

On Population—Labour Force in Korea

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1. Population

To begin with, let us look at some figures from the following table I which sets out, in round number, the population of a number of countries in the Far East at the end of each decades of this century. The taking of accurate censuses began in Korea only in 1925 (1), then being taken regularly every five years until 1944, but it is not likely that the 1910 and 1920 figures are greatly inferior to those for the other countries listed.

Table I.
Population in Selected Countries of the Far East (2)
(millions)

	1910	1920	1930	1940	1950
Korea	13	17	20	22	30(a)
Japan	50(b)	55	64	73	83
India	303	306	338	389	350(c)
Philippines	8	10	11(d)	16	19
Thailand	8	9	11	15	18

- (a) Total Korean Population, including North Korea estimated at 9 millions.
- (b) For the year of 1908.
- (c) De jure population, excluding Kashmir-Jamans and the tribal areas of Asuam where the census could not be taken.
- (d) For the year of 1932.

It is more likely to be instructive from the economic point of view to study this sort of table by horizontal rows than looking down the column. Because population is a main factor in the economic problem of the countries in the Far East; to organize the productive resources of a country so as to provide a rising standard of living for the mass of population, which increased more than two fold in most of these countries in less than half a century, is an immense problem—"one of the greatest problems facing the world to day." (3)

Every one of the countries in the region shows an enormous increase in its population throughout the whole period, jumping by two fold or less with the exception of India. The population of Korea, using the most commonly accepted figures, was 13.3 million in 1910, 17.3 million in 1920, 20 million in 1930, and 22 million in 1940 (4); these figures show a rapid rate of increase, amounting to 1.5 percent per annum during the period 1910—1940. This increase in population is one of the most stupendous facts in Korean history. It is quite probable that no long-term population increase was ever both so rapid and so prolonged. But, if we look at the figures for South Korea in more detail, it becomes apparent that the increase has proceeded quite irregularly since 1945.

As can be seen from the following new table, between 1944 and 1955, the population of South Korea increased by 5.6 million; on September 30, 1955, the total number of Korean nationals in the area South of the Armistice line was estimated 21.5 million, being equal to the population of total Korea in the nineteen-thirties. But the rate of increase has not been constant through the period.

This eleven year history is roughly divided into two distinct phases: During the first half, there was a great acceleration in the rate of growth of the population, while in the latter half, the brake was put on more or less violently.

Table II
Population in South Korea since 1944 (5)
(million)

	Year	Population
September	1955	21.5 (a)
May	1949	20.2 (b)
May	1947	19.9 (c)
August	1946	19.3 (d)
May	1944	15.9 (e)

- (a) Taken from the census of 1955.
 (b) Taken from the census of 1949.
 (c) Estimated by Office of Public Information, Republic of Korea.
 (d) As same as (c).
 (e) Only the population of the area South of the 38th parallel and taken from the census 1944.

From the table, it can be clearly seen that during the five year period between 1944 and 1949, the population of South Korea jumped by 27 per cent to over 20 million (6), but between 1950 and 1955 only by 8 per cent. Thus, the density of population of South Korea came to be in the high range in the world-wide distribution of population densities.

According to the census of September 30, 1955, it has reached about 600 persons per square mile, which is nearly equal to that of Japan, and which is double that of India (7); while North Korea, with a population estimated to be about 8.3 million at mid-1954 (8), has a density of only about 170 persons per square mile, a lower figure compared with that of other Far Eastern countries. In Korea as a whole, there is no doubt that the density of population is still in the middle range in the distribution of population densities in the World. Furthermore, the cultivable area is only 25 per cent of land owing to the extremely mountainous character of the country (9), so that Korea would any case face a more difficult basic population problem than other countries in the region, assuming ultimate unification.

The mounting rate of growth of the Korean population of South Korea during the first year period—27 per cent—was mostly due to an excess of immigration over emigration, while the relatively small increase in the later half was entirely a natural increase.

2. Migration

Although the history of emigration of Korean people can be taken back to the fourth century A.D. (10), when small groups of refugees from the dynastic wars of Korea fled to Japan, the modern history of population movements seems to date from the last two decade of the nineteenth century.

Owing to the great famine of 1870-1875, large numbers of Korean acrossed the Yale River into North-east China, mainly into Manchuria. During and after the First World War, particularly in the 1930's, there were continuously movements of Korean toward North-east China, mounting in number to about 1.5 million by 1944. With the establishment in 1905 of the Japanese "Protectorate" regime, there began a considerable emigration across the Sea of Japan. The stream of Koreans moving into Japan attained a size similar to that into Northeast China in a very short time; the number of Koreans in Japan rising rapidly from only 41,000 in 1920 to 419,000 in 1930, about 1 million in 1940, and about 1.55 million in 1944. In the twenty year period between 1925 and 1944, 2.6 million, Koreans outside Korea are estimated to have increased.

Table III
Number of Koreans Outside Korea
(1925-1944) (11)
(in thousands)

In:	1925	1930	1940	1944
Japan	40	420	950	1,550
Mostly Manchuria	500	620	1,160	1,500
Other countries	180	200	220	240
Total	720	1,240	2,330	3,290

As can be seen from Table III, in 1944, there were 1.55 million Koreans in Japan, 1.5 million in China, most of them in Manchuria (or "Manchukuo"), and 240,000 in Siberia and areas of the Pacific and elsewhere. In general, those who moved north-ward across the Yalu River came from North Korea, while those who moved east-ward across the Sea of Japan were predominantly from the South. The reason for this seems to lie in the simple fact that economic opportunities were greater in Japan than in South Korea, and they were also more or less greater in Manchuria than in North Korea which was a food-deficit area.

On the other hand, the movement from outside, especially of Japanese into Korea, prior to the Russo-Japanese War (1904-5) was quite small; but the number of Japanese in Korea increased to 172,000 by 1910, and then doubled in the next ten years to 348,000 in 1920. Since then, the number was estimated at 970,000 in 1944 of which the armed forces accounted for upwards of 200,000. However, the relatively slow growth of the Japanese since 1920 was due to the fact that nearly all of the Japanese in Korea were engaged in what might be termed "sheltered" occupations—occupations where did not actually come into competition with the Koreans, but the extent of such occupations was so limited that the more Japanese newcomers came, the more difficult it was for them to engage in such favorable "sheltered" occupations.

The Korean emigrants have been drawn largely from the agrarian population; most of them were uneducated, unskilled workers. The early Korean settlers in north-east China, mainly Manchuria and most of the Koreans who went to Japan were engaged primarily in agriculture or in the industries as unskilled manual labour. After the Manchurian "Incident" in 1931, when the Korean immigrants into Manchuria had various opportunities for obtaining employment in the fields of industry and commerce, and were treated as the "Second Order" nations, Japanese provided "sheltered" occupations them of the same kinds as the Japanese in Korea (12). As in other countries of emigration in the Far East, the ratio of the population dependent on agriculture to arable land is relatively high (13), so that it seemed to be natural that the economic pressures in agricul-

ture such as frequent floods droughts, famines, and under-employment which were accentuated by the political and social unrest under the Japanese occupation, had constituted major forces underlying emigration; however, there was another force underlying the outward movements of Korean population. It was characterized by the second world war; before and after the "surprise" attack on Pearl Harbor in 1941, the Japanese were so busy producing munitions of war (including also food) that they forcibly carried away innumerable Korean people to what was called "Choyo" (compulsory labour; it was a horrible name to Koreans, and still is a memorable name to Koreans), from farms and towns, no matter whether skilled or unskilled, to the remote regions of Manchuria where the Koreans were forced to produce food for them, and to the war factories or mines in Japan where the Koreans were forced to work for war purposes. Towards the end of the war, when Japan was facing a shortage of Manpower, they even forced young Koreans into the front bottle line or the other areas of the Far East. 14)

The emigration which occurred within the thirty-five year period between 1910 and 1944, however, not only affected the increase of the total Korean population, but also brought about a change in the population of working ages in Korea. Moreover, it severally affected the change of the South Korean population in the post Second World War period.

The extent to which emigration affected the population increase, and the change in the volume of manpower in Korea in the two decades since the first census year 1925 can be summarized as follows:

In the two decades between 1925 and 1944 alone, the Korean population increased by 6.1 million. If there had been no migration of Koreans into or out of the country, the increase would have been over 8.7 million. Migration removed thirty per cent of the population increase that would otherwise have occurred in Korea. But this is not the whole story. For the Korean migrants were predominantly young men: without migration, the number of Korean men aged 15 to 59 would have increased from 5.3 million in 1925

to 7.4 million in 1944, an increase of 40 per cent within only a 20 year period. However, the actual increase was only 22 per cent: forty-five per cent of the expected increase in working population had been removed by migration (15).

Now, to turn to the movements of population into and out of South Korea during the period under review. It is almost impossible to determine the magnitude of the influx into South Korea from both North Korea and abroad since the end of the Second World War with any precision, all the sources, however, suggest that it was substantial (16). The mass movement of population into and out of South Korea, which began in later 1945, can be divided into two major groups:

- (a) the repatriation of Koreans to South Korea and Japanese from South Korea, which followed the end of the Second World War and continued until the year of the outbreak of the Korean War in 1950;
- (b) the great movement of refugees, which also followed the division of Korea at the 38th Parallel in 1945, but continued through the Korean War.

The former movement was mainly inter-regional, and was characterised by the returning of large numbers of those people who had been forced to work in Japan and Manchuria and by the repatriation of the Japanese from Korea, while the latter was mainly internal, and was characterised by the presence of large numbers of refugees associated with political events and the Korean War.

As the Koreans had the legal option of remaining in Japan after the Second World War, the movement of them from Japan was complex, so that it is difficult to assess the exact magnitude of the volume of the retiring. (Some of them had returned back to Japan again or returned by illegal means). Inefficiency, disorder and incapableness of administrative authorities just after the Second World War accelerated this difficulty. It is safe to assume from the pre-war Korean population in Japan, however, that their number was large; the Government of the Republic of Korea reported an

influx of 1.1 million from Japan by January 30, 1949, and by the end of January of 1950 the figure rose to 1.4 million (17). This is almost 35 per cent of all the immigrants of Koreans who moved into South Korea. The total influx of Koreans from other areas into South Korea was about 430 thousand, of whom 7 per cent came from Manchuria; 12 per cent from China, and nearly 33 thousand from other Pacific areas (18). On the other hand, the outward movement was quite clear, and completed quickly. It mounted at about 890,000 by the end of April, 1948, having been composed mainly of Japanese. The number returned to Japan, according to the report of the Government of the Republic of Korea, was about 885 thousand (19), 590 thousand of whom had lived in the area of South of the 38th Parallel; and the rest of whom came through from North Korea (20).

The exact magnitude of the volume of refugees of all kinds during the post-Second World War between 1945 and 1950 is as difficult to assess as in the case of the Korean War period. However, it was officially estimated that a total of 657 thousand refugees from the North had passed through its camps by January 31, 1949; while the Korean-War refugees were estimated at about 750 thousand or more or less one million (21). The extent to which these estimates approximate the actual number of refugees from the North before and after the Korean War (1945-1953) is debatable, because the official figures include no allowance for those who did not move through the refugee camps. It should be pointed out, however, that political factors, food deficits in the North, and infiltration tactics stimulated a sizeable South World movement (22) and that waves of large numbers of the Korean War refugees have moved ahead of the armies or away from expected areas of military action or unfriendly occupation since 2nd. November, 1950, when the United Nations' Forces had to retreat from the Yalu River owing to the intervention of the Chinese Communists.

Supposing that the rate of natural increase of population of South Korea was 15.8 per thousand per annum during the post-war five year period, 10 in the inter-Korean war period between 1950 and 1953, and again 15.8 per thousand since 1954, it could be

estimated that the increased number which was caused by the total influx of Koreans into South Korea, was nearly four million (23) against figures, the only offsetting factor was the war dead estimated at nearly one million (24). This, with a natural increase, brought an abnormal rise in the population of South Korea.

Now, let us see some of the economic consequences of these movements into and out of South Korea. To begin with, the government and economy were managed by the Japanese during the 35 year period between 1910 and 1945. The Japanese dominated the social structure, intellectual development, and channels of transport and communication all over the Korean areas (25), therefore, the suddenly enforced exodus of the Japanese removed the people trained and experienced in the techniques of political and economic development. This, from the economic point of view, accentuated not only the decrease of productivity of the various industries in South Korea, but also even the collapse of its economic functions (26). Secondly, the magnitude of the influx into South Korea has produced not merely the change in size of the population at present and the prospect of substantial increase in future, but also great changes in the age-distribution, the structure of the population, especially, in the working population; that is, a noticeable increase in the proportion of the population in the productive age-groups. Thus, it, with as much as the war damages, created the large number of unemployment and underemployment (27). Thirdly, the influx of refugees into the cities of South Korea exceeded two million people during the post-war five year period (28); city growths due to the influx of refugees during and after the Korean War have been greater than in any previous periods in the history of Korean urbanization resulting from war refugees flights, economic collapse, and overpopulated rural areas. George Maccun said;

“Following the war (the Second World War), the influx of Koreans entering South Korea from the North and from abroad contributed to a great expansion of the population residents in cities. Thus, the urban population increased 72.7 per cent, as against increase of 26.5 per cent in the

agricultural population, in the seven and one-third year period from October 1940 to January 1948.” (29)

However, this growth of the urban population does not signify a permanent redistribution of the population, but rather an increase in ‘disguised unemployment’ because there was no corresponding increase in the demand for labour in the towns; there was nothing for them to do except to engage in very small trading, in begging or, in the armed forces. It is hard to say that urbanization in South Korea since 1945 (30) has been built through the extending employment opportunities at the higher level of income permitted by rising level of production, which is sustained by either economic transformation or demographic transitions.

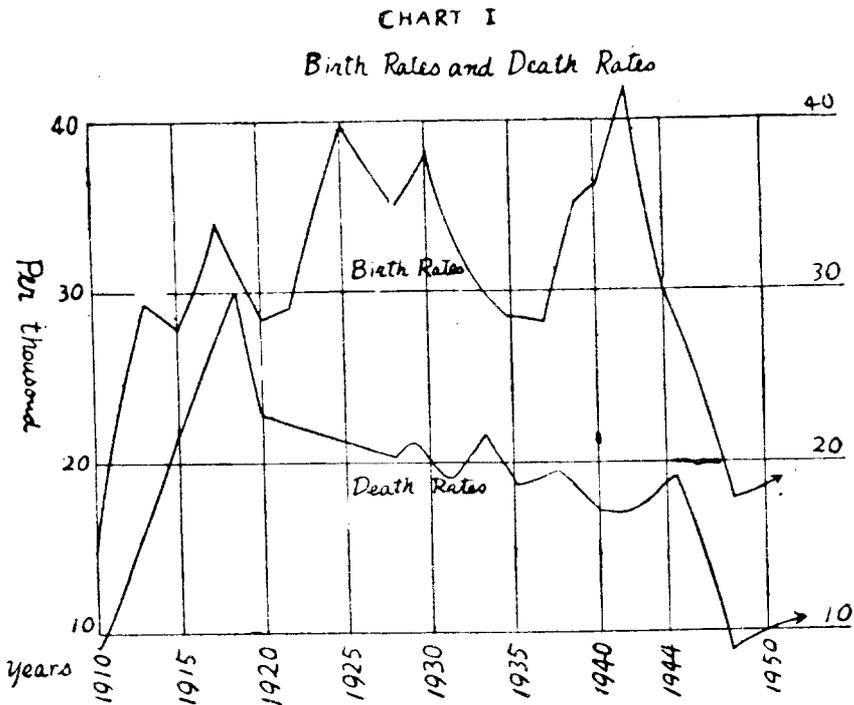
3. Birth Rates and Death Rates

The rate of population growth has accelerated in Korea since 1910, mainly because of progressive reduction in the death rate, not matched by corresponding changes in the birth rate. Recent trends in both are ascertainable in some detail for Korea, and are set out in Chart I. The average rate of birth during the 35 year period between 1910 and 1944 is 32.6 per thousand persons (31), while the death rate has dropped steadily from a moderately high level of 24.2 per thousand persons during 1915-1919 to a medium level of 18.9 per thousand per annum during 1940-1944 (32).

Thus, the rate of natural increase in Korea was 12.9 per thousand population in 1920-1924, 15.6 in 1925-1929, 14.6 in 1930-1934, 13.2 in 1935-1939, and 15.8 in 1940-1944 (33). In general, as can be seen in most of the countries in the Far East, modern influences in Korea have been responsible for measures which tend to cut down mortality such as introduction of relatively better facilities for transportation, improvement of agricultural and manufacturing techniques, and control of epidemic diseases. Wren Thompson said:

“Since Japanese occupation (1920) the sanitary conditions of Korea have been much improved, especially in the large cities,

The efficiency of her agriculture has been increased and the area extended, thus at least temporarily raising the standard of living of part of the population. In addition, a reasonably good transportation system has been built and a small amount of modern industry was established even before 1937. These improvements reduced death rates below than customary level (34)."



However, such changes have had little effect on fertility, which was determined by motives deeply seated in the social and cultural fabric, and Japanese propaganda for encouraging birth in Korea seems to have had great effect (35).

It seems apparently that the great decline in both birth rates and death rates occurred during the five year pre-Korean War period; birth statistics in South Korea have been so seriously affected by underregistration owing to the administrative collapse and social disorder during that period—and even more during and after the Korean War—that they failed to show the actual birth rates, while deaths statistics have been relatively correctly registered, so that they are more correct than the official birth rates. As appears

from the Chart I, however, the birth rate turned extraordinarily downward about 1945; in a very short period it fell from 34 per thousand persons per annum to 19. Though this figure seems doubtful in its exactness, there were so many factors depressing the birth rate—pressures of unsteady social life and lower standard of living resulting from the war and economic collapse, forced postponement of marriage and the irregularity or in some degree impossibility of sexual life,—that we can conclude that the birth rate of South Korea did leave the 30 level and fall very precipitously. Thus, the recent decline in the birth rate seems to be similar to what happened in Japan during the four year period between 1950 and 1953, when the birth rate fell from 28 per thousand persons in 1950 to less than 22 in 1953 (36), that is, to the standard, for example, of England in the nineteen-twenties (37). But this similarity seems to me to be a matter of illusion, which may disappear when we examine, from the historical and economic points of view, the birth rate of the countries concerned. Historically, the drop of the birth rate in Japan, resulting from family limitation, has been steady over the three decades from 1920 to 1950; the rate fell from a moderate level of 35 per thousand persons in 1920-1929 to 28 in 1950 (38). Furthermore, economic and social factors, caused by such as industrialization and urbanization and by the general trend towards an increase in the age at marriage of women, accelerated its decline movement (39). On the contrary, the Korean birth rate, as we have seen above, was at a moderate level of 34 per thousand persons over the same period from 1920 to 1944. Moreover, the country was, and is still now, largely an agricultural one, and only about five per cent of total population was living in urban areas of Korea even in 1935, when the urban population in Japan was nearly 50 per cent of the total population.

The post-war sharp decline in the birth rate was mainly due to temporary changes in social, political and economic conditions, so that it is hard to say that this decline is likely to be maintained in the future as was the decline of the Japanese birth rate in the twentieth century or the English in 1880-1940, that is to say, whether

it is the first indication of a long-term future decrease in the birth rate of South Korea.

The crude death rate has been considerably reduced in South Korea since the end of the Japanese occupation; it has dropped very steeply from a medium level of 18.9 per thousand persons during 1940-1944 to as low as 9.3 in 1948, that is, by over fifty per cent compared with that of the early 1940's. It is probable that the balance of medical, political and economic factors during this period contributed towards the continued decline of the crude death rate of South Korea. Both American health assistance in South Korea to control epidemics and to develop the rudimentary sanitation service and the medical aid of the United Nations' Forces were substantial during the period of military occupation and during the Korean War. Another possible explanation of this falling mortality is the general trend towards increased public education. The number of students of public primary schools jumped by over 100 per cent from 1.3 million in 1945 to 2.7 million in 1954 (1). However the advent of new drugs to control epidemics disease was probably the main reason for such a steep decline of mortality of South Korea towards a new limit, which seems to be located at a level of about 10 per thousand persons. The same trend can be also seen in the figures for such Far Eastern countries as Ceylon, Taiwan, Japan, Malaya, the Philippines, and Thailand (41).

Thus, over 2.5 million out of the total increase in population during the ten year period since 1945 seems to be attributable to the natural increase, which is still the highest rate of natural increase even known in the world. It was due to lower mortality rather than to lower fertility; the only offset to this was the war dead, which are estimated to about one million (12).

These characteristics of the population increase in South Korea are reflected in the development of age-distribution.

4. Age-structure

In a completely stationary population with no migration, where the same number of birth had taken place every year for the previous seventy year, the size of the age-groups would form a descending series; with rather fewer persons, in each age-group than in the one before it (because a certain number of people die at every age). Thus, a typical age-distribution for such population resembles the “profile of a fir-tree” (43) or a “beehive” (44).

If now this population began to decrease by extra emigration, normally of persons of productive-ages, the generations coming into the senior age-groups would be smaller than the junior generations were when they came in, consequently, the beehive would begin to flatten at the higher age-groups. If it began to increase by extra births, the new generation coming into the younger age-groups would be larger than the older generation were when they came in, resulting in a swelling of the beehive at the bottom, the lower strips growing in size relatively to others, vice versa. As time went on, this swelling would tend to move upwards; but, if the number of births went on increasing, the numbers in the lower age-groups would still be high relatively to those in the higher age-groups. The slope of the beehive would be distinctly flattened as compared with the stationary case, so that the beehive would be more like a regular pyramid (45).

Now, looking at charts IIa, IIb, and IIc, which show the actual age-distribution of the South Korean Population in 1944, 1949 and 1953 respectively, let us examine the following table which indicates the changes in percentage of enumerable population in four major age-groups in specified census years for all Korea and South Korea.

Table IV

Percentage of enumerated population in Four Major Age-Groups in Specified census years for Korea and South Korea (46)
(percentage)

Years	Age Groups				Total
	under 14	15.39	40.59	over 60	
1953	37.1	40.6	16.6	5.7	100
1949(a)	41.6	37.9	15.0	5.4	100
1944	43.3	35.0	15.4	6.3	100
1935	40.4	37.4	16.1	6.1	100
1925	39.7	37.7	16.0	6.6	100

(a) Figures in 1944, 1935 and 1925 for all Korea.

To begin with, to examine figures for the years before 1944. As can be seen from the table, over the twenty-year period up to 1944, the proportion of the population under 14 years of age increased slightly from 39.7 per cent to 43.3 (47), while the proportion in the age-groups 15-39 years decreased from 37.7 to 35, and 40-59 year from 16 to 15.4 per cent. The proportion of the persons aged 60 years and over remained at some what 6 per cent through all the periods. These changes in the proportion of the population were due to

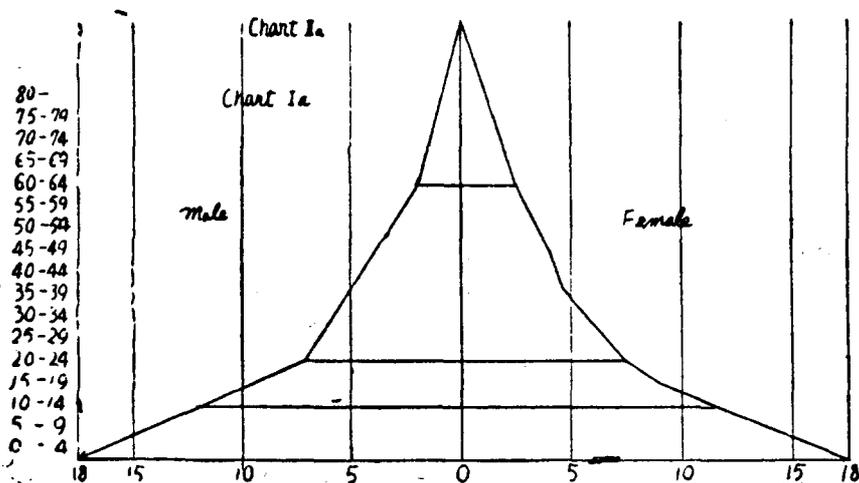
(a) the relatively higher birth rate and the considerable fall in mortality during the period (48).

(b) the fact that the considerable emigration was composed mainly of the productive workable age-groups (49).

(c) and the fact that the "Choyo" (the compulsory labour) and the "Chohei" (the compulsory military service) were drawn from the persons aged between 15 and 59 years under the Japanese rule in the early 1940's (50).

In view of the stable birth rates which characterize the Far Eastern countries (with the exception of Japan), as a result of both the high percentage of married persons in the child-bearing ages and the large numbers of children born per marriage, it is not

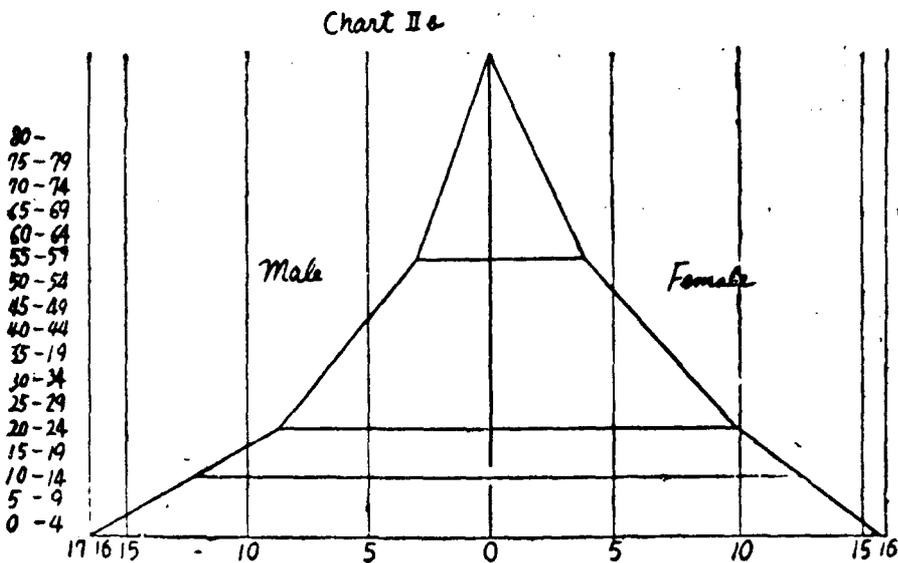
surprising that the higher ratio of the age-groups under 14 to that over 15 in the population has shown slight tendency to increase in the 35 year period between 1925 and 1944.



Thus, Chart IIa, which shows the actual age distribution of the total Korean Population in 1944, is likely to be shaped more like "La Tour Eiffel" rather than a normal pyramid; it shows a very short "cross beam" in the age-groups from 20 to 35 years and over, especially in the male population, and also shows relatively longer "cross beams" in those younger age-groups. The dynamic tendency of the Korean population in the twentieth century has been basically seated in the unbalance of political, economic and social factors, which, on one hand, stimulated the emigration of the Korean population, and on the other hand, brought about the increase of birth rates in the country. This sort of the structure of the population(the type of "La Tour Eiffel") is generally seen in most emigration countries in the Far East, and brings about usually very important economic consequences. Because the heavy burden of child dependency on groups of working ages is an inevitable important factor contributing to the poverty that pervades in Korea as many as with most of other countries in the region.

According to the census in 1949, the proportion of child dependency aged under 14 has decreased by 4 per cent since 1944, showing 41.6 per thousand persons, while the proportion in the

Age groups 15-39 year shows a steep increase from 35 per thousand persons to 37.9, which seems to be the highest figure since 1925. The 40-59 year age-group remained at about 15 per thousand as it was in 1944. The reason for this can be found from the contrary explanation to that for the period between 1925 and 1944. In addition, however, an other possible reason for accelerating the sharp increase in the age-groups 15-39 years is likely to be found in a higher proportion of the age-groups under 14 in the two decades between 1920 and 1930. Because most of the people who belonged to that age-groups in 1949 were under 14 years at that time—that is, roughly speaking, people born before 1935.



The immigration into South Korea, mainly composed of the great influx of refugees from the North and the repatriation from Japan and elsewhere, was responsible for swelling the population of working age shown in Chart IIb. It shows, however, that there has been quite a recovery to a typical stationary age-distribution, thereby showing a normal “pyramid” structure in South Korea.

During and after the Korean-War, the most significant movements of the population in South Korea were two:

- (A) First of all, the war dead and the war refugees from the North come out, both of which were amounted to about one million, thereby cancelling each other out (51).
- (B) The next thing was the sharp drop in the birth rate (52).

These movements so much affected the proportion of the population in every age-groups, that the age group under 14 years was only 37.1 per cent in 1953, which seems to be the lowest proportion since 1925, the first year for which the age-distribution of Korean people is known. It shows a decrease of about 10 per cent in the three years period between 1950 and 1953. On other hand, the proportions in both the age-groups 15-39 years and 40-59 sharply increased from 37.9 to 40.6 and 15 to 16.6 respectively; which that of the population aged 60 years and over remained at about the same as it was in 1949.

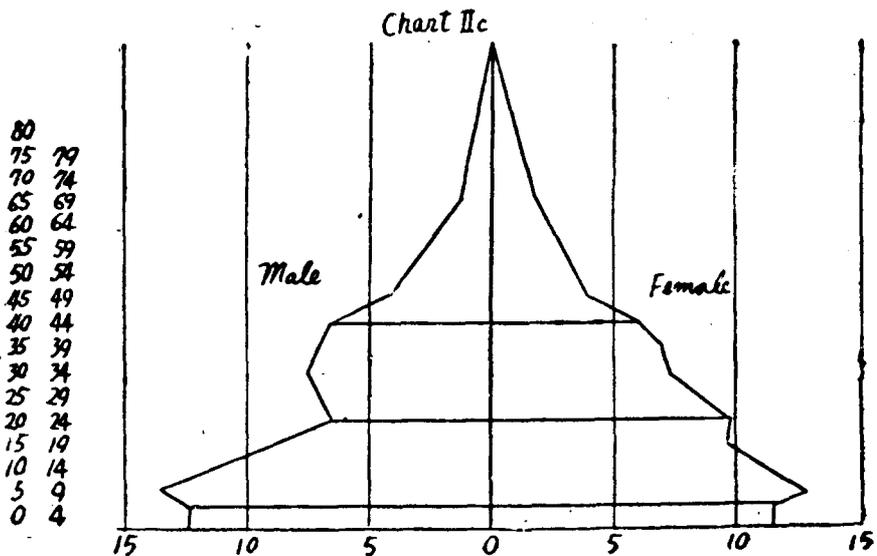


Chart IIc shows the actual age-distribution of the South Korean population in 1953. The very short “cross beam” of the age-groups from 20 to 29 in male marks the effect of the great war dead in these ages, while the relatively long “cross beam” from 30 to 44 years in both the male and female, represents, to some extent, the

influx of war refugees from the North, who belonged to this age-groups. However, the influx of the workable people was likely to be much greater than the war dead who belonged to the workable age-groups, and then caused important consequence in connection with the problem of employment (53). The much more gradual tapering of the "cross beam" from 5 to 19 still registers the great increase of birth, which started in 1930's and had continued until the outbreak of the Korean War in 1950. The shorter "cross beam" at the bottom of the structure gives an image of the decrease in the birth rate during and after the Korean War.

Thus, the present age distribution of the South Korean population is far from having a regular shape (say a "pyramid") but the "war-damaged" structure as it looks. It exhibits two pronounced bulges for the groups representing persons over 30 years aged in 1953 (approximately born before 1923) and persons born after 1935, and also exhibits two pronounced "sunken" groups representing persons between 20 and 29 aged in 1953 and persons born after 1950. As time goes on, these "unevennesses" travel upwards. This too will bring about some important consequences.

In the first place, the upper bulge, representing persons between 30 and 44 years in 1953, will make for a rise in the death rate. For the most part of the persons who died (from natural causes) during the decade between 1940 and 1950 were 55 years at that time (54), that is, roughly speaking, persons born before 1890. The persons who will be over 55 in 1970's, succeeding decades down to 1990, will be those who were born before 1933, and the number of births was greatly rising until 1950 after 1935—this remarks the lower bulge representing persons between 5 and 19 years old, so that there are likely to be more of those latter persons.

"Whatever improvements are made in medical science, the death rate is almost bound to rise as the upper bulge of the diagram passes into the Reaper's hands" (55).

Secondly, and of more lasting importance, there is the effect on the birth rate. The number of births in any time depends as

much on the number of potential mothers then living, and on the average number of births from each potential mothers (56), as on the number of “potential” fathers then living. Consequently, even if the size of the ordinary family remains the same, the number of births will fall if the number of either potential mothers or fathers declines sharply.

As the latter, especially the age-groups between 20 and 29 years old, was bound to decline during the Korean War; it is reasonable to consider that there will be moderate decline of the births in the present 1950's; but, after that, there will be a sharp recovery to normal rate for about twenty years—until 1980. It is not certain that the birth rate, after this recovery, will maintain the level of the recovery period, because the number of potential mothers and fathers will again decline after the early 1980's. The birth rate in the future is likely to depend on the extent to which the birth rate of the latter years of 1950's can be sustained,—that is the lower rate of the early 1950's can be sustained or otherwise the new level (somewhat higher than that) will be sustained.

Lastly, and more interesting from the full employment economic point of view, there is the effect on the number in the working population and on employment. The upper bulge means that there has been an increase in the working population, even though the age-groups between 20 and 29 years old to some extent declined. It increased by 15 per cent from 11.8 million in 1949 to 13.5 million in 1953. Moreover, it is clear that there may be a sharp increase in the working population during the next 15 year period, because, as time goes on, the junior aged groups (at the present, they are unproductivity) who are occupying the large proportion of population at the present moment will travel upwards, and then become the potential productive age-groups.

The increase in the working population has the most important consequences in the developing economy South Korea as well as the increase in the “disguised” unemployment which pervades in South Korea. Now, we come to the last important question about the market for manpower—the problem of the working population in South Korea.

5. Working Population

Population of any country, as is well known, is only the first of economic problems connected with labour as a factor of production, because the contribution of labour to the productive process depends in the first place on the number of workers. Thus, the population of South Korea is also a major factor in the economic developing of it; to organize the productive resources of South Korea so as to provide a rising standard of living for the mass of Korean population is an immense problem. So far, we have analysed the structure of the population with reference to the age-groups, and the influence of its structure upon the demographic trends—the trends of the working population.

Here, we have an analysis of the trends of the manpower and employment during the period, for which we have considered so far.

Before we start with a further consideration about numbers, it should be pointed out that there are certain features of the South Korean manpower, which can be established even without accurate statistics (57).

The first and most significant feature is that the supply of the manpower in South Korea is unusually large in relation to available natural resources (including land too) and capital goods. The second feature is that the supply of the manpower, while already large, has been continuously on the increase, and that its rate of growth has been considerably faster than that of available natural resources and capital goods, and that it is likely to be continued in the future too (58). Lastly, although the total supply of manpower is large, the supply of skilled manpower—manpower trained in modern industrial techniques—is exceedingly small.

It is natural that the number of persons who work and earn their living in the country is always far less than the total population. The main reason for this is that nonworkers are below working age or incapacitated or have other things to do—students are also included in this category (59). Thus, after assembling and analysing all the available informations on manpower in South Korea, it is

classified as presented in the Table V; though approximations were roughly made, it may be useful for understanding the basic problem of the manpower market in relation to the problem of long-term needs in the course of the economic developing of South Korea.

Table V

**Population and Labour Force in South Korea
1944, 1949, and 1953 (60)
(million)**

	1944 (A)			1949			1953		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Total Population	12.5	12.6	25.1	10.2	10.0	20.2	10.6	10.9	21.5
Persons under 14	5.5	5.3	10.8	4.3	4.1	8.4	4.1	3.9	8.0
Persons over 15: Potential Labour Force	7.0	7.3	14.3	5.9	5.9	11.8	6.5	7.0	13.0
In Labour Force	(B)	(B)	10.3	5.5	3.4	8.9	5.7	3.3	9.0
Not in Labour Force	(B)	(B)	4.0	0.4	2.5	2.9	0.8	3.7	4.5

(A) For all Korea.

(B) Not available

The most striking thing to be noticed in this table is that the rate of growth of the potential labour force was accelerated during the ten year period, showing that the ratio of it to the total population was 57 per cent in 1944, 58.4 in 1949, and 63 in 1953 (61).

As far as the number in labour force is concerned, the tempo of increase during and after the Korean War was likely to be slowed down; it was mostly due to two facts that the increasing number of students (excluding primary students) were almost the active age groups over 14 years, and that the influx of war refugees from the north was characterised by composing of the active females aged over 14 years, who were left home in North Korea until the outbreak of the Korean War.

Thus, in 1953, the estimated total number of persons classified as belonging to the labour force—the working population (including those who happen to be out of a work at the moment when the count is taken)—was 5.7 million males and 3.3 million females. 0.8 million males is likely to be the number in the persons over 14 years old who were not working (mostly because they were continuing their education), and in the persons over 65 who were not able to work or in the persons who were seeking work (mostly because they were too old). But about half of the females in the middle age-groups were working; that is, however, a notably large proportion, for in a wealthy and healthy country most else to do with their time (say, house keeping) then to spent it in earning their living (62).

It is true, however, that a part of the labour supply in South Korea is redundant at present. A review of the historical data on the age-distribution and the projection of probable trends lead to the conclusion that there will be also ample number of workers in South Korea to meet the manpower needs of the future economic development programme, and then that it would be adequate for the reconstructed economy.

Though we shall present the numerical analysis of the social structure of the working population latter roughly estimated, about 7 out of 10 member of it are engaged in farm production, 2 out of remaining 3 are employed in other pursuits and live in the cities and the capital, and the remaining one is now in the armed forces of the country (63), which maintain the continuance of a 20-division ROK Army (64).

This higher proportion of the agricultural employment is explicable by the high labour requirements involved in existing methods of cultivation. But the pressures of the population on land have been so severe for decades that the marginal product of labour of agricultural industry used to be less than the minimum subsistence requirements (65). As can be seen in most of the Far Eastern Countries, farming in South Korea is largely on a family basis; so that redundantly the agricultural labour finds expression not so much in the existence of mass unemployment as in the phenomenon of chronic under-employment effecting the whole population.

Unless it is absorbed elsewhere in the economy, this surplus agricultural labour will increase steadily year by year with the continuous growth of the rural population, and consequently the living standard as a whole, will steadily deteriorate, and also the achievement of a viable and expanding economy may be jeopardized (66). The present estimates of unemployment in South Korea are in dispute but it is agreed that unemployment since the year before 1953, when the actual hostilities was absent, has measurably decreased. Severe destruction of facilities, material shortages, widespread disorder of economic activities (including the Government), diversion of transport and power facilities to military purposes, movements of war refugees, etc., are responsible for accelerating the increase in the number of unemployment during and after the Korean War. During and Since the "Armistice Talks", which started in January 1952 and ended in July 1953, there has been a gradual return of workers to productive employment in both the rural and urban areas, and thus an upward trend in the increase of the number of productive employment reaching at high point in 1953. Nevertheless, the reserve of unemployed within the labour force was still great; the situation of employment during the period between 1949 and 1953 is shown in the Table VI.

Within the unemployed, there were about 300,000 totally unemployed workers—non-farm civilian unemployment—in 1953, 400,000 in 1951, and 300,000 in 1949; the balances—that is, 500,000 persons in 1949, 800,000 in 1951, and 700,000 in 1953—were the farm unemployment.

Table VI
Employment Status of the Labour Force in South Korea (67)
1949-1953 (million)

	Total Labour force	Total employment	Total unemployed
1953	9.0	7.9	1.1
1952	8.2 (a)	6.9	1.3
1951	8.9	7.0	1.2
1949	8.9	8.0	0.9

(a) Estimated as if it was in 1951.

Another characteristic form of under-employment in South Korea, as common to the most Far Eastern Countries (68), is the prevalence of past time idleness, which is wide spread not only over farms, but also over the non-farm occupations. There is no doubt that idle manpower in the labour force, in magnitude as a whole, is far larger than the volume of the total unemployment.

According to the "Nathan Report" (69), the volume of this sort of man year equivalents of unemployment of farms was about 1.6 million in 1949 1.7 million in 1952, and 1.5 million in 1953. These estimates admittedly far from accurate, suggest that a large potential manpower is available and that the economic well-being of many families is vitally affected by the extent to which it can find subsidiary employment and earn supplementary income during the slack seasons.

I can be probably said, however, that increases in agricultural productivity would increase fuller unemployment of manpower. Thus, it is also probably possible that construction labour for irrigation works and other rural investment projects would be amply found among the pool of the idleness part-time labour force in South Korea during the developing period (70). It is obvious that there large numbers of employed under powers in agriculture are not available for full time transfer to non-farm employment during the period of developing agricultural productivity; it is only available when most farm hands will not be needed in the fields—mostly in the winter seasons from the end of year to the early spring, (say March). Thus, the extent to which seasonal farm labour can be used in urban pursuits will, as a practical matter, be limited.

But if industrialization or the development of resources supplementary to agriculture is some what essential to improvement in the conditions of living under the present population and its distribution—to permit higher level of living and greater national welfare—, and if urbanization is also an essential aspect of social and economic improvement paralleling with industrialization, the population directly depend upon agriculture should be reduced a great deal.

To conclude this Chapter. The effects of part and likely future demographic changes are likely in the features to be:

- (a) a heavy burden of child dependents on the productive age-groups (71).
- (b) a potentiality for rapid growth—maintaining the moderately high birth rate and the lowest death rate.
- (c) an even faster increase in the volume of unemployment, other thing being equal and a potentiality for the growth of it in the future.
- (d) and the interned movements, not or refugees, but of peasants, who will flow into the urban areas.

The needs for the demographic adjustment not only on the total number and its structure, but also on the unemployment and under-employment, especially the agricultural unemployment and under-employment, must be accomplished, basically and essentially, in the course of developing economy in South Korea.

If, unfortunately, fertility remains unchanged or altered very slowly (72).—as many as with the same age-structure—, if the unemployment and under employment also remains unchanged or altered very slowly, the resulting wider gulf between births and deaths and between the labour force and the employed may jeopardize the achievement of the projects to develop and to expand the South Korean economy.

(1) The Japanese had planned census for 1920 but gave the project up as a result of the demonstrations for an independent Korea of March 1, 1919. According to non-official estimates, the population of Korea in 1675 was 4.7 million, 7.0 in 1726, 7.2 in 1777, and 7.6 in 1807. Office of Public Information; A Hand Book of Korea, p. 20.

(2) United Nations; Demographic Statistics, 1950-55 Resume Statistique De L' Empire Du Japon 44th Annee, Tokyo, 1930, p. 5.

(3) United Nations; Economic Survey of Asia and the Far East, 1949, Chapt. XIII p. 26.

(4) Warren Thompson; Population and Peace in the Pacific, University of Chicago Press. p. 99.

(5) In both 1949 and 1955, the census was taken only for the Korean population of the area South of the 38th Parallel. But the detail of the census for 1949 can be available in limited because of the missing in the Korean-war Period, and the detail of 1955 is now coming out.

(6) It is said that the population of South Korea increased by 25 per cent between 1945 and 1950 in "An Economic Programme For Korean Reconstruction" (United Nations, 1954, so called "Nathan Report").

(7) The densities of population of the main countries in the Far East can be seen as follows, included also North Korea.

**Population Area and Densities
Estimates of mid-year**

Countires	Population 1954 (in million)	Area (in thousands sq. (Kilomatre)	Density (in thousand sq. (Kilomatre)
Burma	19.2	678	28
India	377.0	3,288	115
Japan	88.0	370	238
Korea	30.0	221	138
South Korea	21.7	94	232
North Korea	8.3	127	65
Pakistan	80.2	944	85
Thailand	19.9	514	39

Source: United Nations; Demographic Statistics, 1955

(8) United Nations; Demographic Statistics, 1955.

(9) See below in more detail.

(10) Irene B. Taeuber, George W. Barclay: "Korea and the Koreans in the North-east Asian Region;" Population Index, October, 1950, Vol. 16, No. 4, p. 278.

(11) Office of Public Information; Hand Book of Korea.

(12) This was the reason why the magnitude of influxes of Korea into Manchuria was much greater in 1930's than ever before, jumping, in a decade, by 90 per cent to over 1.1 million in 1940.

(13) (See bellow chapter Two: Agriculture)

(14) The first "Compulsory Military Service", "Chohei" of Korea Youth was executed in September of 1944. Before this there were some Korean who had served as "voluntary."

(15) Iren B. Taeuber, George W. Barclay: ibid p. p. 285-6 United Nations: Economic Survey of Asia and the Far East, 1950. Chapter II, p. p. 50-51.

Public and Professional services	38.1
Commerce	23.4
Other Occupations	2.9
Non Occupation	4.0
Total	100.0

(26) United Nations; Economic Survey, 1948 *ibid.*, Chapt., VII, p. 115.

(27) Since the angarin reform of South Korea was executed since 1949, it was difficult for those war refugees, who have mostly engaged in agriculture in the North, to get a plot of arable land, and then to work on it.

(28) Korea Statistical Year Book; Republic of Korea; 1952 and 1955, Korean censuses for 1949 and 1955.

United Nations; Demographic Year Book 1952, New York, 1952, p. 23.

(29) George Maccun; Korea Today, p. 30

(30) It seems to me that here is the place where we can see, in more detail, the urbanization during the 35 year period under the Japanese occupation. It was likely to be that urban density in Korea have tended to be associated directly with rural density, for the great commercial and industrial cities developed in the low areas and along the seashores or the water ways. While certain cities have evolved as religious centres or for political or military purposes, the major function of most of the sizeable cities has been economic.

In general, as can be seen from most countries of the Far East, the urban population has been dependent upon food and raw materials produced in the rural area, and in return they have produced consumption goods and services, the basic economic differentiation of rural and urban population is to be found in the types of economic activity in which they are engaged, that is, the rural people in agricultural activities, while the urban in trades, manufacturing, and other types of non-agricultural activities. The following figures show, to the some extent, the development of urbanization in Korea and its relationship to the changes in the social structure of the population.

The Korean Population by percentage of rural and urban residents, 1920-1940.

Year	Percentage of Urban	Percentage of Rural	Rate of decreasing in the Rural residents	Percentage of agriculture (a) Decrease	Rate of
1920					
1925	3.4	96.6	100	83.1 (b)	100
1930	4.4	95.6	99	80.5	97
1935	5.6	94.4	97	78.6(c)	95
1940	10.0	90.0	93	95.6(d)	91

- (a) Including also forestry and fishing
- (b) Figure for 1926
- (c) Figure for 1934
- (d) Figure for 1938

**Source: Korea Statistical Year Book 1952, 1955
Bank of Korea; Economic Survey 1949-55**

From this table, it can be seen that industrialization made so slight in road in Korea until 1935 that urbanization had very little attractive power, while the urban population increased from about 1.2 million to 2.4 million in the only five year period between 1935 and 1940. This was mainly due to the fact that industrialization made only rapid during the period when the Japanese war preparation had reached at its peaks.

(31) The estimated gross reproduction rates for census years was 3.5 in 1925, 3.4-1930 and 1935, and 3.3 in 1944.

Population Index: vol 10. No. 4., October 1944, p. 239.

(32) The level of birth rates and death rates for various countries in the Far East is composed following table during the pre and post war periods so far as the available data and estimates permit. The pattern of the data indicates that there has been a general decline in mortality in these countries, but relatively unchanged in fertility with the exception of Japan, where a definite decline of fertility has occurred over three decades 1920-1953, for which Japan has reliable data, rates declining from a moderate level of 35 per thousand persons per annum in 1920-1929 to 28 in 1950 and to 20.1 in 1954.

**Birth Rates and Death Rates of
Selected Countries in the Far East**

	1920-1924		1930-1934		1935-1944		1945-1954	
	Average		Average		Average		Average	
	Birth	Death	Birth	Death	Birth	Death	Birth	Death
India	33.0	26.8	34.0	23.4	31.4	22.5	26.2(a)	17.4(a)
Taiwan	41.8	25.8	45.5	20.6	43.3	19.2(c)	45.7(b)	10.0(d)
Japan	35.0	23.0	31.8	18.1	29.6	17.8	26.8	11.3(e)
Thailand	27.7	15.1	34.6	16.3	35.0	16.2	28.0	11.7 (f)

- (a) For the period between 1945 and 1952
- (b) For the period between 1950 and 1954
- (c) For the period between 1935 and 1943
- (d) For the period between 1950 and 1954
- (e) Excluding 1945
- (f) For the period between 1945 and 1953

Source: United Nations; Statistical Year Book 1949-50 and 1955.

- (33) United Nations; Demographic Year Book 1954, and 1955.
- (34) Warren Thompson; *ibid.*, p.p. 99-102.
- (35) George Maccun said in his "Korea Today";
 "Although the population of Korea evidenced a rapid rate of growth in the Japanese period, it is perhaps some what misleading to describe this trend as the product of a so-called "Oriental" birth rate and an accidental death rate. While it is true that Japanese administration in Korea was accompanied by some reduction in the incidence of epidemic disease and a regularization of the food supply, the available figures indicate that the accomplishments in these fields was of very limited scope. Privately conducted survey covering the period from 1926 to 1935 revealed that official mortality tables grossly underestimated the death rate"—George Maccun; *ibid.*, p. 25.
- (36) Economic Counsel Board, Japanese Government: Economic Survey of Japan (1953-1954); p. 116.
 United Nations; Economic Bulletin for Asia and the Far East; Vol. VI. No. 1., p. 3.
- (37) John Richard, Hicks; The Social Framework, *ibid.*, pp. 40-41.
- (38) United Nations; Demographic Year Book 1954, and 1955.
 Japanese Censuses, 1910-1950.
- (39) United Nations; Economic Bulletin, *ibid.*, p. p. 3-4
- (40) See below footnote
- (41) United Nations; Economic Bulletin, *ibid.*, p. 3
- (42) The War dead was reported by the Government of the Republic of Korea in detail as follows;

The war dead classified (in thousands)

	Total	Dead	Kidna- pped	Killed	miss- ing	pr- soners
Total	943	267	83	123	404	66
South Korean Civilian (b)	741	237	83	123	298	
South Korean Armed Forces (a)	202	30			106	66

(a) Figures for as of 30 April, 1952
 (b) Figures for as of 31 March, 1952

Source:

Statistics Bureau, Office of Public Information,
 Republic of Korea, Statistical Tabulation,

- (43) J.R. Hicks, *ibid.*, American 2nd Edition, 1955, p. 57
- (44) J.R. Hicks, *ibid.*, 1952, p. 46
- (45) J.R. Hicks, *ibid.*, 1952, p. p. 46-7
- (46) a) Korea Statistical Year Book 1952 and 1955
b) Bank of Korean Reconstruction; Economic Survey 1955; Statistics part, p. p. 1060-1
- (47) This is the characteristic figure in the Far Eastern countries, United Nations; Economic Survey, *ibid.*, 1949, Chapt XII. p. 319, "The outstanding characteristic of the age-distribution in the AFE region is the high proportion of children under fifteen years of age, in comparison with the number of adults. It has been estimated that approximately 40 percent of the population of the region was under fifteen years of age about 1948. The same age-groups constituted between 24 and 30 per cent of the total population of the United States, Canada, Oceania, North-west Central Europe and Southern Europe about 1947"
- (48) See above p. p. 19-24
- (49) See above p. p. 678
- (50) See above p. 10
- (51) See above p. 24
- (52) See above p. 24
- (53) See below
- (54) Korea Statistical Year Book, 1952, p. 33
- (55) J.R. Hicks; *ibid.*, American 2nd Edition, p. 59
- (56) a) Irene B. Taeuber, George W. Barclay; *ibid.*, p. p. 270-2
"One fifth of the first birth occurred to women below age 20, and three-fourths were to women below age 25, over two thirds of the birth to women aged 30 to 34 were fourth order or above ; 8 per cent were seventh or higher orders".
b) Korean Statistical Year Book, 1952, p. 33
The birth ages of mothers and the births in 1948 can be summarised as follows;
- | Ages of mothers | Number of births
(in thousands) |
|------------------|------------------------------------|
| Under 20 | 16 |
| Over 20 Under 29 | 188 |
| Over 30 under 39 | 130 |
| Over 40 | 38 |
- (57) United Nations; Economic Survey for Asia and the Far East, 1950, Chapter II., p. 66
- (58) See above p. 25.
- (59) The number of students (secondary and higher) who are active and

seems belong to the age-groups over 14 years has been rapidly increased since 1945; it was totaled at 87 thousand in 1945, 238 1947, 507 in 1952, and 871 in 1954.

- (60) Korean Statistical Year Book 1952, and 1955.
Korean census for 1944, and South Korean census for 1949.
- (61) The rate of that of the Japanese was 66 per cent in 1949, and 68 in 1953.
- (62) Number of the Female working population (in million)

	Female over 14 years	Total economi- cally active Female	Percentage
Japan (1954)	30.2	16.8	55%
United Kingdom (1950)	16.2	6.9	43%
India (1951)	107.2	16.3	16%
Thailand (1947)	5.0	4.3	86%
South Korea (1953)	7.0	3.3	47%
United States (1950)	56.0	16.5	29%

Source: United Nation: Demographic year book 1949-55
Statistical year book 1949-55

- (63) United Nations: An Economic Programme for Reconstruction, p. 199.
- (64) John P. Lewis: Reconstruction and Development in South Korea, p. 81.
- (65) Sung Jae Koh: "The Structure of Korean Economy", Jaejung, Vol. 4. No. 12., pp 36-40
- (66) United Nations: Economic Survey (1950) *ibid.*, Chapter II, p. 66.
- (67) Korean Statistical Year Book 1952 and 1955.
Bank of Korean Reconstruction: Economic Survey 1955.
Statistical part; pp 1064-65.
- (68) For example,
"In India a jute and rice growers generally have a period of idleness of seven and a half to nine months, and in some parts of the country the period of idleness in agriculture is estimated at 120 to 200 days per year."
United Nation: Economic Survey, 1950; *ibid.*, Chapt. II p. 167.
- (69) United Nations: An Economic Programme for Korean Reconstruction, p. 1948.
- (70) United Nation; *ibid.*, p. 201
John P. Lewis; *ibid.*, p. 81
- (71) United Nation; Economic Bulletin., *ibid.*, pp. 3-5

(72) The mortality will be, to some extent, assumed to be decline by the insurances of the government of the Republic of Korea and the cooperation of the international organization.