207,604	20,767	14,776	6,138	10,294	11,908	22,855	24,128	22,254	15,202	16,472	14,653	8,227	17,930				
75+	143,504	14,183	10,036	4,868	5,730	6,516	13,398	15,743	16,351	10,942	11,160	11,592	7,364	13,631				
Total	19,020,030	1,889,899	1,322,331	839,422	1,259,024	1,340,430	2,123,539	2,293,285	1,938,001	1,442,943	1,386,029	1,206,617	592,748	1,385,762				
Males																		
0-4	1,560,053	144,795	103,529	66,335	102,530	108,439	177,065	190,203	164,619	116,654	115,418	101,962	50,315	118,169				
5-9	1,200,503	114,030	84,335	52,434	81,206	87,909	130,751	153,832	118,676	90,056	82,896	74,097	39,290	97,971				
10-14	1,117,122	112,681	78,318	49,620	75,145	75,917	119,224	141,573	114,826	81,523	81,824	67,980	34,796	84,283				
15-19	964,186	102,303	68,819	43,027	63,415	69,041	103,128	119,227	97,958	70,551	69,199	59,086	29,421	69,011				
20-24	749,424	77,367	51,789	33,446	52,390	56,099	83,180	82,061	72,844	56,697	55,631	48,591	24,672	55,607				
25-29	754,495	70,963	51,967	31,866	50,077	56,730	86,405	86,552	79,515	54,952	55,890	47,376	23,914	56,258				
30-34	654,292	68,132	46,535	29,214	46,414	53,326	80,092	70,376	63,653	48,494	44,700	37,767	20,417	45,172				
35-39	594,448	61,721	43,162	28,562	42,067	44,253	65,761	74,695	61,864	42,761	39,461	33,775	16,640	39,704				

1925 (Continued)

Whole	Seoul	Busan	Gyeonggi	Gangweon	Chungbuk	Chungnam	Jeonbuk	Jeonnam	Gyeongbuk	Gyeongnam	Jelju	Whanghe	Pyeongbuk	Pyeongnam	Hamsang	Hannam
40-44	497,970		53,713	37,697	23,830	35,785	35,048	54,004	55,303	45,522		39,246	36,619	31,221	14,753	35,209
45-49	425,428		43,069	33,126	20,286	28,852	30,065	44,749	49,739	40,488		33,742	31,841	26,722	12,560	30,179
50-54	347,447		37,476	27,314	17,777	23,870	23,107	35,436	43,178	33,399		28,374	23,793	21,157	9,378	23,188
55-59	291,999		30,784	22,727	13,802	18,882	19,705	28,396	36,287	30,527		24,692	22,507	19,469	6,156	18,045
60-64	231,498		21,137	16,705	10,190	13,071	16,039	26,329	29,247	26,864		17,137	17,326	14,897	6,762	15,794
65-69	181,586		17,415	13,467	7,171	9,207	11,146	19,200	20,565	19,619		13,901	16,128	12,960	5,895	14,912
70-74	94,614		9,080	7,573	3,716	4,428	5,288	9,329	10,764	9,689		6,908	8,153	6,847	4,018	8,821
75+	61,085		5,414	4,954	1,945	2,209	2,488	5,888	6,490	6,416		4,662	5,211	5,115	3,557	6,536
Total	9,726,150		970,120	692,017	433,221	649,560	693,840	1,070,957	1,170,102	986,179		730,062	706,647	609,022	302,544	711,879
Female																
0-4	1,509,533		140,430	99,153	63,731	98,336	103,706	169,498	182,330	189,223		114,781	113,745	100,437	49,501	114,642
5-9	1,123,590		107,945	78,437	47,871	75,483	80,853	120,541	140,872	110,105		85,881	79,819	71,271	37,667	86,845
10-14	1,040,101		105,130	71,201	44,859	69,424	68,861	110,567	130,729	103,348		77,388	78,922	65,724	33,664	79,564
15-19	912,881		92,828	63,630	40,441	59,275	63,239	98,977	113,189	91,217		68,917	68,464	58,354	28,869	65,481
20-24	720,859		70,478	47,374	31,334	48,894	50,734	83,182	81,651	73,054		55,834	55,008	47,337	23,221	52,758
25-29	718,047		64,067	45,401	29,387	46,171	51,919	86,540	85,801	79,671		53,149	53,139	45,814	21,910	52,878
30-34	605,105		60,285	40,725	25,922	40,900	47,778	77,199	66,680	60,713		46,175	42,140	35,609	18,911	42,168
35-39	545,399		54,763	37,615	25,151	36,549	38,951	63,239	70,051	59,019		40,324	36,734	31,706	14,899	36,398
40-44	451,578		48,682	32,425	21,295	30,945	30,873	50,439	50,443	40,012		37,169	33,569	30,411	13,508	31,807
45-49	392,262		40,709	28,933	18,839	26,049	26,825	42,812	45,804	36,116		31,932	28,733	25,936	11,926	27,646
50-54	326,250		36,304	23,468	16,112	22,384	20,508	35,305	40,126	31,074		27,672	21,426	21,020	9,351	21,500
55-59	296,371		32,633	20,452	14,119	19,545	20,192	31,612	36,579	31,474		25,502	21,129	20,025	6,159	16,950
60-64	248,627		24,000	15,551	11,479	14,835	17,814	31,841	31,561	30,284		18,109	16,594	15,323	6,650	14,586
65-69	207,868		21,069	12,764	8,405	11,287	13,869	25,794	24,750	24,012		15,474	15,692	14,345	5,952	14,454
70-74	112,990		11,687	7,203	4,422	5,866	6,620	13,526	13,364	12,565		8,294	8,319	7,806	4,209	9,109
75+	82,419		6,769	5,082	2,913	3,521	3,828	9,510	9,253	9,935		6,280	5,949	6,477	3,807	7,095
Total	9,293,880		919,779	630,314	406,201	609,464	646,590	1,052,582	1,123,183	951,822		712,881	679,382	597,595	290,204	673,883

1930

	Whole Country															
	Seoul	Busan	Gyeonggi	Gangwon	Chungbuk	Chungnam	Jeonbuk	Jeonnam	Gyeongbuk	Gyeongnam	Jelju	Whanghae	Pyeongbuk	Pyeongnam	Hamgyong	Hamnam
Both Sexes																
0-4	3,281,683		227,911	232,911	143,137	219,480	237,949	376,702	393,828	336,558		222,501	249,428	207,984	114,067	248,807
5-9	2,657,640		243,272	179,838	111,408	177,059	187,407	307,028	314,823	281,760		190,927	199,595	168,055	92,315	204,173
10-14	2,220,479		214,796	161,672	95,149	148,892	162,299	237,619	273,084	215,563		164,570	158,728	139,278	77,819	171,008
15-19	2,051,939		217,561	150,172	90,215	137,491	140,429	207,446	247,785	195,649		149,717	156,171	129,675	70,631	158,997
20-24	1,711,543		178,469	128,335	75,508	113,312	124,447	180,753	195,159	160,464		126,845	130,085	107,996	61,501	128,669
25-29	1,371,976		134,854	97,367	59,830	95,465	102,314	156,108	142,919	128,346		102,953	105,176	89,055	50,630	104,909
30-34	1,384,062		127,553	96,887	56,757	90,307	104,258	165,736	154,091	145,374		98,569	103,430	86,807	48,476	105,797
35-39	1,197,402		122,715	87,236	51,440	82,469	97,655	148,382	124,614	116,115		87,945	83,430	69,054	41,753	84,594
40-44	1,053,400		106,355	78,234	48,696	72,147	77,192	120,229	129,653	111,938		74,272	71,364	60,234	32,407	72,479
45-49	889,145		94,790	68,067	41,660	61,925	63,044	98,935	96,575	79,765		69,092	66,356	56,877	28,627	63,412
50-54	737,442		73,631	57,604	34,258	48,405	50,741	78,388	85,649	70,204		57,538	55,688	47,576	24,401	53,358
55-59	607,955		65,977	47,379	29,807	40,303	39,621	64,483	73,764	58,865		48,730	41,506	38,089	18,370	41,041
60-64	483,750		51,428	35,469	22,069	30,021	31,836	50,035	59,157	51,801		39,761	37,045	33,496	11,352	30,280
65-69	367,736		33,391	25,001	15,922	20,075	25,150	45,979	45,589	44,207		26,176	26,655	23,779	11,569	24,243
70-74	25,258		23,627	16,594	9,329	12,441	14,990	30,184	28,632	29,039		18,179	21,061	18,583	9,169	20,430
75+	167,678		15,662	11,186	5,692	7,149	8,252	20,422	18,532	19,465		11,438	13,319	12,266	8,517	15,778
Total	20,438,108		2,004,012	1,473,972	890,877	1,356,942	1,467,604	2,288,429	2,373,856	2,045,113		1,499,643	1,519,037	1,288,804	701,844	1,527,975
Male																
0-4	1,661,240		151,339	118,319	72,626	111,250	121,599	191,634	195,707	170,046		117,870	124,274	104,480	57,273	124,823
5-9	1,361,625		124,613	92,877	57,473	91,161	96,523	158,148	161,748	144,576		97,083	101,090	84,994	46,881	104,438
10-14	1,152,608		111,368	84,711	49,997	77,614	85,013	124,039	142,805	112,945		84,477	81,413	70,969	40,007	86,230
15-19	1,058,199		114,669	78,605	46,932	70,607	73,242	105,231	127,963	102,147		76,072	78,652	65,846	36,034	81,999
20-24	860,373		92,781	66,638	38,356	57,752	64,403	88,613	94,556	77,528		65,461	65,092	53,880	31,477	66,036
25-29	692,154		70,986	50,700	30,688	45,863	52,077	76,592	68,866	61,891		51,575	52,942	44,927	26,588	54,459
30-34	704,726		66,728	51,634	29,488	46,867	54,485	82,282	75,790	71,248		49,862	53,034	43,868	25,959	55,481
35-39	618,681		64,451	46,636	27,275	43,570	51,332	75,067	62,971	58,570		44,385	42,712	35,151	22,437	44,104

1930 (Continued)

	Whole																
	Country	Seoul	Busan	Gyosangi	Gangwon	Chungbuk	Chungnam	Jeonbuk	Jeonnam	Gyeonggi	Gyeongnam	Jelju	Whanghe	Pyeongbuk	Pyeongnam	Hamhung	Hamnuk
40-44	548,241	44,200	25,990	38,493	41,201	61,011	66,032	56,430	37,734	37,032	30,729	17,664	38,121				
45-49	460,921	36,601	21,884	32,702	33,053	50,458	49,685	41,546	34,977	34,472	28,441	15,053	33,251				
50-54	379,603	37,050	30,877	17,694	25,055	26,618	39,664	36,539	29,206	28,949	23,695	12,641	27,755				
55-59	305,594	32,174	24,980	15,246	20,319	20,249	31,530	29,564	24,006	21,319	18,594	9,212	21,035				
60-64	235,138	24,217	18,517	10,642	14,254	15,392	23,190	24,797	19,171	18,842	16,187	5,690	15,478				
65-69	171,533	14,853	12,780	7,294	8,991	11,389	20,000	19,900	12,257	13,245	11,423	5,793	12,383				
70-74	114,519	10,292	8,564	4,177	5,258	6,543	12,467	12,540	8,305	10,426	8,534	4,513	10,231				
75+	70,514	6,047	5,465	2,320	2,778	3,350	7,581	7,619	4,769	6,142	5,269	4,095	7,487				
Total	10,393,889	1,025,990	770,104	458,082	695,534	757,469	1,147,527	1,027,906	755,210	769,636	646,987	361,317	785,311				
Female																	
0-4	1,620,443	146,572	114,592	70,511	108,230	116,370	185,068	186,121	166,512	115,031	125,154	103,504	123,984				
5-9	1,296,035	118,659	86,961	53,935	85,898	90,884	148,880	153,055	137,184	93,844	98,505	83,061	99,735				
10-14	1,066,871	103,408	76,961	45,152	71,278	77,286	113,580	130,281	102,618	80,093	77,315	68,309	82,778				
15-19	993,740	102,892	71,567	43,283	66,884	67,187	102,215	119,822	93,502	73,645	77,319	63,829	76,998				
20-24	850,970	85,688	61,697	37,152	55,560	60,044	92,140	100,603	82,936	63,384	64,993	54,116	62,633				
25-29	679,822	65,868	46,667	29,142	46,602	49,237	79,516	74,053	66,455	51,408	52,234	44,128	50,450				
30-34	677,336	60,825	45,253	27,269	43,440	49,773	83,454	78,301	74,126	48,707	50,396	42,939	50,316				
35-39	578,721	58,264	40,600	24,165	38,899	46,323	73,295	61,643	57,545	43,560	40,718	33,903	40,490				
40-44	507,159	50,751	36,034	22,706	33,654	35,991	59,218	63,621	55,508	36,538	34,332	29,505	34,358				
45-49	428,224	45,992	31,486	19,776	29,223	29,991	48,477	46,890	38,219	34,115	31,884	28,436	30,161				
50-54	357,839	36,581	26,727	16,564	23,351	24,123	38,724	41,789	33,665	28,332	26,739	23,881	25,603				
55-59	302,361	33,823	22,399	14,561	19,984	19,372	32,653	36,418	29,281	24,724	20,187	19,495	20,006				
60-64	248,412	27,211	16,952	11,427	15,767	16,444	26,845	30,396	27,004	20,590	18,203	17,309	14,802				
65-69	196,183	18,538	13,221	8,628	11,084	13,761	25,979	24,344	24,307	13,919	13,410	12,356	11,640				
70-74	137,739	13,335	8,030	5,152	7,183	8,447	17,717	15,963	16,499	9,874	10,635	10,049	10,199				
75+	97,164	9,615	5,721	3,372	4,371	4,902	12,841	10,940	11,846	6,669	7,177	6,997	4,822				
Total	10,039,219	978,022	703,868	432,795	661,408	710,135	1,140,902	1,176,240	1,017,207	744,433	749,201	641,817	840,527				

1935

Whole Country	Buam	Socul	Gyeonggi	Gangweon	Chungbuk	Chungnam	Jeonbuk	Jeonnam	Gyeongang	Gyeongnam	Jeju	Wŏnghae	Pyeongang	Hambuk	Hamnam
Both Sexes															
0-4	3,671,531	366,283	262,288	157,217	255,628	254,173	392,554	416,257	351,949	281,334	279,124	241,844	128,550	275,375	
5-9	2,886,471	271,335	199,584	122,515	195,132	210,303	340,753	332,082	296,748	203,855	211,487	182,044	103,422	217,211	
10-14	2,531,631	245,848	172,539	105,040	168,106	176,140	287,661	294,803	261,705	182,449	191,518	162,406	88,989	194,427	
15-19	2,101,905	227,178	155,074	90,268	141,025	152,165	213,837	246,653	186,383	157,551	153,581	135,970	77,773	184,447	
20-24	1,897,029	213,020	141,521	81,765	129,531	129,732	186,819	213,420	164,814	142,677	147,314	122,184	73,846	150,316	
25-29	1,613,770	176,759	120,870	69,745	108,883	116,422	168,006	178,265	145,174	121,545	123,258	102,309	62,159	120,355	
30-34	1,285,942	134,755	90,248	55,010	90,127	93,706	144,127	133,034	119,248	97,154	98,139	83,853	49,160	97,381	
35-39	1,308,753	125,833	90,343	52,494	86,100	97,383	156,639	145,338	135,458	94,082	97,930	82,454	46,257	98,452	
40-44	1,112,764	117,140	79,890	47,113	77,224	88,504	138,890	115,524	108,108	81,593	77,705	64,291	38,437	78,345	
45-49	991,393	103,068	72,590	44,724	68,214	71,293	113,857	121,168	104,688	69,934	67,489	56,503	30,341	67,524	
50-54	797,501	87,261	60,427	36,569	55,250	54,252	87,733	86,517	71,917	62,125	60,300	51,622	26,217	57,311	
55-59	666,028	68,538	51,493	30,044	43,826	44,838	70,823	76,498	62,953	52,062	51,185	43,731	22,303	47,734	
60-64	503,268	55,536	38,216	23,996	33,143	31,026	53,727	60,112	48,403	40,375	35,251	32,482	16,217	34,784	
65-69	381,639	41,282	27,171	16,782	23,373	23,902	40,499	45,563	40,667	31,368	30,028	27,219	9,738	24,067	
70-74	247,866	22,541	15,651	9,964	13,121	15,627	32,010	29,601	30,344	17,730	18,257	16,907	6,943	17,270	
75+	210,461	19,422	12,543	6,941	9,707	10,715	27,532	22,404	25,136	14,705	16,881	16,068	9,843	18,364	
Total	22,208,102	2,277,999	1,590,448	930,207	1,498,440	1,570,186	2,452,467	2,517,239	2,153,675	1,650,539	1,659,447	1,421,837	792,195	1,663,373	
Male															
0-4	1,864,127	187,566	133,537	80,054	130,369	129,033	203,640	212,432	178,821	142,314	140,161	121,912	64,853	139,435	
5-9	1,478,064	138,997	103,061	63,105	99,989	108,688	174,900	171,295	151,970	104,210	106,775	92,006	52,485	110,583	
10-14	1,301,810	126,148	89,402	54,586	87,375	91,242	148,473	151,982	134,651	93,268	97,154	82,316	45,463	99,750	
15-19	1,080,314	119,638	80,357	46,144	72,311	78,513	109,335	129,001	96,838	79,824	77,071	68,361	39,817	83,104	
20-24	959,748	111,341	72,604	41,552	66,083	66,648	91,518	106,280	81,441	72,346	73,373	61,438	38,137	76,987	
25-29	811,545	92,460	62,186	35,292	55,500	59,925	81,620	86,234	69,520	61,046	61,693	51,204	32,728	62,137	
30-34	652,568	70,449	46,806	28,242	46,408	48,431	71,141	65,376	58,156	48,897	49,651	42,362	26,025	50,624	
35-39	669,307	66,313	47,802	27,293	44,879	50,605	77,675	72,122	67,059	47,862	50,129	41,489	24,778	51,301	

1935 (Continued)

	Which Country	Seoul	Busan	Gyeonggi	Gangweon	Chungbuk	Chungnam	Jeonbuk	Jeonnam	Gyeongbuk	Gyeongnam	Jeju	Whanghae	Pyeongbuk	Pyeongnam	Hamgyong	Hannam
40-44		572,611		61,355	42,466	24,991	40,774	46,114	69,951	58,760	54,378		41,216	39,676	32,266	20,176	40,468
45-49		508,714		53,416	38,475	23,683	36,026	37,150	57,084	61,493	52,547		35,305	34,455	28,344	15,890	34,846
50-54		409,120		44,476	32,223	18,925	29,025	27,932	44,463	44,297	37,375		31,091	30,785	25,289	13,366	29,073
55-59		334,045		33,432	26,847	15,055	22,084	22,663	34,831	38,570	32,053		25,819	26,056	21,286	11,036	24,313
60-64		248,205		26,443	19,899	12,073	16,177	15,403	25,711	29,977	23,855		19,697	17,971	15,608	7,915	17,448
65-69		179,466		18,629	13,820	7,909	10,701	10,996	18,006	21,532	18,726		14,806	14,933	12,752	4,681	11,995
70-74		113,398		9,676	7,939	4,474	5,722	6,805	13,447	13,585	13,288		8,208	9,088	7,936	4,470	8,760
75+		87,943		7,569	6,125	2,781	3,818	4,213	10,194	9,240	9,686		6,265	7,771	6,839	4,755	8,717
Total		1,271,005		1,167,898	823,549	486,159	767,241	804,389	1,231,989	1,272,176	1,080,364		832,174	836,942	711,408	406,555	850,161
	Female																
0-4		1,607,454		180,717	128,751	77,163	126,259	125,145	195,914	203,825	173,128		139,020	138,963	119,932	63,697	135,940
5-9		1,408,407		132,338	96,523	59,410	95,143	101,615	165,653	160,787	144,778		99,645	104,712	90,038	50,937	106,628
10-14		1,229,821		119,700	83,137	50,454	80,731	84,898	139,188	142,821	127,054		89,181	94,364	80,090	43,526	94,677
15-19		1,021,591		107,540	74,717	44,124	68,714	73,652	104,502	117,652	89,545		77,727	76,510	67,609	37,956	81,343
20-24		937,281		101,679	68,917	40,233	63,498	63,084	95,301	107,140	83,373		70,331	73,941	60,746	35,709	73,329
25-29		802,225		84,299	58,684	34,473	53,383	56,497	86,386	92,031	76,654		60,499	61,565	51,105	29,431	56,218
30-34		633,374		64,306	43,442	26,768	43,719	45,275	72,986	67,658	61,092		48,257	48,488	41,491	23,135	46,757
35-39		639,446		59,520	42,541	24,201	41,221	46,778	78,964	73,216	68,379		46,220	47,801	40,965	21,479	47,161
40-44		540,153		55,785	37,424	22,122	36,450	42,390	68,939	56,764	53,730		40,377	38,029	32,025	18,261	37,857
45-49		482,679		49,652	34,115	21,041	32,188	34,143	56,773	59,675	52,141		34,629	33,034	28,159	14,451	32,678
50-54		388,381		42,785	28,204	17,644	26,225	26,320	43,270	42,220	34,542		31,034	29,315	26,333	12,851	27,638
55-59		331,983		35,106	24,646	14,989	21,742	22,175	35,992	37,928	30,900		26,243	25,129	22,445	11,267	23,421
60-64		255,063		29,093	18,317	11,923	16,966	15,595	28,016	30,135	24,548		20,678	17,280	16,874	8,302	17,336
65-69		202,173		22,653	13,351	8,853	12,672	12,906	22,493	24,031	21,941		16,562	15,095	14,467	5,077	12,072
70-74		134,568		12,865	7,712	5,490	7,399	8,822	18,563	16,016	17,056		9,522	9,169	8,971	4,473	8,510
75+		122,498		12,063	6,418	4,160	5,889	6,502	17,338	13,164	15,450		8,440	9,110	9,229	5,088	9,647
Total		10,937,097		1,110,101	766,899	464,048	731,199	765,797	1,230,478	1,245,063	1,073,311		818,365	822,505	710,479	385,640	813,212

1940

Whole	Country	Bath Seas														
		Secul	Buxen	Gyeycsagi	Gangweon	Chungbuk	Chungnam	Jeonbuk	Jeonnam	Gyeongbuk	Gyeongnam	Jelju	Whanghe	Pyeongangbuk	Pyeongangnam	Hambag
0-4	3,897,658	428,157	293,375	159,316	269,757	256,736	420,904	411,504	345,591	299,608	285,494	269,317	160,689	297,210		
5-9	3,237,238	344,613	230,067	127,534	223,283	221,234	366,593	340,191	307,796	251,101	236,560	221,085	126,531	240,658		
10-14	2,721,264	290,871	191,191	107,728	177,999	189,693	317,174	291,374	273,475	194,849	192,959	179,876	109,209	204,861		
15-19	2,263,663	283,618	184,177	84,264	138,741	141,000	239,356	226,706	205,761	166,672	168,257	159,769	103,685	181,657		
20-24	1,835,093	227,943	146,348	71,697	116,036	119,273	177,372	174,813	135,104	144,275	131,260	132,791	101,669	156,512		
25-29	1,704,599	211,594	135,161	67,138	109,227	106,657	165,613	163,191	132,542	132,561	127,752	120,192	91,220	141,751		
30-34	1,456,721	173,275	113,552	57,697	92,788	96,622	152,567	144,187	123,960	112,218	107,106	98,497	71,143	113,109		
35-39	1,205,407	137,854	87,893	47,808	81,132	82,102	136,799	114,882	107,125	91,665	89,370	83,109	54,660	92,008		
40-44	1,201,302	123,404	85,248	45,473	76,920	83,026	145,318	126,318	121,945	87,316	86,370	79,644	49,628	91,492		
45-49	1,016,874	113,605	74,667	39,987	68,673	76,571	127,817	100,860	97,561	75,598	68,734	61,614	39,354	71,833		
50-54	885,031	96,606	65,604	37,492	58,996	60,357	102,834	104,099	92,738	63,275	58,736	52,789	30,611	60,894		
55-59	713,241	82,147	54,492	31,081	48,556	46,793	79,841	74,666	62,944	55,358	52,828	47,941	25,792	50,802		
60-64	552,549	59,793	42,379	23,440	35,481	35,218	59,856	60,628	51,338	43,544	41,517	38,195	20,845	40,315		
65-69	391,881	45,821	29,339	17,216	24,974	22,640	42,786	44,305	37,070	31,792	27,071	26,946	14,548	27,383		
70-74	256,193	28,595	17,594	10,133	14,952	14,820	28,333	28,937	27,300	21,452	20,045	19,755	7,745	16,532		
75+	208,751	20,223	11,858	7,107	10,517	11,294	30,014	22,516	25,352	14,272	15,011	15,665	9,370	15,552		
Total	23,547,465	2,668,119	1,742,927	935,111	1,546,033	1,564,041	2,593,177	2,428,177	2,147,602	1,785,556	1,708,270	1,607,185	1,016,699	1,802,569		
Male																
0-4	1,974,157	216,421	146,658	81,192	137,135	130,596	214,721	208,232	175,387	151,245	144,043	134,774	81,272	150,481		
5-9	1,655,425	176,180	116,201	65,553	114,919	113,203	187,926	175,074	157,235	127,731	119,901	112,092	64,448	122,962		
10-14	1,398,317	147,484	99,706	55,598	92,847	98,662	163,075	150,463	139,328	99,277	97,795	91,627	55,611	105,144		
15-19	1,142,250	146,131	84,458	42,094	68,380	69,743	117,444	114,212	102,663	82,753	82,668	81,991	56,286	93,152		
20-24	908,119	116,880	75,319	34,768	55,282	56,261	83,763	80,863	61,392	72,223	64,567	67,549	38,330	80,922		
25-29	845,329	109,257	69,855	32,984	52,617	51,375	78,078	73,861	59,345	66,525	63,205	61,785	31,836	74,659		
30-34	725,152	90,145	59,079	28,636	45,382	47,721	73,235	66,932	56,159	56,220	53,210	49,805	40,061	59,566		
35-39	606,498	71,375	46,114	24,246	40,487	40,818	66,854	54,645	50,482	46,449	44,116	42,089	30,657	48,166		

1940 (Continued)

	Whole Country	Seoul	Busan	Gyeonggi	Gangwon	Chungbuk	Chungnam	Jeonbuk	Jeonnam	Gyeongbuk	Gyeongnam	Jebu	Whanghae	Pyeongbuk	Pyeongnam	Hwanghae	Hammam
40-44	608,860			64,197	45,555	23,274	39,386	41,380	71,554	61,093	59,181		43,998	43,795	40,332	27,229	47,949
45-49	515,050			58,512	39,591	20,752	35,456	38,350	63,474	50,492	48,149		37,537	34,506	30,720	20,786	36,725
50-54	445,617			48,475	34,746	19,432	30,459	30,301	50,708	51,766	46,055		31,510	29,482	25,972	15,726	30,985
55-59	355,954			39,982	28,475	15,815	24,638	23,060	39,599	37,513	32,053		26,949	26,382	23,025	12,810	25,633
60-64	270,603			27,842	22,008	11,592	17,325	17,245	28,648	30,128	25,729		21,058	20,708	18,157	10,097	20,066
65-69	186,391			20,663	14,911	8,407	11,696	10,760	19,618	21,422	17,505		15,068	13,387	12,589	6,881	13,484
70-74	115,515			12,039	8,890	4,533	6,663	6,579	12,020	13,007	12,002		9,640	9,743	86,610	3,621	7,917
75+	86,005			7,572	5,595	2,856	4,086	4,396	11,294	9,180	9,820		5,976	6,808	67,230	4,365	7,334
Total	11,839,295			1,353,156	901,141	472,732	776,758	780,450	1,282,011	1,197,883	1,052,485		894,816	854,611	808,091	540,016	925,145
Female																	
0-4	1,923,501			211,736	144,717	78,124	132,622	126,140	206,183	203,272	170,204		148,363	141,451	134,543	79,417	146,729
5-9	1,581,813			168,433	111,858	61,981	108,384	108,031	178,667	165,117	150,361		123,370	116,659	108,993	62,083	117,696
10-14	1,322,947			143,387	91,485	51,130	85,152	91,036	154,099	140,911	134,147		94,872	95,164	88,249	53,598	99,717
15-19	1,121,413			137,487	79,739	42,170	70,361	71,257	121,912	112,494	103,098		83,919	85,294	77,778	47,399	88,505
20-24	926,974			111,063	71,029	36,929	60,754	63,012	93,609	93,950	73,712		72,052	66,693	65,242	43,339	75,590
25-29	889,217			102,337	65,306	34,154	56,610	55,282	87,535	89,330	73,197		66,036	64,547	58,407	39,384	67,092
30-34	731,469			82,129	54,473	29,061	47,406	48,701	79,332	78,255	67,801		55,998	53,896	48,692	31,082	53,543
35-39	598,909			66,479	41,779	23,582	40,645	41,284	69,945	60,237	56,643		45,216	44,254	41,020	24,003	43,842
40-44	592,442			59,207	39,653	22,199	37,534	41,646	73,764	64,225	63,764		43,381	42,775	39,312	22,399	43,543
45-49	501,824			55,093	35,076	19,235	33,217	38,221	64,343	50,368	49,412		38,061	34,228	30,894	18,568	35,108
50-54	439,414			48,131	30,858	18,040	28,537	30,056	52,126	52,333	46,683		31,745	29,254	24,817	14,885	29,909
55-59	357,287			42,165	26,017	15,266	23,918	23,733	46,242	37,153	30,891		28,389	26,446	24,916	12,982	25,169
60-64	281,946			31,951	20,371	11,848	18,156	17,973	31,208	30,500	25,609		22,486	20,809	20,038	10,743	20,249
65-69	205,490			25,188	14,418	8,809	13,278	11,880	23,169	22,883	19,565		16,724	13,684	14,357	7,667	13,899
70-74	140,678			16,556	8,704	5,600	8,289	8,241	16,313	15,930	15,298		11,812	10,302	10,894	4,124	8,615
75+	122,746			12,651	6,263	4,251	6,431	6,898	18,720	13,336	15,532		8,296	8,203	8,942	5,005	8,218
Total	11,708,170			1,314,963	841,786	462,379	771,274	783,591	1,311,166	1,230,294	1,095,117		890,740	853,659	799,094	476,463	877,424

1944

Whole		Seoul	Busan	Gyeonggi	Gangwon	Chungbuk	Chungnam	Jeonbuk	Jeonnam	Gyeongbuk	Gyeongnam	Jeju	Whangje	Pyeongbuk	Pyeongnam	Hwanghae	Honam
Both Sexes																	
0-4	4,278,618	469,423	313,248	173,042	297,964	289,030	471,706	456,440	376,700	342,644	307,888	292,197	163,932	324,324			
5-9	3,562,531	396,179	257,254	141,017	248,806	238,539	390,309	366,701	322,919	288,250	256,732	250,467	138,275	267,083			
10-14	3,008,747	337,309	214,492	113,781	196,527	196,246	334,708	306,563	295,403	234,433	221,398	211,232	117,030	229,625			
15-19	2,350,425	293,599	165,623	83,014	140,625	141,640	233,757	238,704	235,869	173,324	173,359	170,850	106,338	191,743			
20-24	1,869,376	231,428	135,372	64,581	109,806	115,563	185,297	168,665	159,797	148,896	144,818	147,368	95,133	162,602			
25-29	1,671,576	209,724	133,927	62,520	104,660	104,096	152,879	156,548	131,518	136,579	121,841	126,749	85,491	143,044			
30-34	1,557,460	191,506	120,239	61,171	102,989	99,170	152,776	152,695	134,168	127,002	115,924	110,641	73,582	126,617			
35-39	1,356,763	157,700	104,120	51,767	86,138	87,821	139,311	137,765	122,533	109,988	101,242	94,853	59,165	104,380			
40-44	1,138,860	126,300	80,434	44,743	76,094	78,123	131,476	112,047	111,559	87,857	82,166	78,016	45,975	84,070			
45-49	1,086,046	114,864	79,093	42,071	72,096	75,363	125,765	113,710	106,197	83,455	76,884	72,083	41,376	83,059			
50-54	902,634	99,758	63,948	35,043	59,338	64,919	115,643	93,425	94,006	67,346	59,784	55,127	32,194	62,053			
55-59	743,975	84,853	55,260	31,892	50,633	49,417	83,247	85,894	72,206	56,741	50,734	47,028	24,800	51,270			
60-64	607,464	67,131	45,585	25,988	40,466	39,158	70,826	66,270	56,556	47,285	43,810	40,703	21,167	42,539			
65-69	426,058	47,121	32,370	17,738	27,328	26,292	45,701	47,058	39,175	34,977	30,783	30,082	16,079	31,334			
70-74	302,049	34,118	21,291	12,773	19,345	17,966	35,049	31,998	30,243	25,449	21,391	21,764	10,269	20,393			
75+	247,642	25,630	14,405	9,502	14,249	15,870	35,266	26,768	29,217	18,348	16,875	17,348	8,658	15,508			
Total	25,120,048	2,886,643	1,836,661	970,623	1,647,044	1,639,213	2,705,736	2,561,251	2,318,146	1,984,572	1,825,609	1,766,508	1,039,464	1,938,704			
Male																	
0-4	2,159,146	236,485	158,016	87,880	150,280	146,075	238,213	231,115	190,367	172,923	154,912	147,155	81,932	163,793			
5-9	1,815,269	201,520	132,503	72,705	127,915	122,072	199,301	187,458	164,027	146,507	130,297	125,769	69,954	135,241			
10-14	1,545,793	171,130	112,300	60,036	103,285	101,759	172,387	159,739	150,861	119,332	112,031	106,972	59,412	116,849			
15-19	1,174,771	148,856	82,339	40,030	67,427	67,675	114,144	119,584	118,186	86,282	86,567	88,166	57,052	98,463			
20-24	889,337	110,743	65,256	28,491	48,036	50,063	82,138	74,835	74,459	71,563	71,809	75,763	52,497	83,664			
25-29	812,916	104,857	66,858	29,033	47,941	47,412	88,785	70,090	61,755	68,854	60,853	65,329	46,907	74,242			
30-34	768,255	97,306	60,934	29,266	48,526	46,891	69,250	69,539	62,712	63,480	56,013	57,134	39,782	65,422			
35-39	675,127	81,000	53,891	25,520	42,348	42,786	65,881	65,057	58,682	55,004	50,633	48,134	31,867	54,324			

1944 (Continued)

	Whole County	Seoul	Busan	Gyeonggi	Gangwon	Chungbuk	Chungnam	Jeonbuk	Jeonnam	Gyeongbuk	Gyeongnam	Jeju	Whanghae	Pyeongbuk	Pyeongnam	Hambu	Hannam
40-44	575,438	64,810	42,396	22,872	38,540	39,636	63,830	54,976	54,588	44,310	41,969	39,466	24,510	43,535			
45-49	554,141	58,842	42,467	21,872	37,314	38,506	63,318	57,088	53,818	42,019	38,770	36,088	21,404	42,613			
50-54	451,506	49,707	33,681	17,836	30,274	32,101	57,089	46,665	47,297	33,258	29,758	26,965	16,042	30,893			
55-59	366,961	40,752	28,595	16,335	25,897	24,341	40,411	42,309	35,680	27,793	25,071	22,458	12,174	25,455			
60-64	273,122	30,899	23,453	12,722	19,655	18,603	33,661	32,691	27,712	22,478	21,388	19,003	10,014	20,843			
65-69	200,965	20,837	16,357	8,563	12,769	12,190	21,118	22,638	18,515	16,410	14,797	13,825	7,731	15,195			
70-74	136,940	14,426	10,590	5,962	8,687	7,961	15,200	14,821	13,364	11,528	10,268	9,871	4,698	9,564			
75+	101,486	9,542	6,791	3,862	5,394	6,228	13,352	11,013	11,403	7,797	7,381	7,314	4,013	7,196			
Total	12,521,173	1,441,732	936,429	482,985	814,178	804,299	1,318,078	1,259,638	1,143,126	969,538	914,537	889,412	539,989	987,232			
Females																	
0-4	2,119,472	232,938	155,232	85,162	147,684	142,955	233,493	225,325	186,413	169,721	152,976	145,042	82,000	140,531			
5-9	1,747,262	194,659	124,751	68,312	120,891	116,467	191,008	179,243	158,892	141,743	126,435	124,698	66,321	131,842			
10-14	1,462,954	156,179	102,192	53,745	93,242	94,487	162,321	148,324	144,842	115,101	109,357	104,260	57,618	112,776			
15-19	1,175,554	144,743	83,284	42,984	73,198	73,965	121,613	119,120	117,683	87,042	86,772	82,684	49,286	93,280			
20-24	979,989	120,665	70,116	36,090	61,770	65,500	103,159	93,830	85,338	77,333	73,009	71,605	42,636	78,938			
25-29	858,460	104,867	67,069	33,487	56,719	56,684	84,094	86,458	69,763	69,725	60,988	61,420	36,584	68,802			
30-34	799,205	94,200	59,305	31,905	54,443	52,279	83,526	83,156	71,456	63,522	57,911	53,507	33,800	60,195			
35-39	681,636	76,700	50,229	26,247	43,790	45,035	73,430	72,708	63,651	54,964	50,609	46,719	27,298	50,056			
40-44	563,422	61,490	38,038	21,871	37,554	38,487	67,646	57,071	56,971	43,547	40,197	38,550	21,465	40,535			
45-49	531,905	56,022	36,624	20,199	34,782	36,857	62,447	56,622	52,379	41,436	38,094	35,995	19,972	40,476			
50-54	451,128	50,051	30,267	17,207	29,064	32,818	58,574	46,760	46,709	34,088	30,026	28,162	16,152	31,280			
55-59	377,014	44,101	26,665	15,557	25,046	25,076	42,836	43,585	36,596	28,948	25,663	24,570	12,626	25,815			
60-64	314,342	36,232	22,132	13,246	20,811	20,555	37,165	33,579	28,844	24,807	22,422	21,700	11,553	21,696			
65-69	225,093	26,284	16,013	9,175	14,559	14,102	24,583	24,400	20,660	18,587	15,966	16,257	8,348	16,139			
70-74	165,109	19,692	10,701	6,811	10,458	10,005	19,849	17,177	16,879	13,921	11,123	11,893	5,571	10,829			
75+	146,156	16,088	7,614	5,640	8,655	9,642	21,914	15,755	17,814	10,549	9,494	10,034	4,645	8,312			
Total	12,599,001	1,444,911	900,232	487,638	832,866	834,914	1,387,658	1,301,613	1,175,020	995,034	911,072	877,096	499,475	951,472			

1949

Whole Country		Seoul	Busan	Gyeonggi	Gangwon	Chungbuk	Chungnam	Jeonbuk	Jeonnam	Gyeongbuk	Gyeongnam	Jeju
Both Sexes												
0-4	3,171,323	208,772		423,564	175,727	179,326	329,664	322,706	483,311	518,405	489,574	40,274
5-9	2,716,761	178,847		362,852	150,539	153,622	282,412	276,451	414,035	444,100	419,402	34,401
10-14	2,519,064	157,461		346,034	139,958	145,946	258,725	260,113	382,920	398,806	395,294	33,807
15-19	2,026,215	160,434		268,981	112,564	110,007	201,174	203,445	299,835	318,310	326,886	24,377
20-24	1,720,748	166,892		228,072	97,078	90,897	162,197	167,460	251,863	262,976	276,854	16,459
25-29	1,497,944	138,906		205,366	83,989	80,550	143,300	152,162	219,549	226,304	232,882	14,936
30-34	1,267,934	106,809		183,437	75,647	74,220	126,781	129,575	176,192	200,865	182,767	11,642
35-39	1,144,186	86,203		164,816	68,336	67,665	116,210	114,396	162,554	181,354	170,223	12,428
40-44	948,995	62,977		132,717	56,625	55,779	93,182	95,084	142,236	152,655	146,566	11,174
45-49	775,509	45,595		103,857	42,779	46,230	79,777	82,444	124,633	117,159	122,051	10,784
50-54	682,832	37,111		86,777	39,631	38,895	66,406	72,776	112,406	109,010	110,000	9,820
55-59	617,603	33,699		79,943	34,334	34,626	57,806	66,981	110,445	91,729	98,723	9,317
60-64	423,667	21,070		57,996	24,146	26,856	42,888	41,422	63,505	72,221	63,847	9,716
65-69	307,044	15,351		42,034	17,458	19,439	31,063	30,019	46,019	52,311	46,288	7,062
70-74	189,296	9,515		25,915	10,737	11,969	19,133	18,507	26,369	32,232	28,547	4,367
75+	157,435	8,028		21,583	8,887	9,937	15,912	15,411	23,619	26,802	23,793	3,663
Total	20,166,756	1,437,670		2,733,944	1,138,435	1,145,964	2,026,837	2,048,951	3,041,491	3,205,240	3,133,697	254,327
Male												
0-4	1,613,949	105,722		214,324	89,281	91,431	168,317	164,802	246,805	264,375	248,846	20,044
5-9	1,362,613	90,568		183,603	76,484	78,326	144,191	141,180	211,429	226,481	213,180	17,171
10-14	1,284,167	76,131		176,350	72,372	75,199	132,919	132,475	198,324	203,992	199,211	17,194
15-19	1,031,343	83,914		136,297	58,780	56,489	103,458	102,917	150,451	162,961	164,855	11,221
20-24	865,148	91,771		114,086	50,593	45,200	85,467	82,503	123,584	132,601	135,815	6,608
25-29	761,014	74,839		103,396	43,189	40,811	73,698	77,289	110,728	114,766	117,236	6,062
30-34	653,122	58,793		95,328	39,133	38,165	64,611	66,658	88,731	102,765	94,277	4,661
35-39	590,906	47,696		86,311	34,250	34,878	59,450	59,369	82,562	91,886	87,691	4,813

1949 (Continued)

	Who'e	Seoul	Busan	Gyeonggi	Gangweon	Chungbuk	Chungnam	Jeonbuk	Jeonnam	Gyeongbuk	Gyeongnam	Jeju
40-44	489,083	34,035	30,076	28,941	47,980	49,234	72,251	77,109	75,466	4,428		
45-49	394,329	22,927	22,825	24,097	40,739	42,017	63,121	58,858	61,990	4,439		
50-54	341,462	17,341	20,835	20,162	33,809	36,408	55,320	54,797	54,468	4,201		
55-59	294,681	14,059	17,342	17,115	28,513	31,771	52,774	43,631	46,852	3,966		
60-64	199,340	8,022	12,334	13,196	20,436	19,499	29,972	34,677	29,466	4,093		
65-69	139,971	5,633	8,660	9,266	14,490	13,691	21,045	24,349	20,831	2,874		
70-74	83,462	3,359	5,164	5,325	8,640	8,164	12,549	14,519	12,421	1,714		
75+	63,648	2,561	3,938	4,214	6,589	6,226	9,570	11,072	9,472	1,307		
Total	10,186,238	737,371	587,256	583,015	1,029,507	1,034,203	1,529,136	1,618,840	1,572,279	114,736		
	Female											
0-4	1,537,374	103,050	86,446	87,895	161,347	157,904	236,506	254,030	240,726	20,230		
5-9	1,334,148	88,279	74,055	75,296	138,221	135,271	202,406	217,619	206,221	17,330		
10-14	1,234,897	81,330	67,566	70,747	125,806	127,638	184,596	194,814	196,083	16,613		
15-19	974,872	76,520	53,704	53,518	97,718	100,528	149,384	155,349	162,031	13,356		
20-24	855,600	75,121	46,485	45,697	79,730	84,957	128,359	130,375	141,059	9,851		
25-29	736,930	64,067	40,800	39,739	70,402	74,873	108,821	111,538	115,646	8,874		
30-34	614,812	48,016	36,514	34,055	62,169	62,917	87,461	98,100	88,490	6,981		
35-39	553,280	38,507	32,086	32,787	56,761	55,027	79,992	89,468	82,532	7,615		
40-44	459,912	28,942	26,549	26,838	45,202	45,850	69,985	75,546	71,100	6,746		
45-49	381,180	22,668	19,954	22,133	39,238	40,427	61,512	68,301	60,061	6,345		
50-54	341,370	19,770	18,796	18,733	32,597	36,368	57,086	54,213	55,532	5,619		
55-59	322,922	19,640	16,992	17,511	29,293	35,210	57,671	48,098	51,871	5,411		
60-64	224,327	13,048	11,812	13,660	22,252	21,923	33,533	37,544	34,181	5,623		
65-69	167,073	9,718	8,798	10,173	16,573	16,327	24,974	27,962	25,457	4,188		
70-74	105,834	6,156	5,573	6,444	10,498	10,343	15,820	17,713	16,126	2,653		
75+	93,987	5,467	4,949	5,723	9,323	9,185	14,049	15,730	14,321	2,355		
Total	9,978,518	700,299	551,179	562,949	997,330	1,014,748	1,512,355	1,586,400	1,561,418	139,791		

1955

Whole Country		Seoul	Busan	Gyeonggi	Gangwon	Chungbuk	Chungnam	Jeonbuk	Jeonnam	Gyeongbuk	Gyeongnam	Jelju
Both Sexes												
0-4	3,376,648	228,609		366,910	213,273	204,712	355,784	333,900	489,734	550,488	597,303	35,935
5-9	2,847,388	193,756		285,817	141,335	146,898	313,136	319,691	469,319	458,100	505,449	33,887
10-14	2,621,021	183,623		272,124	157,639	149,315	275,256	267,229	411,460	413,571	456,004	34,800
15-19	2,394,911	204,203		252,549	149,130	134,047	247,082	233,215	343,676	373,277	427,407	30,325
20-24	1,754,400	138,988		236,382	197,413	80,071	174,154	141,557	202,574	244,966	301,093	37,197
25-29	1,439,127	116,687		174,235	158,153	66,598	135,216	123,397	177,517	205,595	259,476	22,253
30-34	1,389,448	122,713		160,261	114,728	71,400	134,305	130,991	186,681	200,426	251,411	16,532
35-39	1,168,579	97,511		132,720	79,129	67,837	120,619	119,779	157,570	188,031	194,166	11,217
40-44	1,054,062	83,394		121,327	70,542	63,212	110,398	101,327	140,380	172,517	179,304	11,661
45-49	947,881	70,836		103,325	65,323	56,621	95,720	94,690	135,103	150,854	164,121	11,288
50-54	679,901	41,745		72,063	41,919	41,211	73,193	70,515	107,146	105,408	117,020	9,681
55-59	614,994	29,635		60,002	36,134	35,331	63,278	64,884	103,021	102,907	109,580	10,222
60-64	480,506	24,549		49,780	29,799	29,165	49,647	53,444	84,158	72,599	79,883	7,482
65-69	359,204	16,805		34,674	21,158	22,087	35,507	36,505	59,497	62,547	65,906	6,518
70-74	191,742	9,177		21,259	11,514	12,547	21,006	18,930	31,037	31,642	30,063	4,547
75+	152,574	6,515		16,130	8,566	10,216	16,594	14,447	27,504	28,418	28,928	5,256
Total	21,502,386	1,568,746		2,359,558	1,495,755	1,191,268	2,220,895	2,124,521	3,126,377	3,361,346	3,765,119	288,801
Males												
0-4	1,742,778	120,415		188,553	109,174	105,448	184,426	171,545	251,390	285,953	304,844	19,030
5-9	1,495,871	99,988		148,267	74,319	77,327	163,939	167,151	244,364	239,838	263,411	17,267
10-14	1,371,568	92,599		141,190	83,391	79,414	145,157	141,245	218,811	216,632	235,060	18,049
15-19	1,256,904	109,529		132,073	81,251	71,041	130,057	122,603	179,385	192,058	222,067	16,840
20-24	809,143	59,460		130,783	140,260	28,562	77,716	51,028	73,015	96,591	125,238	26,490
25-29	635,243	45,858		90,110	109,216	23,848	56,887	44,344	62,001	81,745	107,879	13,635
30-34	679,017	61,661		83,721	70,458	31,504	63,224	61,508	85,040	92,281	121,470	8,150
35-39	585,542	52,994		69,059	40,819	32,748	58,831	58,970	75,961	93,079	98,415	4,666

1955 (Continued)

	Whole	Buan	Gyeongsŏng	Gangweon	Chungbuk	Chungcheong	Jeonbuk	Jeonnam	Gyeongsang	Gyeongnam	Jeju
40-44	530,158	45,592	63,692	36,592	31,360	54,224	47,500	66,468	85,809	92,485	4,456
45-49	496,405	41,373	55,373	36,589	27,396	48,994	45,663	67,687	75,864	88,046	4,440
50-54	337,483	20,091	36,400	22,173	21,191	36,544	35,087	52,524	51,737	57,924	3,812
55-59	295,560	13,720	29,174	18,668	17,694	30,610	30,631	49,350	49,612	52,063	4,098
60-64	217,405	9,541	23,162	14,726	13,878	23,232	23,457	37,788	33,301	35,348	2,972
65-69	156,091	5,886	15,604	10,240	10,167	15,943	15,536	25,831	27,517	26,814	2,533
70-74	80,971	2,976	9,231	5,580	5,656	9,045	7,689	13,075	13,662	12,315	1,742
75+	63,834	1,768	6,430	4,018	4,356	6,669	5,595	10,448	11,677	11,040	1,833
Total	10,752,973	782,461	1,222,822	857,474	583,520	1,105,198	1,034,592	1,513,138	1,647,356	1,856,419	149,993
Female											
0-4	1,633,870	108,194	178,357	104,099	99,264	171,358	162,355	238,344	264,535	290,459	16,905
5-9	1,371,517	93,768	137,550	67,016	69,571	149,197	152,540	224,955	218,262	242,038	16,620
10-14	1,249,453	91,024	130,934	74,248	69,901	130,099	125,964	192,649	196,939	220,944	16,751
15-19	1,138,007	94,674	120,476	67,879	63,006	117,025	110,612	164,291	181,219	205,340	13,485
20-24	946,257	80,528	105,599	57,153	51,509	96,438	90,529	129,559	148,375	175,860	10,707
25-29	803,884	70,829	84,125	48,937	42,750	78,629	79,033	115,516	123,850	151,597	8,618
30-34	710,431	61,052	76,540	44,270	39,896	71,081	69,483	101,641	108,145	129,941	8,382
35-39	583,037	44,517	63,661	38,310	35,089	61,788	60,809	81,409	94,952	95,751	6,551
40-44	523,904	37,802	57,635	31,950	31,852	56,174	51,827	73,912	86,708	86,819	7,235
45-49	451,476	29,463	47,952	28,754	27,225	46,726	46,027	67,416	74,990	76,075	6,848
50-54	342,418	21,654	35,663	19,746	20,020	36,649	35,428	54,422	53,671	59,096	5,869
55-59	319,434	15,905	30,828	17,466	17,707	32,668	34,253	53,671	53,295	57,517	6,124
60-64	263,101	15,008	26,618	15,073	15,287	26,415	29,987	46,370	39,298	44,535	4,510
65-69	203,113	10,919	19,070	10,898	11,920	19,564	20,969	33,666	35,030	37,092	3,985
70-74	110,771	6,201	12,025	5,934	6,891	11,961	11,261	17,962	17,980	17,748	2,805
75+	98,740	4,747	9,700	4,548	5,860	9,925	8,852	17,056	16,741	17,888	3,423
Total	10,749,413	786,285	1,134,736	638,281	607,748	1,115,697	1,089,929	1,613,239	1,713,990	1,908,700	138,808

1955*

	Whole Country	Seoul	Buan	Gyeonggi	Gangwon	Chungbuk	Chungnam	Jeonbuk	Jeonnam	Gyeongbuk	Gyeongnam	Jeju
0-4	3,376,648	228,609		366,910	213,273	204,712	355,784	333,900	487,734	550,488	597,303	35,735
5-9	2,867,388	193,756		285,817	141,335	146,898	313,136	319,691	469,319	458,100	505,449	33,887
10-14	2,621,021	183,623		272,124	157,639	149,315	275,256	267,229	411,460	413,571	456,004	34,800
15-19	2,394,911	204,203		252,549	149,130	134,047	247,082	233,215	343,676	373,277	427,407	30,325
20-24	1,754,400	153,570		191,313	105,563	98,097	180,153	168,610	240,469	273,324	324,025	19,076
25-29	1,439,127	125,842		148,136	82,442	77,642	142,319	141,036	204,715	225,809	275,690	15,446
30-34	1,389,448	119,842		145,369	83,366	77,368	138,833	138,368	196,633	215,030	260,031	14,608
35-39	1,166,579	97,511		132,720	79,129	67,837	120,619	119,779	157,570	188,031	194,166	11,217
40-44	1,054,062	83,394		121,327	70,542	63,212	110,398	101,327	140,380	172,517	179,304	11,661
45-49	947,881	70,836		103,325	65,323	56,621	95,720	94,690	135,103	150,854	164,121	11,288
50-54	679,901	41,745		72,063	41,919	41,211	73,193	70,515	107,146	105,408	117,020	9,681
55-59	614,994	29,635		60,002	36,134	35,331	63,278	64,884	103,021	102,907	109,580	10,222
60-64	480,306	24,549		49,780	29,799	29,165	49,647	53,444	84,158	72,599	79,883	7,482
65-69	359,204	16,805		34,674	21,158	22,087	35,507	36,505	59,497	62,547	63,906	6,518
70-74	191,742	9,177		21,259	11,514	12,547	21,006	18,950	31,037	31,642	30,063	4,547
75+	162,574	6,515		16,130	8,566	10,216	16,594	14,447	27,504	28,418	28,928	5,256
Total	21,502,386	1,589,612		2,273,498	1,296,832	1,226,306	2,238,525	2,176,640	3,201,422	3,424,722	3,812,880	261,949
	Male											
0-4	1,742,778	120,415		186,533	109,174	105,448	184,426	171,645	251,390	285,953	306,844	19,030
5-9	1,495,871	99,988		148,287	74,319	77,327	153,939	167,151	244,364	239,838	263,411	17,267
10-14	1,371,568	92,599		141,190	83,391	79,414	145,157	141,265	218,811	216,632	235,060	18,049
15-19	1,256,904	109,529		132,073	81,251	71,041	130,037	122,403	179,385	192,058	222,047	16,840
20-24	808,143	73,042		85,714	46,410	46,588	83,715	78,081	110,910	125,149	148,165	8,369
25-29	635,243	55,013		64,011	33,505	34,892	63,690	62,053	89,199	101,959	124,093	6,828
30-34	679,017	58,790		68,829	39,096	37,472	67,752	68,885	94,992	106,655	130,090	6,226
35-39	585,542	52,994		67,059	40,819	32,748	58,831	58,970	75,961	93,079	98,415	4,666

1955* (Continued)

	Whole Country											
	Seoul	Busan	Gyeonggi	Gangwon	Chungbuk	Chungnam	Jeonbuk	Jeonnam	Gyeongbuk	Gyeongnam	Jeju	
40-44	530,158	45,592	63,692	36,592	31,360	54,224	49,500	66,468	85,809	92,485	4,436	
45-49	496,405	41,373	55,373	36,569	29,396	48,994	48,663	67,687	75,864	88,046	4,440	
50-54	337,483	20,091	36,400	22,173	21,191	36,544	35,087	52,524	51,737	57,924	3,812	
55-59	295,560	13,730	29,174	18,468	17,624	30,610	30,631	49,350	49,612	52,063	4,098	
60-64	217,405	9,541	23,162	14,726	13,878	23,232	23,457	37,788	33,301	35,348	2,972	
65-69	156,091	5,886	15,604	10,260	10,167	15,943	15,536	25,891	27,517	26,814	2,533	
70-74	80,971	2,976	9,231	5,580	5,656	9,045	7,689	13,075	13,662	12,315	1,742	
75+	63,834	1,768	6,430	4,018	4,356	6,669	5,595	10,448	11,677	11,040	1,833	
Total	10,752,973	803,327	1,136,762	658,551	618,558	1,122,828	1,086,711	1,588,183	1,710,732	1,904,180	123,141	
Female												
0-4	1,633,870	108,194	178,357	104,099	99,264	171,358	162,355	238,344	264,535	290,459	16,905	
5-9	1,371,517	93,768	137,550	67,016	69,571	149,197	152,540	224,955	218,262	242,038	16,620	
10-14	1,249,453	91,024	130,934	74,248	69,901	130,099	125,964	192,649	196,939	220,944	16,751	
15-19	1,138,007	94,674	120,476	67,879	63,006	117,025	110,612	164,291	181,219	205,340	13,485	
20-24	946,257	80,528	105,599	57,153	51,509	96,438	90,529	129,559	148,375	175,860	10,707	
25-29	803,884	70,829	84,125	48,937	42,750	78,529	79,033	115,516	123,850	151,597	8,618	
30-34	710,431	61,052	76,540	44,270	39,896	71,081	69,483	101,641	108,145	129,941	8,392	
35-39	583,037	44,517	63,661	38,310	35,089	61,788	60,809	81,609	94,952	95,751	6,551	
40-44	523,904	37,802	57,635	33,950	31,852	56,174	51,827	73,912	86,708	86,819	7,225	
45-49	451,476	29,463	47,922	28,754	27,225	46,726	46,027	67,416	74,990	76,075	6,848	
50-54	342,418	21,654	35,663	19,746	20,020	36,649	35,428	54,622	53,671	59,096	5,869	
55-59	319,434	15,905	30,828	17,466	17,707	32,688	34,253	53,671	53,295	57,517	6,124	
60-64	263,101	15,008	26,618	15,073	15,287	26,415	29,987	46,370	39,298	44,535	4,510	
65-69	203,113	10,919	19,070	10,898	11,920	19,564	20,969	33,666	35,030	37,092	3,985	
70-74	110,771	6,201	12,028	5,934	6,891	11,961	11,261	17,962	17,980	17,748	2,805	
75+	98,740	4,747	9,700	4,548	5,860	9,925	8,852	17,056	16,741	17,888	3,423	
Total	10,749,413	786,285	1,136,736	638,281	607,748	1,115,697	1,089,929	1,613,239	1,713,990	1,908,700	138,808	

*Military Population (Males) is redistributed based on De Jure principles.

1960

	Whole Country											
	Busan	Seoul	Daegu	Gyeonggi	Gangwon	Chungbuk	Chungnam	Jeonbuk	Jeonnam	Gyeongbuk	Gyeongnam	Jeju
Both Sexes												
0-4	4,368,024	387,171	317,490	501,556	254,573	452,119	426,564	616,378	666,580	701,107	44,486	
5-9	3,484,343	305,543	226,899	373,101	199,233	359,737	336,127	501,135	544,326	603,584	34,658	
10-14	2,841,432	263,503	143,123	279,698	136,828	301,690	301,072	446,246	445,728	491,283	32,061	
15-19	2,371,842	285,973	146,098	255,018	120,817	229,012	214,962	328,527	361,242	403,072	27,121	
20-24	2,185,618	247,167	127,613	248,858	119,427	214,907	191,578	269,372	339,584	362,504	24,608	
25-29	1,838,605	206,614	105,416	215,416	95,455	182,356	166,350	242,739	272,941	308,455	21,466	
30-34	1,494,587	174,639	101,541	164,969	74,975	141,297	140,559	206,265	216,287	256,944	15,071	
35-39	1,411,408	161,324	97,061	157,042	73,761	135,508	129,028	192,656	209,162	241,797	13,889	
40-44	1,140,264	121,106	80,089	131,041	64,672	114,011	110,378	150,325	177,110	180,695	10,857	
45-49	1,014,514	96,736	71,178	118,834	60,535	104,647	94,878	132,187	163,343	161,216	10,960	
50-54	831,074	71,488	57,581	94,812	49,976	84,494	79,833	114,980	132,270	135,304	10,376	
55-59	638,110	45,163	40,215	69,369	38,737	67,957	64,413	99,536	99,505	103,971	9,244	
60-64	539,400	32,099	31,600	52,618	30,688	54,631	55,602	89,582	86,832	94,763	9,085	
65-69	378,974	22,593	22,787	40,289	22,226	39,757	41,170	66,524	57,141	60,258	6,229	
70-74	285,179	14,023	24,892	24,892	15,312	25,127	25,193	42,923	42,950	44,458	5,271	
75+	195,859	10,279	10,890	21,251	12,264	20,681	18,516	33,664	31,425	30,609	6,280	
Total	24,989,233	2,445,401	1,636,748	2,748,764	1,369,779	2,528,131	2,395,223	3,553,039	3,848,426	4,182,040	281,642	
Males												
0-4	2,242,556	198,488	162,006	256,201	131,806	232,101	219,570	316,456	343,390	359,818	22,720	
5-9	1,808,083	157,612	117,511	192,517	103,989	186,940	174,717	261,303	283,710	312,161	17,623	
10-14	1,493,043	134,219	75,810	146,116	72,929	160,006	158,733	235,192	234,265	257,271	14,502	
15-19	1,232,316	143,688	78,091	130,533	64,302	120,788	112,827	173,382	187,610	206,615	14,500	
20-24	1,115,249	123,701	74,413	123,625	63,085	112,687	97,547	148,631	173,372	183,019	12,969	
25-29	871,323	93,458	61,300	103,604	45,855	88,633	77,807	114,673	130,781	145,051	10,161	
30-34	703,286	82,759	49,479	78,639	34,247	66,783	66,413	97,824	99,711	121,254	6,167	
35-39	650,791	84,273	49,448	77,200	35,255	65,238	62,949	92,579	100,605	117,971	5,273	

1960 (continued)

	Whole Country	Seoul	Busan	Gyeonggi	Gangwon	Chungbuk	Chungnam	Jeonbuk	Jeonnam	Gyeongbuk	Gyeongnam	Jeju
40-44	578,183	66,846		68,215	42,101	31,976	56,199	54,554	73,454	88,379	92,162	4,287
45-49	507,508	51,518		61,717	37,257	30,436	51,557	46,444	62,718	80,226	81,334	4,101
50-54	418,932	38,050		49,473	31,032	25,301	42,288	39,339	55,984	65,210	68,377	3,898
55-59	300,694	20,449		33,756	20,174	19,153	32,558	29,999	45,594	46,606	48,939	3,466
60-64	242,849	12,729		24,323	15,229	14,547	25,460	24,603	39,844	40,777	41,914	3,423
65-69	160,277	7,909		17,522	10,735	10,284	17,643	16,945	27,911	24,539	24,440	2,249
70-74	104,110	4,330		10,450	6,959	6,807	10,660	10,173	17,726	17,863	17,206	1,936
75+	74,766	2,676		8,188	4,871	5,218	8,113	6,883	12,999	12,574	11,148	2,096
Total	12,543,966	1,222,695		1,382,079	836,616	695,190	1,277,634	1,199,703	1,776,280	1,933,718	2,088,660	131,371
Fears												
0-4	2,125,468	188,683		245,355	155,484	122,767	220,018	206,994	299,922	323,190	341,289	21,746
5-9	1,676,260	147,931		180,584	109,388	95,244	172,797	161,410	239,832	260,616	291,423	17,035
10-14	1,346,389	129,284		133,562	87,313	63,899	141,864	142,339	211,054	209,463	234,012	15,559
15-19	1,139,626	142,305		124,485	68,007	56,515	108,224	102,135	155,145	173,632	196,457	12,621
20-24	1,070,389	123,466		125,233	73,000	56,342	102,220	94,031	140,741	164,212	179,485	11,639
25-29	967,282	113,156		111,812	66,313	49,800	93,723	87,543	128,066	142,160	163,404	11,305
30-34	791,301	91,870		86,330	52,062	40,728	74,514	74,146	108,461	116,576	137,710	8,904
35-39	720,617	77,051		79,842	47,613	38,704	70,270	66,079	100,057	108,557	123,826	8,616
40-44	552,081	54,260		62,826	37,968	32,696	57,812	55,824	76,861	88,731	88,533	6,570
45-49	507,006	45,218		57,117	33,921	30,099	53,090	48,234	69,469	83,117	79,862	6,859
50-54	412,142	33,418		45,339	26,529	24,675	42,226	40,494	58,996	67,060	66,927	6,478
55-59	337,416	24,714		35,613	20,041	19,584	35,399	34,414	53,942	59,899	55,032	5,778
60-64	296,551	19,370		28,295	16,371	16,041	29,171	30,999	49,738	48,055	52,849	5,682
65-69	218,697	14,684		22,767	12,052	11,942	22,114	24,225	38,613	39,502	35,818	3,980
70-74	151,069	9,693		14,442	8,071	8,505	14,467	15,020	25,197	25,087	27,252	3,335
75+	121,093	7,603		13,063	6,019	7,046	12,568	11,633	20,665	18,851	19,461	4,184
Total	12,445,267	1,222,706		1,366,685	800,152	674,399	1,250,497	1,195,520	1,776,759	1,914,708	2,093,360	150,291

1966

	Whole Country	Saoul	Busan	Gyeonggi	Gangwon	Chungbuk	Chungnam	Jeonbuk	Jeonnam	Gyeongbuk	Gyeongnam	Jeju
Both Sexes:												
0-4	4,480,921	472,780	182,107	480,621	310,551	256,540	461,308	417,428	670,374	686,652	486,160	56,200
5-9	4,612,872	522,981	213,039	502,999	308,594	238,654	480,754	411,408	656,805	701,970	506,784	48,984
10-14	3,590,027	441,413	186,322	371,296	219,332	199,871	365,973	310,166	492,616	562,206	404,211	37,681
15-19	2,708,146	426,060	154,109	245,356	124,586	117,423	260,497	240,532	393,849	428,299	287,749	29,686
20-24	2,298,683	386,674	122,634	252,462	137,724	110,126	213,429	177,561	297,307	339,616	234,890	26,260
25-29	2,244,334	348,307	124,618	280,866	151,548	111,719	201,043	169,082	284,701	331,261	225,024	26,145
30-34	1,959,774	298,410	108,986	221,806	127,753	99,066	188,549	156,925	246,516	287,102	201,895	22,746
35-39	1,552,795	222,655	90,656	164,510	95,779	74,782	146,895	130,475	207,729	227,367	168,515	16,432
40-44	1,346,826	186,167	74,029	143,409	85,540	69,366	131,017	113,283	179,349	202,653	148,261	13,732
45-49	1,116,535	145,086	52,667	124,509	72,501	61,784	111,630	98,087	144,205	175,552	119,413	11,101
50-54	947,652	109,359	39,352	106,848	62,533	56,094	99,833	81,895	119,771	156,470	105,161	10,316
55-59	788,723	83,697	30,043	87,438	50,955	46,999	82,494	69,758	106,907	129,420	91,119	9,893
60-64	550,953	50,242	18,783	58,096	32,987	32,551	59,026	50,783	83,589	87,792	68,883	8,221
65-69	437,384	34,028	14,078	41,382	23,676	25,302	45,872	42,016	71,772	72,645	58,719	7,894
70-74	267,288	21,406	7,708	26,850	14,874	14,972	28,402	27,488	46,259	40,837	33,742	4,730
75+	256,647	16,993	6,882	23,868	12,244	14,627	26,188	24,112	47,009	43,022	34,612	7,090
Total	29,159,640	3,793,280	1,426,019	3,102,325	1,831,185	1,548,821	2,902,941	2,521,207	4,048,769	4,472,895	3,175,146	337,052
Males:												
0-4	2,318,664	244,424	94,408	247,494	160,501	133,407	238,890	215,869	347,220	356,631	251,307	28,513
5-9	2,391,295	270,248	110,514	259,222	160,316	134,882	249,107	212,017	341,125	365,908	262,860	25,076
10-14	1,857,472	224,346	94,934	190,911	113,532	103,868	190,720	160,555	257,269	291,911	210,195	19,231
15-19	1,399,246	206,095	77,578	126,837	65,767	63,281	138,775	125,553	207,002	223,420	149,364	15,594
20-24	1,203,321	189,178	59,817	126,562	71,876	60,080	117,058	94,753	164,598	178,577	126,588	14,294
25-29	1,116,120	183,495	59,894	120,151	75,463	57,396	100,979	84,839	143,740	164,105	112,767	13,291
30-34	975,994	151,564	53,815	112,377	64,963	49,122	93,393	76,472	122,436	141,273	99,359	11,230
35-39	734,345	113,660	43,732	78,841	45,836	34,196	69,425	60,981	98,137	104,618	78,106	6,813

1966 (Continued)

	Whole Country	Seoul	Busan	Gyeonggi	Gangwon	Chungbuk	Chungnam	Jeonbuk	Jeonnam	Gyeongbuk	Gyeongnam	Jelju
40-44	659,331	96,075	37,723	70,326	42,862	33,183	63,407	55,064	86,727	98,044	70,765	5,255
45-49	559,889	77,816	28,320	64,201	37,767	30,361	54,724	47,885	69,831	86,504	58,123	4,357
50-54	465,388	54,423	20,270	54,302	32,075	28,131	48,402	39,708	56,591	76,550	51,155	3,781
55-59	376,426	39,985	14,700	43,769	26,466	23,007	39,516	32,580	49,177	60,897	42,724	3,405
60-64	248,035	20,551	8,031	27,176	16,135	15,519	27,395	22,478	37,015	39,649	31,136	2,950
65-69	182,750	11,960	5,088	18,005	11,028	11,425	19,940	17,133	29,810	30,955	24,667	2,739
70-74	104,987	6,559	2,340	10,849	6,769	6,477	11,805	10,374	18,292	16,672	13,246	1,404
75+	90,587	4,328	1,727	8,518	5,260	5,668	9,680	8,285	16,935	16,210	11,903	2,173
Total	14,484,147	1,894,739	712,897	1,559,448	936,624	790,008	1,473,427	1,264,543	2,045,746	2,281,935	1,594,273	160,507
Female												
0-4	2,162,257	228,356	87,699	233,127	150,050	123,133	222,418	201,759	323,154	330,021	234,833	27,487
5-9	2,221,577	252,713	102,525	243,777	146,278	123,772	231,647	199,391	315,660	336,062	243,924	23,808
10-14	1,735,555	217,067	91,388	180,385	105,800	94,943	175,253	149,611	235,347	270,295	194,016	18,450
15-19	1,308,900	219,865	76,531	118,519	88,819	54,142	121,722	114,999	186,847	204,879	138,385	14,092
20-24	1,095,362	197,496	62,817	125,900	65,848	50,046	96,371	82,798	132,779	161,039	108,302	11,966
25-29	1,128,214	184,812	64,724	130,715	76,085	54,323	100,064	84,243	140,961	167,176	112,257	12,854
30-34	983,780	146,856	55,171	109,429	62,790	49,944	95,176	80,453	124,080	146,829	102,536	11,516
35-39	818,450	115,995	46,924	85,669	49,943	40,586	77,470	69,494	109,592	122,749	90,409	9,619
40-44	687,495	90,092	36,306	73,183	42,678	35,183	67,610	58,219	92,622	104,609	77,496	8,497
45-49	556,646	67,270	24,347	60,308	34,734	31,423	56,906	50,202	74,374	89,048	61,390	6,744
50-54	482,044	54,936	19,082	52,546	30,458	27,963	51,231	42,167	63,180	79,920	54,006	6,535
55-59	412,297	43,712	15,343	43,669	24,489	23,992	42,978	37,178	57,730	68,523	48,395	6,288
60-64	302,918	29,691	10,752	30,920	16,852	17,032	31,631	28,305	46,574	48,143	37,747	5,271
65-69	254,634	22,068	8,990	23,377	12,648	13,877	25,932	24,883	41,962	41,690	34,052	5,155
70-74	162,301	14,847	5,368	16,001	8,105	8,495	16,597	17,114	27,967	24,165	20,496	3,146
75+	166,060	12,665	5,155	15,350	6,984	8,959	16,808	15,827	30,174	26,812	22,709	4,917
Total	14,475,493	1,898,541	713,122	1,542,877	894,561	758,813	1,429,514	1,266,664	2,003,023	2,220,960	1,580,873	176,545

1970

	Whole Country	Saekul	Burao	Gyeonggi	Gangwon	Chungbuk	Chungnam	Jeonbuk	Jeonnam	Gyeongbuk	Gyeongnam	Jeju
Both Sexes												
0-4	4,316,143	682,149	247,920	441,963	264,120	208,661	392,372	361,696	594,914	614,037	427,467	58,844
5-9	4,531,942	635,026	226,320	491,185	290,324	238,399	480,119	382,024	633,390	665,714	463,422	54,019
10-14	4,393,348	669,557	241,354	448,233	266,551	225,005	430,526	358,622	565,278	652,333	449,769	46,120
15-19	3,088,134	677,765	224,777	308,903	162,074	127,909	350,504	213,495	351,254	451,400	289,580	30,459
20-24	2,523,170	604,715	182,149	258,493	114,582	87,635	200,274	177,053	289,951	350,721	231,014	26,563
25-29	2,204,293	539,761	167,962	248,944	130,298	84,273	165,578	134,006	233,284	286,338	188,579	25,270
30-34	2,193,279	468,974	152,921	249,653	137,546	94,139	180,050	143,118	247,928	297,569	196,445	24,736
35-39	1,854,200	346,973	118,874	205,602	109,411	83,575	167,623	135,671	222,221	262,433	180,126	21,491
40-44	1,461,903	252,592	91,774	153,226	83,644	67,653	133,901	115,549	186,406	210,721	151,277	14,960
45-49	1,284,628	204,203	73,272	139,259	76,080	63,516	121,666	102,220	163,798	190,702	136,639	13,283
50-54	1,024,535	149,047	48,918	115,275	63,992	55,423	102,254	86,599	125,572	161,954	104,503	10,068
55-59	855,041	113,676	36,860	97,711	52,835	48,695	87,603	69,712	106,456	139,199	92,378	9,916
60-64	665,258	80,428	26,221	72,447	40,353	38,186	68,048	56,286	89,369	108,347	76,398	8,975
65-69	434,715	47,094	15,732	45,519	23,811	24,972	46,335	39,123	65,859	67,057	52,215	6,998
70-74	315,444	29,286	10,997	29,154	15,870	16,841	31,867	29,052	52,317	51,969	41,762	6,329
75+	289,219	23,796	8,340	27,305	13,935	15,462	29,462	27,736	53,635	45,372	37,070	7,106
Total	31,435,252	5,525,262	1,876,391	3,353,272	1,865,426	1,480,338	2,858,202	2,431,692	4,004,632	4,555,866	3,118,634	365,137
Male												
0-4	2,228,736	352,937	126,333	227,597	146,701	108,158	202,598	185,529	307,245	318,862	220,606	30,170
5-9	2,349,086	330,903	118,436	253,122	150,569	123,897	233,247	197,544	328,270	346,182	239,268	27,448
10-14	2,274,301	339,327	124,130	241,297	139,304	118,340	224,272	185,189	305,338	339,746	233,567	23,791
15-19	1,573,179	325,288	112,185	156,600	85,470	69,181	132,642	111,391	183,660	231,701	148,518	15,843
20-24	1,298,687	287,492	86,477	129,485	58,973	49,452	110,518	95,745	158,541	183,228	124,333	14,223
25-29	1,096,819	272,357	83,347	119,700	64,646	42,105	82,494	67,008	117,913	140,414	93,979	12,856
30-34	1,108,853	247,884	80,073	126,407	70,992	47,023	88,709	69,727	123,111	146,286	96,153	12,488
35-39	915,089	179,478	60,404	104,479	55,506	39,540	81,265	64,126	107,780	126,226	86,157	10,108

1970 (Continued)

	Whole Country	Seoul	Busan	Gyeonggi	Gangwon	Chungbuk	Chungnam	Jeonbuk	Jeonnam	Gyeongbuk	Gyeongnam	Jaju
40-44	691,042	126,709	44,917	72,677	39,466	30,821	62,817	53,746	87,233	97,087	69,519	6,070
45-49	628,934	105,539	37,104	66,920	38,306	30,361	58,643	49,337	78,519	92,275	64,852	5,078
50-54	506,534	75,489	58,792	52,855	27,301	27,301	49,997	41,740	60,709	79,748	50,830	3,942
55-59	407,895	52,344	17,508	48,858	26,880	24,252	42,157	35,949	49,045	66,398	43,935	3,589
60-64	302,342	34,011	11,444	34,780	19,967	18,341	31,705	25,432	39,590	49,276	34,661	3,155
65-69	181,431	16,804	5,755	19,751	11,006	11,482	20,180	16,135	27,166	28,649	22,172	2,331
70-74	120,835	8,922	3,359	11,560	7,043	7,140	12,862	10,735	20,382	20,741	16,049	2,042
75+	95,812	5,806	1,933	9,251	5,715	5,836	10,435	8,850	17,897	16,127	11,983	1,979
Total	15,779,615	2,762,190	940,836	1,683,216	953,379	753,230	1,444,541	1,215,203	2,012,399	2,282,946	1,556,582	175,093
Female												
0-4	2,087,407	329,212	119,587	214,366	137,419	109,503	189,774	176,167	289,669	295,175	206,861	28,674
5-9	2,182,856	304,123	109,684	238,063	139,755	114,502	216,872	184,480	305,120	319,532	224,154	26,571
10-14	2,119,047	330,230	117,224	226,936	127,247	106,645	206,254	173,433	279,940	312,587	216,202	22,399
15-19	1,514,955	351,797	112,592	152,303	76,604	58,722	117,862	102,104	167,594	219,699	141,062	14,616
20-24	1,224,483	317,023	95,672	129,008	55,609	38,183	89,776	81,288	131,410	167,493	106,481	12,340
25-29	1,107,474	267,404	84,615	129,244	65,652	42,168	83,084	66,998	115,371	145,924	94,600	12,414
30-34	1,084,426	221,090	72,848	123,446	66,554	47,116	91,341	73,391	124,817	151,283	100,292	12,248
35-39	939,131	167,495	58,470	101,323	53,905	44,035	86,358	71,545	114,441	156,207	93,969	11,383
40-44	770,841	125,883	46,857	80,549	44,178	34,832	71,084	61,603	99,373	113,634	81,758	8,890
45-49	655,694	98,664	36,168	70,339	37,774	33,155	63,023	52,883	85,279	98,427	71,777	8,205
50-54	517,981	73,558	23,687	56,543	31,157	28,122	52,257	44,789	65,863	82,206	53,673	6,126
55-59	447,146	61,332	19,352	48,853	25,955	24,443	45,446	36,753	57,411	72,801	48,443	6,347
60-64	362,896	46,617	14,777	37,667	20,386	19,845	36,343	30,854	49,779	59,071	41,737	5,820
65-69	253,284	30,290	9,977	25,768	12,805	13,490	26,155	22,988	38,693	38,408	30,043	4,667
70-74	194,609	20,364	7,638	17,594	8,827	9,701	19,005	18,317	31,935	31,228	25,713	4,287
75+	193,407	17,990	6,407	16,054	8,220	9,626	19,027	18,886	35,738	29,245	25,087	5,127
Total	15,655,637	2,763,072	935,555	1,670,056	912,047	727,108	1,413,661	1,216,689	1,972,433	2,272,920	1,562,052	190,044

Appendix Table II. The Population of Cities, 1925—70

i) Both Sexes

	1925	1930	1935	1940	1944	1949	1955	1960	1966	1970
Seoul	247,404	279,865	312,587	775,162	824,976	1,437,670	1,568,746	2,445,402	3,793,280	5,422,735
Busan	64,653	97,558	130,017	192,215	267,187	473,048	1,045,183	1,163,671	1,426,019	1,838,746
Incheon	41,541	52,971	67,126	151,454	190,669	260,778	317,967	401,473	525,827	631,281
Gaeseong*		47,722	53,693	69,919	74,513	88,582				
Suweon							81,304	90,801	127,733	166,608
Euijsongbu									74,642	92,759
Chuncheon					36,365	54,431	67,808	82,526	100,033	120,331
Wŏnju							76,375	76,990	103,810	110,072
Gangreung							50,887	58,712	65,206	72,789
Sogcho									63,078	71,948
Cheongju					42,435	64,463	81,031	92,093	123,666	140,810
Chungju								68,675	79,988	85,911
Daejeon			29,263	35,574	65,822	126,560	172,786	228,987	314,991	406,293
Cheonan									71,182	76,453
Jeonju			36,537	41,090	60,054	100,483	124,116	188,216	220,432	257,261
Gunsan	13,906	16,894	31,773	31,945	48,913	73,975	85,932	90,437	102,327	109,743
Iri					26,411	46,422	62,006	65,774	78,198	84,797
Gwangju			46,287	55,975	73,342	138,772	233,043	314,420	403,495	493,006
Magpo	19,544	26,335	51,326	55,652	61,327	111,002	113,492	129,650	162,166	173,902
Yeosu							72,996	87,199	101,851	111,362
Suncheon							61,577	69,471	79,293	88,966
Daegu	58,411	73,060	85,453	158,468	185,465	313,180	487,252	676,692	845,189	1,061,462
Pohang							52,379	59,536	65,927	77,535
Gyeongju							65,331	75,953	85,728	90,358
Gimcheon							45,768	51,164	56,850	60,663
Andong									63,534	74,708
Masan	17,621	22,189	25,768	30,590	48,046	91,214	129,671	158,010	154,600	186,703
Jinju				40,821	50,068	77,412	78,234	87,110	107,035	119,267
Chungmu							61,226	47,773	50,506	53,939
Jinhae							67,559	67,669	80,496	89,774
Samcheonpo								50,351	53,144	53,792
Ulsan									112,848	156,846
Jeju							60,109	67,991	87,369	104,323
Haegu*				56,210						
Pyeongyang*	70,075	116,899	154,759	254,599						
Jinnampo*	21,517	32,073	43,731	60,191						
Shinuiju*	13,185	31,445	41,095	43,586						
Weonsan*	26,824	32,241	47,955	64,918						
Hamhung*		34,191	45,389	64,446						
Cheongjin*	13,471	25,639	42,145	165,869						
Najin*				28,689						

*Located in North Korea.

Appendix Table II (Continued)

ii) Male

	1925	1930	1935	1940	1944	1949	1955	1960	1966	1970
Seoul	128,807	142,798	158,428	393,646	408,485	737,371	782,461	1,222,695	1,894,739	2,660,533
Busan	34,025	50,843	66,569	97,937	136,940	240,872	526,621	578,748	712,897	903,550
Incheon	22,093	27,839	34,657	80,444	101,880	133,134	159,614	201,729	265,586	312,384
Gaeseong*		21,959	24,930	32,658	34,281	42,721				
Suweon							40,450	45,308	63,707	80,861
Euijeongbu									36,693	44,699
Chuncheon					18,575	27,607	36,878	41,472	49,847	58,691
Weonju							47,267	38,695	52,534	54,379
Gangneung							24,815	29,554	32,873	35,940
Sogcho									31,834	36,004
Cheongju					21,320	32,913	39,972	46,302	62,554	70,223
Chungju								34,838	40,566	42,847
Daejeon			15,198	18,032	32,837	69,328	87,259	115,193	158,678	202,354
Cheonan									36,087	37,802
Jeanju			18,503	20,200	29,050	50,925	59,772	93,235	110,707	127,700
Gunsan	7,982	9,764	17,191	16,506	24,556	37,418	41,697	45,348	51,038	53,714
Iri					13,063	23,542	29,720	32,933	39,342	42,302
Gwangju			23,273	27,065	34,910	73,704	128,038	158,663	206,281	248,467
Mokpo	10,547	14,372	27,125	29,073	31,268	58,379	56,477	65,383	83,086	87,322
Yeosu							36,055	43,411	51,294	55,279
Suncheon							29,865	34,979	40,395	44,506
Daeju	29,012	35,557	41,458	77,384	89,030	160,029	244,953	336,324	419,524	519,168
Pohang							25,514	29,888	33,134	38,514
Gyeongju							31,987	37,677	42,717	44,194
Gimcheon							22,713	25,805	28,876	30,190
Andong									32,463	37,337
Masan	8,866	11,039	12,711	15,003	23,605	45,273	63,780	78,226	76,636	89,939
Ulsan				19,718	23,893	38,069	37,412	42,945	53,326	58,864
Chungmu							29,734	23,313	24,911	26,383
Jinhae							41,181	33,895	40,458	44,064
Samcheonpo								24,989	26,711	26,255
Ulsan									57,633	79,268
Jeju							27,721	32,455	42,690	50,474
Haeju*				28,693						
Pyeongyang*	37,352	60,268	78,365	130,407						
Jinnampo*	11,529	17,259	22,885	31,574						
Shineuju*	7,172	16,813	21,761	22,633						
Weonsan*	14,002	16,687	24,440	33,477						
Hamheung*		17,045	22,686	32,575						
Cheongjin*	7,564	14,676	23,370	93,808						
Najin*				16,636						

*Located in North Korea.

Appendix Table II (Continued)

iii) Female

	1925	1930	1935	1940	1944	1949	1955	1960	1966	1970
Seoul	118,597	137,067	154,159	381,516	416,491	700,299	786,285	1,222,707	1,898,541	2,762,202
Busan	30,628	46,715	63,448	94,278	130,247	232,176	518,562	584,923	713,122	935,196
Incheon	19,448	25,132	32,469	71,010	88,789	127,644	158,353	199,744	260,241	318,897
Gaeseong*		25,763	28,763	37,261	40,232	45,861				
Suweon							40,854	45,493	64,026	85,747
Euljeongbu									37,949	48,060
Chuncheon					17,790	26,824	30,930	41,054	50,186	61,640
Weonju							29,108	38,295	51,276	55,693
Gangneung							26,072	29,158	32,333	36,849
Sogcho									31,244	35,944
Cheongju					21,115	31,550	41,059	45,791	61,112	70,587
Chungju								33,837	39,422	43,064
Daejeon			14,065	17,542	32,985	57,232	85,527	113,794	156,313	203,939
Cheonan									35,095	38,651
Jeonju			18,034	20,890	31,004	49,558	64,344	94,981	109,725	129,561
Gunsan	5,924	7,130	14,582	15,439	24,357	36,557	44,235	45,089	51,289	56,029
Iri					13,348	22,880	32,286	32,841	38,856	42,495
Gwangju			23,014	28,910	38,432	65,068	105,005	155,757	197,214	244,539
Magpo	8,997	11,963	24,201	26,579	30,059	52,623	57,015	64,267	79,081	86,580
Yeosu							36,941	43,788	50,557	56,083
Suncheon							31,712	34,492	38,898	44,460
Daegu	29,399	37,503	43,995	81,084	96,435	153,151	242,299	340,368	425,665	542,294
Pohang							26,865	29,648	32,793	39,021
Gyeongju							33,344	38,276	43,011	46,164
Gimcheon							23,055	25,359	27,974	30,473
Andong									31,071	37,371
Masan	8,755	11,150	13,047	15,587	24,441	45,941	65,891	79,784	77,964	96,764
Jinju				21,103	26,175	39,343	40,822	44,165	53,709	60,403
Chungmu							31,492	24,460	25,595	27,556
Jinhae							26,378	33,774	40,038	45,710
Samcheonpo								25,362	26,433	27,537
Ulsan									55,215	77,578
Jeju							32,388	35,536	44,679	53,849
Haebu*				27,517						
Pyeongyang*	32,723	56,631	76,394	124,192						
Jinnampo*	9,988	14,814	20,846	28,617						
Shineviju*	6,013	14,632	19,334	20,953						
Weonsan*	12,822	15,554	23,515	31,441						
Hamheung*		17,146	22,703	31,871						
Cheongjin*	5,907	10,963	18,775	72,061						
Najin				12,053						

*Located in North Korea

Source: Census Reports of 1925-70

Appendix Table III. a Compiled Number of Koreans in Korea, Japan
and China by Sex, 1925—1940

	Korea	Japan	Manchuria	Other China	Total
1925					
Both Sexes	19,020,030	184,230*	589,405*	2,462**	19,796,127
Male	9,726,150	147,383	321,494	1,343	10,196,370
Female	9,293,880	36,847	267,911	1,119	9,599,757
1930					
Both Sexes	20,438,108	418,990	672,665*	2,593**	21,532,356
Male	10,398,889	297,482	366,908	1,414	11,064,693
Female	10,039,219	121,508	305,757	1,179	10,467,663
1935					
Both Sexes	22,208,102	720,818*	915,809*	7,206**	23,851,935
Male	11,271,005	480,545	499,533	3,931	12,255,014
Female	10,937,097	240,273	416,276	3,275	11,596,921
1940					
Both Sexes	23,547,465	1,241,178	1,450,384	129,446*	26,368,473
Male	11,839,295	744,203	789,575	103,556	13,476,629
Female	11,708,170	496,975	660,809	25,890	12,891,844

*indicates the figures in the group were adjusted for under-enumeration and the sex distribution was estimated.

**indicates the sex distribution was estimated.

Source: Tai Hwan Kwon, *Population Change and Its Components in Korea 1925—66*, p388~390.

Appendix III. b Compiled Age Distributions of All Koreans in Korea,
Japan and China, 1925—40

	1925	1930	1935	1940
Male				
0-4	1,614,957	1,740,047	1,992,621	2,214,137
5-9	1,243,545	1,422,852	1,572,621	1,829,859
10-14	1,154,157	1,200,867	1,356,487	1,520,084
15-19	1,007,501	1,122,272	1,143,497	1,302,189
20-24	813,661	950,286	1,083,594	1,096,559
25-29	821,189	787,023	917,663	1,051,803
30-34	703,504	779,723	757,559	890,971
35-39	630,916	678,263	753,818	734,510
40-44	526,408	587,566	631,354	710,805
45-49	444,637	486,406	545,878	578,471
50-54	360,985	395,838	433,492	488,920
55-59	299,312	314,079	346,975	377,646
60-64	235,316	239,713	255,162	282,633
65-69	183,172	173,323	182,441	191,863
70-74	95,555	115,553	114,886	118,535
75-79	45,968	50,559	63,086	58,298
80+	15,587	20,323	25,380	29,346
Total	10,196,370	11,064,693	12,176,514	13,476,629
Female				
0-4	1,560,961	1,695,421	1,928,930	2,152,661
5-9	1,164,633	1,353,037	1,497,960	1,748,879
10-14	1,078,907	1,115,400	1,303,345	1,449,839
15-19	945,256	1,042,493	1,094,957	1,252,504
20-24	748,639	896,564	1,005,559	1,041,456
25-29	743,073	717,308	859,999	962,039
30-34	629,199	710,991	684,001	819,740
35-39	563,350	603,263	675,854	661,241
40-44	466,799	526,394	569,300	644,548
45-49	403,579	441,404	502,527	537,398
50-54	333,823	367,092	402,474	464,981
55-59	301,914	308,980	342,178	375,598
60-64	251,759	252,653	261,421	294,220
65-69	210,046	199,061	206,782	214,007
70-74	114,213	139,210	136,977	145,736
75-79	59,388	67,046	84,535	78,726
80+	24,218	31,346	40,122	48,271
Total	9,599,757	10,467,663	11,596,921	12,891,844

Source: See citation in Appendix Table III.a (p.391).

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