

# ***Employment of Aged People: Comparison Between the U.S. and Japan***

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**A B S T R A C T** \_\_\_\_\_

This paper examines employment for the aged in the U.S. and Japan with emphasis on both the current status and projections to 1990. The first part looks into the employment situation--the labor participation of aged people and then breaks it down by industry or occupation. Following this is a study of the conditions surrounding employment with consideration of the behavior of enterprises toward the aged, and the various employment policies.

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## I. Introduction

The urgent need for employment of aged people is now increasing in an aging society. Both the U.S. and Japan face this problem. This is true from both the macroscopic and microscopic viewpoints. The former is that aging of the population will bring about the aging of the labor force, and the difficulties of pension financing will increase. In fact, the ratio of the population aged 65 and over to the total population has increased from 9.8 percent in 1970 to 11.1 in 1980 in the U.S. and from 7.1 to 9.0 during the same period in Japan, so the ratio of the population aged 65+ in the labor force has increased 0.6 percent in the U.S. and 0.5 percent in Japan during the last ten years.

Pension crises have been strongly forewarned in both countries, and pension systems are now shifting to pay-as-you-go in Japan, owing to the current economic situation. The occupational aptitude of the aged workers is becoming strong due to an extension of life expectancy, although the demand for labor will not necessarily increase under the slow economic growth and growing technological innovation which induces an obsolescent labor force. Every occupation in industry has felt the impact of technology, and this is estimated to become stronger in the 1980's.

This article examines the conditions surrounding employment for aged people in both countries, and searches for some employment policy implementations for each country.

## II. Employment Situation for Aged Workers

### A. Labor Participation of Aged People

The labor participation rate begins to decrease from the top level of the middle-aged group (males aged 35-44, 95.8 percent in the U.S., and 97.6 in Japan in 1980), at first gradually and then more rapidly as persons grow older. As middle-aged people are likely to be at the peak of their working careers, their labor force participation rate can be expected to be high. Almost all healthy males in this age group are in the labor force.

Due to both economic and non-economic reasons, the labor partici-

pation rate decreases with age. The rate of the age group 55-59 becomes 82.2 percent in the U.S. and 91.2 in Japan, and with those aged 65+, it becomes 20.0 and 41.0, respectively. Similar declines in the labor participation rates are seen among women, although the percentage is generally about 30 points lower than for men. This trend is common in both countries.

The labor participation of older people decreases at a greater rate for men than for women, as seen in Table 1. This is partly because men and women have different life expectancies. In the case of the U.S., a male life expectancy at age 60 was an almost constant 16 years through the 1950s, 1960s, and 1970s, in spite of an increase for women. The female life expectancy at age 60 was 18 years in 1950, 20 years in 1960 and 23 years in 1975. These facts mean that the health effect on labor participation was greater for women than for men.

Table 1. Labor Participation Rate by Age

(unit: %)

Age	U.S. (1979)		Japan (1980)	
	Male	Female	Male	Female
Average	77.9	51.0	79.8	46.7
16-19*	61.7	54.5	17.4	18.5
20-24	86.6	69.1	69.6	70.0
25-34	95.5	63.8	96.3	48.1
35-44	95.8	63.6	97.6	60.9
45-54	91.4	58.4	96.3	62.0
55-59	82.2	48.7	91.2	50.5
60-64	61.8	33.9	77.8	38.8
65+	20.0	8.3	41.0	15.5

\* Japan 15-19

Source: U.S. Current Population Survey, Japan Labor Force Survey

However, the factors influencing the labor participation rate are numerous. Life expectancy is only one of them. The percentage of those aged unable to work compared to the total labor force is about one-third in the U.S. Of course, the behavior of the aged people should be examined from various aspects. We should recognize that early retirement is more common among wage and salary workers than among the self-employed who may have greater flexibility in adjusting the number of hours worked or how hard they work.

#### B. Employment Situation by Industry or Occupation for Aged Workers

First, we examine the distribution of employed aged persons by industry or occupation. Table 2 shows the percentage distribution by occupation of male employed persons aged 50+ years in the U.S. In the age group 50-54, the occupational category which has the highest rate share is the crafts workers category with a percentage of 23.8. The categories which have more than a 10 percent share are professional and technical workers (11.5), managers and administrators--non-farm (14.1), and operative, except transport equipment (12.9). But in the 70+ age group, the occupational category which has the largest share is service workers, with a percentage of 14.9, and the percentage of sales workers, farmers and farm managers, respectively, is more than 10. The increase in the percentage of service workers, sales workers, farmers and farm managers shows a clear contrast with a decrease in operatives.

Next, we examine Japan. Table 3 shows the percentage distribution by occupation. Japanese classification definitions are different from those of the U.S., but they are convenient for recognizing the outline of employment situations. As Table 3 shows, the percentage distribution of employed persons by occupation is similar to the U.S. case.

In the 45-49 age group, the male occupational category which has the largest percentage is craftsmen, at 34.0 percent. But in the age 65+ group, the occupational category with the highest share is farmers (32.6), with sales workers also showing a high percentage (14.5).

In Japan, the characteristics of the percentage distribution and its changes are seen for women too. Of course, the percentage of managers and officers is lower for women than for men and, inversely,

Table 2. Occupation Group of Employed  
Males 50+ Years in the U.S. (1970)

(unit: %)

Occupation	50-54	55-59	60-62	63-64	65-69	70+
Professional + Technical Workers	11.5	10.1	10.1	10.5	10.7	11.8
Managers + Administrators (non-farm)	14.1	13.6	13.0	13.0	12.9	13.1
Sales Workers	6.7	6.7	6.9	7.1	9.3	11.0
Clerical Workers	7.1	7.0	6.9	7.0	7.1	7.2
Crafts Workers	23.8	22.8	22.1	20.9	16.20	12.8
Operative (except transport equip.)	12.9	13.3	12.3	11.1	8.0	6.2
Transport Equipment Operatives	6.0	5.6	5.0	4.7	4.2	2.6
Laborers	5.2	5.7	5.8	5.8	5.8	5.5
Farmers + Farm Managers	3.8	4.7	5.3	5.8	8.0	10.9
Farm Laborers + Foremen	1.3	1.4	1.8	2.2	2.9	2.9
Service Workers	7.3	8.7	10.4	11.2	14.3	14.9
Private Household Workers	0.1	0.1	0.1	0.2	0.2	0.4
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: U.S. Department of Commerce, Bureau of the Census, (1970).

Table 3. Percentage Distribution of Employed Aged Persons by Occupation in Japan (1981)

Occupation	(unit: %)							
	Male			Female				
	45-49	50-54	55-64	65+	45-49	50-54	55-64	65+
Professional + Technical Workers								
Total	6.9	7.2	6.2	7.0	6.5	6.4	4.2	4.4
Technical	1.1	1.0	0.6	0	0	0	0	0
Educational	3.2	3.3	1.8	1.1	2.0	2.0	0.8	0
Others	2.7	3.0	3.6	5.8	4.1	4.5	3.4	3.4
Managers + Official Clerical Workers	9.6	10.9	10.7	8.7	0.8	1.0	0.8	1.1
Clerical Workers	12.0	12.8	9.5	7.0	14.2	11.4	6.8	3.4
Sales Workers	10.9	9.5	12.5	14.5	14.6	14.9	16.9	23.6
Farmers	10.9	14.5	21.1	32.6	19.2	24.3	30.8	36.0
Mining Occupations	0.5	0.3	0	0	0	0	0	0
Transportation + Communications	8.0	5.6	2.7	0.6	0.4	0.5	0	0
Craftsmen	34.0	31.3	27.3	18.6	27.5	22.3	19.0	13.5
Laborers	2.4	2.6	3.9	4.1	3.6	4.5	5.1	5.6
Service Workers								
Total	4.5	5.3	6.5	6.4	13.0	14.9	15.6	12.4
Protective	1.6	2.3	2.1	1.2	0	0	0	0
Domestic	0	0	0	0	0.4	0.5	0.8	1.1
Others	2.9	3.3	4.5	5.2	12.6	13.9	14.8	10.1
Total	100	100	100	100	100	100	100	100

Source: Japan Bureau of Statistics "Labor Force Survey"

that of service workers is fairly high. But, in spite of these differences, the characteristics of the distribution change are similar.

After an analysis by occupation, we examine the percentage distribution of the aged employed persons by industry. As Table 4 shows, in the U.S. the age group 55-64 in the manufacturing industry shows a high percentage (27.1), but the age 65+ group decreases to 11.4 percent. In contrast, the percentage in trade and miscellaneous service, respectively, increases from 18.6 to 40.3 and from 27.9 to 40.3.

However, in Japan, as Table 5 shows, the percentage in the manufacturing industry decreases from 24.5 in the age group 45-49 to 14.5 in the age group 65+. In contrast, the percentage in trade and service, respectively, increases from 15.2 to 20.3, and from 13.0 to 16.2.

In addition, we examine the trends in Japan. Table 6 shows a comparison of the change of distribution by age group. The similarity in both countries of the change of percentage by industry accompanying aging is estimated to increase. In Japan this is due to the decrease in the agriculture industry.

#### C. Characteristics Deduced from Comparison of U.S.A. + Japan Aged Workers Data

1. Among the occupations, the percentage of the white collar category decreases slightly, and that of blue collar decreases greatly accompanying aging. The percentage of service workers and farmers increases.

2. These trends are seen in both countries with some variations.

3. Among the industries, the ratio of secondary industry for aged people decreases according to age. However, the ratio of tertiary industry increases.

4. These trends are seen in both the U.S. and Japanese cases.

From the above facts, it can be seen that suitable occupations and industrial sectors for the aged group are common in both countries. In spite of minor differences in the degree of service economizing of both countries, employment situations for aged people should not necessarily be thought of as pessimistic for the future.

We would like to cite employment projections by the U.S. Department of Labor as a reference concerning this point of view. As Table 7 shows, in the future, the probability of securing opportunities for

Table 4. Major Industry Group of Employed Persons 55-64 Years, and 65+ by Sex: 1978 Annual Average. (U.S.)

Industry Group	Both Sexes		Male		Female	
	65+	55-64	65+	55-64	65+	55-64
Employment Total (thousands)	2,454	10,616	1,576	6,528	879	4,089
Mining	0.5	0.8	0.7	1.2	0.2	0.2
Construction	5.8	5.8	8.5	8.8	0.8	1.0
Manufacturing	11.4	27.1	12.9	31.5	8.8	19.9
Transportation + Public Utilities	3.9	7.1	5.1	9.4	1.8	3.3
Trade	25.9	18.8	15.1	17.4	27.4	21.1
Wholesale	4.9	4.0	6.5	5.3	2.0	2.1
Retail	21.0	14.8	18.6	12.1	25.5	19.0
Finance, Insurance + Real Estate	7.7	5.9	8.5	5.5	6.3	6.4
Miscellaneous Service	40.3	27.9	34.4	18.6	50.7	42.8
Business + Repair	5.9	3.3	7.5	3.8	3.1	2.4
Personal (excluding private household)	6.6	3.0	4.7	1.7	10.1	5.0
Entertainment + Recreation	1.8	0.8	2.1	0.9	1.4	0.6
Medical (except hospital)	5.2	3.3	3.9	1.6	7.7	6.0
Hospitals	3.4	3.9	1.6	1.4	6.5	7.8
Welfare + Religious	5.3	1.9	3.9	1.5	7.8	2.7
Education	6.6	9.1	4.9	4.9	10.0	15.9
Other Professional	5.3	2.5	5.9	2.6	4.1	2.4
Forestry and Fisheries	0.1	0.1	0.1	0.2	-	(z)
Public Administration	4.6	6.7	4.9	7.6	3.9	5.2
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: U.S. Department of Commerce, Bureau of the Census, unpublished 1978 Current Population Survey data.

Table 5. Percentage Distribution of Employed Aged Persons by Industry (1981) (Japan)

Industry	(unit: %)									
	Male					Female				
	45-49	50-54	55-64	65+	45-49	50-54	55-64	65+		
Agriculture	9.4	12.5	19.0	30.2	18.2	23.3	30.0	36.0		
Forestry	0.8	1.0	0.9	0.6	0.4	0.5	0.4	0		
Fisheries	1.3	1.3	1.2	1.2	0.8	0.5	0.4	0		
Mining	0.8	0.7	0.3	0	0	0	0	0		
Construction	14.9	12.8	12.5	8.1	4.1	3.5	3.0	1.1		
Manufacturing										
Total	24.5	23.4	20.1	14.5	27.1	21.8	16.9	12.4		
Textile	2.1	2.0	2.1	2.3	7.3	5.9	4.7	3.4		
Chemical	3.5	3.0	2.4	1.7	2.4	2.0	1.7	1.1		
Metal & Machine	11.2	11.5	8.3	4.7	7.7	5.5	3.8	2.3		
Others	7.5	6.6	7.4	6.4	9.7	7.9	6.6	5.6		
Trade	15.2	13.5	18.0	20.3	23.5	22.8	24.1	28.1		
Wholesale	5.9	4.9	5.7	4.7	3.2	3.5	3.0	2.3		
Retail	9.3	8.9	12.5	15.7	19.8	19.8	21.5	25.8		
Insurance +										
Real Estate	2.7	2.3	3.0	2.9	2.4	3.0	3.0	2.3		
Transportation+										
Communication	11.4	11.2	5.3	2.3	2.0	1.5	0.8	0		
Utilities	1.1	1.0	0.6	0	0	0	0	0		
Services										
Total	13.0	14.5	16.6	16.2	20.2	21.3	19.4	17.0		
Professions	7.2	7.9	7.4	8.7	8.9	9.4	7.6	6.7		
Other	5.9	6.9	8.9	8.1	10.9	11.4	11.8	10.1		
Government	5.6	5.9	3.0	1.7	1.2	1.5	1.3	2.3		
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		

Source: Japan Bureau of Statistics "Labor Force Survey"

Table 6. Change of Percentage Distribution of Employment of Aged Males by Industry (Japan)

	(unit: %)									
	1975					1980				
	50-54	55-59	60-64	65-69	70+	50-54	55-59	60-64	65-69	70+
Agriculture	19.3	22.6	29.8	38.7	46.8	11.3	15.3	22.5	28.5	34.5
Forestry	0.8	0.7	0.7	0.7	0.5	0.9	0.8	0.8	0.5	0.5
Fisheries	1.4	1.5	1.6	1.7	1.4	1.3	1.3	1.6	1.6	1.1
Mining	1.1	0.5	0.3	0.3	0.1	0.6	0.4	0.2	0.2	0
Construction	9.0	10.6	10.1	7.2	4.1	13.2	12.6	11.5	10.2	5.9
Manufacturing	24.9	22.2	18.7	15.7	11.9	23.3	21.9	17.7	15.1	12.0
Trade	15.0	16.5	16.8	14.5	16.8	13.2	15.2	18.9	19.3	22.1
Insurance	1.6	1.4	1.3	1.3	1.5	2.0	1.9	1.7	1.2	1.5
Real Estate	0.7	1.0	1.2	1.3	3.1	0.9	1.3	2.0	1.9	2.5
Transportation & Communication	8.0	5.2	3.6	2.2	1.1	11.6	7.2	3.8	2.4	1.4
Utilities	1.1	0.5	0.3	0.2	0.1	1.3	0.9	0.3	0.1	0.1
Services	12.4	13.9	13.4	12.0	12.8	15.2	17.5	16.7	16.8	16.2
Government	4.6	3.4	2.2	2.2	2.0	5.2	3.7	2.2	2.0	2.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Japan Bureau of Statistics "Population Census"

Table 7. Occupational Projection to 1990

	1978	1990
Employed (10 <sup>3</sup> )	97.610	119.590
Persons	(100.0)	(100.0)
White Collar	(49.8)	(50.9)
Blue Collar	(32.6)	(31.5)
Service Workers	(14.8)	(15.8)
Farm Workers	(2.8)	(1.8)

Source: U.S. Department of Labor "Economic Projection to 1990" (Low Trend Case Version)

employment for aged people will be maintained in the U.S. by the increase of employment in the white collar occupations, especially the professional and technical workers, and service workers, especially service excluding private households. It is estimated that the professional and technical workers have been the fastest growing occupational categories and in future these occupations will continue to increase. Rising income and greater awareness of health problems will boost demand for health care, especially as the number of older people with a greater need for health service increases.

Under these conditions it is estimated that the labor participation rate of the age group 65+ will slowly decrease from 20.0 percent in 1979 to 15.8 in 1990 for men, and from 8.3 to 7.3 during the same period for women.

#### D. Differences in Employment Situation for Aged People in Both Countries

1. The substantial change in the proportion of aged workers by occupations or industries as persons grow older begins at age 55-60 in Japan, as compared to age 60-65 in the U.S. (retirement age differen-

tial).

2. The degree of these changes is larger in the U.S. than in Japan.

The changes in the percentage of occupations by ages are shown in Table 3 for the case of Japan and in Table 8 for the U.S. case. Because the two tables have differences in both classifications of the age group and the occupational category, they may not be exactly comparable.

These differences are meaningful in judging employment conditions for aged workers. The former differences are perhaps due to the fact that Japanese workers are forced to transfer jobs at retirement (teinen), and most retirees are between 55 and 57 years of age. According to the Ministry of Labour's "Employment Management Survey", in 1981 the percentage of companies with an age limit of 55 years was 38.0;

Table 8. The Percentage of Major Occupation Groups of Employed Males by Age (1979, U.S.)

(unit: %)

Age	Total Employed	White Collar Workers	Blue Collar Workers	Service Workers	Farm Workers
45-49	100.0	46.8	43.0	6.7	3.5
50-54	100.0	46.2	43.0	6.7	4.0
55-59	100.0	45.1	42.4	7.9	4.6
60-61	100.0	43.9	41.8	8.3	6.1
62-64	100.0	43.5	37.6	10.5	8.3
62-64*	100.0	44.7	37.5	9.6	8.2
65-69*	100.0	43.8	29.4	14.6	12.2
70+*	100.0	42.9	24.6	14.8	17.6

\* 1978 data

Source: U.S. Department of Commerce, Bureau of the Census, unpublished 1978 Current Population Survey Data.

for age 56-59 years, it was 18.0; and for 60 years, 39.5. The percentage of companies with a 60-year age limit increased recently. Five years ago, the percentage was about 30.0. This means that many aged workers are forced to change jobs upon retirement.

In the case of U.S. workers, the change in ratio begins at the formal retirement age of 65. Workers in secondary industries, or blue-collar occupations, prefer to retire; but those in tertiary industries, or white-collar occupations, and service workers, prefer to continue working. The above rates of change are, respectively, 60 percent of white collar, 90 percent of service workers and 25 percent of blue-collar workers in 1978.

Concerning the differences in the degree of these changes of ratio between both countries, the following facts may be stated. In Japan, continuous employment of aged workers in the same firm at the time of teinen (retirement) is not maintained, and they are forced to transfer jobs. Sometimes aged workers are re-employed in the same firm, but their labor conditions often become worse than before (so-called downward transfer). For this reason, they try to maintain continuous occupation in order to protect themselves from worsening labor conditions. The ratio of aged employees who maintain continuous occupation at age 55 are shown in Table 9. The ratios are fairly high in each occupational category, with minor differences of degree at age 55-59. But in the U.S., workers usually retire at age 65 on a public or private pension. Blue collar workers prefer to retire for non-economic reasons, so their retirement rate differs from that of white collar workers who have a relatively high preference to maintain employment, for non-economic reasons. The differences in retirement rates between occupational categories induce the changes of percentage distribution by occupational group at ages 65-69.

### III. Behavior of Aged People and Conditions Surrounding Employment

#### A. Behavior of Aged People

The behavior of aged people greatly affects the development of employment opportunities. So firstly, we examine this behavior. In Japan, concerning the vocational aptitude of aged people, the working group age 30-50 shows a desire to work until age 65; those in their

Table 9. The Percentage of Aged Male Employees Who Maintain Continuous Occupations (1981, Japan)

(unit: %)

Occupation at Age 55	Total	55-59	60-64	65-69
Professional + Technical Workers	43.1	50.4	37.7	33.0
Managers and Administrators	65.4	73.0	59.4	54.6
Clerical Workers	70.3	80.7	58.9	59.1
Sales Workers	83.6	89.8	77.9	79.9
Transport Equipment Operative	42.1	59.4	20.5	36.2
Operative (except Transport Equipment)	67.0	77.7	58.6	52.3
Laborers	51.4	60.7	41.0	49.8
Protective Service	52.1	67.2	38.1	32.7
Service Workers	37.8	50.7	25.7	36.0

Source: Japan Ministry of Labour 1981. The Employment Situation for Aged Persons Survey.

60s show a desire to work until age 70, and those 70+, to work until age 75, as Table 10 shows.

Both the desire to continue working and working aptitude are enhanced as people grow older, with minor differences in the degree of desire to work. According to the "Survey on Employment Situation for Aged People" carried out by the Ministry of Labour, about 56 percent of the age group 65-69 had never considered an ideal retirement age. According to the same survey, 90 percent of workers aged 55-59 want to work for economic reasons and only 5 percent for reasons of health or social participation, whereas 70 percent of workers aged 65-69 want to work for health reasons and 10 percent for social participation.

This flexibility of desire owing to economic reasons for working may indicate that the desire to work may be discouraged by the decrease in job opportunities. In fact, the unemployment rate of the

Table 10. Age Hope to Discontinue Working

		Until 55	Until 60	Until 65	Until 70	Until 75	75+	N.A.
Total	100.0	12.0	27.0	34.7	15.5	2.6	5.1	3.1
Sex								
Male	100.0	7.0	25.6	38.4	17.8	2.9	5.9	2.5
Female	100.0	19.0	29.0	29.6	12.4	2.1	4.0	3.9
Age Group								
20-29	100.0	19.8	32.5	30.1	10.1	1.2	3.5	2.8
40-49	100.0	12.6	29.7	36.5	14.1	1.3	3.6	2.2
60-69	100.0	2.6	7.1	33.5	36.6	8.0	7.5	4.8
70+	100.0	4.5	9.0	12.9	18.3	18.3	28.9	18.0

Note: Workers over 20 years old were surveyed.

Source: Japan Ministry of Health and Welfare. 1980. Study on the Aging Problem.

age group 60-64 is 3.6 percent, as compared to 1.4 percent of the age group 50-54. The rate of acceptance of the applicants of the age group 60-64 is 3.2 percent as opposed to about 10 percent of the middle-age group.

On the other hand, looking at the behavior of the aged in the U.S., their preference to retire should be thought to become stronger. The ratio of early retirement to total pension beneficiaries increased from 8.7 in 1968 to 10.3 in 1980, and the average labor participation rate of the aged group recently decreased, whereas the percentage of persons who are not in the labor force but desire to work due to other than health and household reasons to total non-labor force maintained a low level of 1.2 percent in 1970 and 1.3 percent in 1979. In short, withdrawals from the labor force due to discouragement over job prospects are very few. But, according to the National Longitudinal Sur-

vey, reactions to offers of hypothetical jobs are as follows: in 1978, 5 percent answered that they would definitely accept, and 20 percent answered that they might accept. This means that the judgment of degree of discouragement is a very difficult problem.

These differences between both countries are due to the difference in labor market conditions for aged workers and inversely influence labor market conditions. In the U.S., the unemployment rate of the aged group is not necessarily higher than that of the middle-aged group. The age group 35-44 rate is 3.9, compared to 4.1 for the age group 65+. Moreover, the degree of unemployment (shown as the average unemployed weeks) of the aged group is not so intensified compared with the middle-aged group. Under these conditions, the differential of wages by age does not increase with age. In case of full-timers, the wages of those age 65+ is about 90 percent of those aged 50-55. These conditions are never observed in Japan. Moreover, in the U.S. many part-time employment opportunities are offered to aged people, and this contributes to the increased flexibility in employment and retirement choice (as shown in Table 11).

#### B. Behavior of Enterprises for Aged People

The lifetime commitment employment systems usually adopted by enterprises in Japan is basically dependent upon the idea that the capabilities of workers may be enlarged and enriched by on-the-job training, but these have a definite age limit.

This is recognized from the fact that many enterprises in Japan have customs of periodically hiring new graduates in spring and, on the other side, adopting a mandatory retirement age. But for adjustment of employment to business, enterprises usually adopt a non-periodical hiring system. Under these circumstances, what is the employment situation for aged people? According to the "Survey on Aged Persons Employment Situation", the hiring rate of workers aged 55+ by enterprises hiring non-periodically was only 26.3 percent in 1981, and that of large enterprises (1,000+ workers) was 17.4 percent. Reflecting this behavior of enterprises, the rate of enterprises that have not yet reached the target of 6 percent of workers aged 55+ to total workers is now 48.8 percent, as indicated by the Ministry of Labour.

Concerning the behavior of enterprises, we must examine the im-

Table 11. Part-time Employment of Persons Aged 45-64 by Sex (1979)

	Number (10 <sup>3</sup> )	Percent
Male		
Total	558	3.2
45-54	172	1.7
55-59	146	3.3
60-64	240	8.8
Female		
Total	2,426	21.2
45-54	1,372	20.0
55-59	585	20.4
60-64	469	27.4

Source: U.S. Department of Commerce, Bureau of the Census, unpublished 1979 Current Population Survey Data.

fact of technological innovations on employment. According to a survey carried out by the Japan Ministry of Labour in 1981, main enterprises (those with over 1,000 workers) have already introduced computers and word processors for office automation. The rates of adoption are from 30 to 90 percent with some differences among equipment.

Under these conditions, 46.7 percent of enterprises answered that the number of workers would decrease in the near future, and adjustment of employment may be carried by discontinuing new hiring. According to another survey by the Ministry of Labour, 42.3 percent of enterprises that introduced numerical control devices reported a decrease in the number of employed workers in the past three years. And more, according to the survey by a private research institute on the younger age group, the number of employed workers increased to 74 percent of the enterprises, and decreased in 26 percent. In the middle- and high-aged group, the number of employed workers increased in only

17 percent of enterprises and decreased in 83 percent. These facts indicate that the conditions surrounding employment for aged people offer some important problems to be resolved without delay.

The affairs concerning technological innovations in the U.S. have trends in common with Japan. There is some evidence that changes in the occupational structure, generational job competition, and job obsolescence have strongly affected retirement trends. We must cite the following argument in post-industrial societies that increases in retirement need to be reinterpreted as involving a partial improvement in the status of aged people.

However, we must not forget to examine the problem of seniority systems in the U.S., or fail to recognize the importance of layoffs in the high U.S. unemployment rate. The rate of unemployment due to layoffs to total unemployment was about 20 percent in 1980. Of course, in the long-run, the seniority systems are not easily identified as either positive or negative factors in the obsolescence of aged workers under the going technological innovations. It is difficult to isolate the impact of various factors because changes in labor force participation rates are the end results of complex interactions by various factors.

Now we look at the rate of increase in the number of employed workers in 350 detailed occupational categories which had more than 25,000 workers in 1970. From 1970 to 1979, many of the individual categories which indicated a high rate of over 50 percent belong to the major category of professional and technical workers. The recent percentage distribution of this category in the age group 65+ is about 10 percent, and this percentage slowly increases as people grow older.

But these conditions differ in comparison with degree of education. In the group with less than eight years of elementary school education, the percentage of professional and technical workers decreases to about 1 percent as they grow older than 50 years of age, although that of the group with four or more years of college maintains an even 50 percent even as they grow older than 60 years of age.

### C. Employment Policy for Aged People

It is common policy for both countries to secure employment opportunities for aged people. To this end, the behavior of enterprises

and aged people are not as important as governmental policies. In both countries, various employment measures have been developed. The effects of employment policies are not easily evaluated, as policies have both long- and short-term effects. What should be examined here are long-term effects in both countries. In Japan, the unemployment rate is now 2 percent and, even for the aged group, the unemployment rate is not as high as that of other industrialized countries. So, at a glance, it seems that governmental employment policies are not that important; however, this is not so. As the speed of aging of population is the most rapid among many countries, employment policies, especially for the aged, have a high priority in Japan. In fact, several years ago, the government of Japan adopted various employment measures for aged workers along the "Planning of Employment Improvement". An employment target of 6 percent for workers aged 55+ was established, which is the real average percentage of workers aged 55+ to total employed population. To this purpose, the government adopted measures to subsidize the increased employment cost for aged workers due to the seniority wage system. An article entitled "Employment and Retirement of Older Workers in Japan" was written which points out that as this employment policy had no penalty clauses, its effect was not as strong as expected.

In the U.S., the federal government adopted the Age Discrimination in Employment Act (ADEA), with amendments, which was enacted in 1967 to prohibit employment discrimination against persons aged 40-65. This age limit was chosen to focus on coverage for workers especially likely to experience job discrimination due to age. The upper limit was set at age 65 because it is a common retirement age in the U.S. This Act was amended in 1978 to extend protection beyond age 65 to age 70 for workers, excluding those in the Federal sector. In fact, approximately half of the workers were subject to mandatory retirement, so this amendment should improve employment for aged persons. ADEA now protects workers through age 70, but actually most aged persons choose to retire sooner. It is very important to avoid a crises when the baby boom generation reaches retirement age.

Some studies indicate that prior to the ADEA amendment, only 5-10 percent of retired workers were forced to retire, and it is possible that the ADEA amendment will expand the practice of voluntary retirement with generous retirement packages. The present legislation would

be expected to affect the retirement behavior of only a small portion of aged persons. But the ADEA protection may be used by employees who are faced with deteriorating retirement income.

There are divergent views concerning the retirement age, one of which is that the decision to retire is largely economic. Adopting this view, the baby boom generation is better educated and may have better jobs, so that most of them may be more likely to postpone retirement than present aged workers. If so, the crisis of pension would be avoided. But another view is that many aged persons want employment but are prevented from working by mandatory retirement and age discrimination. Aged persons who want to work do so not only for economic reasons, but also for non-economic reasons such as job satisfaction. In adopting this view, the problem of employment for aged persons should be a more serious one.

The U.S. Department of Labor is mandated by Congress to report the effects of the ADEA amendment. In the near future, an evaluation surrounding the retirement decision should be presented.

#### IV. Conclusion

In spite of various differences in employment situations and conditions for aged persons, the behavior of workers and enterprises, employment systems and customs, and government policies, the importance of employment problems for aged people is common in both countries. It is very difficult to evaluate the preferabilities of the aged group for employment in both countries. What is important is that we recognize the similarities between both countries and learn from the experiences of each other.

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