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Outlook for Elderly Employment in Japan

Extended Employment Policy Might Halve Retirement at Age 60

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A new law urging companies to extend employment through age 65 will be effective in Japan this spring. This trial calculation shows that, because reaching age 60 actually triggers retirement of the elderly from labor market, raising mandatory retirement age from 60 to 65 could increase the labor force participation rate of persons aged 60 to 65 by about 10 percentage points. Encouraging labor supply of those aged 65 and over would appear to require redoubled institutional reform, including abolishment of the mandatory retirement age scheme altogether.

The working-age population (i.e. population aged 15 to 64) in Japan is projected to decline by 0.7 per cent per annum from 2005 to 2010. The decline is likely to accelerate to 1.1 per cent per year in the subsequent five years. The decline should act to lower labor inputs proportionately, thereby dragging on the potential growth rate, if the labor force participation rate remains unchanged.

However, scheduled to be implemented this April is the “Revised Law Concerning Stabilization of Employment of the Elderly.” This legislation will impose firms to make efforts to retain their employees up to age 65, which is indicative of advances on the institutional front to encourage extended employment of the elderly. At present, the male labor force participation rate is 93.2 per cent for those in their late 50s (figures for 2004), declining to 70.7 per cent in their early 60s. That is, reaching age 60 triggers retirement of two out of nine male workers. The institutional reform may help to prevent baby boomers (currently in their late 50s) from retiring (i.e. lowering their labor force participation rate) as in the same manner as the previous generation did, thereby partially offsetting the aforementioned negative impact.

This paper explains a way to calculate to what extent the labor force participation rate may rise as a result of such an institutional shakeup, which was adopted in “The 32nd Medium-term Forecast of the Japanese Economy in FY2005-2015” released by this Center on December 1, 2005.

Raising Age 60-64 Male Labor Force Participation Rate to 80 per cent

The “Revised Law Concerning Stabilization of Employment of the Elderly” aims to eliminate the “age-60 mandatory retirement system,” and encourage continued employment at least until the age of 65. To estimate the effect of this change on elderly

employment, it is necessary to consider two related points: first, how many people in their late 50s are currently working under the system of age-60 mandatory retirement; and second, how many of those workers would continue to work in response to the implementation of the revised law. Because there may not be so many females with full-time jobs covered by mandatory retirement system, this paper will focus on male workers.

Regarding the first point, because the mandatory retirement system is adopted more widely in large corporations than small- and medium-sized enterprises, calculation by firm size is needed. Let's put together the mandatory retirement system adoption rates presented in the "Survey on Employment Conditions of the Elderly" (hereafter referred to as the SECE) Ministry of Health, Labor and Welfare, 2004 (see column II on Table 1), and the number of employees in their late 50s gleaned from the Labor Force Survey (hereafter the LFS) for the same year (column I in the same Table). The information enables us to estimate that 2.87 million out of the 4.21 million male employees are working under the age-60 mandatory retirement systems (column III).

Table 1. Number of Employees Covered Under Mandatory Retirement

	No. of Employment (males, 10,000 persons) <Note 1>		Mandatory retirement adoption rate (%) <Note 2>		Number of Employment by Retirement System (males, 10,000 persons)			
	55-59 (a)	60-64 (b)	2004 <Note 3> (c)	2010-19 assumptio ns (d)	55-59		60-64	
					System adopted a*c/100	Not adopted a* (1-c/100)	System adopted b*d/100	Not adopted b* (1-d/100)
1,000 employees +	62	18	100.0	100.0	62	0	18	0
100-999 employees	79	45	99.1	100.0	78	1	45	0
30-99 employees	53	38	95.1	100.0	50	3	38	0
5-29 employees	79	58	70.6	70.6	56	23	41	17
Under 5 employees	29	23	0.0	0.0	0	29	0	23
Government sector	41	15	100.0	0.0	41	0	0	15
Unknown	1	1	0.0	0.0	0	1	0	1
Non-farm employee total	344	198			287	57	142	56
Agriculture/forestry	13	18	0.0	0.0	0	13	0	18
Self-employed, household help, etc	64	56	0.0	0.0	0	64	0	56
Total	421	272			287	134	142	130

(Notes)

1. "Labor Force Survey" (Ministry of Internal Affairs and Communications), 2004.
2. "Survey on Employment Conditions of the Elderly" (Ministry of Health, Labor and Welfare), 2004. Figures for government, agriculture/forestry, household help, etc. are assumptions.
3. Figures for 100-999 employees are averages weighting the system adoption rates for 100-299 and 300-999 employee segments according to the number of business establishments.

For the second point, an estimate by Seike and Yamada (2004) is useful, which indicates that experience of mandatory retirement will cut the employment probability of males in their 60s by about 20 percentage points. Utilizing the estimate, the steps

described in Table 2 shows the labor force participation rate of males in their early 60s may rise by about 12 percentage points to over 80 per cent. In other words, the retirement rate of two in every nine workers is cut in half to about one.

However, this trial calculation is rough by nature, and it must be kept in mind that this ignores the following points. First, for the measurement unit of firm size, the SECE uses a business establishment, while the LFS does a company. Second, no different treatment is made between “regular” and “irregular” workers. Third, some (but a limited number of) companies adopt mandatory retirement systems of below or above age 60. Yet, the obtained result may be robust because its main finding is confirmed by two different calculations: one using the “Establishment and Enterprise Census,” where the number of employees by establishment size (but no breakdown by age) is available; and the other taking advantage of the adoption rate data by industry available in the SECE.

Abolishing Retirement Age System Vital to Mobilize Age 65+ Workers

Turning to the labor force participation rate of those aged 65 and above, first, a likely change in the rate of those in their late 60s will be examined, and then its impact on all persons age 65 and above will be considered. For this 65-69 age group, the same calculations can be conducted as for the 60-64 age group. I will assume the labor force participation rate for workers in their early 60s to rise to 80 per cent as a result of abolishment of age-60 mandatory retirement, allowing for some margin in the result obtained above. As noted in the No. 2 section of Table 2, the assumption will lead to the result that the labor force participation rate of those in their late 60s is about 45 per cent, revealing little change from the 45.6 per cent in 2004.

In other words, whether the retirement age is 60 or 65 would make no visible difference in the labor force participation rate of those in their late 60s, which means that the upcoming institutional reform will be of little help to encourage employment of those belonging to this particular age group. Thus, in order to mobilize labor force of those aged 65 to 69, a system shakeup to achieve extended employment should be stepped up, such as the outright abolishment of the mandatory retirement age system itself. Eliminating mandatory retirement age would raise the labor force participation rate of this age group to about 52 per cent (see Table 2 3.). That is, the number of those of that age who continue to work would increase from the 4.5 to over 5 out of each 10 persons.

A coming surge in the number of persons in their late 60s during the period from 2010 to 2015, when baby boomers reach that age level, is likely to increase a share of younger age segment, thereby pushing up the overall labor force participation rate of persons 65 or above, even without an increase in the labor force participation rate for each age group.

Table 2. The Influence of Changes in the Mandatory Retirement Age System on Elderly Employment (trial computation method)

1. Impact of a shift to age-65 mandatory retirement on labor force participation rate of males in their early 60s		
Step 1: Assumptions for those in their late 50s and early 60s		
	Employed males in their late 50s (share of population)	Employment probability for those in their early 60s
Work at companies with age-60 mandatory retirement	X %	(a - 20) %
Work at companies without mandatory retirement	Y %	a%
Step 2: Formulation (Notes 1 and 2)		
X+Y=89.4 (= employment rate for those in their late 50s = number of employment ÷ population)		(1)
[(a-20)/100]X+[a/100]Y=70.7 (= labor force participation rate of males in their early 60s)		(2)
Step 3: Obtain additional information		
Chart 1, column III gives X:Y = 287:134.		
Step 4: Solve three unknown parameters, (X, Y, a).		
Combination of the X:Y ratio and Eq. (1) leads to X = 60.9 and Y = 28.5.		
The above and Eq. (2) gives a = 92.7%.		
Step 5: Compute labor force participation rate for those in their early 60s if age-60 mandatory retirement were abolished.		
(a /100)(X + Y) = 92.7/100*89.4=82.9		
2. Impact of a shift to age-65 mandatory retirement on labor force participation rate of males in their late 60s		
Step 1: Assumptions for those in their 60s		
	Employed males in their early 60s (share of population)	Employment probability in late 60s
Work at companies with age-65 mandatory retirement	X %	(a - 20) %
Work at companies without mandatory retirement	Y %	a%
Step 2: Formulation (Note 3)		
X+Y=65.4 (= employment rate for those in their early 60s = number of employees ÷ population)		(3)
[(a-20)/100]X+[a/100]Y=45.6 (= labor force participation rate of males in their late 60s)		(4)
Step 3: Additional assumptions for simplification		
The number of employees working at companies with age-65 mandatory retirement is set equal to zero, i.e. X=0.		
Step 4: Solve remaining two unknown parameters, (Y, a)		
Eq. (3) immediately gives Y = 65.4.		
The above and Eq. (4) give a = 69.7%.		
Step 5: Impact of a rise in labor force participation rate for those aged 60-64 to 80% due to a shift to age-65 mandatory retirement		
Subtracting 5.0% (= 210,000 unemployed persons ÷ 4,160,000 population) from labor force participation rate of 80% yields 75% employment rate.		
X+Y = 75.0 (early 60s employment rate = number of employment ÷ population)		(5)
[(69.7-20)/100]X+[69.7/100]Y= (labor force participation rate of males in their late 60s)		(6)
Step 6: Additional assumptions		
As X and Y under an age-65 mandatory retirement system are unobservable, additional assumptions are needed (Note 4).		
(a) Assume age-65 mandatory retirement to be implemented in all business establishments of 30+ employees; 70% at those with 5-29 employees (equivalent to 2004 results); no mandatory retirement at those of smaller size.		
(b) Continued labor cost cuts prevent the government sector from hiring those in their 60s as regular employees under mandatory retirement systems.		
The above, together with Table 1 column IV, gives X:Y = 142:130.		
Assume for further simplification, X = Y = 37.5 from Eq. (5).		
Step 7: Compute late 60s labor force participation rate		
From Eq. (6), labor force participation rate for those in their late 60s is 44.8%		
3. Impact of mandatory retirement age abolishment on labor force participation rate of males in their late 60s		
Step 1: The following computations based on a modification of Eq. (6).		
[69.7/100]X+[69.7/100]Y= (labor force of males in their late 60s)		(7)
Note the 20% reduction in the first term above disappears as no one experiences mandatory retirement.		
Substituting X = Y = 37.5 in Eq. (7) obtains 52.3%.		
Note 1: The figures used here are 2004 outcomes (Labor Force Survey).		
Note 2: Use of the employment rate in Eq. (1) and the labor force participation rate in Eq. (2) is based on the assumption that workers unemployed in their late 50s will not stay in the labor market in their early 60s.		
Note 3: See Note 1 and Note 2.		
Note 4: A shift to age-65 mandatory retirement could increase the share of large-sized business establishments in employment distribution, compared to that in the early 60s shown in Table 2. The assumptions like (a) will offset the effect of changes in distribution within the business size of 30 employees + on computations of the number of workers under mandatory retirement age systems.		

However, such a scenario may be too optimistic. In 2004, the male labor force participation rates for age 65-69 and age 70 and over were 45.6 and 20.9 per cent, respectively. With unchanged rates for both segments, the expected changes in demographic composition would reduce the labor force participation rate of those aged 65 and above, 28.9 per cent in 2005, by 0.4 percentage points in 2010, and then raise it by 0.3 percentage points in 2015. In short, the shifts in age structure would only be able to cause the downward trend to level off. If the labor force participation rate of those aged 65 to 69 were to rise to 50 per cent in 2015 due to elimination of mandatory retirement, the overall participation rate of age 65 and over would rise by about 1.5 percentage points to 30.3 per cent.

References

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