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Foreword

Aging in Japan is published to provide people outside Japan with updated information on aging trends, socioeconomic changes, and policies in Japan.

This booklet consists of three parts. In the first part, Dr. Shigemi Kono (Professor, Reitaku University, former Director General of the Institute of Population Problems, Ministry of Health and Welfare) describes demographic patterns and social situation in Japan. In the second part, Dr. Naohiro Ogawa (Professor, Nihon University, Deputy Director of Nihon University Population Research Institute) discusses the current socioeconomic conditions and the future perspectives. In the final part, Professor Daisaku Maeda (Professor, Japan College of Social Work) focuses on the history of welfare structures and present conditions of social security, health, medical, and social services for the elderly.

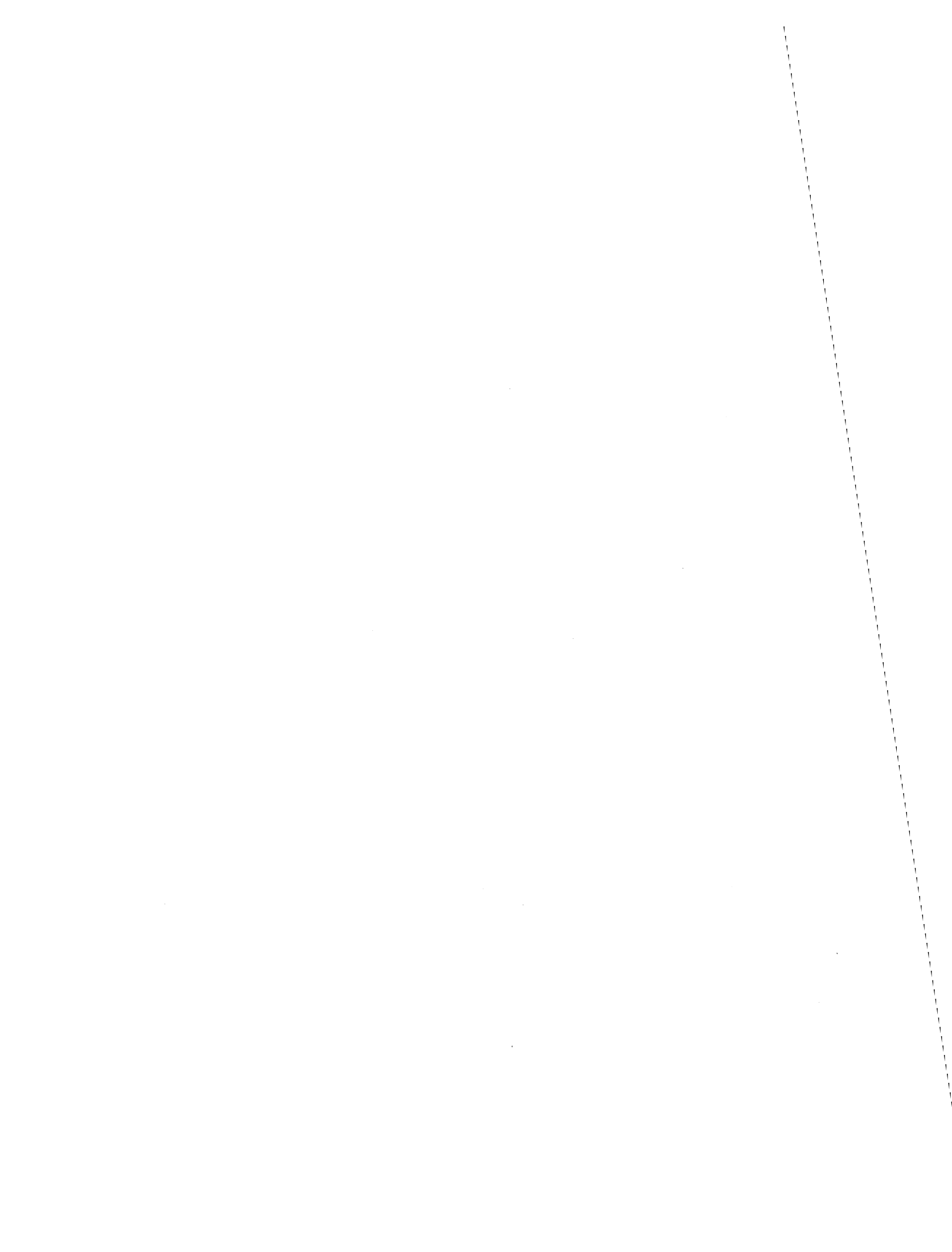
We would like to express our gratitude for their great work and generous cooperation.

Our special thanks also go to The Nippon Foundation, whose grant enabled us to publish this booklet.

Summer 1996



Fumio TAKAGI
Chairman,
Japan Aging Research Center (JARC)



PART I

Demographic Aspects of Population Ageing in Japan

Shigemi KONO
Professor
Reitaku University

Introduction

The term “population ageing” has become a household word for average citizens in Japan. Population ageing is viewed almost unanimously here as a process causing shortages of young labour, sluggish economic growth and higher tax burdens to support social security for the elderly. Population ageing has been considered one of the most crucial demographic and social problems facing contemporary Japan. Actually, the awareness of the seriousness of population ageing came rather prematurely in the 1970s and early 1980s when Japan’s ageing was not in full swing and the elderly population comprised less than 10% of the total population. Most of discussions and arguments dominating those decades were quite pessimistic. However, adverse effects were not immediately apparent and people tired of its discussion of the issue. The advent of the bubble economy let the general public forget the reality of population ageing.

But, in the very recent years after the bubble economy was bust, the people have come to realize that the population ageing is now in full swing. There is a resurgence of keen public interest in its enormous impact upon economic, social, psychological and familial spheres of the Japanese life. Slow growth or non-growth in Japan's economy has shattered people's previously held illusion that a bigger pie of economy allocated to each individual earner could easily afford to shoulder an increasing burden of the outcome of population ageing. When the society enters the fin de siècle, there is a growing sense of urgent necessity among the Japanese people to reassess the reality of the trend and to formulate a more innovative and balanced strategy for the forthcoming 21st century.

The first section attempts to describe the general trend of population ageing in Japan and elucidate its several salient features such as rapidity in the speed of population ageing in reference to various indicators of population ageing. Then, the section will go on discussing the factors causing the population ageing and show that fertility is the one which has played the most important role in getting population ageing. In very recent years, however, fertility has fallen to the unprecedentedly low level, hence, to the general reader's interest, a few paragraphs will be devoted to dealing with determinants of the currently very low level of fertility.

The second section is related to the question of the transformation of the family in the face of population ageing. It is extremely interesting to observe how much demographic changes bring about changes in the size and structure of the family and household.

Finally, towards the end of the second section, the paper would discuss what would be good about at the imminent arrival of an aged society. The section would like to evoke some new ideas which might interest the general reader.

1. Demography and Population Ageing in Japan

A. Change in Age Profile

In discussing the general trend in population ageing, it is useful to compare various age profiles, or what has conventionally been called “population pyramid”, in different years which are indicative of demographic transition at different stages that Japan has undergone. “Demographic transition” is here taken to mean a process of demographic transformation from high birth and death rate to low birth and death rate along with the course of modernization and economic and social development.

Figures 1 and **2** show age profiles of the population of Japan in 1920 and 1994. **Figures 3** and **4** show age profiles for the years 2025 and 2050. The age profiles for 1920 and 1994 represent the actual ones, but the other two are projected ones based on the latest population projections prepared by the Institute of Population Problems (1992).

These four age profiles depict dramatic changes occurred or occurring according to different demographic regimes over a long span of time covering 130 years, and the general reader will get from these graphs some ideas about population ageing that has been going on along with the demographic transition.

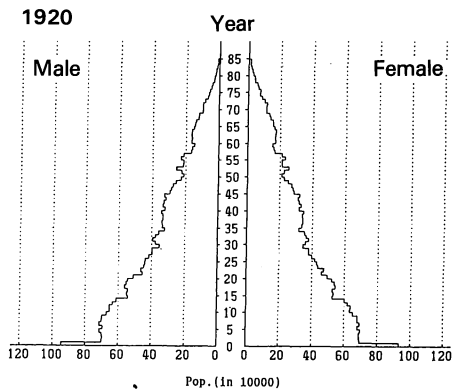
The first one for 1920 in **Figure 1** looks really like a “pyramid”. Although the shape is of ruggedness with minor dents and bumps, the general contour is unmistakably bottom-heavy, triangle-shaped and is typical of present-day developing countries.

On the other hand, **Figure 2** shows the profile for the year 1994 dramatically divergent from the above-mentioned profile for 1920. It looks actually a quite complex shape resembling a Japanese war helmet (kabuto) and clearly tracing the vestige of World War II. Yet, there are one or two clear traits which are characterized by its shrinking lower (younger) sector of the population and by a very large body of middle and early-elderly age groups. This population pyramid may be said to be the one starting to experience a considerable degree of population ageing.

The age profile for the year 2025 shows a vicissitude of age structure which is top-heavy and characterized by two salient bulges, one in the middle and the other in the old ages. Here, population ageing is coming to its climax.

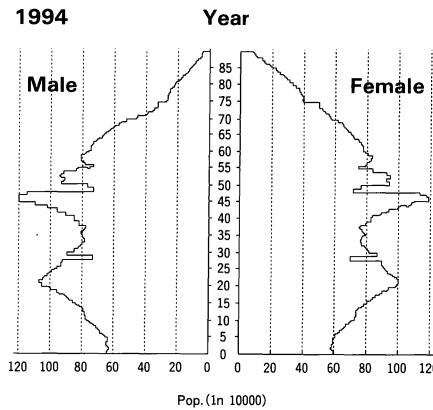
The last age profile for the year 2050 represents a more rectangular shape though it still has an accordion-like vestige of echo effects of past baby booms and baby busts. The last one might draw a contour line pretty

Figure 1. Age Profile of the Population of Japan : 1920



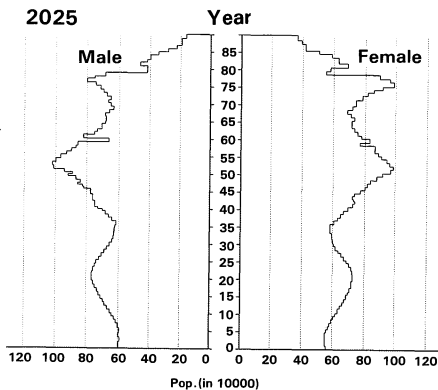
Source :Statistical Bureau, Office of the Prime Minister. *Population Census, 1920.*

Figure 2. Age Profile of the Population of Japan : 1994



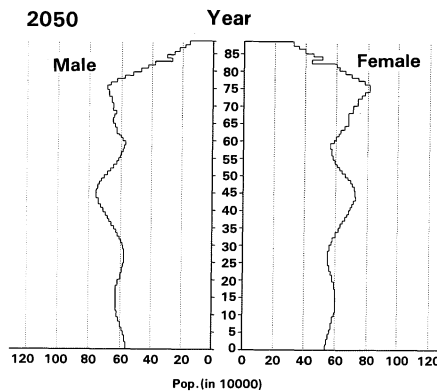
Source :Institute of Population Problems, Ministry of Health and Welfare. *Jinko Tokei Shiryoshu 1995 (Latest Demographic Statistics 1995.)*

Figure 3. Age Profile of the Population of Japan : 2025



Source :Institute of Population Problems, Ministry of Health and Welfare. *Nihon no Shorai Suikei Jinko, 1992.*

Figure 4. Age Profile of the Population of Japan : 2050



Source :See Figure 3.

close to that of a stable population which has been generated by many year's interactions of constant low fertility and constant low mortality with the originally rugged population. The reader may be quite impressed with that picture in which the accordion-shaped population contour remains quite tenaciously for so many years, nearly one century long. Anyhow, here population ageing will start getting stabilized as a result of population dynamics operated for many years.

Population ageing can be measured by various indices. The most popular one deals with the proportion of aged population which is aged 65 and over. If this proportion increases, it is called population ageing. If the proportion stays too small, however, say five percent or less, we do not usually call the population "aged" or "ageing". According to the United Nations' report published in 1956, the population is arbitrarily defined as "aged" when the percentage of old people aged 65 and over exceeds seven percent (United Nations, 1956). In view of the present levels of the population ageing in the developed countries, however, the figure of seven percent seems too small. In the present author's view, the threshold value of 10 percent seems more appropriate. As another index, a use is made of age dependency ratio for the elderly, that is the ratio of the elderly population over the working-age population of 15-64 or 20-64 years. The third often-used indicator is the elderly-children ratio, that is the ratio of the elderly over the children. **Tables 1** and **2** show the trends in the age structure of population in Japan, one for the past and the other for future. By any measure, Japan is experiencing an increasingly pronounced and rapid process of population ageing.

Let us discuss and explain a little bit more of the trends in these indicators.

B. Proportion of the Aged

As already mentioned, the age composition of Japan has undergone a very sharp transformation, from a broad-based, youth-heavy population to a more urn-shaped, top-heavy ageing population, in a relatively short period of time. **Table 1** shows the change in the age composition in terms of various indicators for the period from 1868 to 1995; **Table 2** shows the projected transformation for the periods from 1995 to 2090 based on the population projections prepared recently in Japan in 1992 (Institute of Population Problems, 1992).

Columns (2) to (4) in these tables show percentages of population for

Table 1. Trends in Population Structure: 1968-1995

(percent)

Year (1)	Population composition by major groups			Age dependency ratio			Elderly-children ratio (8)
	0-14 (2)	15-64 (3)	65+ (4)	Total (5)	Children (6)	Old-age (7)	
1868	30.36	63.88	5.76	56.5	47.5	9.0	19.0
1898	32.50	61.70	5.80	62.1	52.7	9.4	17.9
1920	36.48	58.26	5.26	71.6	62.6	9.0	14.4
1925	36.70	58.24	5.06	71.7	63.0	8.7	13.8
1930	36.59	58.66	4.75	70.5	62.4	8.1	13.0
1935	36.89	58.46	4.66	71.1	63.1	8.0	12.6
1940	36.08	59.19	4.73	69.0	61.0	8.0	13.1
1947	35.30	59.90	4.79	66.9	58.9	8.0	13.6
1950	35.41	59.64	4.94	67.7	59.4	8.3	13.9
1955	33.44	61.24	5.29	63.3	54.6	8.7	15.9
1960	30.15	64.12	5.72	55.9	47.0	8.9	19.0
1965	25.73	67.98	6.29	47.1	37.9	9.2	24.4
1970	24.03	68.90	7.06	45.1	34.9	10.3	29.4
1975	24.32	67.72	7.92	47.6	35.9	11.7	32.6
1980	23.50	67.35	9.10	48.4	34.9	13.5	38.7
1982	22.96	67.48	9.56	48.2	34.0	14.2	41.6
1983	22.52	67.71	9.77	47.7	33.3	14.4	43.4
1984	22.04	68.01	9.94	47.0	32.4	14.6	45.1
1985	21.51	68.16	10.30	46.7	31.6	15.1	47.9
1986	20.90	68.52	10.58	45.9	30.5	15.4	50.6
1987	20.24	68.86	10.90	45.2	29.4	15.8	53.8
1988	19.53	69.24	11.23	44.4	28.2	16.2	57.5
1989	18.82	69.57	11.61	43.7	27.1	16.7	61.7
1990	18.24	69.69	12.08	43.5	26.2	17.3	66.2
1991	17.66	69.78	12.56	43.3	25.3	18.0	71.1
1992	17.17	69.78	13.05	43.3	24.6	18.7	76.0
1993	16.70	69.75	13.55	43.4	23.9	19.4	81.1
1994	16.33	69.61	14.06	43.7	23.5	20.2	86.1
1995	15.90	69.28	14.82	44.4	23.0	21.4	93.2

Source: Institute of Population Problems, Ministry of Health and Welfare, *Latest Demographic Statistics*, 1995, Tokyo; Statistics Bureau, Management and Coordination Agency, *Quick Report on One-percent Sample Tabulations of the 1995 Population Census*, Tokyo, 1996.

Table 2. Future Trends in Population Structure: 1995-2090

(percent)

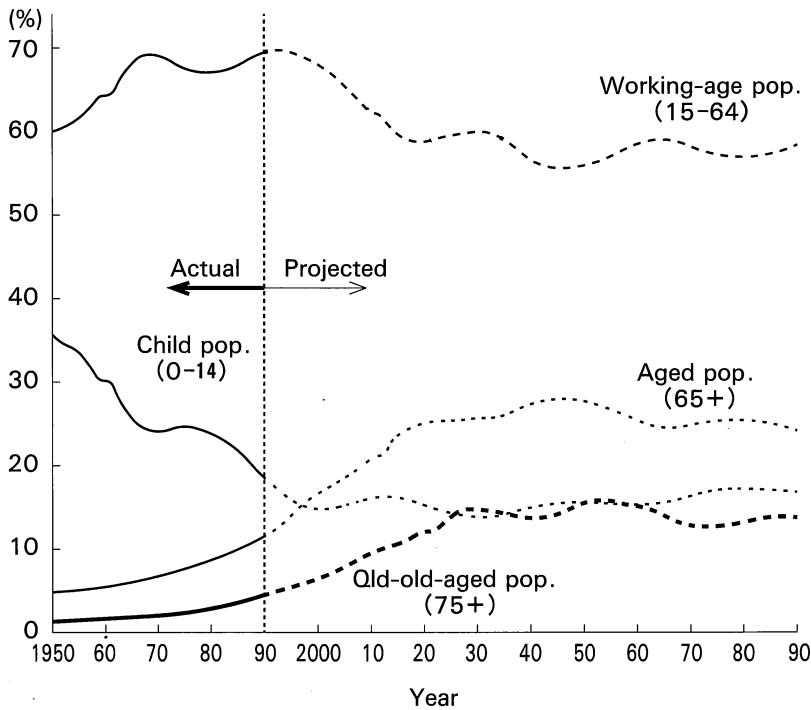
year (1)	Population composition by major groups			Age dependency ratio			Elderly-children ratio (8)
	0-14 (2)	15-64 (3)	65+ (4)	Total (5)	Children (6)	Old-age (7)	
1995	15.90	69.28	14.82	44.4	23.0	21.4	93.2
2000	15.18	67.79	17.03	47.5	22.4	25.1	111.2
2005	15.64	65.24	19.12	53.3	24.0	29.3	121.2
2010	16.37	62.35	21.28	60.4	26.3	34.1	130.0
2015	16.34	59.53	24.14	68.0	27.4	40.5	147.7
2020	15.45	59.04	25.51	69.4	26.2	43.2	165.1
2025	14.50	59.71	25.79	67.5	24.3	43.2	177.8
2030	14.17	59.81	26.02	67.2	23.7	43.5	183.6
2035	14.59	58.82	26.58	70.0	24.8	45.2	182.2
2040	15.34	56.68	27.98	76.4	27.1	49.4	182.4
2045	15.79	55.82	28.37	79.2	28.3	50.9	179.8
2050	15.74	56.09	28.17	78.3	28.1	50.2	179.0
2055	15.51	57.32	27.17	74.5	27.1	47.4	175.2
2060	15.53	58.64	25.84	70.5	26.5	44.1	166.4
2065	15.97	58.95	25.08	69.6	27.1	42.5	157.0
2070	16.62	58.17	25.21	71.9	28.6	43.3	151.7
2075	17.09	57.32	25.58	74.5	29.8	44.6	149.7
2080	17.23	57.12	25.64	75.1	30.2	44.9	148.8
2085	17.16	57.62	25.21	73.5	29.8	43.8	146.9
2090	17.16	58.38	24.47	71.3	29.4	41.9	142.6

Source: Institute of Population Problems, Ministry of Health and Welfare, *Population Projections for Japan: 1991-2090*, Tokyo, 1992.

the well-known three major age categories—under 15, 15-64 and 65+ (See also **Figure 5**). Columns (5) to (7) show age-dependency ratios — total dependency (See also **Figure 6**), child-dependency and old-age dependency. The last column indicates a relatively new concept, that is, the ratio of the elderly to children.

If the degree of ageing is expressed by the percentage of the total population which is 65 years and over, the Japanese age structure at present is hardly very “aged”, since the percentage is approximately 13 — not particularly high in comparison with such countries as Switzerland, Sweden and the Federal Republic of Germany (before the unification) where the corresponding proportions exceed 15 percent. However, according to the medium variant of the above-mentioned provisional population projections prepared by the Institute of Population Problems in 1992, the future pace

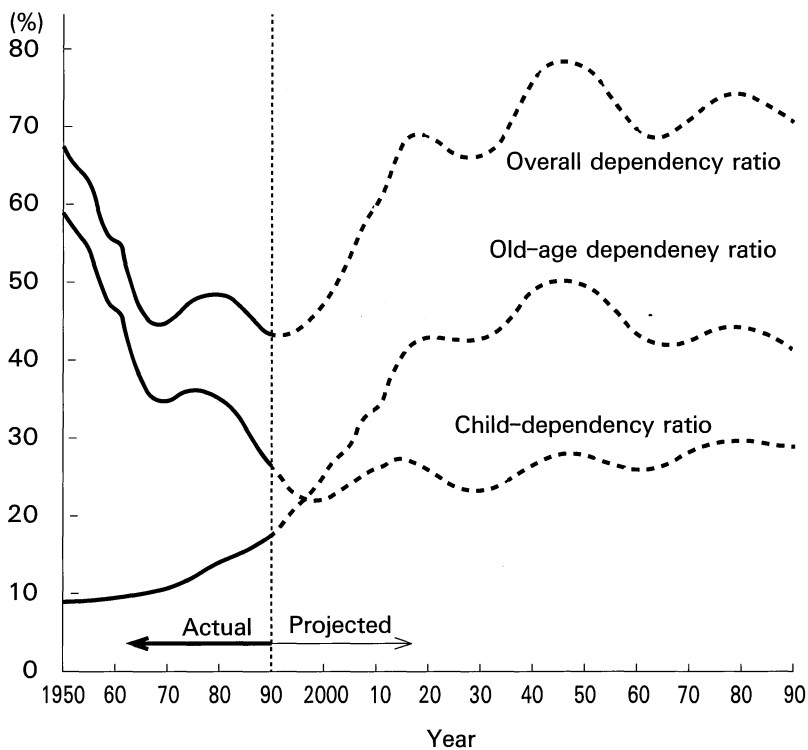
Figure 5. Trends in Major Age Compositions in Percentage of the Total Population
(Median Variant)



of ageing in Japan will be rapid and, by the year 2025, Japan's population aged 65 and over will be 25.8 percent. Since the recent United Nations projections as assessed in 1992 do not reveal any country with equivalently high ageing indicators, Japan would probably be the country which is most aged in the world in the twenty-first century. In the first decades the mean age will continue to rise and will pass the mark of 40 years.

Again, according to the medium variant projections of the Institute of Population Problems, the proportion of the aged will reach 28.4 percent around the middle of the 21st century. If we look into the low variant projections which assume a farther decline in fertility and an eventual stabilization at 1.45 in terms of total fertility rate in the future, the proportion of the aged may rise even to the level 33.3 percent, that is to say, just an one-third of the total population would become the aged. Of course, there are some analytic projections for China on the assumption that their one-child policy would be maintained in the next century. According to such projections by Banister, the proportion of the aged in China currently

Figure 6. Trends in Age Dependency
(Median Variant)



Note: The definitions of various dependency ratios are as follow:

$$\text{Dependency ratio} = \frac{(\text{Child pop.}) + (\text{Aged pop.})}{\text{Working age pop.}}$$

$$\text{Child-dependency ratio} = \frac{\text{Child pop.}}{\text{Working age pop.}}$$

$$\text{Old-age dependency ratio} = \frac{\text{Aged pop.}}{\text{Working age pop.}}$$

being only 6 percent would become 41 percent of the total population, the percentage incomparably and even incomprehensively large (Banister, 1990). The future prospects of population ageing for Japan might not be as far-fetched as those for China, but their implications are immense and mind-boggling.

C. Old-age Dependency Ratio

Age-dependency ratio are the sum of two dependent population groups aged 0-14 and aged 65 years and over divided by the working age population, multiplied by 100. Working age population denotes the population aged 15-64 who have the likelihood of being in the labour force under normal circumstances. In the present discussion of population ageing, the old-age dependency ratio is particularly relevant inasmuch as this indicator roughly quantifies the demographic weight of burden that the current working age population has to bear in order to support social security and medical expenses for the elderly. Notice that according to the pay-as-you-go system of social security, the incumbent labour force is the one who supports social and medical cost for the aged. The old-age dependency ratio may mean how many old persons have to be supported by 100 persons in working age.

According to Column (7) of **Table 1**, the trend in the proportion of the aged to the working-age population is shown from 1868 to 1992 (See also **Figure 6**). Until about 1965, the ratio was relatively small, at about 8 to 9. This means that there are 11 persons or more in working age per one old person. The burden that incumbent working population has to shoulder was relatively light in those years. After 1965, however, the ratio exceeded the level of 10 and has rapidly been increasing. By 1992, the ratio reached 18.7, that is to say, approximately five persons in working age per one old person. Certainly, the burden of support becomes heavier. Column (7) of **Table 2** shows the projected old-age dependency ratio for years 1990 to 2090. The figures shown here clearly indicate that the proportion of the aged to the working-age population will increase very rapidly and to a quite substantial magnitude. In the year 2000 it would become 25.1 percent, that is to say, only four persons in working age have to bear one aged person. By the year 2045, the ratio culminates to the level of 50.9 percent and this means that only two persons in working age have to shoulder one aged person. Remember that until 1965, 11 or more persons in working age could

be compared to one person in the elderly category. Now the ratio increases more than five times. An increase in old-age dependency ratio probably most dramatizes the imminently occurring impact of population ageing.

D. Elderly/children Ratio

As mentioned above, one interesting indicator for showing the change in age-structure is the elderly/children ratio, which is the number of the elderly (population aged 65 and over) divided by the number of children (population under 15), multiplied by 100. In 1930-1950 the ratio was as low as 13 — that is to say, there were relatively few elderly persons in proportion to children. However, the elderly/children ratio has been increasing, and by 1986 it reached approximately 50 per 100 children. According to the projections prepared recently by the Institute of Population Problems (Institute of Population Problems, 1992), the ratio will increase further and before the year 2000 (more exactly, in 1997) it will reach 100 (See also **Figure 5**). Astonishing as it may seem, by the year 2030 it will soar to 184 — that is to say, the elderly will outnumber children by more than 80 percent.

There are few countries whose elderly/children ratio is more than 100 at the present time. Sweden, the Federal Republic of Germany (before the unification) and a few others show elderly/children ratios being close to 100 in 1995. Around 1986, when the elderly/children ratio was only 50, the Japanese started a kind of over-reacting to the rapidity of population ageing, as if their population has already turned grey. Hence, it is difficult to imagine how people would react to the situation where the population ageing is really in full swing. Japan is now entering an entirely new phase of demographic evolution, in which the elderly will outnumber children.

E. Rapidity of Population Ageing

As already mentioned, in Japan the term “population ageing” is not shibboleth but a household word, and there have been so much debates and speculations which have been going on. Why so? Some reasons may be attributable to the high educational standard in which Japanese people might exhibit their concerted interest in social changes, but it seems largely attributable to substantial seasons. That is the rapidity and swiftness of population ageing in Japan.

According to **Tables 1 and 2** as well as in **Figures 5 and 6**, the trends have already been clear. Before 1985 or so, though the issues of population ageing had already been debated hotly, the actual proceeding of population ageing was rather slow and the percentage of the population 65 years and over is hardly beyond 10 percent. However, after 1985, the momentum has been gathering and according to the population projections shown in **Table 2** and **Figure 5**, the population ageing is expected to proceed at an unprecedented speed and by the year 2025 the percentage of the aged is projected to be more than 25 percent.

Table 3 shows international comparison of the speed of population ageing among seven industrialized countries with respect to the year attained or expected to attain the 7, 10 and 14 percent level in terms of the proportion of the aged. Particularly, the last column indicates number of years required to shift from 7 percent to 14 percent. As can be noted in this column, the rapidity of population ageing in Japan is very impressive. The number of years expected to spend for moving from 7 to 14 percent would take only 25 years in Japan and is distinctively shorter than any other selected developed countries. When the speed of ageing is rapid, its social and economic impacts are much greater than otherwise in the situation where the change takes place rather slowly. Hence, people and society's response to those demographic changes must be more difficult in Japan, requiring swift adjustment to those changes and restructuring its institutional setup and infrastructure.

Table 3. Speed of Population Ageing in Selected Developed Countries

Country	Years attaining the specified percentage of the aged among the total population			Number of years required to shift from 7% to 14% in terms of proportion aged
	7%	10%	14%	
Japan	1970	1985	1995	25
France	1865	1935	1995	130
Germany	1930	1955	1975	45
Sweden	1890	1950	1975	85
Switzerland	1935	1960	1985	50
United Kingdom	1930	1950	1980	50
U.S.A.	1945	1975	2015	60

Source: Before 1940: United Nations, *The Aging of Population and its Economic and Social Implication*. Population Studies, No.26, New York, 1956.
 After 1940: United Nations, *The Sex and Age Distribution of World Population: 1994* New York, 1995.

Table 4. Trends in Births, Crude Birth Rate and Reproduction Rates: 1925-1995

Year	Number of births (1000)	Crude birth rate (%)	Total fertility rate	Net reproduction rate
1925	2,086	34.9	5.11	1.56
1930	2,085	32.4	4.71	1.52
1937	2,181	30.9	4.36	1.49
1940	2,116	29.4	4.11	1.44
1947	2,679	34.3	4.54	1.72
1948	2,682	33.5	4.40	1.76
1949	2,697	33.0	4.32	1.75
1950	2,338	28.1	3.65	1.51
1951	2,138	25.3	3.26	1.39
1952	2,005	23.4	2.98	1.29
1953	1,868	21.5	2.69	1.18
1954	1,770	20.0	2.48	1.09
1955	1,731	19.4	2.37	1.06
1956	1,665	18.4	2.22	0.99
1957	1,567	17.2	2.04	0.92
1958	1,653	18.0	2.11	0.96
1959	1,626	17.5	2.04	0.94
1960	1,606	17.2	2.00	0.92
1961	1,589	16.9	1.96	0.91
1962	1,619	17.0	1.98	0.92
1963	1,660	17.3	2.00	0.94
1964	1,717	17.7	2.05	0.96
1965	1,824	18.6	2.14	1.01
1970	1,934	18.8	2.13	1.00
1971	2,001	19.2	2.16	1.02
1972	2,039	19.3	2.14	1.01
1973	2,092	19.4	2.14	1.01
1974	2,030	18.6	2.05	0.97
1975	1,901	17.1	1.91	0.91
1976	1,833	16.3	1.85	0.88
1977	1,755	15.5	1.80	0.86
1978	1,709	14.9	1.79	0.86
1979	1,643	14.2	1.77	0.84
1980	1,577	13.6	1.75	0.84
1981	1,529	13.0	1.74	0.83
1982	1,515	12.8	1.77	0.85
1983	1,509	12.7	1.80	0.86
1984	1,490	12.5	1.81	0.87

Table 4. (continues)

Year	Number of births (1000)	Crude birth rate (%)	Total fertility rate	Net reproduction rate
1985	1,432	11.9	1.76	0.85
1986	1,383	11.4	1.72	0.83
1987	1,347	11.1	1.69	0.81
1988	1,314	10.8	1.66	0.80
1989	1,247	10.2	1.57	0.76
1990	1,228	10.0	1.54	0.74
1991	1,223	9.9	1.54	0.74
1992	1,209	9.8	1.50	0.72
1993	1,185	9.8	1.46	0.70
1994	1,238	10.0	1.50	0.72
1995	1,187	9.5	1.43	...

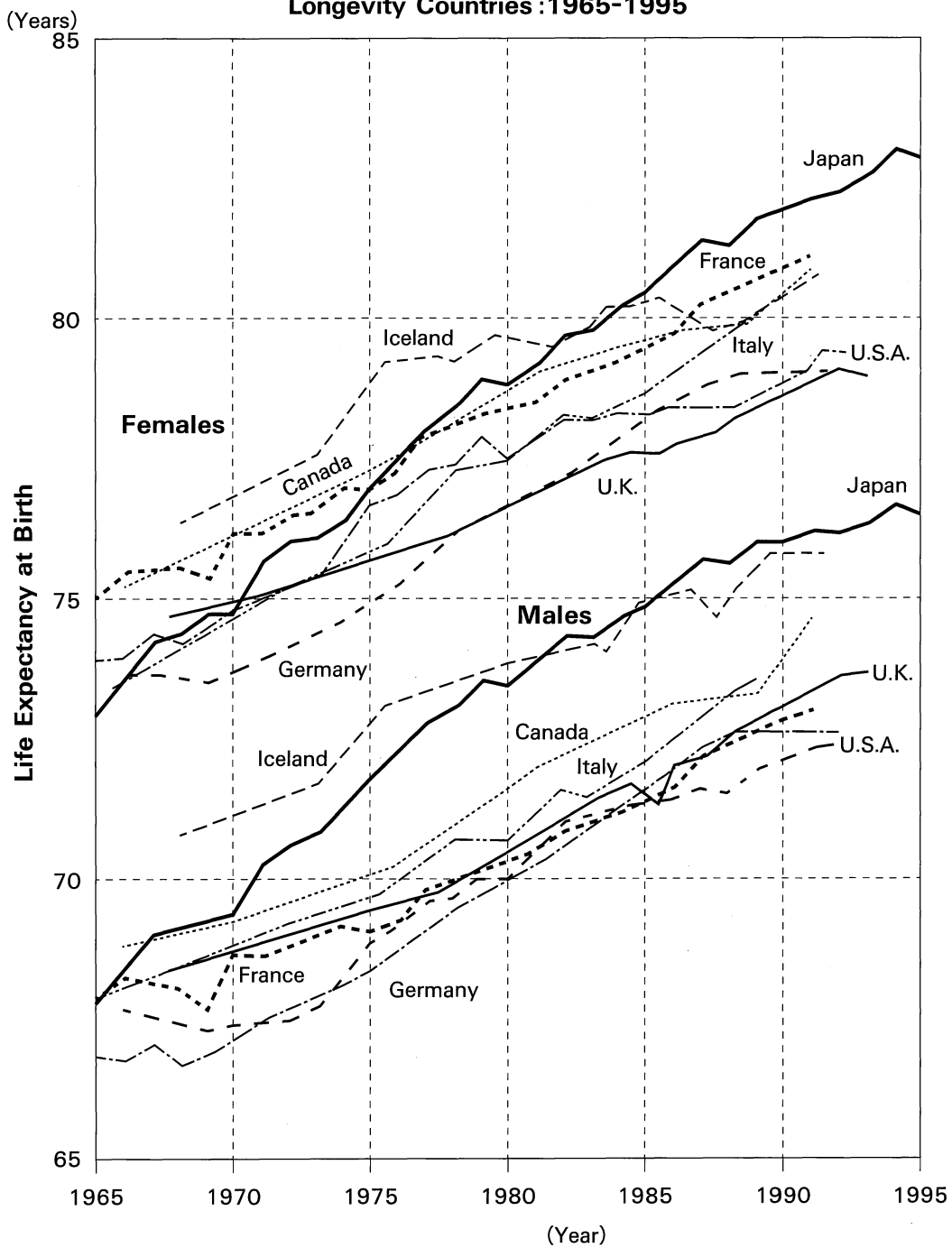
Source: Ministry of Health and Welfare, *Heisei 7-nen Jinko Dotai Gaisu (Provisional Vital Statistics Report for the Year 1995)*, February 1996; Ministry of Health and Welfare, *Heisei 6-nen Jinko Dotai Tokei (Vital Statistics 1994, Japan)*, Vol.1, 1996.

Why is the speed of population ageing so rapid in Japan? This point will be discussed in detail in the next section, but this is because the speed of fertility decline in the postwar years was so rapid in Japan. **Table 4** shows the trends of fertility in Japan. It is remarkable that crude birth rate which was 34.3 per 1000 population in 1947 had been halved to 17.2 in 1957, thereafter fertility never coming back to the level higher than 20 per 1000. The almost unprecedented rapidity of birth rate decline and the continuity of very low fertility level are the principal causes for presenting Japan as a country of the most rapidly ageing population in the world.

F. Causes of Population Ageing in Japan

What have then been the causes for such a rapid population ageing to take place in the future in Japan? Many people even in the journalism have made their off-the-cuff statement that recent prolongation of life expectancy is the cause for it. Indeed, as represented by **Figure 7**, the recent Japanese life expectancies for both males and females have already surpassed those of European countries such as Iceland and France which had been regarded among the highest life expectancy countries in the world. Although the above conventional view of cause of population ageing is true for Japan in the very recent years, but the fact of the matter is more com-

Figure 7. Trends in Life Expectancy at Birth in Selected Longevity Countries :1965-1995



plicated and the lengthening of life expectancy or mortality decline alone could not be the sole or principal factor explaining for such a substantial and rapid population ageing.

Calculations were made to decompose the difference between the percentages of the population aged 65 and over for Japan in two different years. The methodology of decomposition is Kitagawa's (1955). Some unique features of the present calculation of decomposition are that:

- (a) The age data used are by single years; hence, efforts are made to take into account changes in the age pyramid caused by the past annual fluctuations of births, deaths and overseas migration. The analysis by periods of five years may blur ups and downs of fertility and mortality for a country like Japan, thus rendering the conclusions crude and approximate;
- (b) Various time spans are examined in order to analyze every possible combination of time periods;
- (c) The rates obtained from forward and backward standardization are averaged so that the residual interaction term can be eliminated.

Table 5 shows the results of decomposition for various time periods 5-year, 10-year, 20-year, 30-year and 35-year.

In the analysis of five-year periods, apart from the effect of the initial age distribution, the effect of fertility was larger than the effect of mortality in the periods 1950-1955 and 1965-1970. The effect of the initial age distribution (Col. 7) is the effect of the previous age distribution, or the cohort effect. It is obvious that, where the baseline age distribution does not have a smooth profile and is characterized by bulges and troughs, such irregularities often determine a good portion of the proportion of the elderly. To be sure, however, that effect of population distribution may itself be attributable to previous histories of fertility and mortality.

However, in the later years under analysis, nearing the year 1985, the effect of mortality becomes larger than that of fertility, again apart from the effect of the age distribution of the initial population. It is argued that, in the earlier half of the 35-year period between 1950 and 1985, the effect of fertility was definitely larger. In contrast to the common implications of the theory of stable population, however, population ageing (in terms of an increase in the proportion of the elderly 65 and over) has been promoted by a decline in overall mortality and consequently by the prolongation of life expectancy, even in the middle of demographic revolution. According to the conventional interpretation of the theory of stable population, fertility is the predominant force causing population ageing,

Table 5. Changes in the Proportion of the Population in Japan Aged 65 and over, 1950-1985, for Different Time Periods.

Period (1)	Population aged 65+ at beginning of time period ^a (2)	Population aged 65+ at end of time period ^a (3)	Absolute change (4)	Effect of fertility (5)	Effect of mortality (6)	Effect of the initial age distribution (7)
5-year comparison						
1950-1955....	4.94	5.35	0.41	0.07	0.01	0.32
1955-1960....	5.32	5.69	0.37	0.01	0.01	0.35
1960-1965....	5.73	6.28	0.56	-0.04	0.07	0.53
1965-1970....	6.29	7.01	0.72	-0.12	0.02	0.83
1970-1975....	7.06	7.87	0.81	-0.01	0.04	0.78
1975-1980....	7.92	9.08	1.16	-0.02	0.08	1.09
1980-1985....	9.10	10.25	1.15	-0.05	0.09	1.11
10-year comparison						
1950-1960....	4.94	5.70	0.76	0.32	0.05	0.39
1955-1965....	5.32	6.24	0.93	0.06	0.11	0.76
1960-1970....	5.73	7.03	1.30	-0.06	0.28	1.09
1965-1975....	6.29	7.86	1.57	-0.26	0.28	1.54
1970-1980....	7.06	8.99	1.93	0.11	0.37	1.45
1975-1985....	7.92	10.22	2.30	0.01	0.42	1.88
20-year comparison						
1950-1970....	4.94	6.96	2.03	0.91	0.40	0.70
1955-1975....	5.32	7.82	2.51	0.17	0.75	1.59
1960-1980....	5.73	9.04	3.32	-0.05	1.24	2.13
1965-1985....	6.29	10.19	3.90	-0.36	1.40	2.87
30-year comparison						
1950-1980....	4.94	9.01	4.07	1.74	1.32	1.00
1955-1985....	5.32	10.18	4.86	0.52	2.04	2.30
35-year comparison						
1950-1985....	4.94	10.19	5.25	2.38	1.93	0.94

^a Percentage.

NOTE: In Column 3, the value of the percentage of the aged population at the end of the comparison period is not necessarily the same as that of the actual population, although the percentage of the aged at the beginning of the period is always the same as that of the actual population. The difference is due to many types of errors: estimated survival ratios may not perfectly represent the real process of survivorship, even though life tables used were based on the actual vital statistics data; age-specific fertility rates used may not reflect the actual situation; there may be a negligible volume of international migration which was not considered in the estimates; and there may be errors in census-tabulated figures for both the beginnings and the ends of the periods and, likewise, there may be errors in vital statistics data on fertility and mortality.

while mortality decline generally has little effect or, at best, promotes population rejuvenation.

If a longer period is used to decompose the change in the percentage of the population aged 65 and over, the effect of fertility is always larger than that of mortality: see, for example, the 35-year time period between 1950 and 1985 in **Table 5**, where the effect of fertility was even larger than the effect of the initial age distribution.

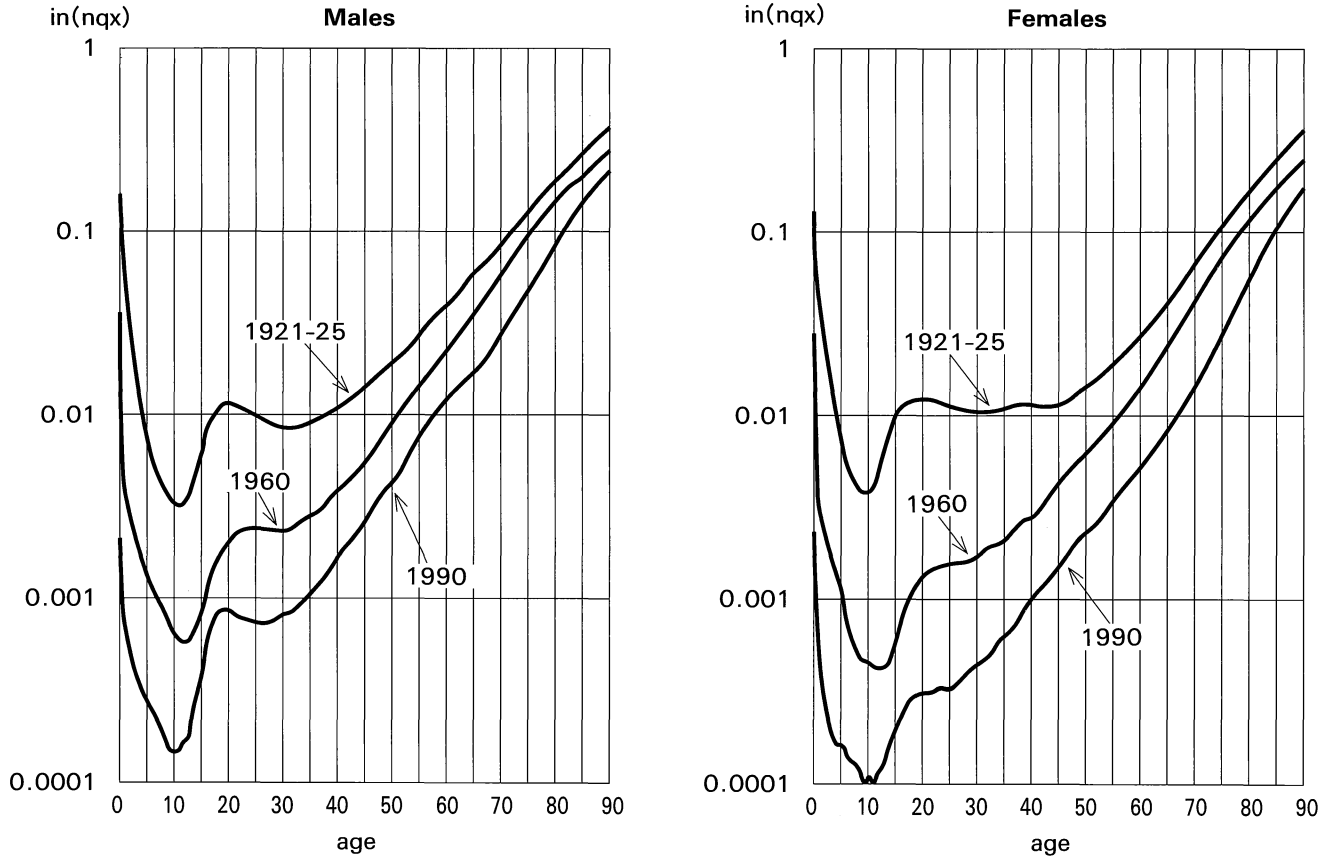
Perhaps, in this moment, it is useful to refer to a chart showing changes in age-specific mortality for males and females separately. **Figure 8** indicates age-specific patterns of mortality for 1921-1925, 1960 and 1990, separately, over several decades. Notice that this chart is based on the semi-logarithmic graph. From this chart, some salient features may be pointed out.

- (1) The decline in infant and child mortality from 1921-25 to 1990 is very significant.
- (2) What may be called "tuberculosis lump" appeared in 1921-25 at ages between 15 and 25 have virtually disappeared among females in 1990. The recurrence of a lump or bump around age 20 among males in 1990 should be considered to be caused by external cause of death, notably attributable to motor-bike accidents.
- (3) On the other hand, however, the mortality improvements are not particularly phenomenal at advanced ages, though the nature of semi-logarithmic graph might disguise some appreciable changes.

These charts may suggest that increases in life expectancy occurred in the postwar years were largely attributable to the rapid declines in infant and child mortality. This pattern of trends is also observed widely in present-day developing countries since the mortality can be more easily reduced in the young age groups rather than in the elderly. Mortality in childhood is caused mainly by infectious and parasitic diseases which can be more easily controlled by the anti-biotics and modern medical technology. On the other hand, however, mortality in the old ages is not easily controlled even by modern medical technology since diseases characteristic of old-ages are of attritional and degenerative nature of human organs. Hence, if other things being equal, the remarkable reductions in mortality in the infancy and childhood have an immediate effect of expanding the bottom part of the population pyramid, thus youthening or rejuvenating population, rather than ageing population.

Table 6 indicates the rate of contribution of improvement in mortality in each age group to the lengthening life expectancy in Japan. Accord-

Figure 8. Age Patterns of Mortality for the Years 1921-25, 1960 and 1990



Source : Japan Ministry of Health and Welfare, *The 17th Life Tables 1993*.

Table 6. Contribution of Mortality Reduction in Each of Major Age Groups to the Increase in Life Expectancy, Japan: 1955-1990

Sex and period	Life expectancy (years) in			Contribution of mortality reduction in each age group (%)				
	Beginning of period	End of period	Difference	0-14	15-39	40-64	65-74	75+
Males								
1955-1960	63.597	65.318	1.722	64.6	26.5	16.3	0.1	-7.5
1960-1965	65.318	67.735	2.417	52.8	20.2	19.8	6.6	0.5
1965-1970	67.735	69.310	1.575	35.8	8.6	27.6	14.5	13.5
1970-1975	69.310	71.726	2.416	16.7	15.6	30.4	23.6	13.7
1975-1980	71.726	73.349	1.622	19.7	14.7	25.3	24.1	16.3
1980-1985	73.349	74.782	1.433	18.6	6.6	21.0	29.9	23.9
1985-1990	74.782	75.921	1.139	9.0	10.3	30.4	19.5	30.8
Females								
1955-1960	67.748	70.194	2.447	53.1	26.3	21.4	4.7	-5.5
1960-1965	70.194	72.921	2.727	45.3	20.2	21.6	11.0	1.9
1965-1970	72.921	74.656	1.735	28.2	11.2	24.0	16.6	20.0
1970-1975	74.656	76.889	2.233	14.1	10.3	29.5	23.9	22.2
1975-1980	76.889	78.765	1.875	13.4	10.1	24.7	22.7	29.2
1980-1985	78.765	80.482	1.717	10.8	4.8	18.5	24.8	41.1
1985-1990	80.482	81.904	1.422	6.8	4.5	19.6	20.9	48.2

Note: Data used in this series of calculation are based on the official life tables prepared by the Department of Statistical Information, Ministry of Health and Welfare. Calculations were made by Shigesato Takahashi, Institute of Population Problems, Ministry of Health and Welfare.

ing to these tables, for example between 1955 and 1960, much contribution has been noted among the young ages under 15 years toward an increase in the life expectancy. There about 65 percent are attributable to mortality reductions in this young age group. On the other hand, however, in recent years, say 1985-1990, the contribution in the improvement in infancy and childhood has become considerably outshined by the contributions in adult and old-age mortality. When the effect of mortality declines among the elderly becomes more pronounced than among the youth population, then, it would be inevitable that the population ageing becomes an important political issue which demographers could not clearly envisage.

Table 7 denotes a similar decompositional table in which the amount of contribution to an increase in life expectancy can be estimated by each cause of death group for Japan. From **Table 7**, it is evident that in the early period of the postwar era, say in 1955-70, the declines in mortality from infectious and parasitic diseases were most important causes of death, thus having played a role at least temporarily toward reducing population age-

Table 7-a. Quinquennial Changes in Life Expectancy and Percentage of Contribution Attributable to Change in Mortality from Each of 17 Causes of Death: Males

Life expectancy and cause of death	Period of observation						
	1955-60	1960-65	1965-70	1970-75	1975-80	1980-85	1985-90
a. Life expectancy at the beginning of period	63.597	65.318	67.735	69.310	71.726	73.349	74.782
b. Life expectancy at the end of period	65.318	67.735	69.310	71.726	73.349	74.782	75.921
c. Difference between a and b	1.722	2.417	1.575	2.416	1.622	1.433	1.139
All causes	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Tuberculosis	28.9	13.3	13.5	6.8	6.7	3.9	2.6
Malignant neoplasm	-7.6	-1.0	0.6	2.5	-5.4	2.3	-0.3
Diabetes	-0.5	-0.8	-1.5	0.1	1.7	0.8	1.2
Heart disease	-3.5	2.2	-1.4	5.2	-5.9	7.8	12.6
Hypertensive disease	-3.7	-0.4	3.7	1.8	5.8	4.5	5.3
Cerebrovascular disease	-10.3	-0.5	19.5	28.0	39.9	50.9	41.5
Pneumonia and bronchitis	2.5	18.1	11.5	4.8	6.5	-2.5	-7.7
Ulcer of stomach and duodenum	6.7	2.7	3.5	2.3	3.2	2.7	4.4
Gastro-enteritis	14.3	7.5	6.6	2.6	2.5	1.7	-1.3
Chronic liver disease and cirrhosis	-1.1	-0.3	-3.4	-1.0	1.2	3.9	5.2
Nephritis, nephrotic syndrome and nephrosis	5.3	2.9	3.7	3.0	-0.7	-0.9	0.3
Senility without indication of mental disease	11.4	4.6	9.0	5.8	3.0	5.6	9.7
Accidents and poisoning	-9.3	4.3	3.2	19.7	15.0	5.9	4.8
Suicide	9.7	7.4	1.2	-3.7	-0.2	-2.1	11.8
Other causes of death	57.3	30.1	30.4	22.1	26.6	15.5	9.9

Source: Calculated by Shigesato Takahashi, Institute of Population Problems, Ministry of Health and Welfare on the basis of various official mortality and demographic statistics, including Ministry of Health and Welfare, complete life tables, abridged life tables, vital statistics and the Statistics Bureau, Management and Coordination Agency, population census statistics reports and population estimates.

Table 7-b. Quinquennial Changes in Life Expectancy and Percentage of Contribution Attributable to Change in Mortality from Each of 17 Causes of Death: Females

Life expectancy and cause of death	Period of observation						
	1955-60	1960-65	1965-70	1970-75	1975-80	1980-85	1985-90
a. Life expectancy at the beginning of period	67.748	70.194	72.921	74.656	76.889	78.765	80.482
b. Life expectancy at the end of period	70.194	72.921	74.656	76.889	78.765	80.482	81.904
c. Difference between a and b	2.447	2.727	1.735	2.233	1.875	1.717	1.422
All causes	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Tuberculosis	21.7	10.8	8.8	4.5	3.4	1.4	1.0
Malignant neoplasm	-2.1	1.7	4.3	5.6	4.1	11.6	3.3
Diabetes	-0.6	-0.8	-1.5	0.3	1.9	1.1	1.6
Heart disease	-0.8	4.0	1.2	6.9	2.0	6.1	11.2
Hypertensive disease	-2.9	-0.7	2.9	1.7	6.4	5.1	7.7
Cerebrovascular disease	-2.3	4.4	18.2	25.1	33.4	42.9	41.6
Pneumonia and bronchitis	4.2	17.7	11.1	5.4	8.0	-0.6	-3.0
Ulcer of stomach and duodenum	2.1	1.5	1.2	1.0	1.2	0.9	2.8
Gastro-enteritis	12.6	9.4	6.9	3.4	3.6	2.1	0.7
Chronic liver disease and cirrhosis	0.4	0.7	-0.5	0.9	0.8	0.8	1.1
Nephritis, nephrotic syndrome and nephrosis	6.0	4.0	3.8	3.0	-0.9	-0.4	-0.1
Sinility without indication of mental disease	13.3	7.0	15.4	13.0	5.7	10.3	19.2
Accidents and poisoning	-0.4	1.8	0.9	6.8	4.1	2.8	-0.1
Suicide	1.6	6.4	-0.4	-0.8	2.9	2.2	2.2
Other causes of death	47.2	31.8	27.6	23.3	23.5	13.8	11.7

Source: Calculated by Shigesato Takahashi, Institute of Population Problems, Ministry of Health and Welfare on the basis of various official mortality and demographic statistics, including Ministry of Health and Welfare, complete life tables, abridged life tables, vital statistics and the Statistics Bureau, Management and Coordination Agency, population census statistics reports and population estimates.

ing. But in the more recent period, the declines in mortality from a non-infectious or degenerative type of diseases have become much more important in contributing to a lengthening of life expectancy. Hence, the lengthening of life expectancy itself lately joins in contributing to accelerate the population ageing in Japan which is principally caused by fertility decline.

G. Fertility Decline and Its Determinants in Japan

It was already mentioned that fertility has declined to an unprecedentedly low level in recent years, much lower than the net replacement level. Since the fertility decline has been the most important determinant factor in causing the population ageing of Japan and since in recent years the issue of fertility decline has evoked great interest and concern among the government workers, industrialists as well as intellectuals, a few words must be devoted here to explain why the current Japanese fertility has precipitated to so low a level and how far the trend would continue in the near future.

On the basis of the vital statistics collected by the Ministry of Health and Welfare, the total fertility rate in Japan has been lower than the replacement level since 1974 (See **Table 4**). The recent movement is, however, unprecedented and beyond our previous experience and projections. In 1990, it went down to 1.53. In 1994 it went up slightly to 1.50, but in 1995 it was reduced to 1.43, the lowest ever recorded in Japan. Alarmed by this fertility plunge, many different groups of people, industrialists, parliamentarians or high ranking government officials expressed their concern and worries that the continuation of such a low rate would give enormous adverse impacts on the Japanese economy and society. According to one series of calculations tentatively prepared by the present author, if the current low total fertility were to continue and the same life expectancies as observed in 1990 were to be kept constant for future years, the population of Japan must get extinct in less than 800 years' time. Such a calculation is of course a kind of science fiction, but it has struck out some demographic implications. And even before such a tragic state of affairs would have ever come true, it has been argued strongly that Japan will inevitably face the exceedingly advanced population ageing or a very large percentage of the aged which may amount to one-fourth or even to one-third of the total population in Japan. If such an extraordinary population ageing has ever come to the seashore of Japan, it has been argued that Japan would collapse under the heavy dependence burden of the elderly, whereas the segment

of population in working-age, say 15 to 64 which currently comprises hefty 70 percent of the total population, would ineluctably be reduced in proportion and in absolute number, and hence it could no longer afford supporting a heavy burden of old-age dependency in the fields of public pension, medical services, nursery and care of the elderly people.

In Japan the feminist movement has not been influential; labor force participation by married women, while increasing, has been lower than in the United States and Western European countries; the oral contraceptive has been banned for medical reasons; and the divorce rate is lower than in the West and is rising more slowly. Why, in spite of conditions such as these that presumably would tend to favor higher fertility, has the Japanese total fertility rate recently been between 1.4 and 1.5, well below replacement level?

Actually, there are good reasons for the current low fertility in Japan. It is in a large part a response to that country's resource-scarce environment. Today, the Japanese population, at some 126 million, numbers about half that of the United States in an area smaller than the state of California. Japan produces practically no oil and little iron ore, and it imports much agricultural produce from such countries as the United States, Canada, and Australia. A scarcity of resources relative to population has figured in Japanese history since the 1860s, when massive efforts to industrialize began.

Distinguishing Japan and the surrounding East Asian region from other parts of Asia is the pervasive and deeply rooted doctrine of Confucianism. The role of Confucianism in Japan is probably comparable to that of Protestantism in Europe at the dawn of industrialization, as depicted by Max Weber. Confucianism emphasizes the ethical value of hard work, asceticism, frugality, and regularity in the daily conduct of life.

What happens when the scarcity of resources and the ethic of hard work collide? The answer is fierce competition within the society. This has led to the emergence of a quasi-meritocracy with an overemphasis on educational attainment. This in turn has contributed to declining fertility. After World War II, Japanese fertility fell sharply. Between 1960 and 1974 the rate was relatively stable at a level slightly higher than replacement, but after 1974 it declined to its current unprecedentedly low level. (It is noteworthy that 1973 was the year of the "oil shock": the Arab oil embargo reinforced the psychological resource-scarcity syndrome in Japan.)

In a resource-scarce but advanced society, fierce competition permeates every corner of life. Rigorous entrance examinations for ranking universities and for large and prestigious corporations become common. Resource

scarcity narrows the chances for a better quality of life. Demographic responses to such an environment are to delay marriage and reduce family size.

An attempt will be made to elaborate briefly on three features of modern Japan that are relevant to the current fertility picture: the postponement of marriage in response to scarce resources and narrow life chances; tough entrance examinations for admission to high schools and universities; and the emergence of a mass-consumption culture.

1) Postponement of Marriage

Age at first marriage in Japan has become one of the highest, if not the highest, in the world. According to 1995 vital statistics, the mean age at first marriage was 28.5 years for males and 26.3 years for females. For females this represents a rise from a mean age of 23.0 years in 1950 and 25.2 years in 1980. Although the divorce rate is lower in Japan than in most of the Western countries, the very high age at first marriage effectively shortens the reproductive span of married couples. According to the 1995 census, the proportion of the population aged 20-24 who were currently married was only 12.2 percent for females and 6.2 percent for males. Even in the age group 25-29, the most reproductive age group, only 48.6 percent of females and 31.5 percent of males were currently married.

Since fecundability starts declining after age 30 and by age 35 is reduced to three-fourths of the full-capacity of fecundability level attained at ages 20-27, late entry into married life, in a setting inimical to premarital births, acts as a biological depressant to fertility. It keeps some Japanese couples from achieving their desired or expected fertility (Institute of Population Problems, 1993). According to the national fertility surveys in 1977, 1982, 1987 and 1992, Japanese couples expected to have 2.2 children on average the number being remarkably stable; in those years, however, observed yearly fertility was below replacement (Institute of Population Problems, 1988 and 1993).

Late marriage in Japan is due to the interplay of economic and social factors. Housing is extremely costly, and young men are not expected to marry until they are capable of maintaining new households without financial assistance from their parents. In addition, marriage in Japan is a very costly event: wedding ceremonies are elaborate and expensive; before the start of marriage the groom must make financial arrangements to set up a new home, and the bride must bring a dowry in kind if not in cash. Nor-

mally, a bride is expected to bring to the new home all the necessary furnishings — including major household appliances and furniture.

In recent years, it was said that particularly young women came to disenchant with marriage life or with expected image of marriage life that they paint. Partly because many women now work in contemporary Japan, the economic necessity to get married has been weakened, hence many females do not have to rely their life upon their husbands. Secondly the imbalanced sex ratio exists in young ages, say 18 to 35, particularly in urban areas, where men are more abundant in the unmarried population. Woman may enjoy her demographic advantages only waiting for a most eligible bachelor who has qualifications of three-high's, that is, taller, better-educated and more income than herself. It has been argued that this hypergamy trends let women postpone their marriages and even increase the percentages of unmarried women in their 30s and early 40s. Thirdly, it was also pointed out that the mechanisms of match-making leading to marriage (miai kekkon) have become weakened for various reasons: urbanization and accompanying increase in anonymity, lack of community tie, young people's individualistic attitude. Although the traditional system of miai kekkon or match-making marriage is ebbing, there is no alternative system replacing that century-old system.

2) Competitive Entrance Examinations

Another important factor conducive to low fertility in Japan is the exceedingly rigorous competition for admission to ranking schools such as the University of Tokyo. It is an ordeal not only for the applicants but also for their families. The advantages of success are great, the costs of failure severe. One lucky enough to gain acceptance to a prestigious school wears badge of honor for the rest of his life. A graduate of a ranking university is usually promoted faster than others and benefits professionally from membership in a network of alumni who hold key positions in government and business. Sometimes, prestigious corporations send notices of job openings only to ranking universities. Actually such universities do provide the highest quality education and training to their students. Those achieving exceptional marks in the highest ranked civil service examinations are usually graduates of law schools of top universities.

Japanese society is not a land of continuing opportunity for people who seek a good career or success in life. Once a young man or woman fails to pass an employment examination to enter government of a presti-

gious corporation as a career officer, he or she is not given another chance. In the government service, only career officers who enter their positions with topnotch test scores are permitted to become directors.

The ordeal of educational competition begins when young children start preparing for examinations in primary school and even in kindergarten. In order to get into a good university, one has to enter a good senior high school, and to get into a good senior high school, one has to enter a good junior high school, and so on. In Tokyo at 10:00 P.M. on Friday, suburban trains are filled with primary school pupils aged around 10 who are just returning from well-known juku (after-school cram sessions) located in the central district. Some of them are already asleep, but the strong ones are rehearsing what they have just been taught. To foreigners it is an eerie scene.

In a national sample survey conducted by the Office of the Prime Minister in 1985, about 80 percent of the approximately 10,000 respondents aged 20 years and over felt that the social hierarchy and professional mobility pivot around employees' academic careers, particularly the stature of the universities from which they graduated (Office of the Prime Minister, 1985). A graduate of an outstanding school like the University of Tokyo can not only get a good job in government or in a respectable large corporation, but can also reach a high step on the hierarchical ladder.

This characterization of the academic career-centered system of promotion and upward mobility in Japan still requires statistical substantiation, but an important point is that it is entirely consistent with public perception. Hence, it is natural for anyone with above-average intelligence and some career ambition to try to get a ticket for the super-express in his life course. Thus, severe and ruthless examinations become the style of life in Japan. Under such circumstances, children become financially and psychologically expensive. Once modern methods of family planning and abortion have become available to every household, no one wants a large family. In Japan the ideal number of children (the number the average couple would like to have if circumstances permitted) is three, but the expected family size is two. In the most recent national fertility survey conducted by the Institute of Population Problems in 1992, one question asked why the couple did not attempt to have their ideal family size. The four most frequent answers from couples with wife aged 20-35 were as follows: (1) the cost of education is too high; (2) raising children requires a lot of money; (3) raising children imposes heavy physical and psychological burdens on the parents; (4) present house or apartment is too small

for an ideal family size (Institute of Population Problems, 1993). The answers did not identify burdens from the strain of preparing for school entrance examinations since the questionnaire was not structured to ask such a question, but the implication would be clear.

3) Advent of the Mass Consumption Society: Reinforcing the Fertility Decline

A major characteristic of Japan is its homogeneity in race, religion, language, and even social class. Once every few years leading newspapers in Japan, such as Asahi Newspapers, repeat a public opinion poll asking “to which social class according to the grouping of ‘upper’, ‘middle’, or ‘lower’ do you think you belong?” Each time, more than 80 percent of interviewees respond that they belong to the “middle” class.

It is well known that income differentials among Japanese workers are the smallest among the industrial market economies. Superimposed on Japan’s small territory and its homogeneity in language, social class, taste, and life styles has been the Western-based mass consumption culture, involving universal television ownership and an enormous volume of advertisement of consumer goods and services in every household. Thus, every other home in the neighborhood and every other colleague at the office serves as the reference group of the “middle class”. Japanese couples are confronted by innumerable “musts” that they need to buy to maintain their middle-class status and prestige. Already the two-child norm has become a household word in Japan. Under the circumstances, having more than two children has fallen totally out of fashion and having more than two adolescents at home strenuously preparing for examinations for admission to high schools and universities seems out of the question. In short, the low birth rate is a natural consequence of the social and economic conditions just described.

4) Increasing Dilemma between Women’s Work and Bearing and Rearing Children: Women’s Revenge

The recent precipitation in the fertility of Japan has sent a wave of shock through many groups of Japanese people, whether professional or laymen. Some critics have even come to interpret this phenomenon of unprecedented fertility decline as a revenge of women against the present male-oriented and male-dominated society and institution, the long fortified

and nurtured male chauvinistic system of society. The women's revenge might even be called as an anti-Machismo movement in East Asia. This is clearly related to the general trend among the Japanese women towards gainful employment outside of home and may be in a line with what Kingsley Davis, a well-known social demographer, once called the greatest silent revolution in the twentieth century. Although women's labour force participation may be lower than many European countries and the United States and Canada, the rate has been increasing and furthermore women's school enrollment in colleges and universities is a record high.

As already mentioned, some industrialists and parliamentarians as well as high-ranking officials of the Government have come to worry about the current exceedingly low level of fertility and have been urging the Government to do something in order to thwart this current of low fertility. These groups of people have come to be seriously concerned that if the current low fertility would prevail in the future, the Japanese industries could not secure a full recruitment of young labour force fresh out of school and the Japanese economy would lose its vitality which has been a part and parcel of the strength in the thrust of Japanese economy. Furthermore, these people argue that the imminent population decline must shake up the very foundation of Japan's current prosperous economy and threaten the future economic growth. The increasing population ageing would create an acute shortage of young and docile segment of manpower and would entail in the decline in productivity and slump in saving rate. These people seriously consider that inasmuch as Japan almost categorically lacks natural resources the only abundant are human resources with a high quality of education and hard-work ethics and such have been the panacea for Japan's miraculous economic achievement in the past. Without abundant manpower resources with a high level of education and aspiration, Japan must in the long run lose its advantageous position in the world economy.

On the other hand, however, some groups of women, notably those female intellectuals related to Japan's feminist movement have been arguing otherwise that it is a woman who bears and rears children and industrialists, parliamentarians and government officials cannot enforce pronatalist population policies and programmes upon the families without a full consent by women. The current unprecedented decline of fertility simply means the disenchantment of women with the current state and mode of family, marriage and reproduction which are male-dominant and often patriarchal. They argue that women are not a child-bearing machine and they are flatly opposed to the government officials and industrialists' views which

they regard as rather short-sighted and unbalanced.

As already mentioned, in Japan and East Asia, Confucianism provides the people in this region with major moral and ethical code governing the daily conduct of people. But, if there are any gaps in this outstanding moral system and philosophy, it is that sufficient attention has never been paid to women. In Confucianism's doctrine, there is no status of women in the family. In the Confucian regime, women have long been considered a kind of childbearing machine and domestic servant for men. Now in the 1990s women are making quiet and non-militant protest against men and against the long-established and cherished East Asian version of Machismo. It is assumed that some of the consequences out of such women's revenge would be the postponement of marriage, non-marriage and non-bearing of children on the part of women, hence decline of fertility. Such a situation will continue until the day when men come to make a peace treaty with women, until the day when women's status has been elevated so as to become equal and equitable with men's, and until the day when women's work aspiration has been harmonized with their childbearing and rearing activities with full cooperation by men and with institutional support by the Government.

H. Population Ageing in Different Prefectures

Another important dimension of population ageing is prefectural disparities. **Table 8** shows prefectural distribution of various ageing scores in 1995, according to the latest population census. Glancing at this table, one may be quite surprised by the presence of a considerable range of prefectural variation on each indicator of population ageing. As expected, those prefectures within metropolitan regions, including Tokyo, Saitama, Chiba, Kanagawa, Aichi, Osaka, etc., unmistakably represent lower scores of the percentage of the aged, whereas those relatively rural-agricultural prefectures situated remote from the metropolitan areas, such as Shimane, Akita, Kochi, Kagoshima, etc., indicate higher scores. In general, those centrally located metropolitan prefectures such as Tokyo and Osaka tend to have a higher proportion of the working age population among the total population mostly because of excessive in-migration in that age category, hence ageing process is slow. On the other hand, those prefectures, which are distant from the metropolitan areas and are traditionally agricultural or fishery-oriented, tend to demonstrate a reverse trend.

The old-age dependency ratio usually shows a more dramatic picture of population ageing. Some centrally located prefectures such as Tokyo, Saitama, Chiba, Kanagawa, Osaka, etc., represent low scores on this index, whereas, some other prefectures distant from the central area and noted for their traditionally agriculture-oriented background, tend to show higher old-age dependency ratios. Shimane Prefecture is a notable example, exhibiting the highest score in the percentage aged and old-age dependency ratio. Shimane's old-age dependency ratio is 36.8, higher than the national average (21.4) by 15.4 percent points and higher than Saitama (14.1) by 22.7 percent points, the prefecture of the lowest ratio. Elderly/children ratio is another indicator of population ageing by which Shimane far excels those metropolitan prefectures. For Shimane, the score is astounding 142.4 percent and, interestingly enough, this more than doubles the score for Saitama, that is only 71.1 percent.

The situation of population ageing in prefectures is more complex than that in Japan as a whole because the local places are affected more heavily by in- and out-migration. Indeed, prefectures with higher ageing scores are the ones characterized by heavy out-migration and prefectures with rela-

Table 8. Population Composition by Major Age Groups, Dependency Ratios and Elderly-Children Ratios: 1995
(percent)

Prefecture	Proportion of population by major age groups				Dependency ratio			Elderly-children ratio
	0-14	15-64	65+	75+	Total	Children	Old-age	
All Japan	15.9	69.3	14.8	5.9	44.4	23.0	21.4	93.2
Hokkaido	15.6	69.1	15.2	5.8	44.6	22.6	22.0	97.5
Aomori	17.2	66.8	15.9	5.8	49.5	25.8	23.7	92.1
Iwate	16.5	65.4	18.2	6.9	53.0	25.2	27.8	110.3
Miyagi	16.7	68.5	14.8	5.6	45.9	24.4	21.6	88.6
Akita	15.4	64.5	20.1	7.1	55.1	23.9	31.2	130.3
Yamagata	16.6	62.9	20.5	7.8	58.9	26.3	32.6	123.8
Fukushima	17.9	64.7	17.4	6.8	54.5	27.7	26.9	97.0
Ibaraki	16.9	68.5	14.6	5.6	46.0	21.3	24.7	86.5
Tochigi	17.3	67.7	14.9	5.7	47.6	25.6	22.0	85.9
Gumma	16.6	67.6	15.8	6.2	47.8	24.5	23.3	95.1
Saitama	16.1	73.5	10.4	3.8	36.0	21.9	14.1	64.6
Chiba	16.0	72.6	11.3	4.4	37.6	22.0	15.6	71.1
Tokyo	12.6	74.1	13.2	5.2	34.8	17.0	17.8	105.2

Table 8. (continues)

(percent)

Prefecture	Proportion of population by major age groups				Dependency ratio			Elderly-children ratio
	0-14	15-64	65+	75+	Total	Children	Old-age	
Kanagawa	15.0	73.5	11.4	4.4	36.0	20.5	15.5	75.9
Niigata	16.4	64.3	19.2	7.8	55.5	25.5	29.9	117.1
Toyama	15.4	66.5	18.1	7.7	50.3	23.1	27.2	117.5
Ishikawa	16.2	67.6	16.1	6.3	47.8	24.0	23.8	99.2
Fukui	16.6	65.4	18.1	7.7	52.9	25.3	27.6	109.1
Yamanashi	16.0	66.6	17.4	7.1	50.1	24.0	26.1	109.1
Nagano	16.3	64.3	19.3	8.1	55.4	25.4	30.0	118.0
Gifu	16.8	67.5	15.7	6.1	48.1	24.9	23.3	93.5
Shizuoka	16.4	68.4	15.1	6.2	46.2	24.0	22.1	92.1
Aichi	16.6	71.3	12.0	4.6	40.1	23.2	16.8	72.5
Mie	16.6	66.9	16.6	6.9	49.6	24.8	24.8	99.8
Shiga	17.5	67.9	14.5	5.9	47.1	25.7	21.4	83.1
Kyoto	15.2	69.7	14.8	6.4	43.0	21.8	21.2	97.6
Osaka	14.9	72.9	12.1	4.6	37.0	20.4	16.6	81.0
Hyogo	16.3	69.5	14.1	5.5	43.8	23.5	20.3	86.5
Nara	16.0	70.2	13.8	5.9	42.4	22.8	19.6	86.0
Wakayama	16.4	65.8	17.8	7.2	52.0	24.9	27.1	108.7
Tottori	17.1	63.6	19.3	8.4	57.3	26.9	30.4	113.3
Shimane	15.9	61.5	22.6	10.0	62.6	25.8	36.8	142.4
Okayama	15.6	66.7	17.7	7.5	49.9	23.3	26.6	113.7
Hiroshima	16.0	67.7	16.2	6.8	47.7	23.7	24.0	101.2
Yamaguchi	15.7	65.5	18.9	7.8	52.7	23.9	28.8	120.5
Tokushima	16.6	63.9	19.6	8.0	56.6	25.9	30.7	118.3
Kagawa	15.1	65.9	19.1	8.3	51.8	22.9	29.0	126.6
Ehime	16.1	64.7	19.2	7.9	54.5	24.9	29.7	119.4
Kochi	15.5	63.5	21.0	8.9	57.5	24.4	33.1	135.5
Fukuoka	16.1	68.5	15.2	6.0	45.8	23.5	22.2	94.6
Saga	17.9	63.8	18.3	7.4	56.7	28.0	28.6	102.2
Nagasaki	18.5	63.4	18.1	7.1	57.8	29.2	28.6	98.0
Kumamoto	17.2	64.0	18.7	7.9	56.2	26.9	29.3	108.9
Oita	16.0	65.2	18.9	7.4	53.5	24.5	29.0	118.2
Miyazaki	17.1	65.3	17.6	7.1	53.1	26.2	26.9	102.4
Kagoshima	18.3	61.9	19.8	8.4	61.6	29.6	32.0	108.3
Okinawa	22.3	65.8	11.9	5.0	51.9	33.9	18.1	53.4

Source: Statistics Bureau, Management and Coordination Agency, *A Quick Report on One-percent Sample Tabulations of the 1995 Population Census, 1996.*

tively low ageing scores are those which have been noted by heavy immigration.

The population ageing is more problem-ridden and badly affects their fate in those out-migrating prefectures because out-migrating people are usually in the prime years of labour force, say in their 20s and early 30s, ineluctably facilitating speedier ageing than otherwise. In general, population ageing is the outcome of vital evolution, interplay of fertility and mortality, particularly reflecting a long term decline in fertility. But, since the end of World War II internal migration from rural to urban and to metropolitan areas, has been promoting heavy concentration of population and industries in the urban and metropolitan areas, on the one hand, and depopulation and heavy erosion of working age population in those remote and traditionally agricultural prefectures, on the other.

Both central and local governments have paid great and painful efforts to prevent and reverse the on-going metropolitan-ward migration of the population by promoting to develop modern industries or to invite those from the metropolitan areas. But, unfortunately, despite their Herculean efforts and programmes exerted towards decentralization of population and industries, their outcome has not visibly been successful. Over-centralization rather than decentralization still prevails in the Japanese Archipelago in the area of population and manpower distribution.

2. Population Ageing and Changes in the Family and Household

A. General Framework

The family or household is a single unit for many social and economic activities, including income maintenance, economic dependency, savings, fertility, migration, social welfare and social adjustment, etc. Very broadly speaking, the family or household has two different aspects in relation to the process of population ageing. First, the family itself undergoes its transformation by demographic changes through the ageing process.

Secondly, the family as a small group serves as buffer to its members to lessen the social and economic impact of population ageing superimposed upon it as if from outside before reaching individual members. The present chapter deals mainly with the former aspect, but consideration is also given to the latter.

Population ageing has very important bearings on the changes in the number and structure of the family and household. Let us first discuss how much population ageing is attributed to determine the size of the family and household. Then, an attempt is made to look into the course of transformation in which dynamics in population ageing affect the structure of the family and household. Here the term "structure" mainly means the composition of the household by family type and patterns of co-living of the elderly with their offsprings.

B. Change in the Size of Household

The recent demographic changes in Japan have been rapid and have made quite considerable effects upon the family size and structure. Obvious changes occur in the average size of household and family in Japan. **Table 9** represents trends in average household size for Japan.

It is apparent that the household size has shrunk down considerably in the long run during 65 years' time span, but some may wonder why the process of shrinkage in the household size has been so slow in comparison with the fertility decline occurred roughly at the same time. For example, total fertility rate had substantially been reduced from 3.65 in 1950 to 2.00 in 1960. On the other hand, however, the average size of household diminished from 5.02 to 4.52 only by 0.50 in term of persons per household between the same years. By the same token, for the Republic of Korea, while total fertility rate was reduced from 4.47 to 3.33 between 1970 and 1975, the average household size shrunk from 5.2 to 5.1 only by 0.1 person per household. It seems that there always exist some kind of demographic lags, so that the process of reduction in household size does not necessarily follow the trend in decline in fertility in an immediate sequence. Part of explanation may be sought in the mortality reduction taking place at the same time, the mortality reduction which facilitates enlarging the household size in a completely opposite direction to the effect of fertility decline under the circumstances where fertility does not drop. The substantial reduction in child mortality occurring in the early cycle of demographic transition precisely means an increase in fertility in Japan. Between 1920 and

Table 9. Trend in the Average Household Size for Japan: 1920-1995

Census year	Average size (persons)
1920	4.99
1925	4.98
1930	5.07
1935	5.13
1940	5.10
1947	4.92
1950	5.02
1955	4.97
1960	4.52
1965	4.08
1970	3.73
1975	3.28
1980	3.22
1985	3.14
1990	2.99
1995	2.84

Source: Statistics Bureau, Management and Coordination Agency, *Population Censuses*.

Note: Definitional changes have been introduced to the concept of "household" since the 1970 census.

1935, the size of household increased appreciably and this phenomenon is principally attributable to a reflection of mortality improvement. In Singapore, by the same token, between 1957 and 1970, the household size increased sizably from 4.8 to 5.4 and this enlargement may at least partly be explained by mortality reduction.

Nevertheless, when demographic evolution proceeds, effects of fertility decline have been captured sooner or later in the household size and structure when the mortality decline has lost its momentum and the rise of life expectancy has hit the plateau. The diminution of household size has started out and then it precipitates. The average size of households for Japan is now 2.84 and will soon become 2.6 by 2010 according to the projections (Institute of Population Problems, 1995).

According to a multiple regression analysis performed by the United Nations Population Division some years ago (United Nations, 1969), the shrinkage of household size was mainly attributable to the reduction of fertility. This relationships may still be holding at present. However, the increasingly significant process of nuclearization or nucleation of the fa-

mily due to mortality reduction, general rise in level of living, urbanization, industrialization, etc., would have also been fairly important for contributing to determine the average household size. This is again not a very recent one, but according to a decomposition study for Japan attributing to various factors the difference between average household sizes in different years, the effect of fertility decline explains 70 percent of the contraction in the average household size from 1955 to 1965; 20 percent were attributed to internal migration and the remaining 10 percent attributed to the nuclear fission, which in turn presumably originated from economic and social factors, notably from the rise in per capita income, urbanization, enhancement in education, and the emergence of individualism, etc. (Kono, 1969).

C. Change in the Family Structure

When the size of household diminishes, so does the structure of the family change. For example, a recent article by Weinstein and others, (Weinstein *et al*, 1990) also signifies some trend of family nucleation and decline in the stem or joint type pf families in Taiwan.

The overall picture is, however, not simple. As shown in **Table 10**, according to the census statistics on households by type, the proportion of nuclear family households has been relatively stable since 1975 without a sigh of significant increase, though the type of “other related households” which practically means that of three-generation families shows a very clear trend in decline. It can be argued that this trend of non-increase in proportion of nuclear families is partly due to the rapid fertility decline which in turn causes the decreased supply of married sons eligible for nuclear families, that is non-eldest sons, if the propensity for living with the married eldest son does not substantially decrease (Yi, 1986; Hiroshima, 1988). But anyway, it can imply the tenacity of the stem-family orientation in Japan like any country in East Asian Region. Even though there are strong currents flowing towards modernization and concomitantly industrialization and urbanization, the traditional cultural influences imbued with Confucianism and kin-orientation are so strong a force as to foster the way of life supporting an perpetuating the three-generation family mode. In the case of Japan, however, in reference to **Table 10**, substantial increase is noted for one-person households. If these one-person households are added to the nuclear-families, then what may be called “nuclear-family like” households demonstrate a clear trend of increase.

Table 10. Trends in Household Structure, by Family Type, Japan

(percent)

Year	The number of total private households (thousands)	One-person households	Nuclear family households				Other related households	Non-relative households
			Total	Husband and wife only	Husband, wife and children	One parent and children		
1960	22,231	16.1	53.0	7.3	38.2	7.5	30.5	0.3
1970	30,297	20.3	56.7	9.8	41.2	5.7	22.7	0.3
1975	33,596	19.5	59.5	11.6	42.5	5.4	20.8	0.2
1980	35,824	19.8	60.3	12.5	42.1	5.7	19.7	0.2
1985	37,980	20.8	60.0	13.7	40.0	6.3	19.0	0.2
1990	40,670	23.1	59.5	15.5	37.3	6.8	17.2	0.2
1995	43,447	24.8	59.1	17.5	34.4	7.2	15.8	0.3

Source: Japan Statistics Bureau, *Population Censuses*.

D. Three-generational Co-residentiality among the Elderly

Table 11 indicates the trends in structure of households by family type having at least one elderly person aged 65 and over. This table may strike out a quite notable result since three-generation households show the largest share in percentage distribution though the proportion has long been declining. In this table, the trends are clear: (1) an increase in nuclear-family like households, including regular nuclear-family households and one-person households and (2) a gradual but fairly appreciable decline in the proportion of three-generation households.

Table 12 indicates the patterns of living arrangement among household members aged 60 and over in Japan 1995. This table presents unique data on living arrangement of the population aged 60 and over classified by five-year age group as to whether living alone, co-living with their spouses, co-living with their married children, etc. This type of data are not available by the census, but only by the sample survey by the Ministry of Health and Welfare. This table clearly shows the continuity and tenacity in the traditional mode of living arrangement in Japan. Even though the three-generation family households has been declining in proportion, still 53 percent of the aged 60 years and over co-live with their children and 30 percent co-live with their married children. Furthermore, when they get older they tend to co-reside more numerously with their children, particularly with the married.

According to the 1985 Family Life Course Survey conducted by the Institute of Population Problems (Family Life Course Survey, 1986), 52.5 percent of the total respondents numbering 7,708 expressed the view that if one could live in a three-generation household, he would feel happier. Then, 38.4 percent of them believed that the three-generational co-living should be a more natural and human way of living arrangement whereas only 25.2 percent of them believed that the nuclear family should be a more natural and human way of living arrangement (Institute of Population Problems, 1986). According to the recent attitudinal survey by the Management and Coordination Agency, 53.6 percent of the elderly aged 60 and over felt happier if they could live together with their children and grandchildren (Management and Coordination Agency, 1992).

However, the model of three-generational family as living arrangement particularly for the elderly may not be a perfect solution and the many problems arising from such a mode of living are already well documented.

Table 11. Trends in the Percentage Distribution of Households by Family Type Containing at Least One Elderly Person Aged 65 and Over, Japan, 1975-1995

(percent)

Year	Total households (thousands)	One-person households	Nuclear family households				Three-generation family households	Other types of households
			Total	Husband and wife only	Husband-wife and unmarried children	One parent and unmarried children		
1975	7,118	8.6	22.7	13.1	6.7	2.9	54.4	14.4
1980	8,495	10.7	26.7	16.2	6.7	2.8	50.1	12.5
1985	9,400	12.0	29.8	19.1	6.4	4.3	45.9	12.2
1986	9,769	13.1	29.3	18.2	6.6	4.5	44.8	12.7
1987	9,954	13.0	29.9	19.0	6.3	4.6	43.9	13.2
1988	10,225	13.7	31.5	20.0	6.7	4.8	41.7	13.1
1989	10,774	14.8	32.6	20.9	6.8	4.9	40.7	11.9
1990	10,816	14.9	33.2	21.4		11.8	39.5	12.4
1991	11,613	15.6	34.1	22.1		12.0	38.5	11.7
1992	11,884	15.7	34.9	22.8		12.1	36.6	12.8
1993	12,187	16.3	35.9	23.3		12.6	35.9	11.8
1994	12,853	16.4	36.4	24.0		12.4	34.9	12.2
1995	12,695	17.3	37.1	24.2		12.9	33.3	12.2

Source: Department of Statistical Information, Ministry of Health and Welfare, *Kokumin Seikatsu Kiso Chosa no Gaikyo (Basic survey for National Life), 1995*, Tokyo, 1996.

Note: Before 1985, it was called Kosei Gyosei Kiso Chosa (Social Survey for Health and Welfare Administration).

Table 12. Percentage Distribution of the Household Members Aged 60 and over by Five-Year Age Groups and Status of Co-living or Being Separated: Japan, 1995

(percent)

Age group	The number of total households (thousands)	One-person households	Households of married couples, no co-living relatives	Co-living with their child			Households co-living with other relatives	Households co-living with non-relatives
				Total	Co-living with married child	Co-living with unmarried child		
All ages	24,745	11.2	31.4	52.8	29.9	22.9	4.3	0.2
60-64	7,296	7.9	36.4	49.3	16.7	32.6	6.3	0.2
65-69	6,289	10.1	37.9	47.1	25.3	21.8	4.7	0.2
70-74	4,618	13.7	32.8	50.3	32.6	17.7	3.0	0.2
75-79	3,122	15.3	23.9	58.1	41.0	17.1	2.6	0.1
80+	3,421	13.3	14.1	69.6	53.1	16.5	2.8	0.2
70+	11,161	14.0	24.6	58.4	41.2	17.2	2.8	0.2

Source: Department of Statistical Information, Ministry of Health and Welfare, *Kokumin Seikatsu Kiso Chosa (Basic Survey for National Life)*, 1995, Tokyo, 1996.

The conflict between mother and daughter-in-law is a classical one, and differences between generations are enormous in respect to taste of food, bio-rhythm, wake-up and sleeping time, susceptibility to different temperature, and more generally, way of thinking and behaving. Elderly suicide rates were reported higher among the three-generational settings rather than otherwise (Ueno, 1981). Yet, when the elderly get older and more frail or one of the elderly couple dies, then in many cases the remaining elderly person tends to give up living by himself or herself and bring their relatives in their home or join the relative's household.

In the Western as well as in the Eastern societies, many studies have pointed to the significant role that families play in caring for the elderly. Even though the society and the Government can prepare expenditure budgets to pay to the elderly a decent amount of social security installment and medical expenses, the role of the family in making a linkage between the Government and the elderly would never be lessened. While only a minority of the elderly routinely require help from others at any one time, where help is needed much of it is provided by family members, either inside or outside the household. Suppose that an old person gets physically and mentally weak and bedridden, the public assistance and institutional help together with the Government's financial aid may not be sufficient to support and maintain their decent life. In many cases the person providing support will be the spouse. However, as the support and care that required gradually become more extensive with increasing age, the more likely it is to be provided by other relatives, principally daughters or daughters-in-law. Such relatives play a role in sustaining the elderly and helping those who require assistance in preparing food, shopping, doing the laundry and toileting.

Allan (1985) stresses in the advent of the aged society the family care increases in its cost, not only monetarily but also non-monetarily. First, the real costs of providing care can be very high. With increasing frailty, when survival chances increase in the elderly, health and medical services increase. The consequence is that the support they require fits less easily with all other activities family members normally expect to engage in. Gradually, the tending they need becomes far more demanding and time-consuming which is the equivalent of a full-time job. It becomes hard work especially for those who are themselves no longer young. Often the sons and daughters in their sixties take care of their parent in their eighties.

In this connection, it should be borne in mind that while caring for the elderly can make demands on all family members, the brunt of the bur-

den is undoubtedly borne by women (Allan, 1985), often by daughters-in-law in Japan. In conclusion, the Japanese model above-mentioned did perhaps nicely work out when mortality was high in the middle and old ages and there were few survivors of the elderly in the stem family households. In that situation, if they survived, they were hale and strong and particularly very useful with knowledge and skills they had accumulated. But when the life expectancy has increased dramatically and there are many survivors, some of whom are infirm and bedridden, it is not sure at all how long the three-generational family household as an optional mode of living arrangement for the elderly can last and can support such onus. But, on the other hand, it is also not sure whether the present model of the West letting the elderly make their own living in the spirit of independence and self-reliance to the latest possible limit can still work nicely in the prospect of further prolongation of life expectancy in the advanced ages and increases in the age segments that is what may be called "ageing within the age".

Summary and Discussion for Part I

The imminent arrival of aged society is recognized as inevitable in Japan, inasmuch as it is an accumulated result of long past demographic trends. Even a drastic increase in fertility which may often be of involuntary nature cannot evade a collision course of population with a forthcoming ageing society, characterized by old-age dependency and the state in which there are more elderly people than children. Certainly, the term "population ageing" has become a household word to an average citizen in Japan. Population ageing has been considered one of the most crucial demographic and social issues facing contemporary Japan.

Contrary to the generally held notion that the prolongation of life expectancy brings about the process of population ageing, the established demographic theory teaches us that lowering fertility is the most important locomotive to reach population ageing. Usually, according to the experiences of recent demographic transition in both the developed and developing countries, increases in life expectancy have been brought up by sharp drops of mortality in infancy and childhood, rather than by mortality reductions in the middle and old-aged groups. Hence, assuming no fertility changes, an increase in life expectancy usually brings about population rejuvenation or population youthening. It is the fertility decline that changes the age profile of population. Fertility decline actually slices off the hefty population piece at the bottom of population pyramid, thus

increasing proportion of the aged in the total population at the upper layers of the age profile. In recent years, however, the trend has changed slightly in such a way that mortality changes are more remarkable in the middle and aged groups of population than in the childhood, hence mortality decline in general means to work out more directly in increasing the sheer percentage of the middle and old level of populations.

Many arguments have been made to the forthcoming exceedingly advanced population ageing in Japan where total fertility rate has not easily been on rise, and the population size in the future may become its incipient decline. The projected figures of future population structure do not give anybody a very rosy prospect of the future population trajectory in which the old-age dependency ratio would very definitely increase, elderly/children ratio would also increase very rapidly while the working-age population who are the incumbent to support the social costs of the aged would definitely shrink in absolute number as well as in proportion. In view of this, one cannot help but think that the humankind is between Scylla and Charybdis in the whirlpooling strait of population, the former character symbolizing the over population and heavy youth-dependency due to high fertility and latter character indicating the ageing of population due to fertility decline and heavy old-age dependency.

What are we going to do in this context? What we must recognize is that the ageing society is a kind of inevitable state of affairs derived from the process of demographic transition, the process of transformation of high birth rate and high death rate to low birth rate and low death rate. What we should do then is to prepare and formulate appropriate programmes in keeping abreast of and in being harmony with the imminent arrival of a super-scaled ageing society. But, at the same time, we must reckon some good aspects of ageing society where the probabilities of surviving among the aged are very large, hence the investment on human resources would get the maximum returns. There are many substantial benefits to be accrued from the population ageing. It is envisaged that decrease would be seen not only in juvenile delinquency but also in general crime, violence, rape, vandalism, etc. It is also envisioned that automobile and motor-bike accidents would considerably be reduced and consequently the streets would regain tranquility and automobile insurance premium would appreciably be reduced. But let us discuss more fundamental issues relating to the demography and sociology of the nation.

There is, however, one aspect of social gains which population ageing brings to the society and its people—that is, a remarkable improve-

ment of survivorship. Phenomenal increases in the life expectancies for males and females enable them to reach the adulthood (say, age 22 years) in the probability of 99 out of 100 births born at the same time and to complete their working life at age 65 years in the probability of 88 percent under the lowest mortality experience as seen in Japan. In the case of Japan, say, in 1935, only three-fourths of the babies born could reach adulthood and only 30 percent could attain the terminal age of working life (65 years). In Japan, the total cost of upbringing a new born baby to college graduation is now estimated approximately at US\$300,000 according to the current Japanese price index and university fees until he gets a gainful job after graduation from the university. Suppose that approximately 1.5 million babies are born annually in Japan. If they have to go through the same mortality schedule as in 1935, approximately 370,000 persons would never reach age 22. Then, Japan as a whole would have lost US\$111 billion since human investment of \$300,000 per person could not produce any returns. There is one thing, however, one has to consider additionally—that many people die not just one day before reaching age 22; many die during the first year of life after birth long before reaching the age of college graduation, so that the nation actually does not waste \$300,000 entirely for each premature death. Suppose the nation wastes only one tenth of \$300,000 per young man on the average. Even on this assumption the nation would have saved, under the low mortality level as is being experienced now, about US\$11 billion each year for each single-year cohort, which is not small money at all.

If that vein of calculation is extended to assess the number of person years gained throughout working ages and if their net contributions to the society are made possible by an increase in life expectancy (remember that nowadays 88 out of 100 births survive to age 65 while only 30 had a chance of surviving in 1935), then such gains in human resources otherwise foregone by premature death would be tremendous. The gains thus accrued from the increase in life expectancy may compensate at least for a good portion of the increase in the Government's spending for bolstering the social security and medical care cost for the elderly.

At the same time, another cheer for the aged society is an expectation of abolishing century-old seniority system prevailing in Japan where ascribed status such sex, age, cohort, year of entrance, etc. rather than merit of achievement and performance, determines status, reward and remuneration in social stratification.

By and large, seniority system in social stratification has a *raison d'être*

in a traditional broad-based population pyramid which is an outcome of high fertility and high mortality; as age increases, the next older population dwindles quickly. In such a broad-based, pyramid-shaped population, the old-age persons were of relative rarity and the chances were that only strong and wise ones survived. In a relatively slow-moving society without frequent technological innovation, skills and know-how in productive work were cumulative and the knowledge and wisdom of old men who were scarce in number were very useful and instrumental for work, life and group solidarity. To be sure, along with the process of ageing, this bottom-wide, triangle-shaped population pyramid is transformed into a more rectangular-shaped age silhouette created by a decline in fertility and a decline in mortality in the middle-age and the elderly. In such a population, the old-aged persons are no longer rare and uncommon but plentiful and ubiquitous.

In the increasingly ageing society, the centry-old social seniority system together with the patriarchal family or extended family system prevalent in Japan and elsewhere may be expected to crumble someday from the very demographic reasons along with the process of modernization, industrialization and urbanization, though it may still take a long time to take place.

It has been pointed out that many older people wish to continue working because they are still vigorous, want more money, want to establish self-reliance; and they need a sense of being wanted and a sense of being creative. But their wish to continue on working is seldom realized or seldom honoured; in fact, older people are shunned away from the productive work inasmuch as there is stronghold of seniority system and value system in a traditional society in which ascription rather than achievement has been the criterion of selection, criterion of reward and punishment. This criterion is now under demographic pressure to change and it is a good thing.

References

- Allan, Graham. 1985. *Family Life*. London: Basil Blackwell.
- Banister, Judith. 1990. Implications of the Aging of China's Population. In *Changing Family Structure and Population Aging in China*, ed. Zeng Yi, Zhang Chunyuan and Peng Songjian. Beijing, China: Peking University Press.
- Davis, Kingsley. 1984. Wives and Work: The Sex Role Revolution and its Consequences. *Population and Development Review*, Vol.10, No.3.
- Hiroshima, Kiyoshi. 1988. "Does very low fertility accelerate nuclearization? Kin availability of low fertility societies". Seminar on Theories of Family Change. IUSSP Committee on Family Demography and Life Cycle, Tokyo, 29 November-2 December 1988.
- Institute of Population Problems, Ministry of Health and Welfare. 1983. *Showa 57-nen Dai 8-ji Shussanryoku Chosa (Eighth National Fertility Survey in 1982)*. First Report: Nihon Jin no Kekkon to Shussan (Marriages and Births among the Japanese). Tokyo: Institute of Population Problems.
- Institute of Population Problems, Ministry of Health and Welfare. 1986. *Showa 60-nendo Kazoku Life Course to Setaikozo Henka ni kansuru Jinkogakuteki Chosa (Demographic Survey on Changes in the Family Life Course and Household Structure)*. Tokyo: Institute of Population Problems.
- Institute of Population Problems, Ministry of Health and Welfare. 1988. *Showa 62-nen Dai 9-ji Shussanryoku Chosa (Ninth National Fertility Survey in 1987)*. First Report: Nihon Jin no Kekkon to Shussan (Marriages and Births among the Japanese). Tokyo: Institute of Population Problems.
- Institute of Population Problems, Ministry of Health and Welfare. 1992. *Nihon no Shorai Suikei Jinko: Heisei 4-nen 9-gatsu Suikei (Population Projections for Japan)*. Tokyo: Institute of Population Problems.
- Institute of Population Problems, Ministry of Health and Welfare 1993. *Heisei 4-nen Dai-10kai Shussho Doko Kihon Chosa; Dai-ichi Hokokusho: Nihonjin no Kekkon to Shussan (The Tenth Japanese National Fertility Survey, Vol. I: Marriage and Fertility)*. Tokyo, Institute of Population Problems.
- Institute of Population Problems, Ministry of Health and Welfare. 1995. *Wagakuni Setaisu no Shorai Suikei, Heisei 2-nen — Heisei 22-nen, (Household Projections of Japan, 1990-2010)*. Tokyo: Institute of Population Problems.

- Institute of Population Problems, Ministry of Health and Welfare. 1995. *Jinko Tokei Shiryoushu 1995 (Latest Demographic statistics, 1995)*. Tokyo: Institute of Population Problems.
- Kitagawa, Evelyn. M. 1955. Components of a Difference between Two Rates. *Journal of American Statistical Association*, Vol.50 (December), pp.1168-1174.
- Kono, Shigemi, 1969. Changes in Household and Family Structure in Japan. *IUSSP International Population Conference*, London, 1969, Vol.3, pp. 2223-2233.
- Kono, Shigemi, 1989. Population Structure. *Population Bulletin of the United Nations*, No.27. New York: United Nations. ST/ESA/SER.N/27.
- Kono, Shigemi and Shigesato Takahashi. 1985. Mortality Trends in Japan: Why Has the Japanese Life Expectancy Kept on Increasing. Paper prepared for the International Population Conference, Florence 1985, June 5-12, International Union for the Scientific Study of Population.
- Management and Coordination Agency. 1992. *Rojin no Seikatsu to Ishiki (Life and Attitude of the Elderly)*. A Report on International Comparative Report on People's Public Opinion.
- Office of the Prime Minister, Public Relations Office. 1985. *Public Opinion Survey on Education Issues (Academic Career)*. February.
- Statistics Bureau, Management and Coordination Agency. 1996. *Heisei 7-nen Kokuseichosa Chushitsu Sokuho Shukkei Kekka (Quick Report on One-percent Sample Tabulations of the 1995 Population Census)*. Tokyo: Statistics Bureau.
- Ueno, Masahiko, 1981. Suicide of the elderly. *Medical Journal of Nihon University* (Tokyo), Vol.40, No.10 (October) (in Japanese).
- United Nations. 1956. *The Aging of Populations and its Economic and Social Implications*. New York: United Nations. Population Studies, No.26.
- United Nations Population Division. 1969. Analysis and Projections of Households and Families. German Foundation for Developing Countries and Federal Statistical office of Germany, *Population Data and Use of Computers with Special Reference to Population Research*, Berlin and Weesbaden.
- Weinsten, Maxine, Te-Hsiung Sun, Ming-Cheng Chang and Ronald Freedman. 1990. Household Composition, Extended Kinship, and Reproduction in Taiwan: 1965-1985. *Population Studies*, Vol.44, No.2 (July), pp.217-239.
- Zeng, Yi, 1986. Changes in Family Structure in China: A Simulation Study. *Population and Development Review*. Vol.12, No.4 (December). pp.675-703.

PART II

Socioeconomic Consequences of Population Aging in Japan

PART II

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Introduction

The story of Japan's miraculous postwar economic success has been told many times (Minami, 1986; Ogawa, Jones, and Williamson, 1993). No less striking, however, was the unprecedented rapidity with which Japan completed her demographic transition (Hodge and Ogawa, 1991). Among all the industrialized nations, Japan was the first to experience a fertility decline in the postwar period and it had the greatest decline in national fertility among these countries.

In contrast to the United States and European countries, the postwar baby boom in Japan was extremely short, lasting only three years, from 1947 to 1949 (Hodge and Ogawa, 1991; Ogawa and Retherford, 1993a).

After this short postwar baby boom, fertility declined sharply in Japan. During the 1947-1957 period, the total fertility rate (TFR) fell by more than half, from 4.54 to 2.04 children per woman. There were only minor fluctuations around the replacement level until the first oil crisis in 1973. Thereafter, the TFR started to fall again and reached 1.43 in 1995.

In addition, age-specific mortality rates declined during the last 50 years. Over the period 1947 to 1965, life expectancy at birth rose from 50.1 to 67.7 years for men and from 54.0 to 72.9 years for women. In 1995, life expectancy was 76.4 for men and 82.8 for women; both of these levels are currently the highest in the world.

As a result, Japan's population aging process is unprecedentedly rapid, and is expected to accelerate towards the early part of the next century (Ogawa, 1993). Although Japan's current level of population aging is not yet as advanced as in many of the Western industrialized nations, within the next few decades it is likely to be even higher than the current levels of those countries (Ogawa, 1993). Furthermore, the Japanese societal structure and family organization are substantially different from those of other developed nations (Morgan and Hiroshima, 1983; Ogawa and Retherford, 1993b). For these reasons, Japan's process of adjustment to her age structural shifts is likely to encounter a wide range of problems, both serious and unique, in allocating support resources for a rapidly growing number of the elderly population.

In this paper, we will discuss a variety of likely consequences of Japan's rapid population aging upon the socioeconomic system in the 1990s and beyond. The next section will provide a brief description of the labor market and the social security system in Japan. Section 2 will discuss, by heavily drawing upon a macroeconomic-demographic simulation model, the process of aging of the Japanese population likely to occur over the next few decades, highlighting its uniqueness in comparison with that for other developed nations. In Section 3, the impact of Japan's future population aging processes upon the socioeconomic system will be assessed, by referring to some of the projected results produced from the macroeconomic-demographic simulation model. In the final section of this paper, we will consider some policy options and their feasibility.

1. Aging Labor Force and Changing Social Security Programs

A. Labor Market Responses

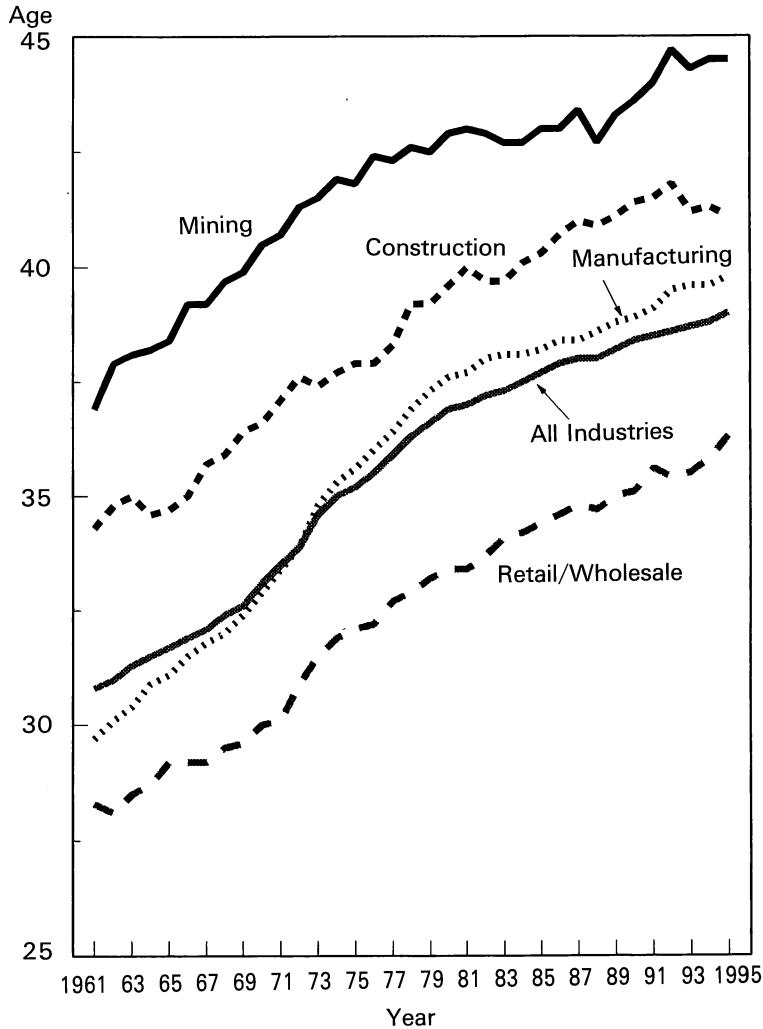
At the close of World War II, the Japanese economy was severely crippled (Thompson, 1950), but her productive capacity had recovered to the prewar level by the second half of the 1950s. During the 1960s, Japan's real GNP grew at the phenomenal rate of about 11 percent per annum. However, since the oil crisis in 1973 which triggered a series of measures for the restructuring of the Japanese economy, her economic growth performance has been much less impressive than that for the 1960s.

As a consequence of the demographic shifts and accompanying economic changes, the annual rate of labor force growth has varied over recent decades, ranging from 1.3 percent in the 1960s to 0.9 percent in the 1970s and to 1.2 percent in the 1980s. There have been substantial differences in the pattern of growth rates between men and women over this period. The average annual growth rate of the male labor force declined from 1.6 percent in the 1960s to 1.0 percent in the 1970s and to 0.9 percent in the 1980s. In contrast, the corresponding growth rate of the female labor force dropped from 1.0 percent in the 1960s to 0.8 percent in the 1970s, but it rose to 1.7 percent in the 1980s. A brief comparison of these growth rates for the two sexes during the past decades reveals that the female labor force has been substituting for the male labor force to a considerable extent, thus keeping the overall labor force growth rate at a relatively high level (Ogawa and Clark, 1995).

Moreover, the proportion of aged workers in the labor force has been steadily increasing in recent years (Ogawa and Clark, 1993). The Japanese census data show that the proportion of employed persons aged 40 and over grew from 37.5 percent in 1950 to 42.6 percent in 1970, and to 58.7 percent in 1995. These age structural shifts of the work force have caused a continuous rise in the mean age of workers. The average age of workers outside agriculture and the service industry was 30.8 years in 1961, 34.6 years in 1973, 37.5 years in 1984, and 39.0 years in 1995 (Ministry of Labour, various years).

As can be seen by inspecting **Figure 1**, there are clear differences in the pattern of increase of the mean age among various industries. The manufacturing industry, which is one of the core industries in the Japanese

Figure 1. Mean age of the workforce for selected industries in Japan, 1961-1995



Source: Ministry of Labour, *Basic Survey of Wage Structure*, various years.

economy, has undergone both in absolute and relative terms the greatest increase in the mean age of its workforce. To partly cope with this rapid rise in the mean age of its workers, the manufacturing industry has been heavily utilizing robotics and other automated production technologies (Ogawa, 1982).

It is also worth noting that the government has recently set up a policy goal to reduce the annual hours of work per worker to 1,800 hours

(Ogawa and Retherford, 1993a). If this policy target is to be achieved as planned, the need for further substitution of labor for capital is likely to increase.

In spite of these pronounced changes in the labor market, the fundamentals of Japanese employment and wage practices have been changing only slowly. The seniority wage system and the lifetime employment practice are still the two major institutional features, particularly for male workers in large-scale businesses (Ogawa and Suits, 1983; Martin and Ogawa, 1988; Clark and Ogawa, 1992a, 1992b). Lifetime employment provides job stability to workers, who in turn exhibit a high level of loyalty to their employers. These extremely loyal workers are essential for team work, which the Japanese system of industrial relations promotes.

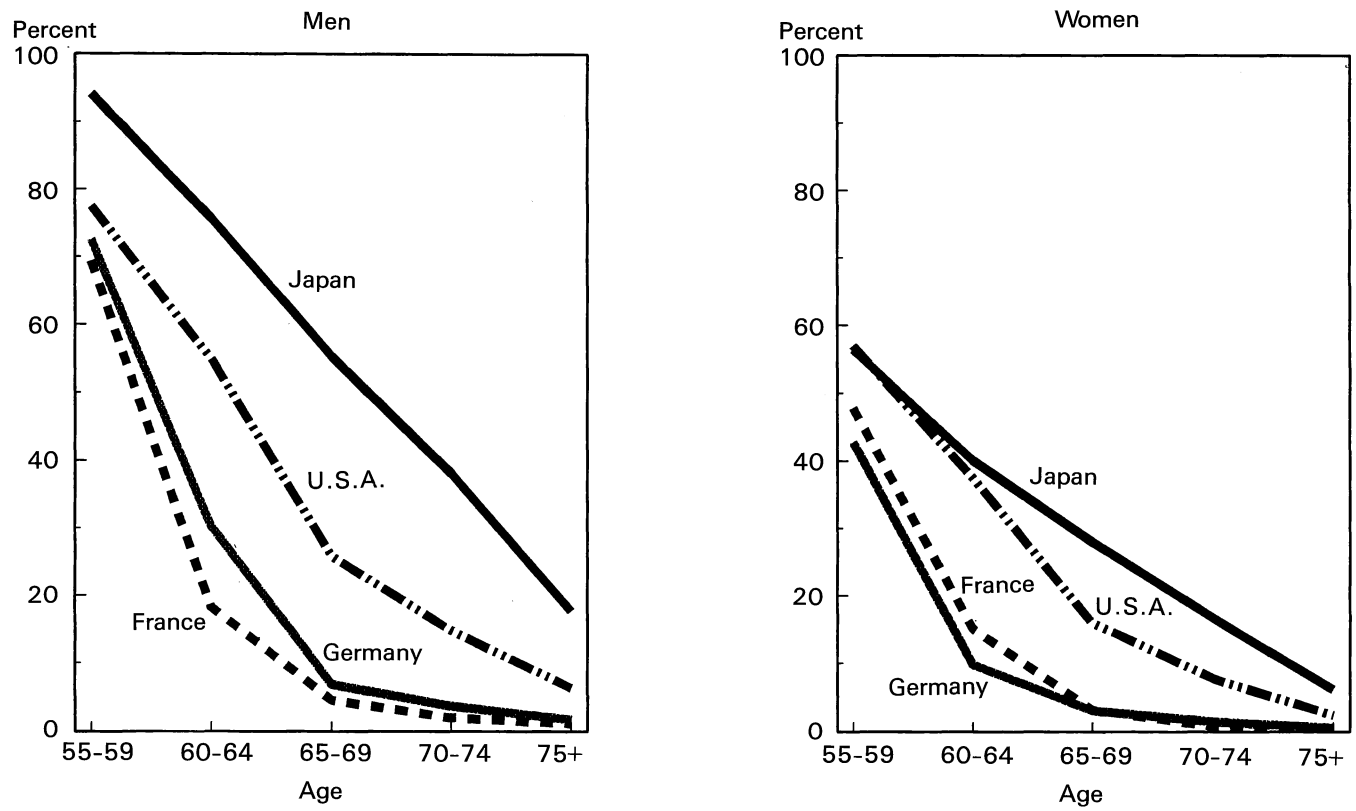
Despite dedication to their work, they are required to retire at an age specified by the company. Japan's mandatory retirement policies probably represent an extreme among the practices of industrialized nations (Schulz, Takada, and Hoshino, 1989). It is important to observe that the proportion of firms having mandatory retirement rules has been increasing, not declining. In 1993, average retirement age for large-scale businesses was 59.9 years, markedly low in comparison to other highly industrialized countries and in view of Japanese life expectancy (Clark and Ogawa, 1992b; Ogawa and Clark, 1993).

One of the principal obstacles to raising the mandatory retirement age is related to the practice of the seniority wage system, under which the postponement of retirement age leads to larger wage bills. In response to the aging of the work force, however, many businesses, particularly among large-scale enterprises, have been gradually modifying the seniority-based wage system by introducing ability-related elements (Ogawa and Suits, 1983; Clark and Ogawa, 1992a, 1992b).

Although the wage system has been modified over time in response to the aging of the labor force, the traditional seniority remuneration system is still widely prevalent. Because of this age-graded wage system, younger workers are still strongly preferred to older workers. Hence, the employment opportunities for aged workers are still seriously limited. For example, the ratio of job openings to job seekers for the age group below 20 was 2.1 in 1995, as opposed to 0.1 for the age group 60-64.

Although employment opportunities for the elderly are severely limited, the labor force participation rate of older workers still remains at a much higher level, compared with that for other industrialized countries. Data displayed in **Figure 2** illustrate this point. It should be emphasized, however, that the majority of elderly workers in Japan are either self-employed in

Figure 2. Labor force participation among elderly people in selected industrialized countries, by sex, 1993



International Labour Office, *Year Book of Labour Statistics* 1994, 1995.

the primary industry or employed by small-scale businesses with low pay, prestige, and job stability (Ogawa and Clark, 1993).

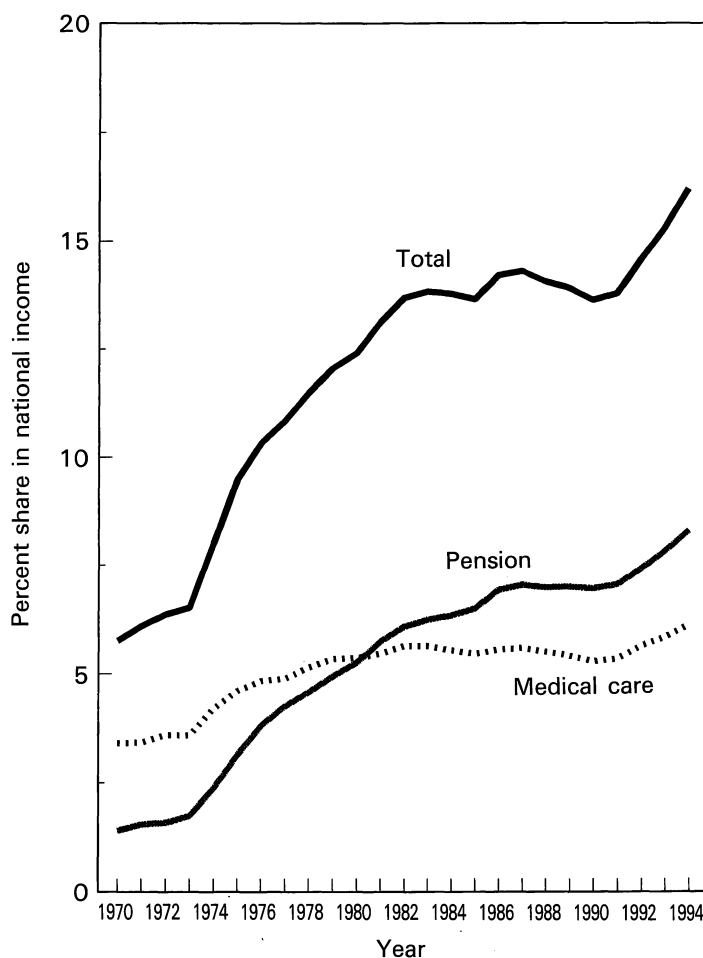
In order to extend the working life of employees, the systems of reemployment and employment prolonging have been in practice. It should be stressed, however, that these plans often provide greater flexibility to the management than uniform increases in the retirement age, because these programs are applied only to selected employees of a company (Furuya and Martin, 1981). In 1995, 70 percent of all companies with 30 or more employees used one or both of these plans. Of these companies, 50 percent reemployed workers after their retirement, 28 percent had a system for prolonging employment beyond the age limit for some employees, and the remaining 22 percent utilized both plans. The recent trends show that the proportion of companies using both plans has been continuously rising. It should also be noted that under these plans, workers' job responsibilities, wages and work statuses are lowered; this is particularly pronounced under the reemployment plan. Attention should be drawn, however, to the fact that the proportion of large enterprises with 5,000 employees or more having these plans is surprisingly low; in 1995, it was only 54 percent. This is because these large-scale businesses have an alternative arrangement where by a substantial number of older employees are transferred to their subsidiary companies well in advance of their retirement age (Furuya and Clark, 1993; Ogawa and Clark, 1993).

B. Evolution of the Social Security System

Over the past few decades, the provision of income and other security for elderly persons through the social security system has improved to a pronounced degree. During 1970-1994, the total amount of social security benefits paid out increased by more than 17 times in nominal terms (Social Insurance Agency, 1996). In 1970, these social security benefits corresponded to 5.8 percent of national income, but grew to 16.2 percent in 1994, as shown in **Figure 3**. By international standards, however, Japan's current social security expenditure is considered to be at a relatively low level (Martin, 1989).

In response to the increase in the benefits paid out, the ratio of social security contributions to national income also went up considerably over the same period. The growing difference between benefits and contributions has been covered primarily by resources from government general revenues. It should be noted, however, that

Figure 3. Trends in social security benefits, 1970-1994



Source: Social Insurance Agency, *Outline of Social Insurance in Japan 1995, 1996*.

faced with slower economic growth triggered by the two major oil shocks in the 1970s and fast population aging, the Japanese government, like the governments of other industrialized countries, has recently been making a series of modifications of various social security programs to increase revenues and limit expenditures (Social Insurance Agency, 1996).

Both old-age pension schemes and medical care plans constitute the core of the social security system in Japan. The share of these two compo-

nents in the total social security payment has changed substantially over time. In 1970, 60 percent of the total social security expenditure was allocated for medical care benefits, and 24 percent for pension benefits. In 1994, the proportion was 38 percent for medical care benefits and 51 percent for pension benefits (Social Insurance Agency, 1996). This intertemporal shift of the allocation of the social security payment is attributable mainly to the maturation of old-age pension schemes and partly to several major changes introduced into medical care plans.

In Japan, both public pension schemes and medical care plans have evolved on the basis of occupational groups. As regards the former, there are currently six different public pension insurance schemes in operation (refer to **Table 4, Appendix B**). Among these six schemes, Employees' Pension Scheme (EPS) and the National Pension Scheme (NPS) cover approximately 90 percent of the work force. The remaining 10 percent of workers belong to four different Mutual Aid Association Schemes (MAAS). Each of these pension schemes has a different evolutionary process. For instance, EPS was instituted in 1941 originally for the purpose of mobilizing resources to finance war expenditures. In 1961, when Japan's miraculous economic spurt was at an early stage, NPS was introduced so as to insure those who had not yet been covered by any other public pension scheme; with the initiation of NPS, the universal pension system was established in Japanese society. Because of the difference in the timing of inception, each pension scheme is at a different level of maturation.

In 1986, a major pension reform was carried out; the concept of a basic pension was introduced as a base for integrating the fragmented, occupation-specific pension schemes. One of the primary objectives of this reform was a gradual reduction of various inequalities existing in the six public pension schemes. For instance, it is expected that the earnings-related component will be eliminated over the next 20 years. The other inequality is associated with the inter-scheme difference in pensionable ages. For male and female members enrolled in NPS, the age for pension eligibility is 65 years. However, the members belonging to other schemes are allowed to receive, subject to a retirement test, earnings-related benefits from age 60. According to the 1986 reform, it was anticipated that this discrepancy of pensionable ages among the various pension schemes would be eliminated, by gradually raising the pensionable age to 65 by the year 2010. However, another minor reform was undertaken in 1994, and the target year was shifted to 2013. Based upon the 1994 reform, the contribution rate for EPS is projected to rise from 17 to 30 percent of salary (excluding bonuses)

between 1995 and 2025. In view of the fact that the majority of employees are required to retire from their firms before they reach age 60, this change in pensionable age may pose serious difficulties unless retirement age is raised accordingly and/or employment opportunities for the elderly are expanded to a large extent.

Now, let us briefly discuss the government health insurance program. Unlike in the United States where market forces are stressed in the development and allocation of health resources, the government assumes responsibility for providing medical care services through its social insurance system. The existing public medical care insurance system, which has been of a universal nature since 1961, consists of five different plans for the same reasons as in the case of the public pension schemes. Among these five plans, the Association-managed Health Insurance Plan (AHIP), the Government-managed Health Insurance Plan (GHIP), and the National Health Insurance Plan (NHIP) are the three major ones, covering 87 percent of the population. Employees of large-scale enterprises are enrolled in AHIP, and those of small- or medium-sized businesses in GHIP. NHIP is the community health insurance for those not covered by any other public medical insurance plans. It is important to note that, compared with AHIP and GHIP, NHIP has a markedly older age structure for the following two reasons. First, a considerable proportion of NHIP members are farmers and self-employed workers whose average age is much higher than that for employees in general. Second, all employees, upon their retirement, are required to shift from their own occupation-specific plans to NHIP.

The contribution is shared by employees and their employers, and the government provides small subsidies to cover administrative and management costs. In the case of NHIP, however, a different amount of the premium is collected from each household, depending upon its annual income and assets. Because of these differences in the premium rates as well as in age structure among the medical plans, the financial foundation of NHIP, compared with the other four plans, is extremely weak, and the government must provide heavy subsidies to cover its deficits. To ease this financial burden on the government, the other four medical plans for employees have been required to make contributions to NHIP since 1984.

The proportion of national income allocated to medical care was only 3.4 percent in 1970, but grew to 5.3 percent in 1979, as displayed in **Figure 3**. Through a series of cost containment policies implemented in the early 1980s, however, the proportion has been fluctuating around the 5-percent level in recent years, reaching 6.1 percent in 1994 (Social Insurance Agency, 1996).

Because there has been a severe shortage of long-term care facilities for the elderly, the overwhelming majority of old inpatients receive medical care at general hospitals, thus substantially increasing the average duration of hospitalization; data gathered in 1993 show that the average length of hospitalization for those aged 65 and over is 71 days, as opposed to 10 days for those at ages 0-14 (Health and Welfare Statistics Association, 1995). Institutions for long-term care for the elderly are a relatively recent development; the establishment of such institutions was officially approved by the government in 1983.

Because institution-building is a slow process, and Japan's population aging is expected to accelerate in the next few decades, it is highly probable that the long period of hospitalization will continue to be the main source of the growth of public medical expenditure in the years to come. In order to avoid this future development, the government emphasized in its 1987 White Paper on Health and Welfare that the responsibility for looking after elderly patients should be shifted from hospitals to family caregivers, who are usually middle-aged women. To facilitate this transfer process, the government started in 1990 to increase substantially, through its 10-year project called "the Golden Plan," its budgetary allocation for the social service programs for elderly patients (Ogawa and Retherford, 1996).

C. Bridging Pensionable and Retirement Ages

It is anticipated among government pension planners that the discrepancy of pensionable ages among the various pension schemes will be eliminated by gradually raising the pensionable age to 65 in all public pension plans by the year 2013. Since the majority of older employees are required to retire from their firms before they reach the age of 60, however, this pensionable age may pose serious difficulties unless the mandatory retirement age is raised accordingly and/or the employment opportunities for work after mandatory retirement are considerably expanded.

In an initiative that is consistent with these policy goals, the government of Japan has been implementing a variety of programs and measures aimed at facilitating the increase in mandatory retirement ages since the latter half of the 1980s. In 1986, it implemented the comprehensive Law Concerning Stabilization of Employment for Older Persons. This legislation established the goal of raising the mandatory retirement age *at least* to age 60 in every Japanese company. The law, however, does not include

any significant sanctions for noncompliance.

In 1990, this law was substantially revised. Under the 1990 amended law, various subsidy programs for older workers have been developed to facilitate the transition to a retirement age of 65. In October 1990, for example, the Ministry of Labour began offering subsidies to companies that introduced policies such as raising the mandatory retirement age, employment extension, and reemployment in order to keep older workers on the payroll up to age 65.

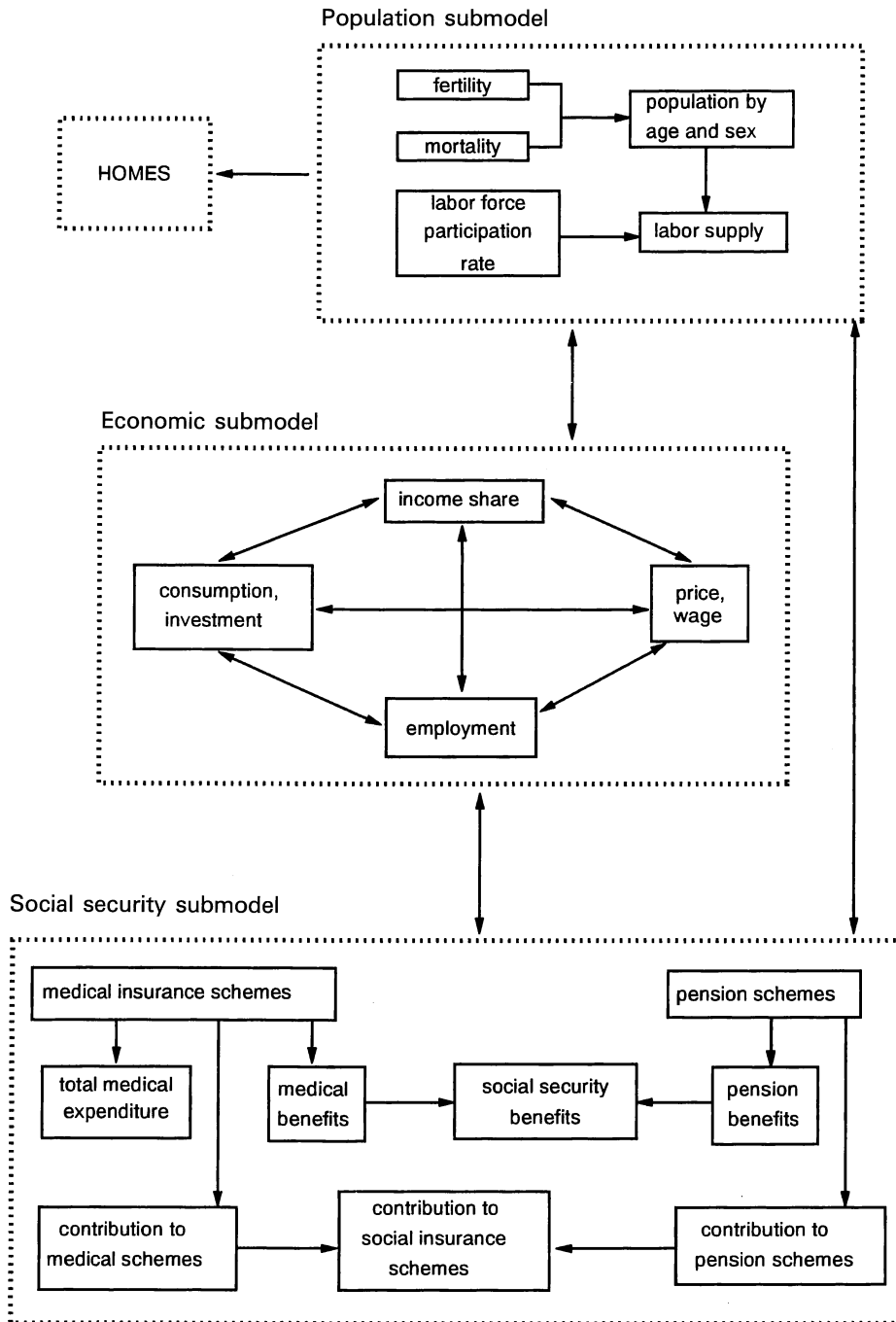
In addition to these subsidy programs, the government of Japan has a wide range of other programs to promote raising of the mandatory retirement age and to increase employment opportunities for older workers. For instance, the Ministry of Labour has organized a series of regional meetings to make employers recognize the importance of solving employment problems faced by workers in their early sixties.

The foregoing discussion clearly indicates that numerous programs have been initiated and measures taken by the government to make the transition to a mandatory retirement age above age 60 less difficult. The future directions of these labor market-oriented policies and programs are closely linked, however, with the evolution of public pension policies. Younger workers are now voicing an increasing concern about the adverse effect of the extension of the mandatory retirement age limit upon their future promotional opportunities within their firms.

2. Japan's Future Aging Process and Its Uniqueness

In the early 1980s, a macroeconomic-demographic-social security model for Japan was developed by the Nihon University Population Research Institute (the NUPRI model, hereafter). Since then, the NUPRI model has been periodically expanded and updated. The NUPRI model consists of the following three submodels: the population submodel, the economic submodel, and the social security submodel. As displayed in **Figure 4**, these three submodels are interdependent; the population submodel is first determined by a set of economic and social security variables with a one-year lag, and the variables in both economic and social security submodels are simultaneously determined, using the computed demographic variables.

Figure 4. Interrelationship among three submodels



The NUPRI model is of a Keynesian nature, incorporating both price and wage adjustment mechanisms to solve the system for each year of simulation. It should be noted that both fertility and mortality are endogenously determined within the macroeconomic-demographic-social security model. The fertility level for each year is estimated from a fertility model of the new home economics approach (Butz and Ward, 1979; Ogawa and Mason, 1986). As regards mortality, the expectation of life at birth for each sex is computed as a function of the one-year lagged per capita government medical expenditure measured in real terms.

Based upon a population projection derived from the most recent version of the NUPRI model (Ogawa and Matsukura, 1995), we will examine Japan's future pattern of population aging over the period 1995-2025. **Table 1** presents projected results. Japan's total population, which was 125.6 million in 1995, is projected to increase to 128.6 million by 2007. After reaching this peak, the nation's population is expected to decrease continuously to a level of 121.7 million by 2025.

Though not shown in **Table 1**, the total number of those aged 65 and over more than doubles from 18.6 million in 1990 to 33.4 million in 2021, after which it is projected to decline gradually. Moreover, due to sexual mortality differentials at higher ages, the predominance of women among the aged population is expected to become increasingly pronounced over time. This feminization of the elderly population suggests that in a virtually universal marriage society such as Japan, the number of widows will grow rapidly in the next few decades. Because of declining family support by adult children (Ogawa, 1993; Ogawa and Retherford, 1993b), the increase in elderly widows is very likely to lead to a considerable rise in the demand for institutional care in the years ahead.

Several important points emerge with regard to the age compositional changes displayed in **Table 1**. First of all, in 1995, the proportion of the population at ages 0-14 is 15.9 percent, and the proportion of those aged 65 and over is 14.8 percent. Throughout the projected period, the former is on the downward trend, but the latter increases continuously. Towards the end of the projected period, however, the growth rate of the share of the elderly population slows down, thus approaching a higher aging plateau (Schurer, Zhao, and Laslett, 1989). In 1998, the elderly aged 65 and over begin to outnumber the young at ages 0-14, as indicated by the index of aging.

Secondly, as indicated in **Table 2**, although the proportion of those aged 65 and over is presently smaller in Japan than in many other industri-

Table 1. Projected demographic changes for Japan, 1995-2025

Year	Total Population (million)	0-14 years old (percent)	15-64 years old (percent)	65+ years old (percent)	$\frac{75+}{65+}$ (percent)	Total dependency ratio	Index of aging	Familial support ratio*
1995	125.6	15.9	69.3	14.8	39.6	44.4	93.2	0.73
2000	127.3	15.3	67.7	17.0	39.9	47.7	111.3	0.52
2005	128.5	15.2	65.6	19.3	44.0	52.6	127.3	0.40
2010	128.4	14.9	63.3	21.8	46.9	58.0	146.0	0.38
2015	127.0	14.0	60.9	25.0	46.4	64.1	178.3	0.38
2020	124.5	13.1	60.1	26.8	49.3	66.3	203.7	0.42
2025	121.7	12.8	59.9	27.3	56.6	66.9	213.3	0.37

*Population aged 45-49 / population aged 65-79.

Table 2. International comparison of the proportion of those aged 65 and over for selected industrialized nations in 1995 and 2025

1995		2025	
Country	Percentage	Country	Percentage
Sweden	17.3	Japan	27.3
Italy	16.0	Italy	25.2
Norway	15.9	Germany	22.9
United Kingdom	15.5	Switzerland	22.4
Denmark	15.2	Netherlands	22.2
Germany	15.2	Finland	21.7
France	14.9	France	21.3
Japan	14.8	Sweden	21.2
Switzerland	14.2	Denmark	20.9
Finland	14.1	Norway	19.2
Netherlands	13.2	United Kingdom	19.0
U.S.A.	12.6	U.S.A.	18.1
Australia	11.6	Australia	17.2

Sources: United Nations, *World Population Prospects: The 1994 Revision*, New York, 1995. The data for Japan are based upon the NUPRI population projection.

alized nations, Japan's population is likely to become the world's oldest known human population in the early part of the next century. More importantly, the Japanese population will reach the world's highest level of aging at an unprecedented rate, as can be seen by inspecting **Table 3**. Japan's aged population reached the 10-percent level in the year 1985 and was the latest among all the industrialized nations listed in **Table 3**. Despite this delayed onset, Japan is the first country in which the aged comprise more than 20 percent of the total population among all the countries appearing in this table. The length of time required to increase from 10 to 20 percent of the Japanese population is only 22 years. Compared with such European countries as Sweden and Germany, Japan will age at a tempo approximately three times as fast.

Thirdly, the aging of the aged population itself deserves special attention. As shown in **Table 1**, the proportion of those aged 75 and over in the population aged 65 and over grows rapidly after the turn of the century. It is projected to rise from 39.9 percent in 2000 to 56.6 percent in 2025. A close examination of this projected result and country-specific data produced from the recent population projection prepared by the United Nations (1994) reveals that Japan's level for 2025 is likely to be by far the highest in the world, followed by Sweden (51.1 percent). Obviously, this

marked age compositional shift of the Japanese population will generate a substantial effect on the pattern and level of demand for medical care services, as will be discussed in the next section.

Fourthly, it should be noted that the total dependency ratio is relatively low until the turn of the century. In 1991-1992 the index of total dependency is 43.3, which is the lowest in postwar Japan. Moreover, it is also one of the lowest levels in the contemporary developed world (United Nations, 1994). In the next century, however, the index is expected to increase continuously, thus reaching its peak value of 66.9 in 2025, which will be the highest among all the industrialized nations at that time. In view of these projected results, appropriate policies should be formulated before the end of this century to cope with the negative effects of the anticipated acceleration in population aging.

It is interesting to note that the peak of total dependency over the projected period is comparable to Japan's highest level (71.6) recorded in 1920. It has been observed in a few existing studies (Wander, 1978) that the average per capita total expenditure (private and public) is roughly equal between young and old dependents. If this observation holds for Japan, one may say that because Japan had already experienced greater total dependency in the prewar period, the rising total dependency burden to be placed upon the productive population in 21st-century Japan will be within a manageable range. It should be stressed, however, that over the next three decades, Japan's tempo of the increase in total dependency is the fastest among all the industrialized nations, thus suggesting that Japan, compared with other developed nations, is likely to face more formidable adjustment

Table 3. International comparison of the speed of population aging

Country	Year in which the aged population reaches		Time required to increase from 10 to 20% (years)
	10%	20%	
Japan	1985	2007	22
Greece	1968	2011	43
Italy	1966	2010	44
Spain	1975	2019	44
Finland	1973	2019	46
Switzerland	1959	2020	61
Germany	1952	2017	65
Sweden	1947	2017	70

Source: Same as Table 2.

problems in reallocating resources among various age groups.

Fifthly, familial support ratios, which relate the population at ages 45-49 to those aged 65-79 and enable us to assess the number of adult children in terms of a single generation of parents who would have borne them at ages 15-34 (Myers, 1992), are expected to decline by 50 percent from 0.76 in 1990 to 0.38 in 2010, as presented in **Table 1**. These projected results indicate that the demographic potential of familial support by adult children for the elderly diminishes rapidly, starting from the turn of the century when a large age cohort glut of baby boomers disappears from the age group 45-49.

These pronounced age compositional shifts are closely reflected in the future course of Japanese households. A recent application of a new household projection technique called "HOMES" to Japan has yielded a number of interesting results (Mason, 1988; Mason, Ogawa, and Fukui, 1992). For instance, the average household size will continue to drop from 3.1 members per household in 1990 to 2.6 in 2025. Households headed by the elderly will increase at a very rapid pace, especially those with a head aged 75 or older. By 2025, nearly one in five households will have a head of this age group, as compared with only 4 percent in 1990. Moreover, in 1990, almost three-quarters of all households are intact households where a husband and wife are present. This percentage of intact households declines steadily so that, by 2025, two-thirds of all households are intact; the remaining one-third consists of non-intact households such as one-person households. Thus, an increasing number of households will face the special pressures that bear on households which do not have the benefit of both a husband and wife present.

These HOMES-based results, coupled with the declining trend of the familial support ratio, point to the high likelihood that the traditional extended family system will be continuously weakened over time. Although the government has recently started, as discussed earlier, its 10-year Golden Plan to alleviate the family's burden in taking care of frail older parents at home, the number of households which do not have caregivers is expected to rise so that the effectiveness of the Golden Plan is likely to be increasingly limited over time.

3. A Macroeconomic Scenario: Limits to the Support System for the Aged

The NUPRI model has also yielded a projection of a host of macroeconomic and social security-related variables over the period 1995-2025. Among these variables, we have selected, as shown in **Table 4**, several key variables with a view to discussing some of the major impacts of population aging upon the socioeconomic system in Japan.

Although real GNP is projected to increase by 1.6 times over the 30-year period, its annual growth rate slows down over time from 2.8 percent during 1995-2000 to 1.0 percent in the 2010s. One of the principal sources of such declining economic growth is related to the labor side. It is the first time in modern Japanese history that labor supply is expected to decrease after it reaches its peak value of 68.3 million in the year 2001. This negative growth of labor supply is induced by such factors as (i) a marked decrease in the number of new entrants due to sustained low fertility and to a further rise in educational enrollment at the tertiary level, and (ii) a continuous fall in the labor force participation rate of the elderly through an increase in the per capita pension benefit as well as reduced employment opportunities in the primary industry where many elderly workers are engaged. Although the labor force participation rate for middle-aged women is projected to rise considerably over the next 30 years, this positive effect is not large enough to offset the numerous negative effects on labor force growth.

It should also be noted that, though not shown in the table, hours worked per worker are projected to diminish by 6 percent during the 30 year period owing to a gradual rise in real wages. If the government's goal to shorten the average annual working hours per worker to 1,800 hours, as discussed earlier, is successfully achieved in the near future, the total amount of effective labor supply will decrease at a faster rate than that computed from the model.

These projected results for labor supply, however, may be affected appreciably by a number of factors not having been explicitly incorporated in the NUPRI model. One of these factors, for instance, is related to Japanese workers' attitudes toward their own jobs. The age composition of the labor force will shift pronouncedly. In 1995, the ratio of the male labor force aged 15-24 to that aged 60 and over is roughly 0.8, but is projected to fall to 0.5 in 2009 when the baby boom cohorts reach age 60.

This age structural transformation is prone to adversely affect the upward mobility of young workers due to a lack of higher posts (Keyfitz, 1973), which may, in turn, erode a strong work ethic.

The other source of the decline of real GNP growth performance lies in the gradual fall in the saving rate. As presented in **Table 4**, the gross national saving rate is projected to decrease substantially over time, declining to 7.9 percent by 2025. The expected rise in social security contributions as well as in household consumption resulting from population aging is primarily responsible for the fall in the saving rate; increased social security contributions lead to a rise in the wage bill, which will, in turn, reduce corporate savings; and the growth of retirees relative to workers depresses household savings, as is theoretically consistent with the framework of life cycle savings (Mason, 1988). It should also be noted that Horioka (1988) has recently examined 30 different factors on the basis of data gathered from various OECD countries and Japan, and identified the following three significant factors accounting for Japan's high household savings rate: (i) the low proportion of the aged population, (ii) the bonus system, and (iii) the rapid rate of economic growth. The NUPRI model shows that both the first and third factors are likely to adversely affect Japan's household savings as her population aging process advances.

It is worth noting, however, that the above result for the saving rate may differ considerably, if the following three considerations are incorporated in the model. First, Ando (1985) has suggested the possibility that further improvements of life expectancy may motivate Japanese workers to save more. Second, the extent to which the government's recent policy shift from export-oriented growth to domestic consumption-fueled growth is implemented may lead to a lower saving rate. Third, although the low interest rate policy has been implemented by the monetary authorities in postwar Japan, it is likely to rise in the future as Japan's financial liquidity diminishes in the process of population aging. Then, the higher interest rates in the domestic financial market will not only prevent a flight of capital abroad but also induce a return or inflow of capital from outside. Despite the declining savings rate, therefore, this shift of capital may lead to an increased capital-labor ratio, thus facilitating favorable growth performance. These three considerations, however, are not incorporated in the NUPRI model.

As Harada and Takada (1991) have recently demonstrated, using a simple simulation model, Japan's saving rate may change appreciably, depending upon the future direction of the social security programs.

Table 4. Projected changes in selected economic and social security-related variables, Japan, 1995-2025

Year	Real GNP* (trillion yen)	Labor supply (million yen)	Gross national savings rate** (percent)	Male contribution rate for ESP (percent)	Total medical expenditure (million yen)	Social security contributions + taxes national income (percent)
1995	488.3	67.4	21.9	17.0	29.9	40.5
2000	560.0	68.3	18.5	18.0	40.6	41.3
2005	623.2	67.5	15.2	18.9	53.1	43.1
2010	671.4	66.0	11.9	22.0	65.6	46.7
2015	706.3	64.5	9.4	27.6	77.5	51.3
2020	740.0	63.5	8.3	30.1	89.9	54.3
2025	765.1	62.1	7.9	31.5	100.4	56.4

* 1985 constant prices

** Defined as $100 \times \frac{\text{personal savings} + \text{corporate savings} + \text{government savings}}{\text{national income}}$

The NUPRI model has produced, by assuming that the current structure of the social security system is maintained throughout the projection period, trajectories of various social security-related variables. The projected results for a few key variables are displayed in **Table 4**.

The male contribution rate for the leading pension scheme (EPS) is projected to grow from 17.0 percent in 1995 to 20.9 percent in the year 2010, and 31.5 percent in 2025. Among Japanese pension planners, it has been generally agreed, though not theoretically well-grounded, that 20 percent will be a limit to the contribution rate for EPS. In view of this implicit consensus, it is likely that Japan's pension system will be reviewed and modified again before the year 2000, which may be more drastic than the 1985 major revisions.

The total medical expenditure measured in nominal terms is expected to rise almost 3.4 times over the 30-year period. This increase in medical care costs is attributable to both the aging of the population and further medical technological progress. The share of Japan's GNP required for medical expenditure rises gradually from 5.1 percent in 1995 to 6.5 percent in 2025. At this juncture, it is interesting to compare these projected figures with the levels being experienced in some of the other industrialized nations. The share of GNP allocated to medical expenditure, which is adjusted for intercountry differences in coverage, was 7.6 percent for France in 1989, and 9.9 percent for the United States in 1991 (Health and Welfare Statistics Association, 1995). When compared with these statistics, the projected results for Japan over the next 30 years indicate that it is unlikely to reach such levels.

How much will Japanese taxpayers be required to contribute to the social security system over the next 30 years? In 1996, the Government of Japan set a ceiling for the tax burden arising from financing the social security programs. According to the government plan (the so-called *Hashimoto Vision*), the national financial burden defined as [(social security contributions + taxes) / national income] should be kept below 45 percent in the years to come. As presented in **Table 4**, although it appears to meet this target until the beginning of the next century, it is projected to exceed 50 percent in 2014, reaching 56 percent in 2025. Obviously, if the government sticks to its current plan, both pension and medical care programs will need to be considerably downgraded in the near future.

In the process of downward adjustments, however, the intergenerational inequity issue is likely to arise as a matter of wide public concern. To mitigate such intergenerational conflicts, long-term planning is essen-

tial, and revisions should be made well before the process of population aging accelerates in the early 21st century. In the late 1990s, therefore, it is crucial for Japanese nationals to decide whether the current government plan for the social security system is acceptable (Clark and Ogawa, 1996). Are Japanese taxpayers willing to choose the high welfare/high cost scenario? Or, do they prefer the low welfare/low cost scenario?

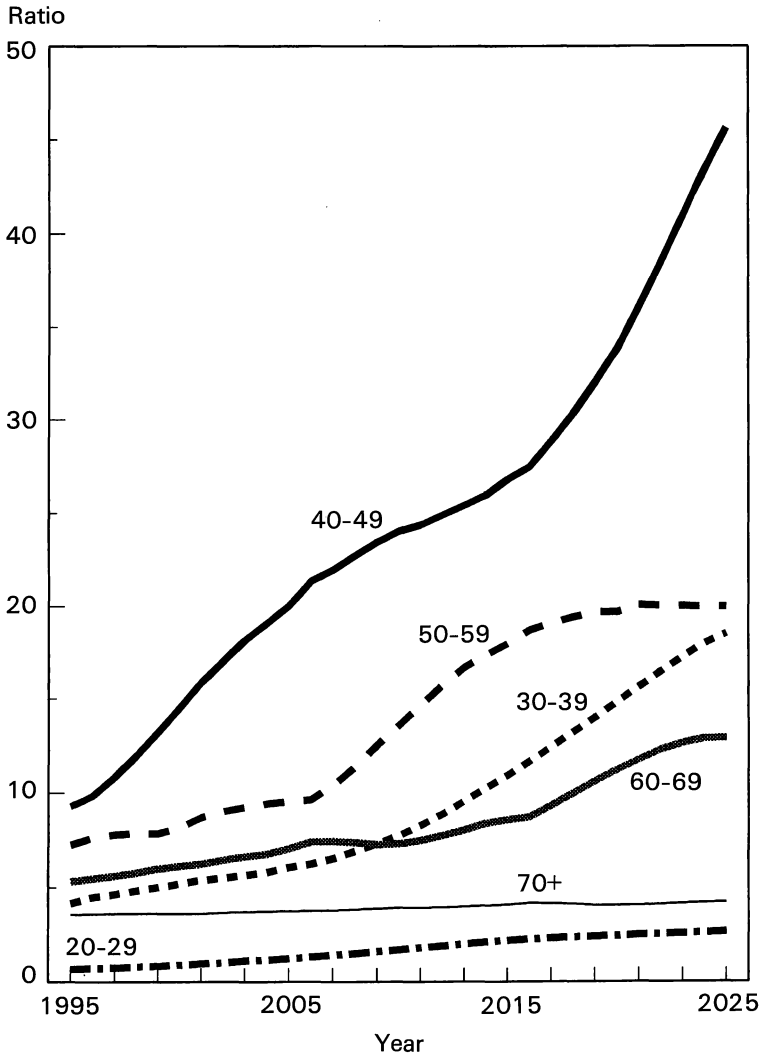
The choice between these alternative scenarios will clearly affect the extent to which families provide care to their elderly parents at home. As the aging process advances, elderly patients who need intensive nursing are expected to increase at an alarming rate. In the NUPRI model, the number of those aged 65 and over who are bedridden, or suffer from senile dementia, has been estimated for the next 30 years, by assuming the age-sex-specific pattern of the incidence of being each type of patient to remain unchanged throughout the projected period. The number of bedridden patients, either at home or in medical institutions, will grow by 2.3 times, i.e., from 1.0 million in 1995 to 2.29 million in 2025. The total number of senile dementia cases will increase by 2.6 times from 1.25 to 3.22 million during the corresponding period.

This difference in the magnitude of growth between the two types of elderly patients is explained by the following two factors. First, at higher ages such as 75 years old and over, the incidence of being senile-demented is much higher than that of being bedridden. Second, as discussed in the earlier section, the aging of the aged is expected to become increasingly pronounced over the next few decades.

A substantial proportion of these elderly patients has been and will be looked after at home by adult children, particularly non-working middle-aged women. With this family support pattern borne in mind, we have projected the ratio of elderly patients at home to women at various ages outside the labor force. To facilitate this computation, it has been assumed that the current age-sex distribution of female caregivers at home will remain constant in the future. Moreover, the number of non-working women at varying ages has been calculated by multiplying the age-specific female population by $(1 - \text{FLFPR})$, where FLFPR stands for the female labor force participation rate for the corresponding age group; both of these population and economic variables have been derived from the economic submodel of the NUPRI model. The ratios have been computed for the following six age groups: 20-29, 30-39, 40-49, 50-59, 60-69, and 70 and over.

The estimated results are shown in **Figure 5**. As can be seen by inspecting the graphical exposition, the ratios of the aged population at

Figure 5. Change in the ratio of the aged population suffering from senile dementia or being bedridden to non-working women at various ages, 1995-2025



home suffering from senile dementia or being bedridden to women outside the labor force grow over time for all age groups. It can also be noted that although the differences in the ratios among these age groups are very small in the early years, they expand markedly over time. Furthermore, non-working women in their 40s consistently show the highest ratio throughout the projection period. Approximately one out of every 10 women aged

40-49 assumes responsibility for taking care of one infirm elderly person at home in 1995, but almost 50 percent of the non-working women of this age group is likely to provide in-home care to elderly patients in 2025. These intertemporal differences in the pattern of increase in the computed ratios among the six age groups are attributable to changes in their labor force participation rates as well as in their cohort size.

The above computational results point to a dramatic rise in the burden placed upon middle-aged Japanese women providing in-home nursing for the frail elderly. These results are likely to change drastically, depending upon the future availability of both (i) public support services through social security programs such as the Golden Plan and its subsequent plans beyond the year 2000, and (ii) long-term care institutions. The degree to which care for elderly patients is internalized through Japan's traditional familial support network is also contingent upon the magnitude of the future demand for female labor force, and upon the commitment of future cohorts of women to care for elderly kin with serious infirmity or illness at home. In view of the financial constraints on the part of the government, the recent trend for female paid employment (Ogawa and Clark, 1995; Ogawa and Ermisch, 1996; Ermisch and Ogawa, 1994), and the rapid filial normative shift (Ogawa and Retherford, 1993b; Retherford, Ogawa, and Sakamoto, 1996), the financial and manpower outlook for providing care to Japanese frail elderly is rather gloomy.

4. Policy Options Facing Japan

The projected results for the macroeconomic and demographic variables suggest that the population of Japan will age at an accelerated speed, which will, in turn, give rise to Japan's slowed economic growth and increased social security costs. These results accord with the government's outlook for 21st-century Japan (Economic Planning Agency, 1983). Although both the abundance of high-quality human resources and the high saving rate have been two principal driving forces of Japan's remarkable postwar growth performance, it is very likely that both of them will drastically change as the aging processes advance over the next few decades. In addition, the borrowing of technologies from the Western developed countries has also played a crucial role in placing the Japanese postwar economy on the high-growth path, but Japan has now entered the stage where

she has to invent her own new technologies, by allocating greater resources for research and development activities. Undoubtedly, these financial, manpower, and technological constraints will pose formidable challenges to Japanese bureaucracy, businesses, and households. What should be done to cope with these challenges?

The model simulation results show that the supply factors, particularly labor supply, will constitute a major bottleneck to sustaining economic growth, beginning from the mid-1990s. One of the ways to overcome this supply-constrained growth scenario is to shift a considerable amount of production to areas outside Japan by exporting capital to the sources of cheap labor. This policy option is, however, threatened by political instability in receiving countries, and the loss of Japanese comparative advantages as a result of Japan's transfer of technologies and management skills to business leaders in the receiving countries.

A second policy option related to labor is to change Japan's traditional employment and wage practices to accommodate a rapidly growing elderly labor force. A key factor is how quickly Japanese businesses can change their management strategy formed during the labor-surplus period of the 1950s and 1960s, and replace the seniority-based wage structure with the ability-oriented remuneration system. Also, evidence that has been amassed to date indicates that the government's various subsidy programs for facilitating the employment of aged workers are not enough. To achieve the government's specified goals, it may be necessary to impose heavy penalties for noncompliance rather than to rely on persuasion to influence employers.

Japan's future shortage of young workers can be partially remedied by the development of labor-saving technologies such as robots and automated production methods. At the same time, older workers should be encouraged to familiarize themselves with the use of microelectronics and related modern technology. To facilitate this process, part of the technical development efforts should be directed toward the simplification of the operation of productive equipment so that elderly workers can easily handle it. Also desirable is a better utilization of young workers. To promote technological innovations, a considerable proportion of these young workers with modern scientific knowledge should be effectively allocated to highly technology-developing sectors, preferably through government incentive and disincentive schemes.

International labor migration, which is another policy option, is a recent phenomenon in Japan. At present, although the Japanese government

allows businesses to export wealthy retired persons to various resort areas in several countries such as Australia and Canada (Martin, 1989), it prohibits business firms from importing labor except for those with highly-specialized skills such as foreign language teachers and professional athletes (Ogawa, Jones, and Williamson, 1993). The proportion of foreign nationals in the Japanese labor force is the lowest percentage among the industrialized nations (Abella, 1989).

In June 1990, the Immigration Law was amended to tighten a further inflow of illegal foreign workers. Unlike the case of Singapore, it is not foreign employees but employers that are penalized; as for the maximum penalty faced by the employers, the revised provision includes imprisonment up to three years or a fine up to 2 million yen. One additional important feature of the 1990 amendments is that a training program with the quota imposed was instituted. The total number of foreign trainees (who are actually unskilled workers) should not be more than 5 percent of the employees working for each firm; this implied that firms with less than 20 workers were not allowed to have any foreign trainees.

Another labor-related policy option is to raise female participation in the labor force. The age-specific labor force participation rates of Japanese women still show a M-shaped pattern, although participation among middle-aged women has been rising in recent years primarily due to their higher education, shortening of the reproductive span, and a more modern life-style (Shimada and Higuchi, 1985; Ogawa and Clark, 1995; Ogawa and Ermisch, 1994). It should be stressed that slightly more than half of married women working as paid employees are part-time workers, and that this proportion has been growing at a rate faster than that of full-time workers since the late 1970s (Ogawa and Retherford, 1993a). This increased importance of part-time employment is related to the income tax rules; those who earn more than one million yen a year must not only pay income tax but also lose their dependent status in their husbands' payroll and social security plans. The removal of these tax rules is expected to lead to a further rise in the participation of middle-aged women in full-time paid employment.

To raise married women's participation in the work force, the government has also been attempting to improve the availability of day-care centers by extending their service hours rather than by increasing the number of day-care facilities. At present, although the supply of day-care facilities for preschoolers is reasonably sufficient, only 28 percent of married women with children aged 0-5 are using day-care services (Population Problems

Research Council, 1994). More importantly, among women not using day-care services, almost two-thirds feel that they would prefer to care for their own children at home, while less than 2 percent cannot utilize the services due to limited service hours (usually from 8 o'clock in the morning to 6 o'clock in the evening.) These results indicate that the majority of Japanese mothers still attach prime importance to "mothering," and that the extension of service hours at day-care facilities is unlikely to lead to an increase in mothers' purchase of day-care services for preschoolers.

There are a few policy areas which seek to curb the escalating cost of the social security system. One of them is related to a further reduction of social security benefit levels and coverage. In the realm of medical care services, cost-containment policies such as the diagnosis-related group (DRG) approach, the acceptance of the euthanasia concept, and the recognition of brain deaths are conceivable options facing Japan. To reduce the manpower and financial requirements for bedridden or senile-demented patients, modern technologies such as "telemedicine" (a computerized diagnostic system linking homes and hospitals) are now being used experimentally in selected areas. If these policies are to be implemented, however, they may lead to a shortening of the Japanese life expectancy, and a loss of the human touch in medical care services.

The government is currently considering the establishment of a new social insurance scheme to provide home nursing services for the elderly, modeled after a similar program recently initiated in Germany. According to the 1994 and 1995 rounds of the National Survey on Aging, approximately 90 percent of respondents aged 20 and over were supportive of this new scheme (Ogawa and Retherford, 1996). However, the financing of the scheme is problematic and still under discussion.

Although the scope of this paper is confined largely to the Japanese context, Japanese experiences of population aging and policy responses seem to be useful in formulating suitable policies in many developing countries currently undergoing rapid demographic transformations, particularly in Asia. Furthermore, in the face of her fast economic development, Japan has retained some of her traditional cultural values, so that the Japanese model may be of relevance to policy makers in developing regions interested in combining the best of traditional and modern approaches in order to provide support to the elderly.

References

- Abella, Manolo I. 1989. "Japan: short on labour, big on aid," unpublished manuscript, ILO Regional Office for Asia and the Pacific.
- Ando, Albert, 1985. "The savings of Japanese households: a micro study based on data from the National Survey of Family Income and Expenditure, 1974 and 1979," manuscript, University of Pennsylvania.
- Butz, William P., and Michael P. Ward. 1979. "The emergence of countercyclical U.S. fertility," *American Economic Review* 69, no. 3: 318-328.
- Clark, Robert L., and Naohiro Ogawa. 1992a. "Employment tenure and earning profiles in Japan and the United States: comment," *American Economic Review* 82, no. 1: 336-345.
- Clark, Robert L., and Naohiro Ogawa. 1992b. "Mandatory retirement and earnings profiles in Japan," *Industrial and Labor Relations Review* 45, no. 2: 258-266
- Clark, Robert L., and Naohiro Ogawa. 1996 forthcoming. "Public attitudes and concerns about population aging in Japan," *Aging and the Society*.
- Economic Planning Agency. 1983. *Japan in the Year 2000: Preparing Japan for an Age of Internationalization, the Aging Society and Maturity*. Tokyo: The Japan Times.
- Ermisch, John F., and Naohiro Ogawa. 1994. "Age at motherhood in Japan," *Journal Population Economics* 7, no. 4: 393-420.
- Furuya, Kenichi, and Robert L. Clark. 1993. "Labour force developments and emerging human resource policies in Japan," in Naohiro Ogawa, Gavin Jones, and Jeffrey Williamson (eds.), *Human Resources in Development along the Asia-Pacific Rim*. Singapore: Oxford University Press pp. 210-225.
- Furuya, Kenichi, and Linda G. Martin. 1981. "Employment and retirement of older workers in Japan," NUPRI Research Paper Series, No. 8. Tokyo: Nihon University Population Research Institute.
- Harada, Yutaka, and Seiji Takada. 1991. "Chochiku, shihon chikuseki to koreika shakai (Savings, capital accumulation, and an aging society)," Discussion Paper Series, No. 1, Tokyo: Institute for Posts and Telecommunications Policy.

- Health and Welfare Statistics Association. 1995. *Kokumin Eisei no Doko 1995 nen (Trends of National Health for 1995)*. Tokyo: Health and Welfare Statistics Association.
- Hodge, William R., and Naohiro Ogawa. 1991. *Fertility Change in Contemporary Japan*. Chicago: University of Chicago Press.
- Horioka, Charles. 1988. "Why is Japan's private saving rate so high?" in Ryuzo Sato and Takashi Negishi (eds.), *Recent Developments in Japanese Economies*. Tokyo: Academic Press, pp. 145-178.
- Keyfitz, Nathan. 1973. "Individual mobility in a stationary population," *Population Studies* 27, no. 2: 335-352.
- Martin, Linda G. 1989. "The graying of Japan," *Population Bulletin* 44: 1-42.
- Martin, Linda G., and Naohiro Ogawa. 1988. "The effect of cohort size on relative wages in Japan," in Ronald D. Lee, W. Brian Arthur, and Gerry Rodgers (eds.), *Economics of Changing Age Distributions in Developed Countries*. Oxford: Clarendon Press, pp. 59-75.
- Mason, Andrew. 1987. "HOMES: a household model for economic and social studies," Papers of the East-West Population Institute, No. 106. Honolulu: East-West Population Institute.
- Mason, Andrew. 1988. "Saving, economic growth, and demographic change," *Population and Development Review* 14, no. 1: 113-144.
- Mason, Andrew, Naohiro Ogawa, and Takehiro Fukui. 1992. *Household Projections for Japan, 1985-2025: A Transition Model of Headship Rates*. Tokyo and Honolulu: Japan Statistical Association, Nihon University Population Research Institute, and East-West Center.
- Minami, Ryoshin. 1986. *The Economic Development of Japan: A Quantitative Study*. London: Macmillan Press.
- Ministry of Labour. Various years. *Basic Survey on Wage Structure*. Tokyo: Rodo Horei Kyokai.
- Morgan, S. Philip, and Kiyosi Hiroshima. 1983. "The persistence of extended family residence in Japan: anachronism or alternative strategy?" *American Sociological Review* 48, no. 2: 269-281.
- Myers, George C. 1992. "Demographic aging and family support for older persons," in Hal Kendig, Akiko Hashimoto, and Larry Coppard (eds.), *Family Support for the Elderly*. Oxford: Oxford University Press, pp. 31-68.

- Ogawa, Naohiro, 1982. "Economic implications of Japan's ageing population: a macro-economic demographic modelling approach," *International Labour Review* 121, no. 1: 17-33.
- Ogawa, Naohiro. 1993. "Impact of changes in population and household structure upon the allocation of medical resources in Japan," *Japan and the World Economy* 5, no. 2: 137-156.
- Ogawa, Naohiro, and Daniel B. Suits. 1983. "Retirement policy and Japanese workers: some results of an opinion survey," *International Labour Review* 122, no. 6: 733-746.
- Ogawa, Naohiro, and Andrew Mason. 1986. "An economic analysis of recent fertility in Japan: an application of the Butz-Ward model," *Journal of Population Studies* no. 9: 5-14.
- Ogawa, Naohiro, and Rikiya Matsukura. 1995. "Population change, development and women's role and status in Japan," *Asian Population Studies Series* no. 133: 1-91.
- Ogawa, Naohiro, and Robert D. Retherford. 1993a. "The resumption of fertility decline in Japan: 1973-92," *Population and Development Review* 19, no. 4: 703-741.
- Ogawa, Naohiro, and Robert D. Retherford, 1993b. "Care of the elderly in Japan: changing norms and expectations," *Journal of Marriage and the Family* 55, no. 3: 585-597.
- Ogawa, Naohiro, and Robert D. Retherford. 1996. "Japan's attempt to shift some of the social security costs of caring for the elderly back to families," unpublished manuscript.
- Ogawa, Naohiro, Gavin Jones, and Jeffrey Williamson (eds). 1993. *Human Resources in Development along the Asia-Pacific Rim*. Singapore: Oxford University Press.
- Ogawa, Naohiro, and Robert L. Clark. 1993. "Aging labor force and labor market responses in Japan," Background Paper Series No. 9, The Commonwealth Fund.
- Ogawa, Naohiro, and Robert L. Clark. 1995. "Earnings patterns of Japanese women: 1976 - 1988," *Economic Development and Cultural Change* 43, no. 2: 293-313.
- Ogawa, Naohiro, and John F. Ermisch. 1994. "Women's career development and divorce risk in Japan," *Labour* 8, no. 4: 193-219.

- Ogawa, Naohiro, and John F. Ermisch. 1996 forthcoming. "Family structure, home time demands and the employment patterns of Japanese married women," *Journal of Labor Economics*.
- Population Problems Research Council. 1994. *Summary of Twenty-Second National Survey on Family Planning*. Tokyo: Mainichi Newspapers.
- Retherford, Robert D., Naohiro Ogawa, and Satomi Sakamoto. 1996. "Values and fertility change in Japan," *Population Studies* 50, no. 1: 5-25.
- Schulz, James H., Kazuo Takada, and Shinya Hoshino. 1989. *When "Lifetime Employment" Ends: Older Worker Programs in Japan*. Waltham, Massachusetts: Policy Center on Aging, Brandeis University.
- Schurer, Kevin, Zhongwei Zhao, and Peter Laslett. 1989. "The secular shift in ageing: China and England compared," paper presented at the International Population Conference, New Delhi.
- Shimada, Haruo, and Yoshio Higuchi. 1985. "An analysis of trends in female labor force participation in Japan," *Journal of Labor Economics* 3, no. 1: 355-374.
- Social Insurance Agency. 1996. *Outline of Social Insurance in Japan: 1995*. Tokyo: Japan International Social Security Association.
- Thompson, Warren S. 1950. "Population and resources in Japan: a 1949 forecast," in *Modernization Programs in Relation to Human Resources and Population Problems*. New York: Milbank Memorial Fund, pp. 142-153.
- United Nations. 1994. *World Population Prospects. The 1994 Revision*. New York: United Nations.
- Wander, Hilde, 1978. "Zero population growth now: the lessons from Europe," in Thomas J. Espenshade and William J. Serow (eds.), *The Economic Consequences of Slowing Population Growth*. New York: Academic Press, pp. 41-69.

PART III

Social Security, Health Care, and Social Services for the Elderly in Japan

PART III

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Introduction

In the preceding two parts of this booklet, the demographic, social, and economic backgrounds of problems of the elderly were described in detail. In this part, the author would like to focus his attention on the development and present conditions of social security, health, medical, and social services for the elderly in Japan. In the final section, the author will offer a projected outlook of our health care and social services in the near future.

I. Brief History of the Societal Efforts for the Welfare of the Elderly in Japan before Meiji Restoration

Societal efforts for the welfare of the elderly in Japan can be traced back to charitable work by Buddhist temples in the old days. These provided relief to poor older persons without family to support and care for them. Since in ancient times Buddhism was in effect the national religion in Japan, it might be said that at that time the state was providing relief to poor elderly persons.

In feudal times, however, societal efforts for relief almost disappeared because of incessant wars between feudal lords throughout Japan.

The Age of Civil Wars came to an end when Japan was unified once again by the Tokugawa regime approximately four hundred years ago. The Tokugawa regime promoted, among other things, mutual assistance between relatives as well as neighbors. At the same time it gave protection and encouragement to Confucianism, Buddhism, and Shintoism (Japanese folk religion with a basic philosophy of ancestor worship) in order to maintain social order. Thus, filial piety, respect for the elderly, and ancestor worship became the basic moral laws of Japanese society.

Owing to the peace and prosperity of the Tokugawa Era, many Buddhist temples were engaged in charity as one of the most important parts of their activities. Needless to say, older persons were the main recipients, as the Tokugawa regime placed a special emphasis on the virtue of respect for the elderly. It should be pointed out, however, that relief was neither the responsibility of the central regime nor of the local feudal lords. In other words, in the Tokugawa Era, relief was essentially charity to be performed by Buddhist temples or charitable individual persons, though some feudal lords immortalized their names with their sincere relief efforts.

A. From Meiji Restoration in 1868 to the End of the Second World War

In 1874, the new Meiji Government issued the famous administrative order called “Jutsukyu Kisoku” (the Relief Order of 1874), which stipulated that an elderly sick person of 70 or more who had no relatives to support him/her could be given public relief. Other targets of public relief were

orphans and severely impaired persons. It should also be pointed out that the amount of money given as relief was very small, only sufficient to maintain a bare existence. Furthermore, this order did not cover any indoor relief. Thus, indoor relief to poor children and older persons had to be provided by private charity organizations or individuals. What the government did was only to give these almshouses a partial grant which covered only a very small proportion of actual expenses. This severe Relief Order was kept in effect for more than 60 years until 1932, when a new public relief law (Kyugohoh) was put into practice. The number of almshouses at that time was only 66 and the number of older persons living in these almshouses was only 2,753 throughout Japan.

The new public relief law (Kyugohoh) which was enacted in 1929 and put into practice in 1932 stipulated that the National Government should take the responsibility of relief for the poor. Eligibility for relief was eased a little in comparison with the previous order (Jutsukyu Kisoku), though it was still very limited from the standpoint of modern social welfare philosophy. This law lowered the age limit for relief from 70 to 65. In addition, indoor relief was approved as a legitimate form of providing assistance. As a result, the number of older persons institutionalized increased to 4,295 in 1940. That is, the number of such older persons was nearly doubled in nine years between 1931 and 1940. The number of relief institutions was, however, still seriously short of the actual needs. Therefore, many older beggars could be seen wandering here and there throughout Japan, while a huge amount of money was ungrudgingly spent for the expansion of military forces.

Japan's entrance into the Second World War in 1941 caused a devastating effect on the lives of Japanese people, especially on the lives of older persons without children on whom to depend, of orphans, and of the disabled. Because of the shortages of food, clothing, and above all, money allocated to the services for these persons, the death rate among the institutionalized, especially that of older persons, was extremely high. Such miserable conditions continued till the end of the Second World War in 1945.

B. From Military State to Welfare State

The defeat of Japan in the Second World War caused a thorough eradication of prewar ultra-nationalism and militarism. Instead, peace, democracy, human rights, and social welfare became the Nation's goal. Just one year after the end of the Second World War,

Kyugohoh (the old public relief law) was abolished, and a completely new public assistance law (Livelihood Protection Law) was enacted in accordance with the modern social welfare philosophy, though it did not recognize the legal right of people to ask for the provision of public assistance. Five years later, in 1950, the old Livelihood Protection Law was abolished, and the new Livelihood Protection Law was enacted. This is the present Japanese public assistance law, which recognizes the legal right of people to ask for the provision of assistance, and the right of appeal to upper administrative office and also to the court, when the applicant thinks that the decision of the local Welfare Office is not adequate in light of his/her needs. Owing to this law, the living conditions of poor older persons were significantly improved. One of the most significant effects of the new law was that older beggars who had been so commonly seen almost everywhere in the prewar days almost disappeared.

In addition to the public assistance law, two important laws were stipulated between 1945 and 1950. The first was the Child Welfare Law of 1947 and the Law for the Welfare of Handicapped Persons of 1949.

Another important step for the construction of the Welfare State was establishment of public pension programs to secure minimum income after retirement. Actually the first step in this direction, though very limited in its scope, was taken in 1941, before the end of the Second World War, in the form of a law for the establishment of public pension insurance for persons employed in mining, manufacturing, and other important firms. Three years later in 1944, one year before the end of the Second World War, this Law was revised so as to expand its coverage. The main goal of the 1941 and 1944 laws was to raise the morale of the employees of key industries, and thereby contribute to the national effort to win a victory in the War. It is to be noted, however, that this law also aimed at collecting money in the form of insurance contributions to finance the huge military expenses needed to continue the war. Whatever its goals may have been, the 1941 Law was the predecessor of the present National Retirement Pension Insurance Program for the Employees of Private Firms (Kosei Nenkin Hoken). Almost a decade after the end of the Second World War in 1954, the 1944 Law was revised so as to cover almost all employees working for private enterprises, including those which have only a very small number of employees.

In contrast with the public pension program for employed persons, the one for self-employed persons was established much later than the former, as will be discussed later in this paper.

C. Social Change and Its Impact on the Lives of the Elderly after the mid-1950's

Japan underwent a rapid economic development and urbanization from the mid-1950's. The impact of this change was so profound that it is sometimes referred to as "the second industrial revolution." In 1955 the proportion of the population engaged in agriculture was approximately 41 percent. This proportion was reduced to approximately 9 percent in 1985. Rapid industrialization and urbanization greatly affected the lives of Japanese older persons through a number of changes in the social and economic structure of Japan. I shall discuss some of the important ones below.

a) Impact of Demographic Change

As discussed in Part I of this booklet, because of improvements in the general standard of living as well as in medical sciences, the number of very old persons, aged 80 years or above, has been and is increasing significantly. The growth of the old old means an increase in the demand for various forms of care services. This increased demand is accelerated by the decreased capability of family caretakers, because the more advanced age of dependent older parents means that the age of their caretaking children has also become higher. In many cases, children themselves are already old and their own health is not adequate to provide needed care.

b) Migration of Younger Persons from Rural to Urban Areas

The reduction in the agricultural population means that there was a great migration from rural to urban industrialized areas. As a result, even in rural areas, the proportion of older persons living alone or only with a spouse increased significantly, though the proportion of such older persons in rural areas is still much lower than in urban areas.

c) Influence of the Dispersion of Industrial Areas

In addition to the great migration of the younger generation from rural to urban areas, due to a dispersion of industrial areas caused by the development of the manufacturing industry, a large number of young people were forced to move to other industrial areas to find jobs. Thus, persons

who were born and raised in urban locations often have found it difficult to obtain a job in the same urban area where their older parents live. As a result, in urban areas, too, the proportion of old people living alone or only with their spouse has increased.

d) Increase in Geographic Mobility

Industrialization has brought about much higher geographical mobility of working people in general. In industrialized societies, people change their jobs much more frequently than before. Even when they remain in the same firm, employees are often forced to move to other industrial areas for various reasons. In such cases, aging parents tend to prefer to remain at the original residence rather than move to an unknown place with the child's family in order to continue to live together. Besides, in our industrialized areas, housing for workers is, generally speaking, not spacious enough for two generations to live together.

e) Increase of Working Middle-aged Women

Another conspicuous change is the growing number of working women. Because of the shortage in the male workforce, many married, middle-aged women who were once the most dependable caretakers of dependent older parents are now working outside their homes. In addition, the number of married women who are engaged in full-time professional jobs has been increasing significantly. These women seldom quit their jobs to take care of their aging parents as those with part-time and/or unskilled jobs frequently do.

f) Awakening of the Sense of Selfhood

The awakening of a sense of selfhood among the general public aroused by higher education, higher living standards, and the cultural influence of western industrialized countries has also played a very important role with regard to the change in living arrangements of the elderly in Japan. For example, these days an increasing number of both older and younger generations prefer to live separately from each other just for the sake of personal independence and freedom.

g) Decrease in the Number of Children

The number of children in Japan has decreased rapidly since 1950. As a result, persons with fewer children are now gradually entering the aged population. Obviously, when old people have fewer children, their chances

of depending on them are reduced. This factor will make the need for services for old people, both community and institutional, more acute in the near future.

D. Realization of Universal Coverage of Public Pension Insurance and Public Sickness Insurance

The rapid and profound social changes discussed above drew people's attention to the need for a realization of universal public pension insurance and sickness insurance programs. When Japan's rapid economic development started in the middle of the 1950's, public pension insurance only covered employed persons. In case of public sickness insurance, too, the compulsory program only covered the employees. The public sickness insurance program for the self-employed of 1938 was not compulsory. Therefore, quite a large number of local governments did not put this program into practice.

Universal coverage of public sickness insurance was realized by the National Health Insurance Law for Self-employed Persons (Kokumin Kenkouhoken-hoh) which was enacted in 1958 and fully put into practice in 1961. In the same year, universal public pension coverage was also realized by the National Pension Insurance Law for Self-employed Persons (Kokumin Nenkin-hoh) which was enacted in 1959 and put into practice in 1961 (refer to **Chart 1, Appendix B**).

E. Development of Public Services for the Elderly after 1960

Around the year 1960, Japan managed to succeed in meeting the basic needs of her citizens. At the same time, she finished constructing the basic legislative and administrative framework needed for protecting and promoting basic human rights, i.e., the Livelihood Protection Law (1950), Child Welfare Law (1947), the Law for the Welfare of the Handicapped Persons (1949), universal coverage of public sickness insurance (1961), and universal coverage of public pension insurance (1961).

Thus, Japan began to pay more attention to the social and humanistic aspects of the life of the people, and started to develop various public services to meet such needs, including the needs of the elderly for health, social, cultural, and recreational services. It should be noted, however, that the efforts of the National Government for the development of public services for the elderly before the 1980's were designed to catch up with those of the other industrialized countries of Western Europe and North America.

Except for several minor services, Japan followed the paths which other industrialized countries had trailblazed for the promotion of the well-being of the elderly. Therefore, let me touch very briefly on those developments which seem important in light of the purpose of this booklet.

a) Enactment of the Law for the Welfare of the Elderly

In 1963, the National Government enacted the Law for the Welfare of the Elderly. This law has two characteristics. First, it is a basic law which stipulates several basic principles to which all the other laws as well as governmental and voluntary actions related to the life of the elderly should conform. At the same time it is a law which regulates the welfare services for the elderly, including institutional services, community care services, free health-check services, health promotion services, educational services, recreational services, and the like. When this law was enacted, it did not start any new program, in other words, this law was only a compilation of existing services at that time. However, it seems to me that the very existence of this law played a very important role in the development of the public health and welfare service for the elderly thereafter.

b) Tax Deduction Program

The income tax deduction program for those persons supporting parents aged 70 and over was started in 1972, and a similar deduction program for local income tax was started in the following year, 1973. The purpose of tax deduction programs is to stimulate and promote traditional family support and care of aging parents, especially those who are frail and impaired, in their own homes.

c) Development of Old People's Clubs

When the National Government enacted the Law for the Welfare of the Elderly in 1963, the Legislature requested that local governments should make every possible effort to provide needed help to old people's clubs and other organizations that are working for the well-being of the elderly. Along with the enactment of this law, the National Government started the National Subsidy Program for the establishment and operational expenses of old people's clubs. At present, there are more than 130,000 such old people's clubs throughout Japan, and about 8,700,000 -- approximately 37 percent of the older population aged 60 and over -- are members.

d) National Support for the Establishment of Community Centers for

the Elderly

In 1963, the National Government started the National Subsidy Program for the Establishment of Community Welfare Centers for the Elderly. These centers are multi-purpose senior citizens' centers designed to provide counseling, health, rehabilitational, cultural, and recreational services for the elderly. These centers also play an important educational role. They frequently hold so-called "Old People's College," which is a series of lectures for senior citizens. In addition, a substantial part of their usual programs is educational rather than merely recreational.

e) National Support for Elderly Education Program

The Ministry of Education started the National Support for Elderly Education Program in 1973, and now adult education courses for senior citizens are conducted at least once a year in almost all local communities.

F. Development after 1980

(1) Policy Statement on the "Society of Longevity"

The proportion of the elderly in Japan exceeded 9 percent in the year 1980. Since then, although the level of aging was still low compared to other industrialized countries, the impact of population aging became increasingly clear not only to those who were directly engaged in work for the elderly, but also to the leaders of various areas of Japanese society. In addition, many people also became aware that Japan was to become the most aged country in the world within 40 years, when the proportion of the elderly in our country will be far higher than the present percentage in the Scandinavian countries.

Thus, in the early 1980's, many national government bodies appointed advisory councils and instructed to investigate policies to be adopted to prepare for the rapidly approaching highly aging society. Among them, the most important was the establishment of the Sub-Cabinet on Aging Society by the National Government. In 1985, the National Government decided to establish a special Sub-Cabinet to deal with policies to be adopted for the coming "Society of Longevity." In the following year, 1986, a Policy Statement on the National Long-term Program to cope with the "Society of Longevity" was adopted by the Cabinet. The Cabinet also decided that progress of the National Long-term Program should subsequently be evaluated regularly.

From the viewpoint of social gerontologists who are well-informed on social policies for the elderly in the advanced countries of Western Europe and North America, the contents of this Policy Statement are not very new. Moreover, the goals are described in very abstract terms. Therefore, I shall refrain from citing any sections of the Policy Statement in this paper.

It should be stressed, however, that in spite of the lack of substantiality in its contents, the Statement played a very important role in the development of social policies for the elderly in Japan. Actually, even before its formal adoption, or while it was in the process of formation, it exerted strong impact on the policies of various national government bodies.

(2) Enactment of the Fundamental Law on Policies for Aging Society

In November 1995, approximately ten years after the promulgation of the Policy Statement on Society of Longevity, the Fundamental Law on Policies for Aging Society was enacted by the National Diet. The purpose of this law is to establish a solid and more powerful basis for national policies and programs for the aging society than the Policy Statement of 1986, which was only a kind of administrative guideline set by the National Government, though actually it exerted a much stronger impact than expected.

In accordance with the law, in July 1996, the National Cabinet adopted the Policy Statement on Aging Society which is to replace the former one on Society of Longevity promulgated ten years ago. Because the new Policy Statement is also written in abstract terms, and its contents are not very new for social gerontologists in industrialized countries, I shall again refrain from citing any parts of the Statement.

(3) Programs Started since 1980

a) Enactment of the Law for Health and Medical Services for the Elderly

In 1982, the Law for Health and Medical Services for the Elderly was enacted by the National Diet and put into practice early in 1983. This law was based on the chapter on health and medical services of the Law for the Welfare of the Elderly of 1963. It should be emphasized that the previous programs were substantially enlarged in many respects. One of the most significant revisions was the lowering of the age limit for health checks and preventive services; namely, the age limit was lowered from 60 to 40. According to the Law, every local government is required to give health check services regularly to all citizens aged 40 and over (for uterine and breast

cancer, those aged 30 and over are covered). The health check services are given with only a moderate fee or free of charge. It can be said that this law intends to improve the health of our senior citizens in the next century.

b) Renovation of the Public Pension System

In 1985, our public pension system was completely renovated. The main purpose of this renovation was to restructure our public pension programs so that they can function well even at the peak of the aging of our society, which will come around the year 2020. For this purpose, among others, the level of the retirement benefits was considerably lowered, though serious consideration was given to the interests of those who were already receiving retirement benefits. In light of the much longer average life span of women, necessary revisions were implemented.

c) National Subsidy Program for the Establishment of Health Care Facilities

In 1988, the National Government started a National Subsidy Program for the establishment of Health Care Facilities for the Elderly (Rojin Hoken Shisetsu). The purpose of such institutions is to provide long-term institutional care for the elderly who are suffering from chronic diseases and need intensive care, but do not need hospitalization. Until then, because of the lack of public home-care services and because of lenient public sickness insurance regulations regarding long-term hospitalization, many of them had been hospitalized for long periods. Needless to say, this represented nothing but a waste of society's financial and manpower resources. Another purpose of these institutions is to improve the services to such patients by caring for them in places that are more adequate than nursing homes. In Japan, the nursing home is not a health care institution. Therefore, the health and medical care provided in Japanese nursing homes is limited. The new Health Care Facility for the Elderly is to fill the gap between hospitals and nursing homes. Actually, however, the most important aim of this program is to accelerate the development of long-term care institutions by utilizing the public sickness insurance fund. Previously, nursing homes were established and run with money from general revenues. As it is almost always difficult to expand general revenues, the development of nursing home service in Japan has not kept pace with the rapidly expanding needs for long-term institutional care of the elderly. Many social gerontologists specializing in long-term care of the elderly suggest that, in industrialized societies, the number of beds for long-term institu-

tional care should be at least 4 percent of the population aged 65 and over, even when home care and domiciliary services are well developed. This means that at the peak of population aging, i.e., around the year 2020, Japan will have to have approximately 1,200,000 such beds. It seems to me that without the establishment of this new type of long-term care institutions utilizing the money of the public sickness insurance programs, a realization of this goal will be almost impossible.

d) National Sheltered Housing Program

In the light of the predicted sharp increase in the number of the elderly living alone or aged couples living by themselves in the community, it is quite clear that a special type of housing whose structure and facilities are specially designed to accommodate frail and/or impaired elderly should be developed, so that such older persons may continue to live independently in the community. If we fail to supply such housing in sufficient quantity, the demand for institutional care services will unnecessarily expand instead, a trend which will be much more costly for society than providing such housing for the elderly. Needless to say, to assist people to be as independent as possible is one of the most important goals for all human services.

However, due to the serious shortage of public housing for middle-aged wage-earners, our government has hardly been able to spare any funds for public housing program for the elderly. In 1988 our National Government finally decided to start *the National Sheltered Housing Program for the Elderly*.

I hope that this important program will develop fast enough, so that in the future the elderly may not unnecessarily be institutionalized only because they cannot find adequate housing in which to live independently.

e) National Registration System of Trained Careworkers

In 1988 the National Registration System of Trained Careworkers was put into practice, and the first national examination was held in early 1989. The aim of this system is to improve the quality of careworkers, and thereby secure better services for frail and impaired persons living in the community and also in various types of institutions.

Another reason why our National Government started this program is to make preparations for the anticipated growth of private care service agencies. Until recently, the National Government was reluctant to do anything for the development of care services by for-profit agencies. However, partially because of the slow development and inefficiency of the home-help service provided by local governments, the National Government

changed its attitude.

In Japan most homehelpers are full-time employees of local governments or local social welfare councils which are entrusted with the administration of this service by the local governments. In other industrialized countries, a substantial proportion of homehelp service is provided by part-time workers. However, due to the law on government employees and also due to pressure from the Union of the Local Government Employees, it is very difficult for local governments to hire part-time homehelpers. This is one of the reasons why our homehelp service has been inefficient and its development very slow. Thus, the National Government recently revised the regulations on the homehelp service system, so that local governments may purchase these services from for-profit agencies. Without the registration system of trained careworkers referred to above, it would be very difficult for the government to control the quality of service provided by for-profit agencies. I should think that the registration system of trained careworkers will also make a great contribution to the improvement of the quality of care services provided by public bodies and not-for-profit agencies in the community and in institutional settings.

(4) Recent Trends and the Present Situations

a) Ten-year Gold Plan for the Development of Health and Welfare Services for the Elderly

At the beginning of 1990, the "Ten-year Gold Plan for the Development of Health and Welfare Services for the Elderly" was promulgated by the National Government. According to this plan, the pace of the development of various public services for the elderly was to be greatly accelerated (Table 1, 2).

However, as the Gold Plan of 1990 was significantly revised in 1995, the details of the Plan will be given later in this paper when the author explains the New Ten-year Gold Plan.

The reason why the Plan was promulgated was that the existence of a gap between the pace of the aging of the Japanese society and that of the development of various social policies for the elderly had become quite clear. In order to cope with the predicted gap between the supply and demand, the National Government planned to introduce a new "consumption tax." To persuade the public of the necessity of the new tax, the National Government made a long-term plan to cope with the coming aging society and disclosed it along with the necessary huge amount of money which could only be raised with the new tax system.

Table 1. The Comparison of Gold Plan (1990) and New Gold Plan (1994): Goal for 1999

	Gold Plan (1990)	New Gold Plan (1994)
1) In-home service		
Home helpers (persons)	100,000	170,000
Short-term stay service (beds)	50,000	60,000
Day service centers (places)	10,000	17,000
Home care support centers (places)	10,000	10,000
Visting nurse stations (places)	—	5,000
2) Institutional service		
Nursing homes for the elderly (beds)	240,000	290,000
Health care facilities for the elderly (persons)	280,000	280,000
Care Houses (A New Type of Home for the Elderly with Moderate Charge) (persons)	100,000	100,000
Multipurpose senior centers in depopulated area (places)	400	400

Source: Ministry of Health and Welfare.

Table 2. Implementation for Gold Plan by FY: 1992-1996

	budget				
	FY 1992	FY 1993	FY 1994	FY 1995	FY 1996
1) In-home service					
Home helpers (persons)	46,405 (56,543)	52,405 (69,298)	59,005	92,482	122,482
Short-term stay service (beds)	15,674 (17,797)	19,674 (22,054)	24,274	29,074 (30,627)	36,727
Day-service centers (places)	3,480 (2,743)	4,330 (3,453)	5,180	8,550 (6,273)	7,573
Home care support centers (places)	1,200 (791)	1,800 (1,238)	2,400	3,400 (3,472)	4,672
Visiting nurse stations (places)	—	—	—	1,500	2,300
2) Institutional service					
Nursing homes for the elderly (beds)	192,019 (196,279)	202,019 (207,235)	212,019	227,329 (231,509)	247,109
Health care facilities for the elderly (persons)	91,811 (71,336)	113,811 (88,828)	139,811	165,811	191,811
Care Houses (A New Type of Home for the Elderly with Moderate Charge) (persons)	9,700 (3,760)	16,700 (6,853)	23,700	30,700	38,200
Multipurpose senior centers in depopulated area (places)	120 (101)	160	200	240	280

Parenthesis indicates settlement at the end of fiscal year.

Source: Ministry of Health and Welfare.

b) Restructuring of the Administration of Health and Welfare Services for the Elderly

In the year 1990 we witnessed another significant development: a fundamental restructuring of the public health and welfare services for the elderly implemented through the revision of the Law for the Welfare of the Elderly, the Law for the Health and Medical Services for the Elderly and several related laws and orders. The crux of the restructuring can be summarized in the following two points.

- **Decentralization** First, by the revision of the Law for the Welfare of the Elderly, the authority to decide the admission of an older person into a home for the aged or a nursing home was transferred from the Prefectural Government to the Local Government. With this change, the Local Governments have come to assume all the responsibilities for public health and welfare services for the elderly, from long-term institutional care to preventive, promotive and recreational services. As a result, there has been better coordination among the various care services in regard to both the maximum quality of life and efficiency.

- **Long-term Planning** As a result of the revision of the two basic laws, all local governments were required to make a long-term plan for the development of health and welfare services for the elderly, including institutional care services, community care services, preventive, promotive, and recreational services. Before the end of fiscal year 1993, all the local governments completed these long-term plans.

c) Revision of the Ten-year Gold Plan

The most conspicuous trend after 1990 with regard to social security and health and social services is the growing concern of people of the need for so-called “kaigo hoshō” (care security) in the coming highly aging society. “Care security” means a social service system by which all the needs for the care of older persons, including both institutional care and home care, are met publicly regardless of income. In March, 1994, “the Advisory Group on the Welfare Vision in the Coming Highly Aging Society” presented its report to the Minister of Health and Welfare. This report proposed, among other things, the construction of a comprehensive public care service system. It also pointed out that the goals set by the 1990 Gold Plan mentioned above were not satisfactory in light of the predicted future growth of the care needs of older persons.

In September, 1994, the National Advisory Council to the Prime Minister on Social Security disclosed the Second Report on the “Future

Image of the Social Security System.” Among other things, the Report stressed the pressing need for the construction of a comprehensive public care service system as an integral part of our Social Security System and proposed establishing a public long-term care insurance program as soon as possible.

In response to growing concern on the construction of a public care service system, the National Government took two important actions. One was the revision of the goals of 1990 Ten-year Gold Plan, now called the New Gold Plan. The other was the setup of the special task force for the development of a comprehensive public care service within the Ministry of Health and Welfare.

The New Gold Plan was made public in December, 1994. Below, let me briefly explain the contents of the New Ten-year Gold Plan. Its goals are to be reached before the end of fiscal year 1999 (**Table 1, 2**).

- The number of homehelpers will be increased from 31,405 (1989) to 170,000 (the former goal was 100,000.) When the goal is reached, the ratio between homehelpers and the population aged 65 and over will be 1: 127.6. It is said that in Sweden this ratio is roughly 1:50. This means that Japan’s level will be still far below the levels of other advanced countries of Western Europe.
- The number of Day Service Centers will be increased from 1,080 (1989) to 17,000 (the former goal was 10,000.) When the goal is reached, Japan will have one such center for every 1,300 older persons aged 65 and over, or a typical medium-sized city of 100,000 will have approximately 13 such centers.
- The number of beds for Short-term Stay Service (respite care service) will be increased from 4,274 (1989) to 60,000. (the former goal was 50,000.)
- The development of visiting nurse services for the elderly will be accelerated. The goal set by the New Ten-year Gold Plan is 5,000 Visiting Nurse Stations throughout Japan. This goal was newly added in the New Gold Plan. (In 1989, the number of such centers was negligible.)
- The number of beds for long-term institutional care will be increased from 189,830 (1989) to 570,000. This means that when the goal is attained in 1999, the proportion of institutionalized older persons among those aged 65 and over will be 2.6 percent. This figure is far less compared with those of countries in Western Europe and North America. It is said that the average proportion among these countries is

approximately 5 percent. Parenthetically speaking, however, the average length of stay of older persons in hospital in Japan is much longer than in other advanced countries. Thus, the actual gap between the needs and the available resources in the year 1999 will be considerably narrower than pure numerical comparison would indicate.

- The number of qualified workers will be substantially increased through the strengthening of various training programs. That is, the number of qualified careworkers will be increased by 200,000, trained nurses by 100,000, and trained PT and OT by 15,000 before the end of 1999. This goal was not included in the original Gold Plan.
- In addition to the numerical goals described above, the New Ten-year Gold Plan is to promote the following services as fast as possible.
 - Development of round-the-clock visiting personal care services by homehelpers;
 - Improvement of nursing home facilities, so that they can have more private rooms;
 - Strengthening of the family doctor system;
 - Development of individual care planning for older persons needing community care services;
 - Development of meals-on-wheels service;
 - Improvement of personal care service in long-term care hospitals for aged patients;
 - Modernization of nursing homes through the provision of grants for mechanization;
 - Expansion of community-based rehabilitation service;
 - Improvement and development of services for demented older persons, especially expansion of group-home service;
 - Expansion of educational facilities and in-service-training programs for careworkers and social workers working for the welfare of the elderly;
 - Development of technical aid service systems, including the strengthening of the research and development system;
 - Utilization of voluntary and private (for-profit) services for the diversification of service resources and for flexibility of the service delivery system;
 - Expansion of specially designed public housing for the elderly;
 - Improvement of physical environments for the elderly and the handicapped persons so that they may live pleasant lives safely in the community.

2. The Present Japanese Social Security Programs, Health Care, and Social Services for the Elderly

In the previous section, we described the historical development of Japan's social policies for the elderly. I am afraid that it might be difficult for readers to understand clearly the total structure and the present level of Japan's efforts for the welfare of our senior citizens. Therefore, the purpose of this section is to give you a clear-cut outline of Japan's contemporary social policies and programs for the elderly. In so doing, some explanations may unavoidably restate those given in the previous section.

A. Public Pension Insurance Programs

Roughly speaking, Japan has three kinds of public pension insurance programs by which all adult Japanese people are covered. The first is the National Pension Insurance Program for Self-employed Persons (Kokumin Nenkin). The second is the National Pension Insurance Programs for the Employees in Private Firms (Kosei Nenkin). The third is a group of pension insurance programs for the employees of governmental bodies and related agencies. In addition, there are several minor programs for special groups of employees, such as teachers employed by private schools, sailors, and the like. The universal coverage of public pension insurance is realized by these mutually independent programs which have been established separately but are working cooperatively (refer to **Table 4, Appendix B**).

B. Public Sickness Insurance Programs

The structure of public sickness insurance programs is quite similar to that of the public pension insurance program. That is, we have several mutually independent programs. The first is the National Health Insurance Program for Self-employed Persons (Kokumin Kenko Hoken). The second is the one for those who are employed by private firms (Kenko Hoken). The third is the one for those who are employed by governmental bodies and related agencies. In addition, there are a number of minor pro-

grams for special groups of employees such as teachers employed by private schools, sailors, and the like. By these mutually independent programs the universal coverage of public sickness insurance is realized.

C. Medical Service

For those aged 70 and over, a special arrangement has been made to reduce the charge for medical services provided by public sickness insurance. Although our public sickness insurance covers 90% of medical costs of the insured, its coverage is 80% of hospital charge and 70% of outpatient service when an older person is a dependent of the insured. For retired older persons who do not have income other than public pensions, these charges (10-30%) are sometimes difficult to bear. To cope with this problem, the Law for Health and Medical Services for the elderly of 1982 stipulates that the elderly aged 70 and over are required to pay only a small fixed amount of charge. In some regions, like Tokyo, the age limit has been lowered to 65. It can be said that in Japan, adequate medical services are available to all senior citizens regardless of the amount of income.

D. Health Check Service

The Law for Health and Medical Services for the Elderly of 1982 requires all local governments to have a Health Check Service for their citizens aged 40 and over, which is free of charge or with only moderate fees. For uterine and breast cancer examinations, the age limit is lowered to 30 years of age. All important medical examinations are included in the program. In general, local governments provide health check services annually for older persons aged 60 and over. For middle-aged persons between 40-59, most of the local governments provide health check services about once every five years. Incidentally, all enterprises employing a certain number of persons (including not-for-profit agencies) are required to provide annual health check services for their employees. Therefore, generally speaking, the local governments only provide their health check service to self-employed persons and unemployed persons, including housewives of the employed.

E. Long-term Care

In principle, long-term care is to be provided by two kinds of institu-

tions — the Nursing Homes for the Elderly and the Health Care Facilities for the Elderly (HCF). Due to the serious shortage of beds in these long-term care institutions, a special type of hospital or hospital ward also provides long-term care for the elderly (refer to **Table 3, Appendix B**).

a) Nursing Homes for the Elderly

The Nursing Home for the Elderly (“Tokubetsu Yogo Rojin Hohmu” in Japanese, literally translated, “Special Nursing Home for the Elderly”) is a long-term care institution which belongs to the category of welfare institutions. Those who want to use this institution should apply to the Welfare Bureau of the Local Government. The Welfare Bureau assesses the physical and mental conditions of the applicant and decides whether or not the application should be accepted. However, because of the serious shortage of Nursing Homes, especially in the large metropolitan areas, Tokyo, Yokohama, Nagoya, Osaka, and the like, even if the application for admission is accepted, the applicants have to wait for a long time before being actually admitted.

In principle, the running costs of this type of institution are born jointly by the State (1/2) and City Government (1/2). When the placement for admission is done by the Township or Village, the running costs are born jointly by the State (1/2) and Prefectural Government (1/2). The costs for the construction of Nursing Homes for the Elderly are jointly born by the State (1/2), Prefectural Government (1/4), and the establisher (1/4).

The client as well as the relative who is legally responsible to support and care for the client are charged in accordance with the Law for the Welfare of the Elderly. The administrative definition of the responsible relative is, however, very lenient. The charge is actually imposed only on the spouse or child who was living together in the same household, when the decision of placement is done by the Local Government. The amount of charge is decided according to income. Savings are not taken into consideration, though the interest from savings is regarded as income. The average amount of charge in 1994 was approximately 29,000 yen (approximately US\$270) a month. The calculation method of the amount of charge is very complicated. It can safely be said that, generally speaking, the amount of charge imposed on the responsible relative is significantly less than the amount of money he/she has to bear when he/she supports and care the client at his/her own home. At present (at the beginning of 1995) there are approximately 206,600 Nursing Home beds throughout Japan.

As was shown in **Table 1**, the number of Nursing Home beds is to

be increased to 290,000 before the end of fiscal year 1999 by the New Ten-year Gold Plan.

b) Health Care Facilities for the Elderly

Health Care Facilities for the Elderly are long-term care institutions designed as halfway houses between hospitals and the community. The running costs of the Health Care Facilities are born jointly by the Public Sickness Insurance Scheme (6/12), the State (4/12), the Prefectural Government (1/12), and the Local Government (1/12).

In order to promote the construction of Health Care Facilities, the National Government has a special grant program, a low interest loan program, and a special tax deduction program.

The client of a Health Care Facility is required to bear residential costs. The amount of charge differs among Health Care Facilities. The average amount is approximately 60,000 yen (approximately US\$560) a month. Except for those who are receiving public assistance, the charge is equal for all clients regardless of the amount of their income or savings. As a Health Care Facility for the Elderly belongs to the category of medical care institutions, no charge is imposed on relatives, however he/she might be well-to-do. Therefore, for those who have income above certain level or who have a wealthy relative, a Health Care Facility is more economical than a Nursing Home.

At present (February, 1995), there are approximately 88,800 beds in Health Care Facilities throughout Japan.

As pointed out above, because of the shortage of long-term care beds, quite a number of seriously impaired older persons are hospitalized for a long time without a real need for such hospitalization. The accurate number of such older persons is unknown. The only information available is the number of beds in so-called Geriatric Hospitals ("Rojin Byoin"). The number of beds in Geriatric Hospitals was approximately 182,500 in May, 1993.

As discussed earlier in this paper, the number of beds in Health Care Facilities is to be increased to 280,000 before the end of fiscal year 1999 by the New Ten-year Gold Plan.

F. Homes for the Aged

Homes for the Aged are for frail or slightly impaired older persons who are functionally independent in daily living activities but in need of

a meal service and a slight domiciliary service. There are two types of Homes for the Aged. One is called "Yogo Rojin Hohmu" (if literally translated, a "Nursing Home for the Elderly") that has its origins in public assistance institutions for the aged. (Hereafter in this paper, this type of Home for the Aged is to be written as "an Ordinary Home for the Elderly.") The other is called "Keihi Rojin Hohmu" (if literally translated, a "Home for the Elderly with Moderate Charge."). Incidentally, in one type of "Keihi Rojin Hohmu" (Type B), meal services are not provided.

To enter an Ordinary Home for the Elderly, one is requested to apply to the Welfare Bureau of the Local Government. On the other hand, to enter a Home for the Elderly with Moderate Charge one can apply directly to the home. The most important difference between the two is that an Ordinary Home for the Elderly can be used by those older persons who have no income or only a very small income and cannot bear any fees.

In these days, the buildings and facilities of Ordinary Homes for the Elderly have been improved greatly. There is still, however, a significant gap in facilities of these two types of Home for the Aged, though there is not an essential difference in their services.

At present (October 1, 1994), there are approximately 67,500 beds in Ordinary Homes for the Elderly. In general, there are quite a number of vacant beds in this type of Home for the Aged due to the development of homehelp services and the improvement in the supply of public housing for the elderly.

The current number of beds in Homes for the Elderly with Moderate Charge is approximately 23,700 (October 1, 1994). In contrast with Ordinary Homes for the Elderly, most Homes of the Elderly with Moderate Charge have a long waiting list, probably because of the difference in admission procedures, a discrepancy in facilities, and the traditional stigma placed on Ordinary Homes for the Elderly which have their origin in public assistance institutions for the aged.

In addition to these publicly supported Homes for the Aged, there are a number of "Yuryo Rojin Hohmu" (if literally translated, "Home for the Elderly with Charge"). Most of these homes provide so-called "lifelong care." Thus, even if residents become severely impaired, the home provides needed nursing care as long as the residents wish. They are established and run without any public grant or subsidy, the only public support being a low-interest loan program. Therefore their charges are very expensive, and only those who belong to the upper-income class can afford to enter. At present (October 1, 1994) there are approximately 250

such homes with the number of older persons living in such homes at approximately 18,700.

G. Day and Home-delivery Services

a) Homehelp Service

At present (in fiscal year 1996) , there are approximately 122,000 homehelpers throughout Japan. As discussed in the previous part of this paper, our National Government is placing a special emphasis on the rapid development of this service, and before the end of fiscal year 1999, the number of homehelpers will be increased to 170,000. Those who have little or no income can utilize this service without any charge.

Generally speaking, in large metropolitan areas, the shortage of homehelpers is very acute, while in some rural areas the supply tends to exceed the demand because of the conservative attitude of people toward the utilization of welfare services.

b) Visiting Nurse Service

This service is now developing very rapidly in Japan. At the end of fiscal year 1996, there will be approximately 2000 visiting nurse stations throughout Japan. As mentioned earlier in this paper, the number of the stations will be increased to 5,000 before the end of fiscal year 1999.

The charge for this service is only 250 yen (approximately US\$2.30) per visit.

c) Day Service for Frail and Impaired Elderly

This service is also developing very rapidly in Japan. At the end of fiscal year 1996, there will be approximately 7600 Day Service Centers throughout Japan. The number of the centers will be increased to 17,000 before the end of fiscal year 1999, as mentioned earlier in this paper. Day Service Centers are obliged to provide transportation service for their users. Some of the Day Service Centers are also providing such home-delivery services as visiting bathing services, meals-on-wheels, and laundry services. The users of this center bear a small amount of the charge which is roughly equivalent to the costs of the materials they consume.

d) Short-term Stay Service (Respite Care)

Short-term Stay Services are mainly provided in nursing homes for the elderly. There are also institutions providing only short-term stay serv-

ices, but the number of such institutions is quite limited. At the end of fiscal year 1999, there will be approximately 60,000 beds for Short-term Stay Service throughout Japan.

e) Home Care Support Centers

The purpose of the Home Care Support Center is to give advice to family caregivers, to provide information on home care, and to refer cases to an appropriate social agency when necessary. Some centers have a showroom of equipment and supplies for home care. According to the national standard, each center should have at least one social worker and one trained nurse. All the centers receive telephone calls 24 hours a day.

At the end of fiscal year 1996, there will be 4700 such centers throughout Japan. As was described earlier in this paper, the number of the centers will be increased to 10,000 before the end of fiscal year 1999.

f) Provision of Technical Aids for Home Care

This program is subsidized by the National Government. Utilizing this subsidy, all Local Governments are operating this service. The program covers most of the important technical aids for home care, including specially-equipped beds, special mattress, air-pads for the prevention of bedsores, toilet chairs, special automated urinals, fire alarms, automated fire-extinguishers, emergency alarm systems, a set of special transmitters and receivers for the loitering demented elderly, wheelchairs, special telephone equipment, and so forth. At present, sixteen kinds of equipment are provided by this program. These technical aids are free of charge for low-income persons. Those whose income is more than a certain level are required to pay a charge. The amount of charge is decided according to their amount of income.

H. Educational and Recreational Services

a) Educational Service

As mentioned earlier in this paper, with the subsidy from the Ministry of Education, all Local Governments have a variety of educational services for their senior citizens. In general, they are provided as a part of the adult education program. Some Prefectural Governments as well as Local Governments have special programs and/or facilities for this service. Among them, Inamino-Gakuen (the Inamino School for Senior Citizens) of Hyogo Prefecture in western part of Japan is very famous for its excellent programs and good facilities.

b) Community Welfare Centers for the Elderly

The main function of Community Welfare Centers for the Elderly is to provide recreational and educational services for the elderly. Most of them have a room and facilities for rehabilitation training. Most of them also have a free public bath. In addition, many centers provide counseling service. At present (October 1, 1994) there are approximately 2,190 such centers throughout Japan. The construction of these institutions is subsidized by the National Government.

In addition to the Community Welfare Centers for the Elderly, there are quite a number of small-scale neighborhood welfare centers for the elderly (“Rojin Ikoino Ie”—literally translated, “Rest and Relaxation House for the Elderly”). They are serving as places for older persons to visit together and enjoy various recreational activities. At present (October 1, 1994) there are approximately 4,500 such centers throughout Japan. When the local government constructs these houses, they can obtain low-interest loans from the National Government.

c) Old People’s Clubs

Information on Old People’s Clubs has already been given in a previous part of this paper. Therefore, please refer to p. 92.

I. Programs to Provide Opportunities to be Engaged in Gainful Occupations

Generally speaking, Japanese older persons, especially male older persons, want to continue to work as long as possible to live a meaningful life as well as to have extra income. In order to meet these needs, the following services are provided through a national subsidy.

a) Information Center for the Development of Vocational Ability of Older Persons (Koreisha Nouryoku Kaihatsu Jouhou Centah)

The main purpose of this kind of center is to find adequate jobs for unemployed older persons. It also serves as an information and advice center on various issues and problems of older persons. At present (October 1, 1994) there are 110 such centers throughout Japan.

b) Silver Manpower Center

The purpose of the Silver Manpower Center is to find opportunities for light, part-time gainful work for older persons. It is to be noted that this center is to be run by a not-for-profit organization of retired older per-

sons themselves. This is a national subsidized program of the Ministry of Labor. Most cities with a population over 100,000 have these centers now.

J. Other Programs

a) Tax deduction

Please refer to Section 1.

b) Telephone Reassurance Service

This service is popular in Japan, though it is not supported by the National Government. In most cases, the service is provided by volunteers, even when it is run by local governments.

c) Services for Improvements, Additions, or Remodeling of Houses for the Elderly

Recently, this kind of service has been growing rapidly, though it is not supported by the National Government. Some local governments even provide a grant for the improvement of the houses of impaired older persons when this seems necessary to avoid institutionalization.

d) Meal Services

In Japan, a daily meal service is provided by only a very small number of local governments or voluntary organizations. Moreover, almost all of these programs are still in an experimental stage. The reason why this service has not developed in Japan is that almost always such frail and/or impaired older persons who need daily meal service live with their children or are institutionalized. This is due to the underdevelopment of homehelp and other essential community care services, so that such frail and/or impaired older persons as those who need daily meal service cannot live independently in the community.

e) Sheltered Housing

Sheltered housing for the elderly was started in 1988, as reported earlier in this paper. Unfortunately it is not yet very well developed yet in Japan. The fundamental reason is that the National Government is still placing great emphasis on investment for the construction of roads, harbors, and other basic Public Works. Compared to these Public Works, public housing, including those for the elderly, receives minor attention from the Ministry of Construction.

Epilogue — Future Outlook

As described in the previous section, Japan has a wide variety of programs and services for the welfare of the elderly. Most of the important services, however, have yet to be fully developed. Especially in the field of long-term care, the shortage of service resources is very serious. In order to cope with this situation, the National Government started the Ten-Year Gold Plan in 1990 and revised it in 1994. The problem is, however, that the population aging will continue at an accelerated pace in the next century, and the various needs of older persons, especially the needs for long-term care, will grow very rapidly.

In order to meet the expanding needs for long-term care and secure a decent level of care services for every senior citizen, we shall have to start another Ten-year Gold Plan in the year 2000. The budget needed for it will be much greater than that for the present New Ten-year Gold Plan. Thus, securing the necessary amount of revenue for the second Plan to be started soon is one of the most important issues for the National Government.

The answer from the National Government is the establishment of a public long-term care insurance program. In May, 1996, the Ministry of Health and Welfare finished its first draft and presented it to the National Advisory Council on the Health and Welfare Services for the Elderly. According to the draft, the public long-term care insurance program will be started in 1999. At first, it will only cover the care services to older and middle-aged persons aged 40 and over living in the community. In the case of middle-aged persons between age 40 and 64, the insurance will only cover the care services to those who suffer from such age-related illnesses as stroke, or dementia. Institutional care services will be covered several years later.

Contributions to the program will be collected from persons aged 40 and over. This means that retired older persons will also be obliged to contribute. According to the draft, the contributions of retired older persons are to be deducted from the payment of the public pension. The contribution of middle-aged persons is to be collected along with their contribution to public sickness insurance programs.

The proposed long-term care insurance is to be financed with insurance contributions (1/2) and general revenue (1/2). Therefore, in order to cope with the predicted conspicuous increase in the amount of general revenue, the National Government intends to raise the rate of the consump-

tion tax from 3 percent to 5 percent in the near future.

It seems that a great majority of Japanese people are in favor of the introduction of the proposed long-term care insurance. It is expected that the new program will greatly raise the level of Japan's health and welfare services for the elderly.

APPENDIX A

General Principles Concerning Measures
for the Aging Society

July 1996

APPENDIX A

On publishing the English version of the “General Principles Concerning Measures for the Aging Society”

The Management and Coordination Agency tentatively translated this document in cooperation with the International Longevity Center (ILC-Japan).

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Part 1 Objectives and Basic Concepts

1. Objectives in Drawing Up General Principles

Japan is facing rapid population aging. This, together with the undulating changes in our economic societies, has an extensive influence on the people.

In the beginning of the 21st century, Japan expects to become a genuine aging society. In order to build, without delay, an affluent society full of solidarity and vitality where each and every one can feel that they are happy to live long and are in perfect harmony with one another, it is vital to promote sound development of the economy as well as stable improvement of people's living conditions. This can be accomplished by continuously reviewing socio-economic systems so that they meet the needs of the new society, support the independence of individuals and the role of families, maintain and promote the vitality of the people, and assure peaceful living by appropriately combining self-support with mutual and public support.

To help achieve this goal, general principles, which the government should implement, have been drawn up as a basic and comprehensive policy for the aging society in accordance with the provisions in Article 6 of the Basic Law on Measures for the Aging Society (Law 129, 1995, hereafter referred to as the "Law.")

2. Basic Concepts

In principle, measures for the aging society should be implemented with the goal of building the following society as prescribed in Article 2 of the Law:

- 1) A fair and energetic society where people can be ensured that they have the opportunity of participating in diverse social activities or working throughout their lives.
- 2) A society where people are respected as important members throughout their lives and where local communities are formed based on the spirit of independence and solidarity.
- 3) An affluent society where people can live peacefully and with fulfillment throughout their lives.

In order to achieve these basic principles, it is vital to implement measures for an aging society under a system in which all members of the society can help and support one another. This can be achieved through mutual exchange and cooperation among all members of the society, such as the national government, local governments, corporations, local communities, families, individuals and volunteers, as well as their active involvement in achieving this goal.

To facilitate such efforts, the governmental measures for the aging society have been drawn up based on the fundamental concepts described below and will be implemented across various sectors, such as working and income, health and welfare, learning and social involvement, living environments, and promoting research.

(1) Emphasis on the independence, participation and choices of the elderly

Considering the diversity of the elderly, they will be supported so that they can live peaceful lives independently and conditions will be improved so that they can actively participate in diverse social activities by utilizing their experience and abilities as important member of the aging society. In addition, private service providers will be utilized in providing services, so that the elderly can independently choose their life-styles based on their own values. Consideration will also be given to diversity of choice by actively utilizing private insurance for extra benefits, while publicly assuring the provision of fundamental benefits.

(2) Systematic implementation of measures throughout people's lives

Systematic implementation of measures for the aging society will be promoted by effectively combining various measures. In other words, the measures will be implemented effectively to meet the needs of individuals at various stages of life, from infants to the elderly and will focus on the independence of individuals and the role of families.

(3) Respect for regional autonomy

Necessary environments will be developed to promote regional autonomy and effective measures, such as the utilization of existing facilities and community development will be taken, considering the degree of aging and socio-economic conditions in the region, urban and rural areas alike.

(4) Effective implementation of the measures

An increase in people's future burdens will be mitigated as much as

possible and a fair and appropriate sharing of burdens among different generations can be achieved by optimally utilizing social resources, including the private sector, and effectively developing and implementing measures for the aging society.

(5) Cooperation among the administrative bodies concerned

In order to promote measures for the aging society effectively and comprehensively, current measures will be subject to stringent reviews, thorough coordination among the measures will be carried out and close cooperation among the administrative bodies concerned will be promoted.

(6) Use of technology concerning medical care, welfare, information and communication

The research, development and utilization of technology concerning medical care, welfare, information and communication will be promoted so that the results can be also enjoyed by the elderly.

In addition, as basic conditions for promoting measures for the aging society, efforts will be made to achieve sustainable economic development by maintaining stable price levels and promoting creative technology research and development activities and reforms, while promoting balanced development of national land through infrastructure developments, focusing on improving the quality of the life of people.

Part 2 Basic Measures by Sector

1. Working and Income

In response to the aging working population as we approach the 21st century, employment and working environments will be improved to achieve sustainable economic development and allow working people to show their abilities to the fullest up to the old age, thereby rejuvenating the aging society.

Considering the elderly's positive will to work, continuous employment up to the age of 65 will be promoted with the aim of allowing the elderly to work regularly until they are 65 if they wish, utilizing the knowledge, experience and abilities which they have acquired over many years. In addition, diverse opportunities will be provided so that the elderly can find jobs, depending on their will and abilities.

Various measures will be promoted, such as professional ability development, working hour reduction, further assurance of equal employment opportunities and labor conditions, and the propagation of child-care leave and care leave for the elderly, so that working people can exhibit their abilities throughout their professional careers while they are coping with their profession, family, and community life.

The income of the elderly after their retirement will be mainly secured by public pensions, which are based on social solidarity among the people, properly combining corporate pensions, retirement allowances, personal pensions and assets, which are based on company and personal efforts.

(1) Securing employment and working opportunities for the elderly

a. Promoting continuous employment until the age of 65

Employment and working environments for the elderly will be improved, centering on continuous employment until the age of 65.

With respect to the retirement system at the age of 60, which serves as the basis of continuous employment until the age of 65, companies that have not implemented this system will be urgently instructed to do so as soon as possible before April 1998 when the system becomes compulsory.

In order to promote continuous employment until the age of 65, the introduction of post-retirement continuous employment systems will be encouraged and directed. Consultation and assistance concerning fair wages and personnel management will also be promoted. Furthermore, various subsidies concerning the employment of the elderly will be utilized.

For those elderly people whose wages have declined considerably since they were 60 years old, allowances for continuous employment of the elderly, which is part of employment insurance, will be utilized to respond to their will to work.

Considering physical and psychological changes associated with aging, efforts will be made to prevent industrial accidents and improve workers' health and working environments.

b. Securing diverse employment and working opportunities

As people get older, health and physical strength condition differs among individuals and their needs for working diversify. It is, therefore, necessary to provide diverse working opportunities while maintaining close cooperation among the parties concerned.

To help the unemployed elderly find new jobs, labor demand and supply coordinating functions of public employment security offices will be enhanced by promoting professional ability development, exploiting job offers, providing employment information and implementing reemployment assistance measures. Reemployment assistance programs offered for retired people by private organizations will also be promoted.

In addition, to help the elderly work at their own discretion, the special exemption system for labor dispatch programs concerning the elderly will be implemented appropriately and labor dispatch programs, which will be carried out by the Center for the Utilization of the Professional Experience for the Elderly, will be promoted.

Furthermore, in order to provide temporary and short-term employment opportunities after retirement on a regional basis, silver human resource center programs will be enhanced, including the expansion of target areas.

So that working people can prepare for their lives when they get old or after retirement, assistance programs, such as information services, provided by private organizations, etc. will also be promoted.

(2) Helping working people exhibit their abilities throughout their lives

a. Ability development over long professional careers

To help working people exhibit their professional abilities over a long time, support for company education and training and individuals' voluntary efforts to develop professional abilities will be promoted by providing diverse information and consulting services, and utilizing lifelong ability development allowances. Vocational training offered at public professional ability development centers will also be promoted.

b. Realizing a comfortable vocational life

Shifting to the 40-hour week system, which is scheduled to be carried out on a full scale from April 1997, will be facilitated. Working hours will continue to be reduced positively to achieve and maintain total annual working hours of 1,800 by popularizing the five-day workweek system, encouraging annual paid vacation and reducing overtime work. This will in turn contribute to harmonizing professional careers with family and community life as well as maintaining and expanding employment opportunities.

Additionally, refreshing vacations will be encouraged and health care for working people will be promoted through health improvement programs implemented at workplace levels.

c. Helping women exhibit their abilities in terms of employment and working

To help women exhibit their abilities in terms of employment and working, further efforts will be made to assure equal opportunities and labor conditions. In addition, referral services and vocational training that meet the needs of women will be promoted and women's involvement in the sectors of agriculture, forestry and fishery will be facilitated.

d. Promoting measures to help working people cope with both professional careers and family life

Measures to help working people cope with both their professional careers and family life will be promoted comprehensively and systematically.

Employment and working environment will be improved so that working people can cope with both their jobs and child-care and care for the elderly by creating an atmosphere where it is easy to take leave for nursing and elderly care and return to work, or continue to work while caring children and the elderly alike. The popularization of the child-care leave system will continue to be promoted and the early introduction of care-leave for the elderly systems, the implementation of which will become compulsory in April 1999, will be encouraged.

e. Creating an environment where diverse ways of working are available

The creation of an environment where diverse ways of working, such as part-time and temporary employment, can be chosen will be facilitated and the development and popularization of ways to work far away from company offices, utilizing communication technology, will be encouraged.

(3) Stable operation of the public pension systems

With regard to the public pension system, appropriate benefit levels, as well as employment levels, will be maintained so that public pensions will continue to play a core role in assuring incomes for the elderly. In view of the reforms that took place in 1985 and 1994, measures, such as balancing the benefits and burdens, will be taken to assure long-term stable operation of the public pension system. Since the public pension system requires intergenerational support, consideration will be given so that excessive burdens will not be exerted on future generations. In addition, to stabilize and justify the system in response to the changes in employment structures and the maturity of the system, the reorganization of the public pension system will be facilitated.

(4) Support for securing incomes for the elderly through self-help

a. Stable operation of corporate pension system

Since corporate pension systems complement the public pension system, it is vital to ensure their stable operation even under harsh economic conditions. The Employee's Pension Fund System, which serves as the core of corporate pension systems, will be subject to drastic reviews. Additionally, deregulation, etc. will continue to be considered so that the fund will be used more efficiently.

Furthermore, consideration will be given to the need for the review of qualified retirement allowance systems.

b. Improving retirement allowance systems reflecting the needs of the aging society

Consideration will be given to desirable company retirement allowance systems to cope with an increase in retired people and labor shifts due to changes in industrial structures.

In addition, the introduction of external reserve systems will be encouraged. Consideration will also be given to developing measures to secure the payment of retirement allowances as part of the retirement al-

lowance preservation measures. Moreover, the popularization and improvement of retirement allowance systems among small and medium-sized enterprises will be pursued.

c. Promoting asset accumulation, etc. for the elderly

To help the elderly live better-off lives, the development of financial products with the aim of stabilizing incomes of the elderly and self-help asset accumulation through the improvement of various financial services will be promoted. Further support will be provided to help working people systematically accumulate their assets while they work regularly and their employers are making efforts to support this.

In addition, to facilitate self-help by people in response to their needs for more affluent and peaceful lives when they become old, the popularization and utilization of personal pensions and the National Pension Fund will be promoted by improving over-the-counter consultation services, etc.

Furthermore, to help the elderly to utilize their assets, consideration will be given to the reverse mortgage system in which loans will be provided for the elderly on the security of their own houses. Moreover, as part of the effort to help the elderly manage their assets, systems to protect the rights of the senile dementia elderly will be developed.

2. Health and Welfare

Lifelong comprehensive health improvement will be promoted in order to help people improve their health while they are still young and maintain their health when they get old or when they get ill, in their daily life, as well as helping them live a peaceful and fulfilling life, enjoy longevity.

With respect to health, medical and welfare services, a system, in which someone who needs support can easily be provided with services necessary for their independence, will be established by steadily implementing the “New Gold Plan” which was drawn up in 1994, following the review of the “Ten-Year Strategy to Promote Health Care and Welfare for the Elderly.”

In addition, a system will be established, in which medical care will be provided. With regard to long-term care services, a mechanism, with which necessary financial resources can be secured toward the future based on the principle of solidarity between the elderly and working people, will be established through extensive understanding and cooperation among the people. When establishing such a system or mechanism, it is important to

ensure the consistency in the overall social security systems.

In order to provide a variety of services, help provided by private enterprises will be used. To do so, it is vital to ensure that services will be provided based on the users' choice.

To construct an aging society, it is of paramount importance to cope with the decline of fertility. In consequence, comprehensive and intentional measures to support child care will be promoted.

(1) Comprehensive promotion of health improvement

a. Promoting lifelong health improvement

Through the dissemination of health-related information, lifelong improvement through well-balanced nutrition, exercise and recreation will be promoted. People should become aware of their health, thereby improving their health, preventing diseases and encouraging early diagnosis and detection of illness. Moreover, eating habits which contribute to health improvement will also be encouraged.

With respect to health improvement for the people in the prime of their lives or in their old age, a system, in which regional health services will be provided at municipal levels with the support of prefectural governments, will be developed, which will be complemented and enhanced by the use of private services and communication technology.

b. Developing health improvement facilities

In order to facilitate lifelong health improvement, necessary facilities, including regional health facilities, will be developed so that sick people can improve their health in a friendly environment.

(2) Enhancing health, medical and welfare services

a. Improving regional systems to provide comprehensive services

In order to meet the needs of the elderly while coordinating systems and using private service providers, certain systems will be developed so that user-oriented services can be provided in areas where residents feel most familiar, such as their municipalities.

b. Improving in-home services

In view of the importance of homes/families in living and psychological terms, in-home services will be improved so that the elderly can live

at their own homes or in their communities as long as they want even when they require care.

To support such elderly people and families, home help, short-stay and day services and home-visit nursing programs will be improved. In addition, the development of in-home care support centers will be promoted.

With regard to home help services, 24-hour service systems, including holidays, will be established.

Furthermore, comprehensive in-home health and medical care will be promoted through the enhancement of the functions of family doctors, in-home terminal care and day-care.

c. Improving facility services

Facility services will be enhanced to allow the elderly to receive appropriate services when they have difficulty to live in their own homes.

To achieve this, the development of special nursing homes for the elderly, health services facilities for the elderly to provide medical and living services, living welfare centers for the elderly in depopulated areas, and care houses (moderate-fee homes for the elderly) where the elderly can continue self-supported lives, utilizing wheelchairs and other essentials will be promoted. In addition, recuperation bedrooms with complete recuperation environments and care services will be developed.

While considering original functions of such facilities, existing facilities will be effectively used, including combined development with other public facilities and conversion of medical facilities.

d. Implementing comprehensive support measures for the independence of the elderly who need assistance

In order to positively support the independence of the elderly by preventing them from being in bedridden conditions that require personal assistance, regional rehabilitation systems will be enhanced and comprehensive measures, such as health care programs to prevent cerebral apoplexy, fractures and hypofunction due to aging, will be implemented.

e. Implementing comprehensive measures for senile dementia

With respect to senile dementia, consultation and information services will be promoted through the development of senile dementia treatment centers. Moreover, senile dementia prevention and early detection/treatment systems will be upgraded by providing trained qualified personnel for treating dementia.

In addition, to improve medical and care systems, day service centers and group homes for the senile dementia elderly will be developed and institutionalized. The development of medical care and recuperation wards and health service facilities specializing in the treatment of dementia will be facilitated.

(3) Implementing comprehensive support measures to improve long-term care foundations

a. Promoting measures to train and secure staff to care for the elderly

In order to train and secure staff to care who have the responsibility of providing care services for the elderly, such as staff to care of social welfare facilities, nurses and home helpers, measures will be taken to improve training systems, including training centers, better qualifications, and working environments.

In addition, labor demand and supply coordination between public employment security offices and the private sectors will be enhanced.

Moreover, volunteer activities concerning welfare for the elderly will be highly promoted.

b. Popularizing technical aids

In order to encourage appropriate use of technical aids, practical health care training and dissemination centers will be developed to provide opportunities for equipment display and consultation. The popularization of technical aids will also be promoted through donation and lease programs. Furthermore, support systems will be developed for technical aids manufacturers and dealers to ensure provision of technical aids.

c. Comprehensive development of user-friendly service provision systems

To allow residents to seek for advice and obtain necessary information about care in areas to which they are familiar, specific measures, centering on in-home care support centers, will be taken. Care management systems will also be enhanced to properly understand the needs for care and link them to necessary services.

(4) Service costs

a. Medical expenses

In order to provide appropriate medical care suitable for the aging society, comprehensive measures, including drastic reform of medical in-

insurance systems and the improvement of medical care provision systems, will be implemented on a medium to long-term basis. This will facilitate the optimization of medical expenses including medical care expenditure for the elderly and justify intergenerational burdens and a balance between benefits and burdens within and among different insurance systems.

b. Securing long-term care expenses through social solidarity

In order to establish a mechanism, with which necessary financial resources can be secured toward the future based on the principle of solidarity between the elderly and working people through extensive understanding and cooperation among the people, positive efforts will be made to establish a new long-term care system for the elderly, incorporating adequate public money and social insurance systems.

(5) Utilizing private service providers

To meet the increasing and diversifying demand for health and welfare services as well as to provide such services more efficiently, private service providers will be used, regulations on care service providers will be eased, measures to foster private service providers, including loan systems, will be taken with the aim of expanding long-term care related markets and employment.

In order to ensure service quality, service evaluation systems will be established.

(6) Promoting comprehensive measures to support child care

To help create an environment where people can raise their children, comprehensive measures to support child care, such as the improvement of child care services and mother-and-child health and medical care systems, will be implemented systematically. In doing so, five-year programs, such as emergency child care services, will be put into practice and sound development of private child care services will be provided through market mechanisms.

3. Learning and Social Involvement

In an aging society where people's values increasingly diversify, it is vital to provide people with opportunities to seek fulfillment in their mind and daily life and continuously learn new knowledge and technology. It is our aim to create a lifelong learning system in which people can freely choose their learning opportunities and their efforts can be appropriately evaluated.

In addition, to help the elderly have something to live for as important members of the society, their social involvement, including volunteer activities, should be facilitated and environments in which the elderly can make the most of their free time and live fulfilling lives should be developed.

Furthermore, since volunteer activities help the elderly to achieve their own goals, participate in local communities, contribute to enhancing community welfare and promote a spirit of social solidarity and mutual support, social foundations need to be developed so that anyone can freely participate in volunteer activities while their own initiatives are respected.

(1) Creating a lifelong learning system

a. Improving systems and foundations to promote lifelong learning

With the aim of creating a lifelong learning system and achieving structured improvements in learning opportunities, a comprehensive system to promote lifelong learning will be developed, in cooperation with the public and private bodies concerned, such as social educational facilities and institutions of higher education. Symposiums and conferences will be organized to ensure regional cooperation. Master plans that are necessary for comprehensive implementation will also be developed.

In addition, to strengthen the foundation of providing lifelong learning opportunities, lifelong learning will be propagated, information and consultation services will be improved, instructors will be trained and learning results will be appropriately evaluated.

b. Ensuring diverse learning opportunities at school

At institutions of higher education, such as colleges and universities, to provide adults with advanced and practical learning opportunities, efforts will be made to implement special enrollment systems for adults, establish night graduate schools, offer day and night courses, and expand through the country the University of the Air.

Moreover, school functions and facilities will be opened to the public for open seminars for local residents and the utilization of unused classrooms for social education.

c. Providing diverse learning opportunities

In order to meet people's diversifying and demanding need for learning and provide diverse lifelong learning opportunities, social education at community centers, libraries and museums, cultural activities at art

museums, and sports will be promoted, while ensuring the sound development of private service providers and utilizing communication networks.

d. Supporting working people's learning activities

To develop a system in which working people can study while leaving their workplace for some time, paid-vacation systems for education and training will be popularized and measures will be developed to directly support individual workers who try to improve their professional abilities on their own initiative.

(2) Promoting social involvement

a. Promoting involvement of the elderly in social activities

In order to build energetic local communities as well as to help the elderly play an active role in them with something to live for, the elderly's involvement in social activities will be facilitated.

To achieve this goal, opportunities will be provided for the elderly and young generations to promote mutual exchange, and voluntary activities of the elderly will be supported. Moreover, the social involvement of the elderly will be propagated, information and consulting services will be improved and instructors will be trained.

In addition, to help utilize the elderly's abilities overseas with the advance of international exchange, systems will be developed so that expertise and skills of the elderly and retired people can be utilized for overseas technical cooperation and so on.

Furthermore, to help the elderly live fulfilling lives through recreation, sightseeing and hobbies, leisure facilities for the elderly will be improved, existing facilities will be utilized, availability information will be provided and broadcasts with subtitles will be upgraded.

b. Improving the basis of volunteer activities

The basis of volunteer activities will be improved in effective cooperation with the regional bodies concerned.

To do so, volunteer bases will be secured, volunteer activities will be propagated, information, consultation, registration and referral systems will be developed, introductory seminars and hands-on programs will be organized, and volunteer leaders and coordinators will be trained. Extensive educational opportunities concerning volunteering and welfare will also be provided.

In addition, the social appreciation of volunteer activities will be

promoted and measures will be taken to facilitate the introduction of volunteer vacation systems and support corporate philanthropy.

4. Living Environment

Since houses serve as the basis of peoples' living, housing environments will be improved so that people can choose their houses based on their life plans, thereby ensuring lifelong, stable and comfortable residential lives. To achieve this goal, housing standards will be improved, the rationalization of housing production will be promoted and housing styles will be diversified so that people can live with or neighbor to their parents. In conjunction with welfare measures, moreover, the provision of houses equipped with life-support systems that allow self-support or care for the elderly will be promoted.

To ensure safe and smooth activities of the elderly, public transportation systems, sidewalks and public buildings will be made barrier-free, and comprehensive measures will be taken to facilitate community development that takes the elderly into consideration.

In addition, measures will be taken to protect the elderly from traffic accidents, crimes and disasters so that they can live with peace of mind.

Furthermore, considering the status and socio-economic features of the aging society, living environments will be developed to create comfortable urban atmospheres by the use of water and green, and energized agriculture, forestry and fishery villages.

(1) Ensuring stable and comfortable housing

a. Promoting the provision of high-quality houses

To provide high-quality houses which serve as the basis of a stable and comfortable life, efforts will be made so that half of the households nationwide can achieve the target housing standards by FY 2000 and half of the households in all major cities can achieve the same goal as soon as possible after that. In particular, measures will be taken to ensure that there will be no more households that are below the minimum housing standards, focusing on apartment residents in major cities.

To achieve this goal, support will be provided for young people to acquire or improve their own houses. With respect to apartments, support systems will be implemented to facilitate the supply of high quality private and public apartments.

In addition, housing production, distribution systems and consumer

consultation services will be improved.

b. Diversifying housing styles

The construction and extension of houses will be facilitated by the use of loan systems to allow people to live with their parents in their own homes.

Moreover, public rented house or apartments will be supplied, giving priority to households with the elderly as well as meeting the needs for living together with, neighboring and group homes which do not involve blood relations.

c. Developing houses for self-support and care

Through the propagation of the Design Guidelines for the Aging Society and loan systems, the construction and renovation of houses suitable for self-support and care for the elderly will be provided. In particular, new public rented house or apartments will be constructed in accordance with certain specifications, giving consideration to the functional deterioration associated with aging.

In addition, by coordinating housing and welfare measures, the supply of residential buildings which are equipped with daily assistance and care systems for the elderly, and the development of housing complexes with life-support systems will be promoted.

(2) Community development for the elderly

Community development for the elderly will be promoted to help the elderly move easily in barrier-free living spaces.

Public transportation systems will be made barrier-free by installing elevators in traffic terminals, such as train stations and airports, and facilities and vehicles will be improved to ensure the convenience of the elderly. Continuous walking space will be secured by widening sidewalks. Road traffic will also be improved so that the elderly can drive or go out with peace of mind.

In addition, buildings that are open to the general public, such as hospitals and theaters, will be made barrier-free. Governmental facilities that provide over-the-counter services will be converted to meet specifications focusing on the convenience of the elderly.

Furthermore, in conjunction with welfare measures, welfare and medical facilities will be systematically located in urban areas, together with the development of parks and other infrastructures. In rural areas, sites for welfare and medical facilities, together with farms and other facilities, will be developed.

(3) Protecting the elderly from traffic accidents, crimes and disasters

In cooperation with the bodies concerned and local residents, an environment, where the elderly, especially those who live alone or are handicapped, can live peacefully, will be developed.

Measures, such as offering traffic safety seminars and developing traffic safety facilities for the elderly, will be taken to prevent the elderly from being involved in traffic accidents, as well as to protect the elderly from crimes, dangers associated with wandering due to dementia, human right infringements, and vicious traders. Moreover, disaster measures will be strengthened to protect the elderly who are vulnerable to disasters.

(4) Developing comfortable and energized living environments

To create comfortable urban environments, urban park development, roadside tree planting and public access-oriented waterfront development will be promoted.

In addition, to revitalize rural villages, measures will be taken to allow the elderly to exhibit their abilities in production activities, help their successors become established and improve living environments, taking regional features into consideration so that they can live with peace of mind.

5. Promoting Research

The research, development and use of technology greatly contributes to resolving issues associated with aging societies. Research activities that help realize an affluent and active aging society, such as research into diseases peculiar to the elderly and technical aids, and the development of foundations will be promoted.

(1) Promoting a variety of research activities

a. Research into diseases peculiar to the elderly

Research into diseases peculiar to the elderly, such as dementia and osteoporosis, as well as adult diseases, such as cerebral apoplexy, will be promoted. Research into disease prevention, and medical and care for the elderly, as well as basic research into aging will also be facilitated.

b. Research and development of technical aids

In order to support the independence of the elderly and reduce care burdens, research and development of technical aids and medical equip-

ment for the elderly will be promoted.

c. Research and development of safe and easy-to-use household articles

The research and development of household articles, foundations for living and safe and easy-to-use systems for the elderly will be promoted.

d. Research and development of communication technology

The research and development of new communication technology, including both hardware and software technology, to be used for working, health and medical care, welfare, learning, social involvement, and living environments for the elderly, will be promoted.

(2) Improving the basis of research activities

a. Improving systems to facilitate research activities

Systems to facilitate research, such as longevity science research institutes and support institutions, will be enhanced.

In addition, to facilitate research and development, a database on physical characteristics of the elderly will be developed and a technical aids evaluation system will be established, thereby standardizing technical aids for the elderly. Moreover, research will be made more efficient by creating a research information network.

b. Personnel development

Professional researchers will be trained, and research and personnel exchange will be encouraged.

International collaboration, such as joint research and information and personnel exchange, will also be promoted.

Part 3 To Promote Measures for the Aging Society

1. Important Points in Promoting Measures for the Aging Society

When promoting measures for the aging society, the following points should be attended to:

- (1) The role of families and local communities in supporting individuals' self-help efforts and maintaining living conditions will be emphasized. In particular, consideration should be given to the importance of volunteer activities which support the elderly. In addition, the public and private sectors should share appropriate responsibilities. Measures should be implemented efficiently by making the most of creativity and flexibility of private service providers based on the principles of competition. Moreover, local administrative bodies should be utilized.
- (2) To obtain the understanding and cooperation of people in promoting measures for the aging society, people's opinions should be reflected, and effective public relations and education should be implemented.
- (3) Information about changes in economic societies associated with aging should be continuously collected and analyzed. Necessary systems should be developed so that the elderly and local residents may have easy access to this information as well as other information about the use of measures for the aging society.
- (4) Measures should be implemented steadily, giving consideration to training and securing necessary personnel, based on plans with goals that are made as clear as possible.
- (5) Measures which can be trusted by people should be promoted through administrative reforms, such as deregulation, decentralization and the disclosure of administrative information.
- (6) Consideration should be given to resolving governmental issues that are closely connected with measures for the aging society, such as a gender-equal society and the normalization of the disabled.

2. Systems to Promote Measure for the Aging Society

In order to implement measures for the aging society selectively and efficiently, these general principles will be reviewed and important subjects, such as the preparation of annual reports to be submitted to the Diet, will be discussed at the Aged Society Policy Council. The Management and Coordination Agency, which is responsible for the general affairs of the Council should further cooperate with the administrative bodies concerned.

3. Revision of the General Principles

These general principles will be reviewed in approximately five years since they are medium to long-term guidelines for governmental measures for the aging society. However, they should be reviewed immediately in the event that any significant changes should occur in socio-economic conditions.

APPENDIX B

APPENDIX B

Table 1. Number of Dependent and Bedridden Persons at Home by Sex and Age: 1989 and 1992

Age	1989				1992			
	Number of household member (1,000)	Dependants (1,000)	Bedridden persons (1,000)	Rates of bedridden persons (‰)	Number of household member (1,000)	Dependants (1,000)	Bedridden persons (1,000)	Rates of bedridden persons (‰)
Total	114,202	826	400	3.5	115,776	1,188	338	2.9
6-17	21,665	26	7	0.3	19,696	30	4	0.2
18-59	71,664	119	37	0.5	72,853	175	29	0.4
60-69	11,563	119	52	4.5	12,958	179	42	3.2
70-79	6,715	240	125	18.6	7,216	298	94	13.0
80+	2,593	322	181	69.6	3,053	436	170	55.7
(65+)	14,239	630	335	23.5	15,986	836	289	18.1
Male	55,584	365	170	3.1	56,188	493	137	2.4
6-17	11,126	16	4	0.4	10,051	17	1	0.1
18-59	35,485	65	20	0.6	36,038	94	16	0.5
60-69	5,216	66	28	5.5	6,061	98	22	3.6
70-79	2,788	114	59	21.2	2,973	142	46	15.7
80+	970	103	58	59.8	1,101	141	52	47.1
(65+)	5,831	251	132	22.7	6,611	335	110	16.6
Female	58,617	461	230	3.9	59,589	625	201	3.4
6-17	10,539	9	2	0.2	9,645	13	2	0.3
18-59	36,179	54	17	0.5	36,815	80	13	0.4
60-69	6,374	53	23	3.7	6,897	81	20	2.9
70-79	3,929	126	66	16.7	4,279	156	47	11.1
80+	1,623	220	123	75.5	1,952	295	118	60.6
(65+)	8,408	379	203	24.2	9,375	501	179	19.1

Dependent person (= dependants) means a household member who is aged 6 and over and needs support in bathing, moving inside home, changing clothes, excreting, having meals, changing body position. Bedridden (at home) means a patient who is in bed almost the whole day. Source: Ministry of Health and Welfare, *Comprehensive Survey of Living Condition of the People on Health and Welfare*. Various Years.

Table 2. Dependent Persons Who Have Difficulties Living at Home and Performing Daily Activities by Age: 1992

(Multiple answer)

Age	Total	Washing face and teeth	Changing clothes	Having meals	Excreting	Bathing	Walking
Number (1,000)							
Total	338	220	239	202	235	259	246
6-17	4	3	3	3	3	3	3
18-59	29	18	19	18	19	22	21
60-69	42	25	29	24	27	32	29
70-79	94	61	65	55	63	70	66
80+	170	113	122	102	123	133	127
Percent(%)							
Total	100.0	65.1	70.7	59.8	69.4	76.6	72.6
6-17	100.0	82.5	82.5	82.5	82.5	82.5	82.5
18-59	100.0	62.7	66.4	62.0	63.8	74.1	70.4
60-69	100.0	61.0	69.5	58.1	65.7	76.4	69.2
70-79	100.0	64.8	69.7	58.8	67.4	74.9	70.8
80+	100.0	66.4	72.0	59.9	72.1	77.9	74.5

See note of Table 1.

Source: Ministry of Health and Welfare, *Comprehensive Survey of Living Condition of the People on Health and Welfare*; 1992.

Table 3. Number of Social Welfare Institutions for the Aged, Admission Capacity, and Admitted Personnel by Type of Institution: 1992

Kind of institutions	Number of institutions	Admission capacity	Number admitted	Personnel
Public Assistance Institution	349	22,481	21,586	6,387
Welfare Institution for the Aged	7,986	269,598	264,164	150,649
Home for the Aged (General)	902	64,934	62,431	18,516
Home for the Aged (Blind)	46	2,744	2,732	1,141
Special Nursing Home for the Aged	2,576	182,280	181,083	96,872
Home with Moderate Charge (Type A)	253	15,307	14,659	3,896
Home with Moderate Charge (Type B)	38	1,809	1,530	183
Home with Moderate Charge (Care house)	46	2,300	1,640	343
Welfare Center for the Aged (Type SA)	257	.	.	1,453
Welfare Center for the Aged (Type A)	1,528	.	.	8,384
Welfare Center for the Aged (Type B)	338	.	.	1,139
Day-service Center for the Aged at Home (Type A)	126	.	.	1,700
Day-service Center for the Aged at Home (Type B)	1,575	.	.	14,768
Day-service Center for the Aged at Home (Type C)	237	.	.	1,841
Day-service Center for the Aged at Home (Type D)	27	.	.	158
Day-service Center for the Aged at Home (Type E)	32	.	.	175
Short Stay Facility for the Aged	5	224	89	80
Other Social Welfare Institutions				
Fee-charging Home for the Aged	228	23,529	17,570	6,091
Relaxation Home for the Aged	4,316	.	.	7,744
Rest Home for the Aged	70	1,054
Isolated Area Day Care Center	1,499	54,992	32,489	6,587

The total of admission capacity excludes numbers of Medical Care Aid Institution, Maternity Home, Mother's Home and Institution for Free or Low Cost Medical Care.

For Public assistance Institution, the admission capacity, the number admitted and the number of personnels exclude those for Medical Care Aid Institution.

For Child Welfare Institution, the admission capacity, the number admitted exclude those for Maternity Home and Mother's Home and the number of personnels excludes that for Maternity Home.

For Other Social Welfare Institutions, the admission capacity, the number admitted and the number of personnel exclude those for Free of Low Cost Medical Care Institution.

Source: Ministry of Health and Welfare, *Survey of Social Welfare Institutions*.

**Table 4. Number of Pensioners and Amount of Statutory Pension Schemes
(New System) : 1989-1992**

(At the end of each fiscal year)

Pension scheme	Number of pensioners (In thousand)				Pension amount (In million yen)			
	1989	1990	1991	1992	1989	1990	1991	1992
Old-age (Retirement) Pension								
Basic Pension	760	973	1,761	2,697	280,798	372,487	830,310	1,412,501
Employees' Pension	1,617	2,118	2,677	3,401	1,939,721	2,570,119	3,252,937	4,044,611
Mutual Aid Pension	435	580	699	816	967,531	1,274,111	1,538,271	1,786,138
National Public Service Employees' MAA								
Ministries and Other National Agencies	112	141	166	191	271,729	343,119	402,434	460,988
Former Public Corporations treatable as NMAA	64	79	86	93	119,590	149,389	167,290	186,031
Local Public Service Employees' MAA	204	269	336	402	505,166	669,297	831,586	992,734
Private School Teachers' and Employees' MAA	19	44	53	61	21,789	48,427	57,767	58,365
Agricultural, Forestry and Fishery Institutions Employees' MAA	37	47	59	69	49,257	63,879	79,194	88,020
Invalidity Pension								
Disability Basic Pension	864	904	942	981	684,623	729,130	779,299	834,224
Disability Employees' Pension	71	87	104	121	46,389	58,209	71,650	85,949
Disability Mutual Aid Pension	5	7	10	12	6,388	8,544	11,241	13,329
National Public Service Employees' MAA								
Ministries and Other National Agencies	1	1	2	3	1,162	1,643	2,339	2,895
Former Public Corporations treatable as NMAA	0	0	1	1	325	340	497	632
Local Public Service Employees' MAA	3	4	6	7	4,018	5,387	6,978	8,555
Private School Teachers and Employees MAA	0	0	0	0	170	269	333	290
Agricultural, Forestry and Fishery Institutions Employees' MAA	1	1	1	1	714	905	1,094	958
Survivors' Pension								
Survivors' Basic Pension	181	207	224	239	116,272	135,836	151,910	167,323
Survivors' Employees' Pension	593	755	916	1,087	446,069	587,863	743,684	920,762
Survivors' Mutual Aid Pension	148	192	237	282	180,846	240,209	306,686	373,444
National Public Service Employees' MAA								
Ministries and Other National Agencies	33	42	52	62	42,386	55,583	70,942	87,311
Former Public Corporations treatable as NMAA	28	37	45	53	34,844	45,747	58,725	71,968
Local Public Service Employees' MAA	70	91	112	134	89,562	120,308	153,336	189,143
Private School Teachers and Employees MAA	7	9	11	13	4,455	5,791	7,346	7,529
Agricultural, Forestry and Fishery Institutions Employees' MAA	10	14	17	20	9,599	12,780	16,337	17,494

Source: Prime Minister's Office, Secretariat of Council Social Security, *Annual Report of Social Security Statistics*.

Chart 1. Chronology of Aging Japan

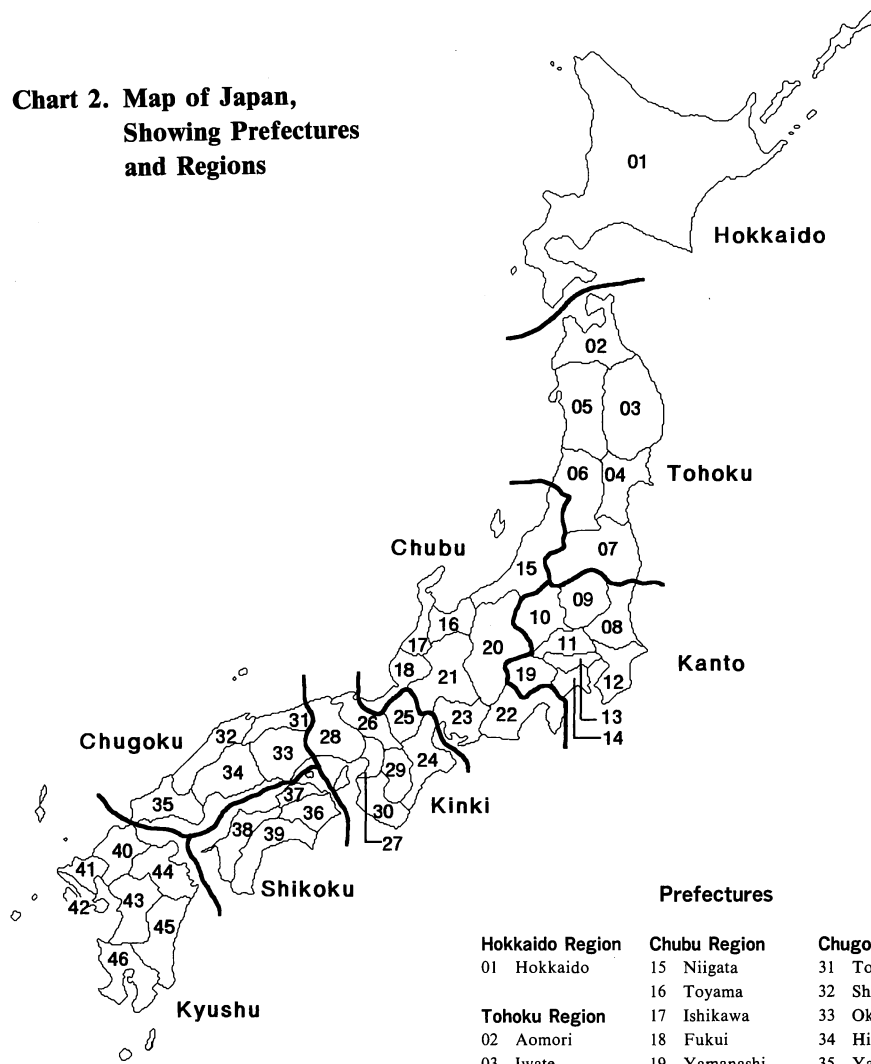
Demographic and Social Trends		Government Policies	
1945	End of World War II	1946	The New Constitution is enacted
		1958	The National Health Insurance Law for Self-employed Persons and The National Pension Insurance Law for Self-employed Persons are practiced
		1959	The National Pension Insurance Law for Self-employed Persons is enacted
Era of 70-year-long Life (Longevity Society)			
1960	Share of Aged Population: 5.7% Live Expectancy at Birth: Male 65.3, Female 70.2	1961	The National Health Insurance Law for Self-employed Persons and The National Pension Insurance Law for Self-employed Persons are practiced (An Era of Universal Coverage of Public Pension and Public Sickness Insurance begins)
		1963	The Law for the Welfare of the Elderly is enacted
		1964	Trends of raising mandatory retirement age
		1966	National holiday "Respect-for-the Aged Day (Keirou-no-hi)" is proclaimed
		1966	The Foundation of Retirement Pension for Employees is established
		1969	The Program "No Charge for the Old-age Medical Care" starts in Tokyo
Aging Society Begins			
1970	Share of Aged Population: 7.1%		
1972	The Best Seller, <i>Mental Dementia Person (Koukotuno-hito)</i> is recorded	1973	The Law for the Welfare of the Elderly is revised (Free medical care for the elderly aged 70 and over is practiced at national level)
1973	Oil Crisis	1973	The Policy Office for the Aged is established at the Prime Minister's Office
1973	Designated Sheet for the Elderly called "Silver Sheets" on public transportation	1973	The Public Pension System is revised
		1973	Local Tax Deduction Program for the Aged starts
		1973	The National Support for Elderly Education Program starts
		1975	The Union for the Retired Workers is established
1980	Share of Aged Population: 9.1%		
1980	Life Expectancy at Birth: Male 73.35, Female 78.76		
1981	Number of Households headed by aged person: 2,424,000 which is double over the past 10 years	1982	The Law for the Health and Medical Services for the Elderly is enacted (Partial reinstatement of medical charges for the aged)

Chart 1. (continues)

Demographic and Social Trends		Government Policies	
1984	Life Expectancy at Birth: Male 74.20, Female 79.78 (World Longest Level of Life Expectancy at Birth)	1985	Mandatory retirement system for national government workers at age 60 is introduced
1985	Female life expectancy at birth reaches 80 years	1985	The National Pension Insurance Law is revised (Public pension system is completely renovated)
		1986	The Cabinet decides on Guidelines on Policy for a Society of Longevity (Chojusyakai-taisaku-taikou)
		1986	Health Care Facilities for the Elderly is established
		1987	The National Registration System of Trained Care-workers starts
		1988	The National Sheltered Housing Program for the Elderly starts
1989	TFR: 1.57	1989	The Silver Mark System for the elderly care business is introduced
1990	Share of Aged Population: 12.0%	1990	Ten-year Strategy for the Promotion of the Health and Welfare Services for the Aged ("Gold Plan") is implemented
1990	"Bubble Economy" collapses	1990	Eight Laws Related to Social Welfare are revised (Commitment of Social welfare services to municipality)
		1991	The Law for the Health and Medical Services for the Elderly is revised
1992	Number of Dependent Elderly: 836,000 persons, 16% of those are bedridden persons	1992	The Visiting Nurse Services starts
		1993	All Municipality drafts the Plan for Elderly Health and Welfare
		1993	The Law for Persons with Disabilities is enacted
Aged Society Begins			
1994	Share of Aged Population. 14.1% TFR:1.43	1994	Future Image of the Social Security System (The Vision for Welfare toward the 21st. Century) is formulated
		1994	The Gold Plan is revised ("New Gold Plan")
		1994	Angel Plan (Guideline for the Support of Child Care) is formulated
		1995	The Law for the Child Care and Elderly Care Leave is enacted
		1995	The Fundamental Law on Policies for the Aging Society is enacted
		1995	The Government Action Plan for Persons with Disabilities is formulated (A Seven-Year Normalization Strategy)
		1996	The Cabinet decides on General Principles Concerning Measures for the Aging Society (Koureisyakai-taisaku-taikou)
			The establishment of a new social insurance scheme for the elderly care is under consideration

(Translated by JARC)

**Chart 2. Map of Japan,
Showing Prefectures
and Regions**



Prefectures

Hokkaido Region

01 Hokkaido

Tohoku Region

02 Aomori
03 Iwate
04 Miyagi
05 Akita
06 Yamagata
07 Fukushima

Kanto Region

08 Ibaraki
09 Tochigi
10 Gumma
11 Saitama
12 Chiba
13 Tokyo
14 Kanagawa

Chubu Region

15 Niigata
16 Toyama
17 Ishikawa
18 Fukui
19 Yamanashi
20 Nagano
21 Gifu
22 Shizuoka
23 Aichi

Kinki Region

24 Mie
25 Shiga
26 Kyoto
27 Osaka
28 Hyogo
29 Nara
30 Wakayama

Chugoku Region

31 Tottori
32 Shimane
33 Okayama
34 Hiroshima
35 Yamaguchi

Shikoku Region

36 Tokushima
37 Kagawa
38 Ehime
39 Kochi

Kyushu Region

40 Fukuoka
41 Saga
42 Nagasaki
43 Kumamoto
44 Oita
45 Miyazaki
46 Kagoshima
47 Okinawa



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