

A Statistical Review of Changes in 'One Person & Couple' Households including the Elderly in Japan and Korea

Bae, Jeong-In Andong National University

1. Introduction

1) Purpose of Research

The phenomenon of population aging, which is caused by longer expected life spans and a lower birth rate, is becoming an important social issue. The U.N. defines an aging society as one in which over 7% of the total population is age 65 or more. For Korea in 1995, the figure was 5.9%, and the National Statistical Office¹⁾ predicts that this will rise to 6.8% in 2000, and 8.2% in 2005. Therefore, it must be addressed the social issues caused by an aging population.

This study intended to examine the phenomenon of population aging from the point of view of housing problems. That is, it will focus on household structure, the most fundamental materials relating to housing. Household structure is closely related with the demand for housing. Research focusing on trends in transition of the number of residents in a particular household will be useful not only for the past, but also for the present and future too. In this respect, household structure provides the basic materials necessary for research about housing problems. So far, research about the housing problems of the elderly in Korea has focused on three-generation households and universal design, in order to improve the lives of disabled elderly people. A significant amount of academic work has been done in this area, but there has been almost no research about to what extent and where housing for the elderly should be provided. The purpose of this study was to divide and organize data related to transition of the number of residents in elderly married couple households and single-member elderly resident households, the basic materials for the supply of housing. It is expected to continue research on the basis of cities and country towns.

This study also compared the transition of the characteristics of elderly married

1) The National Statistical Office of the Republic of Korea, *Changes to the Korean Population Structure and Issues of Social Policy*. 1997: p. 78.

couples and one-person households in Korea with those in Japan. The reasons for choosing Japan are as follows. First, when trying to reveal the characteristics of the object being studied, it is easier to do so if the objects are appropriate for comparison. Second, Japan is about 25 years ahead of Korea in terms of life expectancy projections, its household composition is similar to Korea's,²⁾ and aging has proceeded rapidly in Japan,³⁾ so it will be appropriate for comparison with Korea. The differences between the two countries which have similar population structures, can be thought of as Korean characteristics. Third, in Korea, studies about housing policies for the elderly usually involve case studies of advanced countries, and for this study, the researcher has chosen Japan. Elderly single-member and married couple households will be the chief recipients of housing policies. Outlining the similarities and differences about trends in transition of Japan and Korea will produce important basic reference resources.

Therefore, the purposes of this study were 1) to collate information related to transition of household structure, which includes the elderly in Korea, by observing elderly single-member and married couple households ; 2) to reveal the characteristics of elderly households in Korea through a comparison with Japan.

2) Research methods

The best materials for analyzing transition of household structure, including that of the elderly in Korea and Japan, are the Korean census reports, and Japan's reports on population census.

As the surveys on national scales, the scale of these reports is incomparably larger than other types of the surveys, so they provide a very high degree of accuracy and representativeness. The researcher used the *Population and Housing Census Reports* and *Final Reports of Population Census* as research materials for these reasons.

Except for 1960, when the Korean population and housing census was made from only 20% of the population, and in 1966, when the figure was 10%, censuses have covered the entire population. Japan's reports of population census included the whole country in 1995. Until 1990, censuses were carried out from either the

2) Kim, Tae-il, "Research into expectations about housing demand by age group and aging trends, using population structure as a variable: A comparative analysis of Japan and Korea." *Journal of the Architectural Institute of Korea* (November 1994). p. 38.

3) In Japan, those aged over 65 made up 5.7 and 6.3% of the total population in 1960 and 1965 respectively, while in Korea, that figure was 5.9% in 1995. Therefore, we can see that Korea began aging thirty years earlier than Japan. In 1995, 14.6% of the total Japanese population was in this age group (18,260,822 out of 125,439,273), or 2.5 times the rate of Korea.

entire population or 20% thereof. The 1960 census covered only 1% of the population. However, when examining transition of household structure, the categories of these materials was inconsistent with the study's research perspective, so the researcher of this study rearranged them to better fit the needs of the study.

This study examined transition of the number of residents in households by age group, in order to analyze the process of transition of elderly single-member and married couple households. Also, in order to find more accurate trends about this transition, this study examined the transition in the proportion of elderly single-member and married couple households in each age group, and also that proportion in each birth cohort.

II. Changes in Household Composition

Korean population and housing census reports firstly divide household structure into single-generation households, two-generation households, three-generation households, four or more-generation households, and one-person households. They are then again divided into subdivisions and tallied. Japanese census reports firstly divide households into nuclear family households, blood relatives' households, non-blood relatives' households, and independent households. These categories are then redivided and tallied in subdivisions.⁴⁾ However, the researcher is unable to carry out in-depth analysis of the lives of the elderly using these categories. The main aim of this study is to examine the household composition of single elderly and the married couples. It has recompiled the census statistics into 'One person and couple' households, 'Married couples living with parents', and 'Parents living with unmarried children, and Others'. The researcher examined the changes in the number of households, and the results appear in Tables 1 and 2.

Proportion of the living with unmarried children, and others in Korea showed a small increase from 68.6% in 1966, then decreased slightly (3%) by 1995, when they numbered 65.6%. Overall, this category had not been changed very much. In Japan, there was a similar trend, with the figures for 1960 and 1995 being 50.9% and 44.3% respectively, a decrease of 6.6% for 35 years. There was no great change over these three decades.

However, 'One person and couple' households in Korea rose rapidly by 16.8%, from 6.7% in 1966 to 23.5% in 1995. In Japan, the increase over the period from 1960 to 1995 was 19.9% (23.1% to 43.0%).

4) Category names differed slightly depending on the year in which a census was carried out, but there was no change in the larger Scale. Category names used in this paper were based on the 1995 censuses.

For the category of 'Parents living with unmarried children, and Others', there was no great change between the two countries. The increase in the number of 'One person and couple' households in both Korea and Japan means that the proportion of the other part of the category (Parents living with married couple) decreased significantly. Actually, in Korea it decreased from 24.7% in 1966 to 10.9% in 1995, a drop of 13.8%. For Japan, this decrease was 13.3%, with the 1960 figure of 26.0% dropping to 12.7% by 1995.

Table 1. Changes of Household Composition for All Ages (Korea)

Year	Total	One person/ couples			Married couple + parents			Parents + unmarried child/ Other		
		One person	Couples	Total	Couple + parents	3,4generation	Total	Parents + unm. child	Other	Total
1960	4357600	100210	-		-	1245525		-		
		2.3%				28.6%				
1966	5057030	117460	224010	341470	69880	1178700	1248580	3049400	417580	3466980
		2.3%	4.4%	6.7%	1.4%	23.3%	24.7%	60.3%	8.3%	68.6%
1970	5576277	-	303748		77318	1294149	1371467	3684893		
			5.4%		1.4%	23.2%	24.6%	66.1%		
1975	6647778	281007	317908	598915	34492	1339718	1374210	4181313	493340	4674653
		4.2%	4.8%	9%	0.5%	20.2%	20.7%	20.7%	7.4%	70.3%
1980	7969201	382743	478458	861201	47237	1353745	1400982	4966863	740155	5707018
		4.8%	6.0%	10.8%	0.6%	17.0%	17.6%	62.3%	9.3%	71.6%
1985	9571361	660941	680621	1341562	66879	1422830	1489709	5905606	834484	6740090
		6.9%	7.1%	14.0%	0.7%	14.9%	15.6%	61.7%	8.7%	70.4%
1990	11354540	1021481	942479	1963960	92158	1418091	1510249	6783848	1096483	7880331
		9.0%	8.3%	17.3%	0.8%	12.5%	13.3%	59.7%	9.7%	69.4%
1995	12958181	1642406	1398508	3040914	121013	1291864	1412877	7487980	1016410	8504390
		12.7%	10.8%	23.5%	0.9%	10.0%	10.9%	57.8%	7.8%	65.6%

Source: Population and housing census reports 1960,1966,1970,1975,1980,1985,1990,1995

Table 3 examined the composition of household structures, with those aged 65 or more, in Korea and Japan using the same categories as in Tables 1 and 2.⁵⁾

'Parents and unmarried children/Other' households showed no great change, with 20% in Korea and 22.3% in Japan, and the prevalence of 'Living with married children' households was high in Korea, with 9%. The rate of 'single-member or couple' households was high in Japan (7.6%), but the 19% difference between the two countries has reduced greatly from 19.5% in Tables 1 and 2. That is, the rate of elderly people with age 65 and over among Korean 'one person or couple' households was higher than that in Japan.

Table 4 shows the household composition of people with age 65 and over in Korea (1995) into *dong*, *eup* and *myon*. The most notable difference was the rate of one person and couples in *myon* was 23.7% higher than in *dong* - almost twice

5) In Korea, there are no statistics for household composition of families, including the elderly, except for 1995, so the researcher cannot examine changes between different years.

Table 2. Changes of Household Composition for All Ages (Japan)

Year	Total	One person/ couples			Married couples + parents			Parents + unmarried child/ Other		
		One person	Couple	Total	Couple + parents	3,4genera-tion	Total	Parents + unnm. child	Other	Total
1960	22123900	3471400	1630300	5101700	784000	4970300	5754300	1044060	827300	11267900
		15.7%	7.4%	23.1%	3.5%	22.5%	26.0%	47.2%	3.7%	50.9%
1970	30297014	6137443	2971840	9109283	603675	4875789	5479464	14811364	896903	15708267
		20.3%	9.8%	30.1%	2.0%	16.1%	18.1%	48.9%	3.0%	51.8%
1975	33595728	6561316	3880428	10441744	718223	4961911	5680134	16620992	852858	17473850
		19.5%	11.6%	31.1%	2.1%	14.8%	16.9%	49.55%	2.5%	52.0%
1980	35823609	7105246	4460240	11565486	769107	5223680	5992787	17474692	790644	18265336
		19.8%	12.5%	32.3%	2.1%	14.6%	16.7%	48.8%	2.2%	51.0%
1985	37979984	7894636	5211892	13106528	836113	5260511	6096624	17941802	835030	18776832
		20.8%	13.7%	34.5%	2.2%	13.9%	16.1%	47.2%	2.2%	49.4%
1990	40670475	9389660	6293858	15683518	897005	4941311	5838316	18261318	887323	19148641
		23.1%	15.5%	38.6%	2.2%	12.1%	14.4%	44.9%	2.2%	47.1%
1995	43899923	11239389	7619082	18858471	990679	4594265	5584944	18470943	985565	19456508
		25.6%	17.4%	43.0%	2.3%	10.5%	12.7%	42.1%	2.2%	44.3%

Source: Japanese census reports 1995. The figures for 1960-1990 were reproduced from Hideyo Yamada and Shingo Tamaki, "A statistical analysis on the changes in the structure of households with the elderly", JArchit.Plann.Environ.Eng., AIJ, No.483, 199-210, May, 1996.

Table 3. Composition of Households, with Elder (65+) in Korea and Japan, 1995

Country	Total	One person/couples			Married couple - parents			Parents + unmarried child/ Other		
		One person	Couple	Total	Couple + parents	3,4genera-tion	Total	Parents + unnm. child	Other	Total
Kor.	2182187	349020	386282	735302	96181	914248	1010429	245521	190935	436456
		16.0%	17.7%	33.7%	4.4%	41.9%	46.3%	11.3%	8.7%	20.0%
Jap.	12780231	2202160	3041791	5243957	847378	3844428	4691806	2320812	523656	2844468
		17.2%	23.8%	41.0%	6.6%	30.1%	36.7%	18.2%	4.1%	22.3%

Source: Korea population and housing census reports, 1995; Japanese census report, 1995.

the prevalence. When the researcher compares the rate of 'one person and couple' households among Korean elderly people to that of Japan, the overall national average was lower, but for *myon*, it was higher.

Another interesting point was that the rate of households living together was 17.7% higher in *dong* than in *myon*. It has been widely recognized that country towns generally have a higher rate of living together than cities.⁶⁾ However, the rate

6) Kim Nam-il *et al* notes that although the rate of families living together with their parents was higher in *myon* (21.36%) than in cities (17.71%) in 1995, even country towns are moving towards the nuclear family model. The rate of living together in the country is still higher than in the cities (National Statistical Office Republic of Korea, 1997a: pp. 116- 118).

of the households with the elderly was higher in the country than that of the city,⁷⁾ so the share of the total number of households living together rose. Statistics covering all age groups must interpret this as the rate of living together in country towns having increased over that in cities. When the researcher studies households with the elderly, the rate of living together in cities is 1.5 times as high as that of country towns.⁸⁾ That is, on average elderly people living in the cities are 1.5 times higher than those who live in country towns to live with their married children in general.

**Table 4. Composition of Households, with Elder (65+)
in Korean *Dong*, *Eup* and *Myon* (1995)**

Admin-istrative district	Total	One person /couple			Married couple + parents			Parents + unmarried child/ Other		
		One Person	Couple	Total	Couple + parents	3,4genera-tion	Total	Parents + unnm. child	Other	Total
dong	1281174	150044	167611	317655	37859	640985	678844	167909	11676	284675
		11.7%	13.1%	24.8%	3.0%	50.0%	53.0%	13.1%	9.1%	22.2%
eup	229220	45622	45993	91615	11588	83078	94666	23214	19725	42939
		19.9%	20.1%	40.0%	5.1%	36.2%	41.3%	10.1%	8.6%	18.7%
m'n.	671793	153354	172678	326032	46734	190185	236919	54398	54444	108842
		22.8%	25.7%	48.5%	7.0%	28.3%	35.3%	8.1%	8.1%	16.2%

Source: Population and census report, 1995

In order to verify if the phenomenon of the higher rate of one person and married couple households among elderly people being higher in country towns than in the cities is unique to Korea, Table 5 explained annual changes in one person and married couple households of Japanese elderly people into cities and rural counties.⁹⁾

Country towns in Japan did not tend to have a higher rate of one person and married couples' households than cities. Overall, the rate in the cities was higher. The difference between city and country was smaller than that in Korea. It means that the sharp increase in the number of one person and married couples' households living in country towns was a unique characteristic of Korean population.

7) The rate of elderly people aged over 65 was 4.3% in *dong*, and 13.9% in *myon*.

8) Country towns, fishing villages and mountains villages are all included in *myon*, but for the sake of convenience, the term 'country town' is used in this paper.

9) Materials dividing the 1995 Japanese census report into cities and counties are expected to be published in a final report that should be released in the year 2000, so this table presents only the information up until 1990.

Table 5. Number of 'One Person and Couple' Households of Japanese people aged 65 and over, by City and Rural County

Region	1960년		1975년				1980년			
	Total h'holds	One Person	Total no. h'holds	One Person	Couples	Total	Total no. h'holds	One Person	Couples	Total
City	2488700	116700 4.6%	4642761	423144 9.1%	668471 14.4%	1091615 23.5%	5561610	620039 11.1%	957140 17.2%	1577179 28.3%
Rural County	1948500	86500 4.4%	2238160	166115 7.4%	232734 10.4%	398849 17.8%	2516270	214981 8.5%	315293 12.5%	530274 21.0%
Region	1985년				1990년					
	Total h'holds	One Person	Couples	Total	Total no. h'holds	One Person	Couples	Total		
City	6498949	892594 13.7%	1251434 19.3%	2144028 33.0%	7614446	1250174 16.4%	1690098 22.2%	2940272 38.6%		
Rural County	2785034	288129 10.4%	399690 14.4%	687819 24.8%	3115018	373259 12.0%	527777 16.9	901036 28.9%		

Source: Japan, *Final Report of the Population Census*, 1960, 1980, 1990.

III. Trends of One Person and Married Couples' Households by Age Group

In order to examine more closely the process of change in one person and married couples' households, this study inquired into the state of each household, from the aspect of change in the age composition. In Figures 1 and 2, the number of households by age group for one person households was presented by age group. In Japan, one person households were mainly found among young people, but in Korea on the other hand, this trend was not strong in that group. Instead, the one person households were the most common in the group of age 65 and over in Korea. Figures 3 and 4 show the subgroups of Korean one person households into city and *myon*¹⁰⁾, but the overall trend was for cities and *myon* is different. One person households were concentrated among the younger generation, and were being reduced along with increasing age. Those over 50 years old showed a slight increase. Directly opposed to this, there were almost no one person households among the younger generation in *myon*, and they then show an increase after the age of fifty. This trend is strengthening every year, and in 1995, 12.7% of one person households were the elderly (with age 65 and over) in cities, but for *myon*, this figure was 47.6%. Unlike Japan, the thing that created the other peak in the age groups on the graph of Korea's one person households was the one person households of a single elderly person living in *myon*.

10) In 1995, cities were *dong*, and in 1966, *myon* were countries. This is the same as in all the Figure below.

Figures 5 and 6 describe the composition of married couples' households in Japan and Korea.¹¹⁾ In 1966, the younger generation(20-29 age group) showed the highest number of married couples' households in Korea while the older generation(60-64 age group) did not. However, in 1985 there was also a peak amongst the 25-29 age group, and a peak had also definitely formed amongst the 60-64 age group. After this period, young married couples' households have not changed greatly, but a peak has gradually increased for married couples in their sixties. Therefore, it was at the same level as the peak of the 25-29 age group in 1995. That is, the term married couples' households mainly meant young newly married couples, but now that term is also used for elderly couples which have become 'empty nests'. This trend is more prevalent in Japan, and since the 1980s a peak has been reached among the number of elderly married couples' households.

Figures 7 and 8 divide trends in Korean married couples' households into cities and country towns (*myon*). In 1966 a high point was reached in the number of young couples in the cities, and this number decreased as age increased. However, in 1985 a small increase began to appear in the number of elderly couples' households, and this grew every year so that it reached the highest number in 1995. This clearly shows that the number of elderly couples' households has risen. Until now it is noted that young, newly-married couples' households have made up the majority of couples living in the cities. However, in *myon*, the situation is totally different. Prior to 1966 - before industrialization began - young couples(20-25 age group) reported the highest number of married couples and the number of married young couples has gradually decreased from 1966 to 1995. On the other hand, the peak in elderly couples expanded each year, and the creation of new young couples was small but that of elderly couples clearly rose.

IV. Changes in the Rate of Affiliated Households by Birth Cohort

This chapter was to examine only the data about *number* of households, in order to gain a better understanding of the trends within a fixed age group, the distribution of the each age groups for single-member and married couple households respectively were reviewed.

Figures 9 and 10 refer to 'one person' households in Japan and Korea, and show changes in the share of the each age group that one person households occupy. Figures 11 and 12 display the situation in Korean cities and *myon*. Compared to Figures 1 and 2, the share and the number of 'one person' households among the younger generation in Japan was much higher than in Korea. However, for 'one person' households among the older generation, the number of households in Japan

11) The statistics provided for Korea is the number of married couples' households, and that for Japan is the number of people living in married couples' households.

is much higher but the share of elderly 'one person' households in each age group is similar in each country. For *myon*, as in Figure 12, show the share in Korea was higher. In the same way, the number of households in Korea's cities and *myon* both displayed very different trends. In the cities, the rate among the older generation was higher, but there was also a peak among younger people. However, in the *myon*, only the rate among the older generation - which peaks in the 70-74 age group - was rising rapidly, and as a result, 18.3% of those age 65 and over in *myon*, or one person in every 5.5, was a 'one person' household.

In order to examine this fact more closely, Figures 13, 14, and 15 display the changes in the share that each age group holds amongst the total population. The country as a whole and the cities peak in the 25-29 age group, and the rate of 'one person' households decreased. That is, before reaching a marriageable age, the rate of 'one person' households increases, but that rate then decreased after marriage. If when the age group is fixed, the rate of 'one person' households increased with the younger cohort, regardless of the age group. However, for *myon*, once passing the 25-29 age group, the rate did not decrease. That is, the population of each age group decreased, offsetting the decrease in the number of the single-member households due to marriage. The most notable change occurred among the elder generation. The rate among elderly people in both the city and the country rose greatly, and the rate was higher in *myon*. For example, the rate among people born in the 1921-1925 period was 4.4% and 7.3% for cities and the country respectively in 1985, when they reached the 60-64 age bracket. In 1990, when they reached the age of 65-69, the rates were 7.0% and 12.2%, and in 1995, when they were age 70-74, the respective figures were 10.9% and 20.1%.

Figures 16 and 17 show married couples' households in Japan and Korea, and changes in the share of the population in each age group.¹²⁾ In both countries, the rate of married couples' households amongst the younger generation did not change very much, but that of elderly people increased rapidly every year. Compared to Figure 5, the number of married couples' households in Korea had similar peaks for both young and old people, but the rate for elderly people was far higher than that of young people.

Figures 18 and 19 examine the rates of married couples' households in cities and

12) While the graph for Japan has been drawn to display the proportion of the total number of people living in married couples' households in the population of each age group, the graph for Korea displays the number of married couples' households as a proportion of the total population of each age group. Korea only has statistics about the number of people living in married couples' households for 1995, because before that time, statistics were based on the number of households by age group of the household head. As a result, if the researcher want to examine these figures by converting them into the share of people living in married couples' households, couples will be two-member households. If the researcher double the rate of the number of married couples' households, the researcher can roughly estimate the figures.

myon in Korea. In *myon*, the peak for married couples amongst the younger generation gradually weakened, and it was almost non-existent in 1995. On the other hand, elderly couples increased rapidly every year, and for *myon*, the rate was higher than the national average for Japan. Figures 20, 21 and 22 explain that the number of married couples' households increased greatly with the increase in age, and that the increase in *myon* was even higher. For example, when the researchers compare the cohort of those born in 1921-1925 and one person households to cities and *myon*, the researcher see that the rate increases rapidly with age: in 1985 (when these people were 60-64) the respective rates for cities and *myon* were 4.7% and 10.8%; in 1990 (65-69), 8.4% and 17.6%; in 1995 (70-74), 12.0% and 23.0%. Also, the rate of those over fifty in all age groups increased rapidly with a young cohort. That is, the trend towards married couples' households strengthened every year.

V. Conclusion

After examining almost thirty years of annual changes to household composition, the result showed that both Korea and Japan experienced a small decrease in the number of "Parents living with unmarried children/other" households. The number of "Married couples living with parents" decreased dramatically, and "Single resident and couple" households increased sharply. That is, the increase in "Single resident and couple" households increased because of the decrease in the number of "Parents living with unmarried children/other" households.

In particular, the trend towards "Single member and married couple" households in Korean country towns (48.5% in 1995) was higher than that in the cities (24.8% in 1995), and the proportion of "Parents living with unmarried children/other" households was clearly lower for elderly people living in the country (35.3% in 1995) than the city (53% in 1995). The high degree of elderly "Single member and married couple" households in Korean country towns compared to the cities was not evident in Japan. It appeared to be a uniquely Korean characteristic. Thus the issue of housing for elderly "Single member and married couple" households in Korean country towns is relatively serious.

In order to more accurately outline the trends among fixed age groups, this study examined trends into the transition of the proportion of "Single member and married couple" households among each age group of the population. As a result, the ratio of elderly "Single member and married couple" households in Korean country towns was found to be increasing far more quickly than Japan, and as birth cohorts become younger, that ratio increases. That is, the trend towards elderly "Single member and married couple" households strengthens every year.

In general, the issue of the elderly in Korea is less serious than that in Japan. However, this study verified that when it was isolated specific issues regarding the elderly living on their own despite of increasing dependence, Korean country towns were in a more serious situation than Japanese ones. This issue will be more likely to be getting worse in the future.

There has not yet been significant research about the supply of housing for the elderly in Korea, and it is regarded this is because of the low purchasing power of the elderly. However, when the government considers housing to be a social issue, it must strongly implement policies to provide housing for "Single member and married couple" households in country towns, as a form of social welfare policy. The result of this study also suggests that more research is necessary about the housing needs of the elderly in country towns.

VI. References

Jung, Mu-ung *et al.* 1996. "A Study on the Research Trends and Characteristics in the Housing for Elderly". *Journal of the Architectural Institute of Korea* (Vol.12, No.11, pp. 51-61).

Kim, Tae-il. *Research into expectations about housing demand by age group and aging trends, using population structure as a variable: A comparative analysis of Japan and Korea.* *Journal of the Architectural Institute of Korea* (November 1994).

Lee, Ka-ok *et al.* 1989. *Research into the State of Independent Housing for the Elderly.* Korean Population and Welfare Research Institute.

National Statistical Office Republic of Korea, Population and Housing Census Report, 1960, 1966, 1970, 1975, 1980, 1985, 1990, 1995.

_____. 1997a. *Changes and Population Characteristics in Population Movement and Rural Areas.*

_____. 1997b. *Changes to the Korean Population Structure and Issues of Social Policy.*

Statistics Bureau Management and Coordination Agency Government of Japan. 1995. *Reports of Population Census.*

_____. *Final Report of Population Census, 1960, 1980, 1990.*

Yamada, Hideyo *et al.* 1996. "A Statistical Analysis on the Changes in the Structure of Households with the Elderly". *J.Archit.Plann.Environ. Eng., AIJ, No.483, 199-210.*

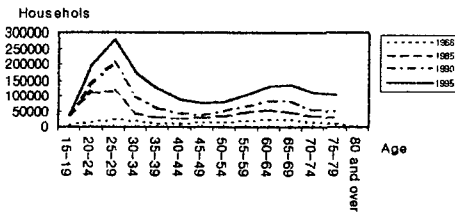


Figure 1: Number of One person Households (Korea)

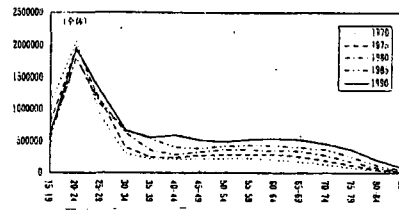


Figure 2: Number of One person Households (Japan)

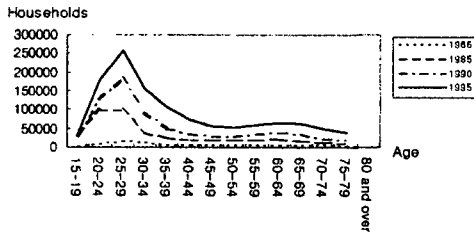


Figure 3: Number of One person Households (Korea, Cities)

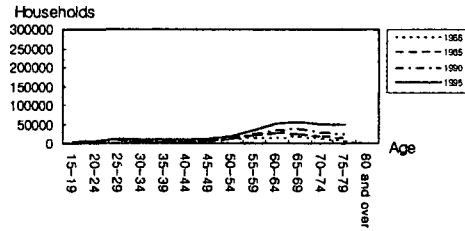


Figure 4: Number of One person Households (Korea, Myon)

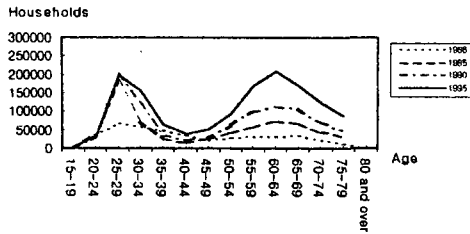


Figure 5: Number of Married Couple Households (Korea)

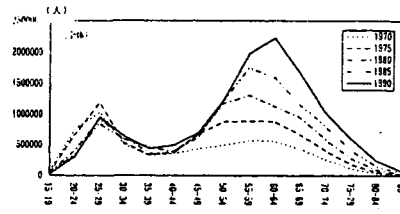


Figure 6: Number of Married Couple Household Members (Japan)

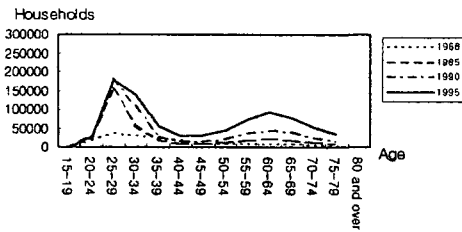


Figure 7: Number of Married Couple Households (Korea, Cities)

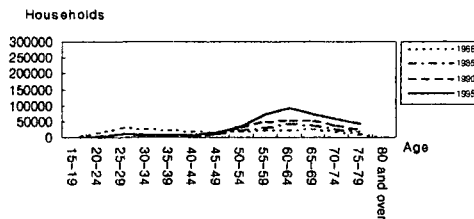


Figure 8: Number of Married Couple Households (Korea, Myon)

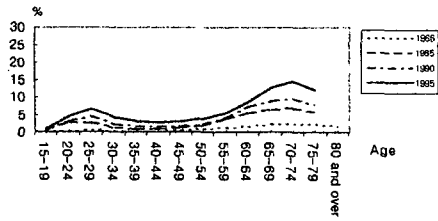


Figure 9: Share of Each Age Group Population (One person Households,Korea)

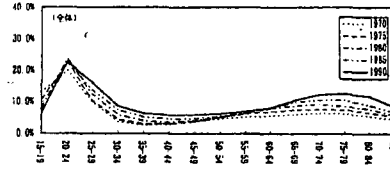


Figure 10:Share of Each Age Group Population (One person Households,Japan)

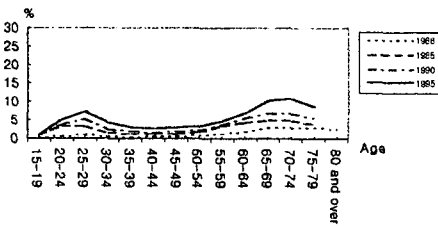


Figure 11: Share of Each Age Group Population(One person Households,Korea,Cities)

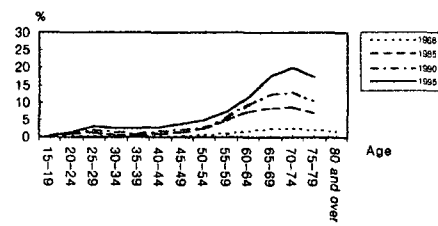


Figure 12:Share of Each Age Group Population (One person Households,Korea,Myon)

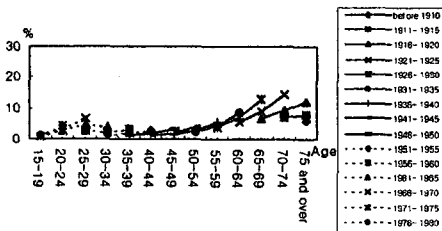


Figure 13: Change in the Share of Population, Based on Composition of Households and Birth Cohort (One person Households, Korea)

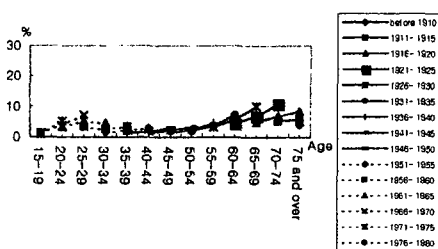


Figure 14: Change in the Share of Population, Based on Composition of Households and Birth Cohort (One person Households, Korea,Cities)

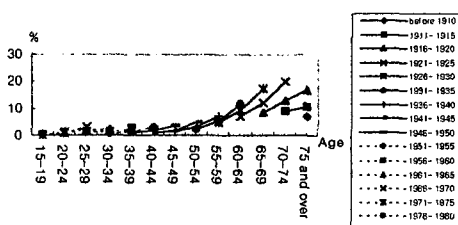


Figure 15: Change in the Share of Population, Based on Composition of Households and Birth Cohort (One person Households,Korea, Myon)

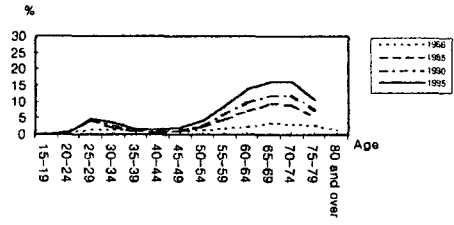


Figure 16: Share of Each Age Group Population (Married Couples, Korea)

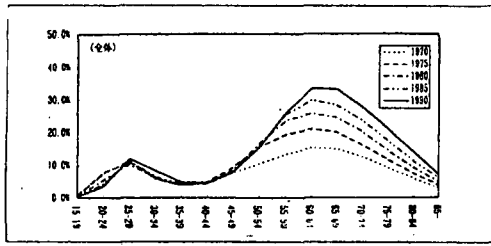


Figure 17: Share of Each Age Group Population (Married Couples, Japan)

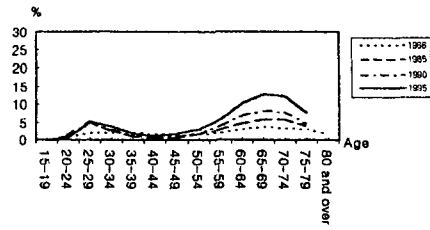


Figure 18: Share of Each Age Group Population (Married Couples, Korea, City)

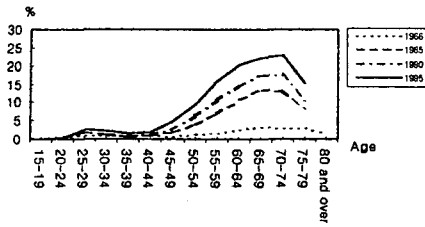


Figure 19: Share of Each Age Group Population (Married Couples, Korea, Myon)

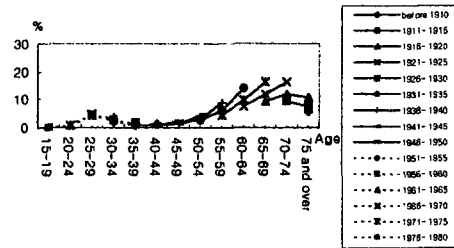


Figure 20: Change in the Share of Population, Based on Household Composition and Cohorts (Married Couples, Korea)

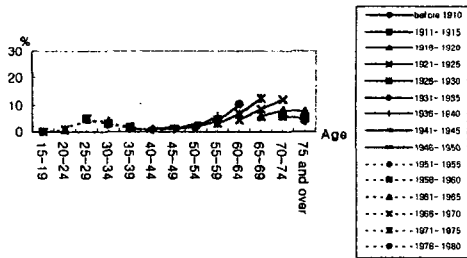


Figure 21: Change in the Share of Population, Based on Household Composition and Cohorts (Married Couples, Korea, City)

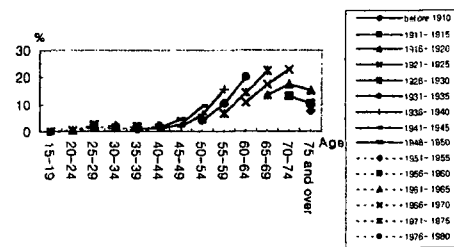


Figure 22: Change in the Share of Population, Based on Household Composition and Cohorts (Married Couples, Korea, Myon)

Nb: Figures 2, 6, 10, 17 were reproduced from Hideo YAMADA and Shingo TAMAKI, A STATISTICAL ANALYSIS ON THE CHANGES IN THE STRUCTURE OF HOUSEHOLDS WITH THE ELDERLY, J.Archit.Plann.Environ.Eng., AIJ, No.483, 199-210, May, 1996