

# Attitudes Toward the Public Pension—Analysis From a New Perspective

by Kunio Nakashima

Financial Research Group / Pension Forum

nakasima@nli-research.co.jp

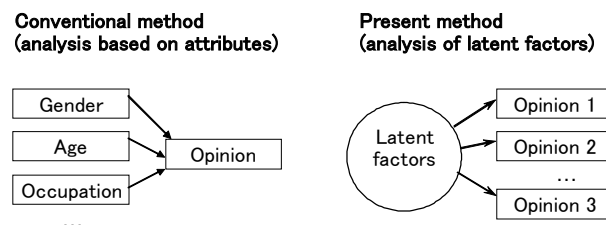
## 1. Analysis of Attitudes from a New Perspective

In the past, the public's attitudes toward the public pension have primarily been surveyed by the government, with results compiled by attributes such as gender, age and occupation. As a result, the surveys fail to discern exactly who has what expectation or dissatisfaction. In this paper, we use data from a private-sector survey to analyze attitudes toward the public pension from a new perspective.<sup>1</sup>

Since participation is mandatory, the public pension affects a vast number of people. As a result, problems arise with the conventional approach of categorizing respondents into homogeneous groups. For example, it is known that among women, attitudes toward pensions tend to differ between housewives and employed women. But the conventional approach based on attributes such as gender and age fails to analyze the diversity.

We adopt a method increasingly used in marketing research called latent class analysis, which classifies multivariate categorical data into subtypes of related cases (latent classes). Instead of starting from visible attributes, we start from latent factors (assumed to underlie attitudes) to categorize the diversity, and then classify respondents into the most likely latent class (Figure1).

Figure 1 Analytical Framework



A key feature of our analysis is that we treat “don’t know” responses as separate and distinct from “agree” and “disagree” responses. This is because while surveys often evaluate the “don’t know”

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response as being somewhere between a positive and negative response, we believe that lack of knowledge regarding the public pension is not necessarily equivalent to a neutral assessment.

We used individual data from the *Survey on Individual Life and Life Insurance* (1998 and 2001) by the Japan Institute of Life Insurance. The survey outline and age and gender composition of respondents are shown in the figure. The survey results can be regarded as representative of the Japanese public. We extracted seven questions from the survey pertaining to public pensions. Each question consists of a positive statement regarding the public pension, to which respondents choose one of five responses—agree, tend to agree, tend to disagree, disagree, and “don’t know.”

**Figure 2 Survey Outline**

Survey name	Survey on Individual Life and Life Insurance (1998 and 2001)						
Survey period and data size	May 22~June 21, 1998 sample size: 6,000 persons valid responses: 4,217 persons			May 18~June 17, 2001 sample size: 6,000 persons valid responses: 4,197 persons			
Geographic coverage	Nationwide (400 places)						
Survey sample	Individuals living in municipalities, age 18 to 69						
Sampling method	Two-stage sampling						
Survey method	Interview						
	<b>Total</b>	<b>Age composition (18~69)</b>					
	<b>persons</b>	<b>18-19</b>	<b>20-29</b>	<b>30-39</b>	<b>40-49</b>	<b>50-59</b>	<b>60-69</b>
<b>1998 survey</b>							
Men	1,953	2.2%	13.7%	17.5%	22.4%	21.9%	22.3%
Women	2,264	1.4%	13.1%	17.9%	22.2%	22.6%	22.7%
Total	4,217	1.8%	13.4%	17.7%	22.3%	22.3%	22.5%
<b>2001 survey</b>							
Men	1,937	2.4%	13.3%	15.7%	19.9%	25.1%	23.5%
Women	2,260	1.7%	12.4%	19.3%	21.3%	23.2%	22.0%
Total	4,197	2.0%	12.8%	17.7%	20.7%	24.1%	22.7%
<b>2000 national census (for reference)</b>							
Men	44.4 million	3.5%	20.9%	19.2%	18.9%	21.4%	16.0%
Women	44.5 million	3.3%	20.1%	18.8%	18.7%	21.7%	17.4%
Total	88.9 million	3.4%	20.5%	19.0%	18.8%	21.6%	16.7%

## 2. Results of Grouping

The seven questions, each with five response options, generate a total of about 80,000 possible combinations. All of these patterns can be statistically tallied using latent class analysis. We distinguished five classes based on our analytical framework and statistical criteria. Furthermore, rather than classifying each respondent to a particular class, we tallied membership probabilities of each respondent for each class.

Using latent class analysis, we can distinguish the characteristics of each class by examining the

probability distribution (proportion of responses) of variables in each class. The results for the five-class model are shown in Figure 3.

**Figure 3 Results of the Latent Class Analysis Model**

Class	Class 1	Class 2	Class 3	Class 4	Class 5	Total
<b>Segment size</b>	14.8%	25.9%	27.0%	18.8%	13.5%	100.0%
<b>Q1.2 Public pension is adequate for retirement living expenses</b>						
++	<b>6.9%</b>	2.4%	1.1%	1.5%	2.0%	2.5%
+	<b>25.5%</b>	<b>27.1%</b>	8.7%	7.2%	13.5%	16.3%
-	31.2%	47.2%	48.6%	27.3%	34.6%	39.7%
--	34.4%	20.4%	39.1%	<b>60.3%</b>	28.1%	36.0%
?	2.0%	3.0%	2.6%	3.7%	<b>21.8%</b>	5.4%
<b>Q2.2 Am interested in the content of the public pension system</b>						
++	<b>47.2%</b>	18.3%	14.2%	26.4%	9.0%	21.8%
+	41.5%	61.4%	60.1%	47.4%	37.5%	52.3%
-	8.5%	18.0%	22.9%	18.5%	<b>32.5%</b>	20.0%
--	2.4%	1.4%	2.0%	6.5%	<b>14.7%</b>	4.5%
?	0.4%	0.9%	0.8%	1.2%	<b>6.2%</b>	1.6%
<b>Q19.1 Public pension premium is inexpensive</b>						
++	<b>7.8%</b>	0.9%	0.8%	2.6%	0.5%	2.1%
+	<b>19.6%</b>	<b>20.9%</b>	7.1%	2.3%	1.5%	10.9%
-	31.6%	<b>58.8%</b>	<b>67.4%</b>	16.9%	17.8%	43.7%
--	30.9%	10.4%	21.3%	<b>73.8%</b>	15.2%	29.0%
?	10.1%	9.0%	3.5%	4.4%	<b>65.2%</b>	14.4%
<b>Q19.2 Public pension benefit is generous</b>						
++	<b>12.7%</b>	0.8%	0.5%	1.5%	0.4%	2.6%
+	<b>26.7%</b>	<b>44.3%</b>	8.1%	4.9%	1.9%	18.8%
-	25.8%	35.8%	<b>65.8%</b>	15.6%	4.8%	34.4%
--	18.9%	3.9%	10.4%	<b>61.4%</b>	2.9%	18.6%
?	16.0%	15.2%	15.2%	16.7%	<b>90.1%</b>	25.7%
<b>Q19.3 Mandatory participation in public pension is desirable</b>						
++	<b>82.1%</b>	22.0%	7.2%	13.5%	9.6%	23.6%
+	11.4%	<b>70.9%</b>	41.5%	21.6%	28.4%	39.1%
-	3.4%	6.1%	<b>43.9%</b>	15.9%	8.7%	18.1%
--	2.3%	0.4%	5.7%	<b>44.6%</b>	5.2%	11.1%
?	0.8%	0.8%	1.8%	4.4%	<b>48.1%</b>	8.1%
<b>Q19.4 Public pension is fair to the public</b>						
++	<b>37.8%</b>	4.1%	0.5%	2.8%	2.3%	7.6%
+	21.6%	<b>64.0%</b>	10.9%	6.8%	6.0%	24.8%
-	16.3%	22.6%	<b>72.0%</b>	14.1%	7.1%	31.3%
--	16.6%	2.2%	11.0%	<b>66.3%</b>	4.1%	19.0%
?	7.7%	7.1%	5.6%	10.0%	<b>80.5%</b>	17.3%
<b>Q20 ++: Will pay higher premium, want better benefits</b>						
<b>--: Want to prepare on own rather than pay higher premium</b>						
++	<b>34.4%</b>	14.2%	7.4%	10.4%	6.7%	13.6%
+	18.6%	<b>35.1%</b>	19.8%	11.0%	18.3%	21.7%
-	10.2%	26.0%	<b>37.8%</b>	17.1%	18.9%	24.2%
--	32.8%	18.7%	29.9%	<b>50.3%</b>	20.9%	30.1%
?	3.9%	6.0%	5.1%	11.2%	<b>35.3%</b>	10.4%

Note: ++ Agree, + Tend to agree, - Tend to disagree, -- Disagree, ? Don't know

Looking first at class 1, probabilities for the “agree” response are higher than the overall probability (far right column) for each question. This indicates that class 1 has a high assessment of the public pension. Similarly, classes 2 to 5 respectively show high probabilities for “tend to agree,” “tend to disagree,” “disagree,” and “don’t know.” From this we can distinguish the five

classes by their overall assessment of the public pension: high assessment, somewhat high assessment, somewhat low assessment, low assessment and “don’t know.” This suggests that partial assessments of the public pension tend to be consistent with the overall assessment.

We should note that class 1 (high assessment) and class 4 (low assessment) show a strong interest in the public pension, which appears to inform their unambiguous assessment. Another interesting result is that unlike classes 2 and 3, the attitudes of class 1 are polarized on Question 20. This indicates that many people in class 1, while evaluating the public pension system highly, oppose further premium hikes and are inclined to prepare for retirement on their own means.

### **3. Latent Class Analysis of Attributes**

We next apply the latent class analysis results to an analysis of attributes (Figure 4). Unlike Figure 3, here we look at how people with particular attributes are distributed by class (membership probability).

By gender, we find no major differences compared to the overall class probabilities (first row of Figure 4). By age, class 5 (don’t know) contains high probabilities for persons in their teens and 20s, and class 1 (high assessment) for persons in their 50s and 60s. These results are compatible with general results from conventional surveys. In addition, class 3 (somewhat low assessment) contains high probabilities for persons in their 30s and 40s.

By occupation—which is broadly divided into self-employed, employed, and other (part-time, student, unemployed, housewife)—the self-employed have high probabilities in class 1 (high assessment), class 4 (low assessment), and class 5 (don’t know). By sub-category, the self-employed, who pay fixed premiums and received fixed benefits under the national pension plan, have high probabilities in class 1 for primary industries, and in class 4 for commerce & industry and services. We can see that primary industries tend to evaluate public guarantees highly, while commerce & industry is more oriented toward self-reliance. Moreover, for employed persons, whose premiums and benefits are proportional to income, public employees and private-sector managers have high probabilities in class 2 (somewhat high assessment), and private-sector administrative workers in class 3 (somewhat low assessment). However, no major divergences appear from the overall probability. By income, no clear patterns are observed other than that persons without income have a high probability in class 5.

Figure 4 Membership Probability of Attributes

	Segment size	Membership probability					Total
		Class 1	Class 2	Class 3	Class 4	Class 5	
<b>Overall probability</b>	100.0%	14.8%	25.9%	27.0%	18.8%	13.5%	100%
<b>Gender</b>							
Men	46.2%	16.3%	27.3%	26.0%	17.9%	12.4%	100%
Women	53.8%	13.5%	24.7%	27.8%	19.6%	14.4%	100%
<b>Age</b>							
Average	46.5	<b>52.7</b>	48.5	43.6	46.4	41.8	46.5
10s	1.9%	2.6%	15.3%	17.9%	6.2%	<b>58.0%</b>	100%
20s	13.1%	6.9%	20.2%	31.9%	18.6%	<b>22.4%</b>	100%
30s	17.7%	8.3%	24.1%	<b>34.8%</b>	19.3%	13.6%	100%
40s	21.5%	11.8%	25.4%	<b>32.4%</b>	20.4%	10.1%	100%
50s	23.2%	<b>19.2%</b>	26.7%	24.7%	20.1%	9.4%	100%
60s	22.6%	<b>23.9%</b>	<b>31.4%</b>	15.9%	16.8%	12.0%	100%
<b>Occupation</b>							
<i>Self-employed</i>	17.4%	18.2%	22.2%	24.5%	<b>23.7%</b>	11.3%	100%
Agriculture, forestry, fishery	4.1%	<b>22.3%</b>	27.4%	17.8%	19.6%	13.0%	100%
Commerce & industry, services	12.1%	16.9%	20.4%	26.7%	<b>25.2%</b>	10.9%	100%
Freelance	1.2%	17.6%	23.3%	26.2%	23.4%	9.5%	100%
<i>Employed</i>	40.6%	13.9%	28.0%	29.1%	17.6%	11.5%	100%
Public sector	4.5%	13.9%	<b>36.4%</b>	28.4%	12.2%	9.1%	100%
Private sector:							
management	4.9%	17.7%	<b>34.9%</b>	28.2%	13.1%	6.1%	100%
administrative	9.8%	13.3%	26.9%	<b>33.0%</b>	17.9%	8.9%	100%
blue collar	12.9%	12.5%	24.0%	27.9%	20.2%	15.5%	100%
sales	5.0%	13.5%	25.3%	28.1%	18.9%	14.2%	100%
specialist	3.5%	15.5%	29.2%	26.5%	18.0%	10.8%	100%
<i>Other</i>	42.0%	14.3%	25.5%	25.9%	18.0%	16.4%	100%
Part-time	10.3%	11.4%	23.9%	30.1%	20.7%	13.9%	100%
Student	2.9%	4.9%	15.0%	23.0%	12.3%	<b>44.8%</b>	100%
Unemployed/housewife	28.4%	16.4%	27.2%	24.5%	17.6%	14.3%	100%
Other	0.1%	4.8%	22.0%	<b>59.8%</b>	13.2%	0.2%	100%
<b>Gross income</b>							
None	18.0%	11.9%	24.0%	28.2%	18.0%	<b>18.0%</b>	100%
Under ¥1 million	14.1%	12.6%	24.1%	27.8%	19.5%	16.0%	100%
Under ¥3 million	19.4%	15.9%	25.6%	25.9%	19.4%	13.2%	100%
Under ¥5 million	15.9%	15.7%	27.5%	29.0%	17.1%	10.9%	100%
Under ¥7 million	9.0%	15.5%	29.0%	29.3%	18.4%	7.8%	100%
Under ¥10 million	5.9%	20.7%	30.7%	26.7%	17.1%	4.8%	100%
Under ¥15 million	2.2%	18.0%	36.4%	27.6%	13.0%	5.0%	100%
Under ¥20 million	0.4%	39.9%	36.1%	6.4%	16.0%	1.7%	100%
At least ¥20 million	0.3%	14.9%	42.5%	18.8%	18.2%	5.7%	100%
No response	14.7%	14.1%	22.8%	23.3%	22.3%	17.6%	100%
<b>Marriage status</b>							
<i>Married</i>	83.6%	16.1%	27.0%	26.9%	18.9%	11.1%	100%
With children	76.6%	16.4%	27.1%	26.7%	19.0%	10.8%	100%
No children	6.7%	13.6%	25.0%	29.6%	18.5%	13.3%	100%
<i>Never married/no response</i>	16.4%	8.0%	20.6%	27.2%	18.2%	<b>26.0%</b>	100%
<b>Housing status</b>							
<i>Owner-occupied home</i>	74.3%	16.2%	27.4%	25.7%	18.0%	12.7%	100%
Owned by hus./wife, with loan	28.3%	14.4%	26.9%	28.3%	19.4%	11.0%	100%
Owned by hus./wife, no loan	33.7%	20.3%	29.0%	21.9%	17.2%	11.6%	100%
Owned by other than hus./wife	12.2%	9.0%	24.2%	30.1%	16.9%	<b>19.8%</b>	100%
<i>Rented/company housing</i>	24.7%	11.0%	21.7%	30.9%	21.3%	15.2%	100%
Rented	20.9%	11.2%	20.7%	30.2%	22.4%	15.5%	100%
Company housing	3.8%	10.1%	27.3%	34.6%	14.8%	13.2%	100%
<i>No response</i>	1.0%	5.1%	18.6%	25.2%	20.4%	<b>30.9%</b>	100%
<b>Household financial assets</b>							
Under ¥1 million	12.0%	11.9%	20.2%	28.4%	22.5%	17.0%	100%
Under ¥5 million	18.0%	13.5%	27.7%	<b>30.7%</b>	17.8%	10.4%	100%
Under ¥10 million	11.1%	16.6%	29.4%	29.4%	17.1%	7.6%	100%
Under ¥20 million	7.2%	<b>21.9%</b>	<b>33.2%</b>	23.2%	16.0%	5.7%	100%
Under ¥30 million	3.5%	<b>22.6%</b>	<b>33.4%</b>	23.3%	15.4%	5.3%	100%
At least ¥30 million	5.3%	<b>23.8%</b>	<b>30.3%</b>	23.3%	16.6%	6.0%	100%
No response	43.0%	12.8%	23.6%	25.7%	19.7%	18.3%	100%

By marriage status, never-married persons and non-responders have high probabilities in class 5 (don't know). This result is compatible with age-based results, since never-married persons are mainly in their teens and 20s. By housing status, married couples living in owner-occupied homes with no housing loan have a high probability in class 1. This result is compatible with the high probabilities in class 1 for primary industries and persons in their 50s and 60s because outright home ownership is common among persons working in primary industries, and also because older persons are more likely to use retirement benefits to repay housing loans or to purchase homes. Moreover, persons with financial assets of at least ¥20 million have a high probability in class 1. This is compatible with the fact that persons in their 50s and 60s, who tend to have large financial assets, have high probabilities in class 1.

Since our analysis uses pooled data from surveys conducted in 1998 and 2001, we considered the possibility that attitudes might have changed due to the intervening pension reform of 2000, which froze premiums, cut benefits by 5%, and introduced a sliding inflation scale. However, we found no changes between the two years.

From the above, the results of the attribute-based approach are as follows:

- (1) Students have a high probability in class 5 (don't know), which is consistent with high probabilities in class 5 for attributes such as age in the teens and 20s, no income, and never married.
- (2) Persons in their 50s and 60s have high probabilities in class 1 (high assessment). This conforms with high probabilities in class 1 for attributes such as homeownership with no loan, and high net-worth.
- (3) Among the self-employed, persons in primary industries have a high probability in class 1 (high assessment), while those in commerce & industry and services have high probabilities in class 4.

However, other than for students, results from the attribute-based analysis are not as conspicuous as those of the latent class analysis shown in Figure 3. Thus we can conclude that the conventional approach fails to distinguish latent classes.

#### **4. Implications of Other Survey Questions**

We applied the latent class analysis results on other questions in the survey (Figure 5). Knowledge regarding aspects of the public pension is high in class 1, and low in class 5. This result is consistent with our previous result of class 1's strong interest in the public pension, and prevalence of the "don't know" response in class 5. However, we could not confirm that poor knowledge of the public pension leads to low confidence and dissatisfaction, since class 4 does not have poor knowledge compared to the others.

Regarding assessments of health insurance and long-term care insurance, the probability of high assessment is high in class 1 compared to the overall result, followed by classes 2, 3, and 4 in order, while “don’t know” has a high probability in class 5. These tendencies roughly parallel assessments of the public pension, suggesting that rather than having different attitudes toward various components of the social insurance system, the public likely has a common assessment of the system as a whole. However, the tendencies observed for these other systems are not as pronounced as for the public pension (Figure 3).

**Figure 5 Responses to Other Questions**

	Class 1	Class 2	Class 3	Class 4	Class 5	Total
<b>Segment size</b>	14.8%	25.9%	27.0%	18.8%	13.5%	100%
<b>Knowledge level (regarding 8 facts below)</b>						
Average	5.1	4.6	4.4	4.5	2.8	4.4
0–2 facts	12.1%	17.5%	19.3%	21.9%	<b>48.4%</b>	22%
3–4 facts	27.0%	32.9%	34.6%	29.1%	29.0%	31%
5–6 facts	30.0%	27.9%	28.3%	27.3%	15.5%	27%
7–8 facts	30.9%	21.7%	17.8%	21.6%	7.1%	20%
<b>Q1.1 Public health insurance can cover health expenses</b>						
++	<b>10.0%</b>	5.1%	3.2%	6.0%	4.2%	5%
+	30.1%	<b>37.8%</b>	28.2%	22.1%	26.8%	30%
–	35.4%	42.0%	<b>47.7%</b>	35.5%	34.2%	40%
--	20.7%	12.1%	17.6%	<b>32.3%</b>	15.8%	19%
?	3.8%	3.1%	3.2%	4.2%	<b>19.0%</b>	6%
<b>Q1.3 Public LTC insurance can cover LTC expenses</b>						
++	<b>3.1%</b>	0.9%	0.9%	1.1%	0.9%	1%
+	<b>9.4%</b>	<b>9.6%</b>	4.3%	3.1%	5.5%	6%
–	31.7%	<b>45.6%</b>	<b>42.0%</b>	24.8%	30.1%	37%
--	43.0%	30.9%	45.0%	<b>59.8%</b>	31.4%	42%
?	12.9%	13.1%	7.9%	11.2%	<b>32.0%</b>	14%

- Facts to test public pension knowledge level:**
1. Old-age pension eligibility age will gradually be raised to 65.
  2. Everybody must participate in the public pension from age 20.
  3. The employees’ pension premium is proportional to income.
  4. Housewives of salaried workers do not pay premiums.
  5. The public pension premium is fixed regardless of income level.
  6. In principle, the public pension premium increases every year.
  7. In principle, the public pension benefit is linked to inflation.
  8. Public pension premium and benefit levels are revised every five years.

Note: The following item was added in the 2001 survey, but omitted here to maintain data continuity: “Students (age 20 and above) whose income is below a prescribed level can apply to be exempted from paying the public pension premium.”

### 5. Retirement Preparation

We also examined how people in each class are preparing financially for retirement. Asked how they plan to finance retirement life, class 1 and class 2 put high expectations on the public pension (Figure 6, top). As expected, class 5 (don’t know) harbors low expectations for all methods. This can be attributed to the high proportion of students in class 5, for whom retirement is not yet a concern.

Other notable characteristics are: (1) expectations for retirement benefits (retirement allowance and corporate pension) are high in class 2 and class 3, and low in class 4; and (2) class 1 puts high expectations on marketable securities. The first result can be attributed to the high proportion of employed persons in classes 2 and 3, and of self-employed persons in class 4 (Figure 4). As for the second result, we infer that class 1 has a high risk tolerance due to ownership of large financial assets.

Regarding preparations other than the public pension and retirement benefits, we see two tendencies—class 1 has a high ownership ratio of marketable securities, while class 5 is making no actual preparations (Figure 6, bottom).

**Figure 6 Preparation for Retirement**

	Class 1	Class 2	Class 3	Class 4	Class 5	Total
<b>Segment size</b>	14.8%	25.9%	27.0%	18.8%	13.5%	100.0%
<b>Q26 How do you plan to finance your retirement life? (multiple response)</b>						
Public pension	<b>91.2%</b>	89.2%	84.1%	79.6%	65.8%	83.2%
Savings	64.6%	<b>68.8%</b>	<b>68.6%</b>	62.4%	49.4%	64.3%
Retirement benefits	40.4%	<b>44.2%</b>	<b>42.7%</b>	32.9%	25.6%	38.6%
Individual annuity	40.4%	40.1%	<b>44.6%</b>	35.8%	24.6%	38.5%
Life insurance	26.4%	26.3%	27.2%	22.6%	13.7%	24.2%
Earned income	17.0%	18.0%	21.1%	20.0%	13.3%	18.4%
Financial securities	<b>7.2%</b>	6.4%	4.9%	4.5%	1.7%	5.1%
Real estate	5.6%	4.6%	4.1%	4.6%	2.6%	4.4%
<b>Q21 Preparations other than public pension and retirement benefit (multiple response)</b>						
Life insurance, annuity	<b>59.1%</b>	<b>56.5%</b>	53.9%	47.7%	34.0%	51.5%
Savings	<b>53.5%</b>	<b>50.6%</b>	44.7%	41.6%	26.9%	44.6%
Financial securities	<b>8.0%</b>	6.4%	4.7%	4.4%	1.7%	5.2%
None	23.2%	26.4%	30.2%	35.0%	<b>46.9%</b>	31.3%

Note: Shows relevant items extracted from survey.

Next we examine the participation rate for individual annuities based on data from 2001 (Figure 7). The highest participation rate belongs to class 1, and the lowest rate to class 5. The high participation rate of class 1 can be attributed to the large proportion of persons in their 50s and 60s, who have a high assessment of the public pension, and are also actively preparing individually for retirement. By comparison, class 5 consists largely of young students.

Looking at the annuity amount and benefit period for persons enrolled in individual annuities, class 1 shows a high probability (relative to the overall probability) for an annuity of ¥240,000 or less (less than ¥20,000 per month) and a five-year benefit period. Again, this can be attributed to class 1's large proportion of persons in their 50s and 60s, who are satisfied with their public pension benefits, and who also have a fairly clear idea of the preparations needed for retirement.



**Figure 7 Participation in Individual Annuity (2001 survey)**

	Class 1	Class 2	Class 3	Class 4	Class 5	Total
<b>Segment size</b>	14.8%	25.9%	27.0%	18.8%	13.5%	100.0%
<b>Participation rate</b>	<b>27.9%</b>	23.7%	21.5%	24.2%	14.1%	22.4%
<b>Annual annuity amount</b>						
Under ¥240,000	<b>11.0%</b>	8.2%	8.1%	5.3%	4.6%	7.7%
Under ¥360,000	8.3%	13.2%	8.7%	9.9%	10.8%	10.3%
Under ¥480,000	9.7%	8.9%	6.9%	6.6%	7.8%	7.9%
Under ¥600,000	3.6%	7.2%	10.1%	10.1%	11.9%	8.4%
Under ¥720,000	20.7%	17.0%	21.5%	16.1%	20.0%	18.8%
Under ¥820,000	3.6%	6.4%	6.0%	7.6%	2.6%	5.8%
Under ¥960,000	3.1%	<b>6.2%</b>	2.2%	2.4%	4.2%	3.6%
At least ¥960,000	18.4%	21.5%	26.0%	28.1%	27.3%	24.2%
Not clear	<b>21.5%</b>	11.5%	10.6%	14.0%	11.0%	13.4%
<b>Benefit period (multiple response)</b>						
5 years	<b>15.1%</b>	11.8%	9.1%	7.1%	13.0%	10.6%
10 years	40.8%	45.7%	44.7%	<b>51.9%</b>	43.3%	45.9%
15 years	11.7%	13.3%	15.1%	16.0%	9.4%	13.9%
Lifetime	25.1%	25.5%	28.6%	23.2%	31.1%	26.2%
Other	4.5%	2.4%	1.3%	2.9%	5.1%	2.7%
Not clear	5.0%	5.2%	5.5%	5.3%	1.2%	5.0%

## 6. Conclusion

In this paper, we analyzed the results of an opinion survey on the public pension using latent class analysis, and classified the public into five groups (classes). Members of each group share a similar overall assessment of the public pension: high, somewhat high, somewhat low, low, and persons responding “don’t know” to each question.

The high assessment group is not only knowledgeable about the public pension, but also has a high assessment of other social insurance systems. Moreover, this group prepares financially for retirement through various methods including marketable securities and a high participation rate in individual annuities.

The group that responds “don’t know” to each question tends to be making no particular preparation for retirement. This is not surprising, considering that the group consists largely of students. However, as the society ages, the political clout of elderly persons receiving pension benefits will grow. For younger persons to also participate in the political decision-making process, they must learn more about the pension system and form their own opinions.

The groups with a low or neutral assessment of pensions tend to have a similar assessment of other social insurance systems. However, we did not find any other notable characteristics.

In the future, to forward the debate on public pension reform, conventional studies must be combined with new approaches such as ours to find ways to improve the public’s assessment of the public pension, particularly among groups who don’t know or have a low assessment.