

Better Administrating the Challenging Groups in the National Pension in Korea

Jan. 2010

Hyungpyo Moon, KDI

Seong Sook Kim, NPRI, NPS



- I . Current State of the National Pension**
- II . Administrative Challenging Population Groups in the National Pension**
- III . Causes of Low Compliance to the Scheme**
- IV . Measures for Better Administrating the Challenging Groups**
- V . Effectiveness of Contribution Subsidy**

Current State of the National Pension

| -1. Brief History of the National Pension

▶ Expansion of Coverage

- 1986: legislation**
- 1.1988: enforcement of the scheme**
 - workplaces with 10 workers or more**
- 1.1992: expanded to the workplaces with 5 workers or more**
- 7.1995: expanded to rural areas**
- 4. 1999: expanded to urban areas**

| -1. Brief History of the National Pension

▶ Reforms

- **1998: First Reform**
 - Pensionable age: 60 \Rightarrow 65 (2013~2033)
 - Earnings replacement rate: 70% \Rightarrow 60%(from 1999)
 - Introduction of periodic financial review
- **2007: Second Reform**
 - Earnings replacement rate: 60% \Rightarrow 40%(2008~2028)

I - 2. Applied Population by the N P

► Size of the Insured, as of the end of year

(Unit: 1,000 workplaces, 1,000 persons)

Year	Total	Workplaces		Regional Insured			Voluntary	Voluntary + continuous
		W·P	Insured	Total	Rural	Urban		
'88	4,433	58.6	4,431	–	–	–	1.4	0.3
'92	5,021	120.4	4,977	–	–	–	32.2	11.5
'95	7,497	152.5	5,542	1,890	1,890	–	48.7	15.8
'99	16,262	186.1	5,238	10,822	2,083	8,739	32.9	168.6
'08	18,335	921.6	9,493	8,781	1,941	6,841	27.6	32.9
9.09	18,614 (100.0)	972.9	9,894 (53.2)	8,647 (46.4)	1,914	6,734	33.5 (0.2)	38.9 (0.2)

I - 2. Applied Population by the N P

▶ The Insured by sex (Sep. 2009)

(Unit: %)

Sex	Total	Workplace	Regions	Voluntary	Voluntary & Continuous
Total	100.0	100.0	100.0	100.0	100.0
Male	61.2	63.9	58.9	25.7	30.5
Female	38.8	36.1	41.1	74.3	69.5

I - 2. Applied Population by the N P

▶ The Insured by age (Sep. 2009)

(Unit: %)

Age	Total	Workplace	Regions	Voluntary	Voluntary & Continuous
Total	100.0	100.0	100.0	100.0	100.0
Under 30	19.9	23.3	16.2	0.6	–
30–39	29.4	33.2	25.2	5.9	–
40–49	29.3	28.1	30.9	23.5	–
50–59	21.1	15.4	27.7	70.0	–
60& over	0.2	–	0.0	–	100.0

I - 2. Applied Population by the N P

► The Insured by size of workplaces (Sep. 2009)

(Unit: %)

	Under 5	5-9	10-49	50-99	100-499
Workplace	63.1	20.5	14.0	1.3	0.9
Insured	13.9	13.0	25.8	8.8	16.4
	500-999	1000-2999	3000-4999	5000-9999	10000 & over
Workplace	0.1	0.0	0.0	0.0	0.0
Insured	5.3	6.4	2.6	2.6	5.2

I - 2. Applied Population by the N P

- ▶ The Insured in regions with exemption from contributions (Sep. 2009)

(Unit: %)

	Total insured	Total insured in regions	Urban	Rural
	100.0	100.0	100.0	100.0
The insured with earnings declaration	-	42.0 (100.0)	40.0 (74.2)	49.0 (25.8)
The insured with contribution exemption	27.0	58.0 (100.)	60.0 (80.6)	51.0 (19.4)

I - 3. Size of Pensioners and Benefit Level

▶ The Insured by size of workplaces (Sep. 2009)

65 or more in total	Basic Old age Pension	NP+Public Occupational	No benefit
5,210 (100.0)	3,563 (68.4)	1,377(NP1,195, PoP 182)	953 (18.3%)
	Only BOAP 55.3%, NP+BOAP 13.1% Only NP or POPs (13.3%)		

Administrative Challenging Population Groups in the NP

II-1. Groups Excluded from the Application

▶ Types of the groups excluded from the application (Sep. 2009)

(Unit: 1,000 persons, %)

Types	persons	%
Students & military personnel aged 18 to 27	3,344	25.1
Insured of public occupational pension	1,450	10.9
Pensioners of the public occupational pension	110	0.8
Beneficiaries of the Basic Livelihood	755	5.7
Pensioners of the National Pension	79	0.6
Spouses with no earnings	5,534	41.6
Others	2,048	15.4
Total	13,320	100.0

II -2. Groups Exempted from Paying

- ▶ Causes of exemption from paying contributions (Sep. 2009)

(Unit: %)

Total	Unemployed	Suspension from office	Cease of business	Hospitalization over 3 months
100.0	75.9	1.9	8.7	0.2
National disaster	Economic difficulties	In jail	Missing	Schooling etc
0.0	6.8	0.2	0.7	5.6

II -3. Groups not Paying contributions

▶ Rates of contributions collections

(11. Sep '09~10. Oct. '09)

(Unit: billion won, %)

Total	Workplaces	The insured in regions			Voluntary (+Continuously)
		Total	Urban	Rural	
1877	1,671	201	156	45	5
88.1	93.8	58.4	58.8	56.9	100.0

II -4. The Insured with Low Earnings

▶ Average earnings of the insured by types

(Unit: thousand won)

	Average earnings in total	Workplaces	The insured in regions		
			Average	Urban	Rural
Dec. '95	943	1,053	577	–	577
Apr. '99	1,096	1,440	785	841	629
Dec. '08	1,751	2,012	1,089	1,119	1,003
Sep. '09	1763	2,016	1,073	1,101	994

Causes of Low Compliance to the Scheme

III -1. Feeble Labor Market & Economic Difficulties

- ▶ Size and rate of affiliation to the NP among the insured as employees

(Unit : 1,000 persons, %)

Types	2004	2005	2006	2007
Temporary, casual/informal	1,540(31.6)	1,630(32.9)	2,100(25.5)	2,170(23.1)
Temporary, casual/formal	1,870(41.1)	1,930(45.4)	13,080(32.4)	3,030(30.1)
Regular/informal	1,520(96.9)	1,420(97.9)	1,500(97.7)	1,720(98.5)
Regular/formal	5,940(98.1)	6,260(99.3)	6,530(98.5)	6,800(99.4)
Total	10,860(78.7)	11,230(80.2)	13,220(71.4)	13,720(71.9)

III -2. Defective Infrastructure for Good Administration

- ▶ Vulnerable to catch the earnings activities and earnings of the insured in regions appropriately
 - Gradual improvement but yet enough

III -3. Mistrust on the National Pension

- ▶ Misunderstanding of the National Pension
 - Difficulty of understanding the complicated social insurance pension
- ▶ Short history of the National Pension
 - Pensioners are much better than the insured in the level of trust
 - Gradual increase of trust in the N P

Measures for Better Administering the Challenging Groups

IV - 1. To Promote Contribution Careers

- ▶ Activating the delayed payment of contributions and the return of lump sum refund
- ▶ Subsidizing contributions to the low income earners
- ▶ Expansion of credits
- ▶ Activating voluntary affiliation
- ▶ Reduction of minimum qualifying years

IV - 2. Improvement of Administrative Capacity

- ▶ Promoting the transition of the insured status to the insured in workplaces
- ▶ Improvement of infrastructure to seize earnings appropriately
- ▶ Consolidation of collection organizations

IV - 3. Improving the Trusts in the Scheme

- ▶ To promote the insured's understanding to the NP
 - Giving better and more customer-oriented services
- ▶ Gradual increase of the insured's interests in the NP as the NP matures

Effectiveness of Contribution Subsidy: Empirical Examination

V - 1. Policy Options for Coverage Expansion

- ▶ Option1: Introduction of non-contributory universal basic pension
 - Due to rapid population aging, the BP expenditure alone will take up 7.2~9.6% of GDP in 2050. (avg. rep. rate: 15~20%)
 - When financed by VAT, the tax rate (currently 10%) should go up to 21~29% by 2050.

- ▶ Option2: Providing compliance incentives thru contribution subsidy
 - How effective is the contribution subsidy in enhancing coverage of the challenging groups?
 - Who should be the targeted groups?

V - 2. Current Contribution Subsidy for Farmers/Fishermen

- ▶ Beneficiaries: persons who are engaged in agriculture, forestry, livestock or fishery businesses. (farmers and fishermen)
 - ▶ Subsidizing period: 1995 ~ 2014
 - ▶ Financing: tax-financed (Special Accounts for Agriculture and Fishery Structure Adjustment)
 - ▶ Subsidy amount:
 - if monthly income \leq SIA, 4.5% of income (1/2 of contribution)
 - if monthly income $>$ SIA, 4.5% of SIA (fixed amount)
- ※ SIA(Standard Income Amount): 3-year average income of the total insured

V - 3. Effectiveness of Contribution Subsidy

- ▶ Data: Korean Welfare Panel Study, KIHASA, 2007
- number of obs. : 1,723(individually insured, 18~59)
- ▶ Model : Probit Regression

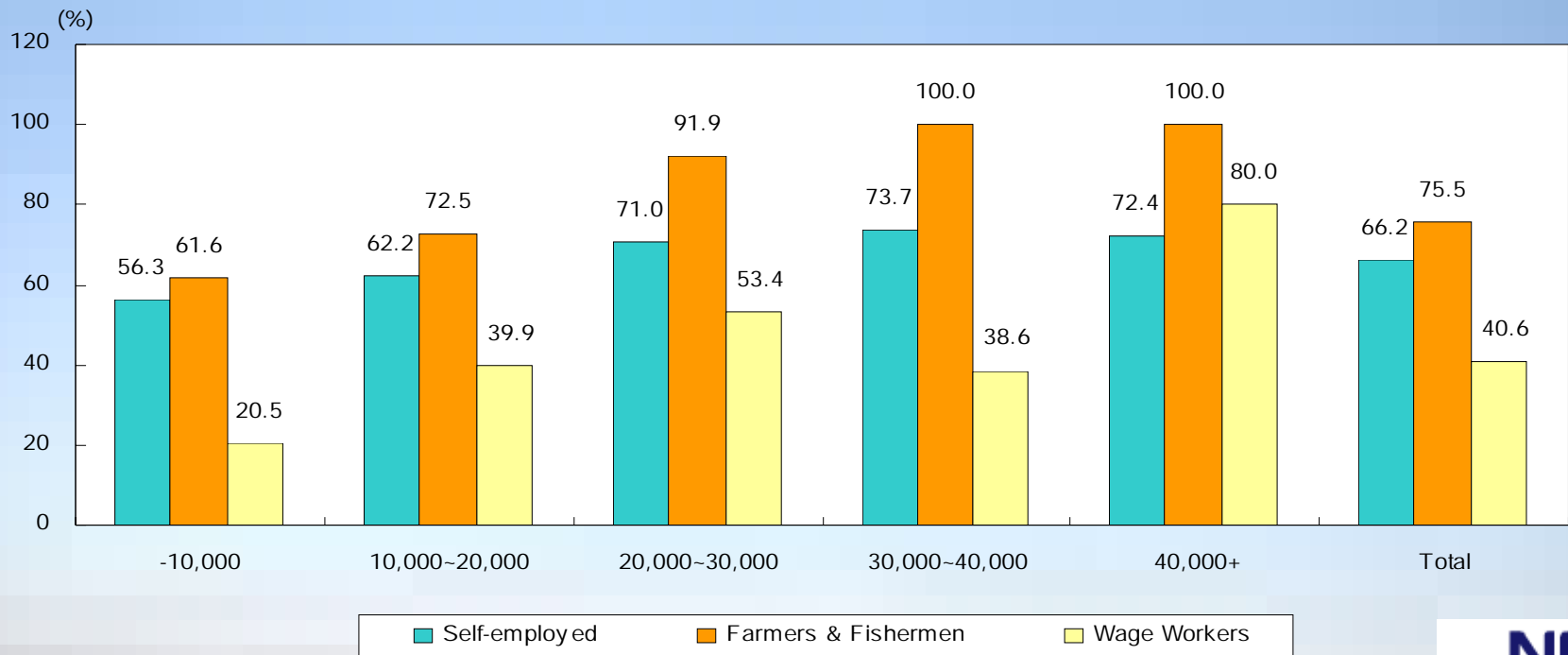
Classification		Regular	Non-regular	Self-employed	Others*	Total
Workplace based Insured	Paid	1,977 (99.5)	180 (86.2)	75 (82.8)	14 (14.4)	2,245 (94.3)
	Unpaid	10 (0.5)	29 (13.9)	16 (17.2)	81 (86.0)	136 (5.7)
	Sub Total	1,987 (83.4)	209 (8.8)	91 (3.8)	95 (4.0)	2,382 (100)
Individually Insured	Paid	120 (52.6)	108 (32.4)	461 (67.3)	134 (28.4)	824 (47.9)
	Unpaid	108 (47.4)	227 (67.6)	224 (32.7)	340 (71.6)	899 (52.2)
	Sub Total	228 (13.3)	335 (19.5)	685 (39.8)	474 (27.5)	1,723 (100)
	exempted	80 (73.9)	166 (73.0)	109 (48.9)	298 (87.8)	653 (72.7)
	default on premiums	28 (26.1)	61 (27.0)	115 (51.1)	42 (12.2)	246 (27.3)

* Others include unpaid family workers, unemployed, economically inactive population.
Data: Korean Welfare Panel Study, 2007.

V - 4. Differences in Compliance Rates (1)

- ▶ Compliance rates of the subsidized farmers and fishermen are highest throughout all income levels.
- ▶ Non-compliance is pronounced among wage workers who are mostly low-paid and temporary/daily workers

<Figure> Compliance Rates among the Individually Insured by Income Levels

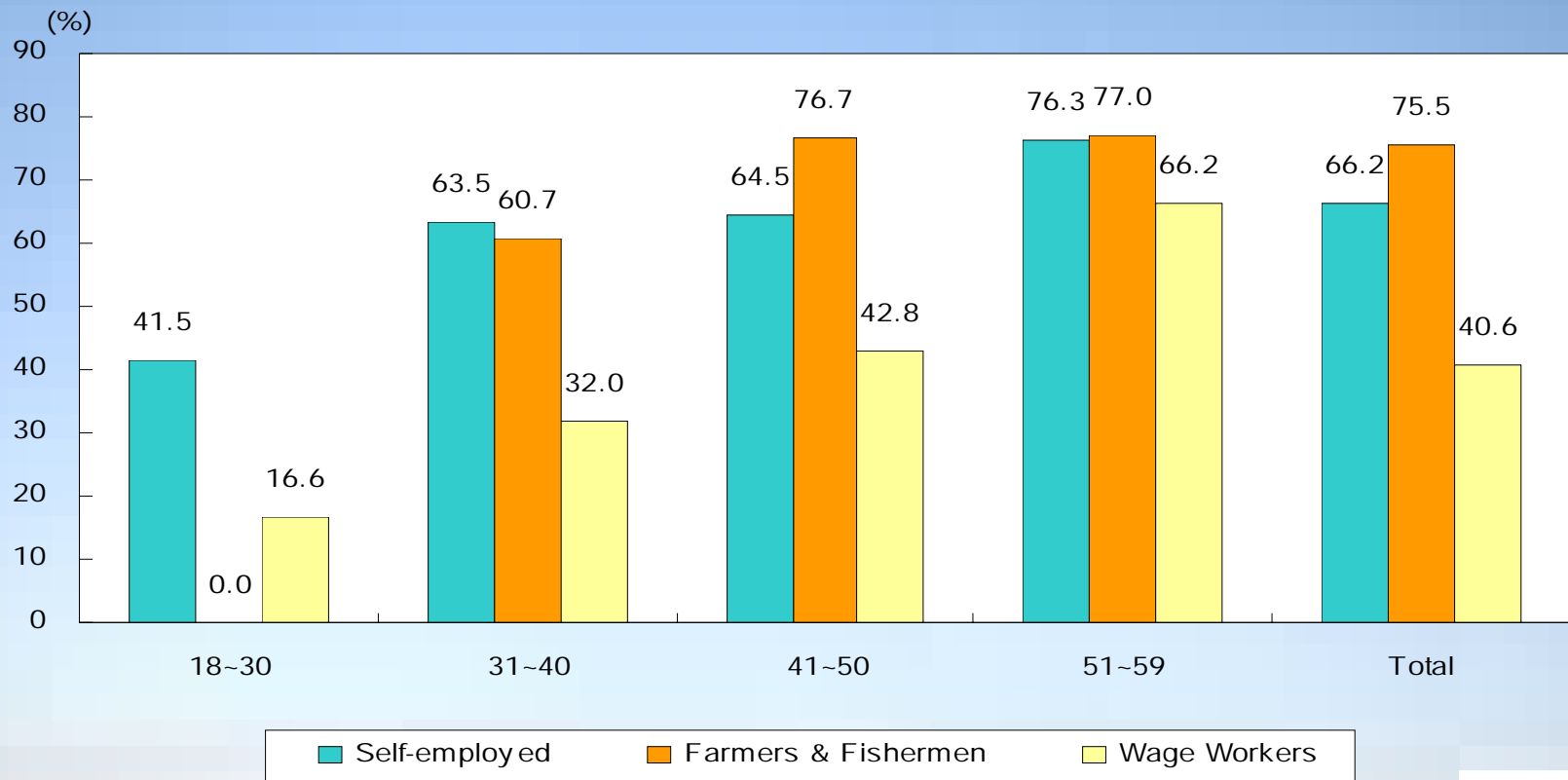


Data: Korean Welfare Panel Study, 2007.

V - 4. Differences in Compliance Rates (2)

► Compliance rates are increasing with the higher age cohorts.

<Figure> Compliance Rates among the Individually Insured by Age Cohorts



Data: Korean Welfare Panel Study, 2007.



V - 5. Effectiveness of Contribution Subsidy

- ▶ The marginal effect of contribution subsidy to farmers and fishermen is statistically significant and robust.
- ▶ Among sub-groups, the effect of contribution subsidy is significantly high when compared to wage workers.
 - Compared to other self-employed, contribution subsidies are estimated to increase the compliance rates of farmers and fishermen by close to 10 percentage point.
 - Provision of similar subsidies to individually-insured wage workers may increase the compliance rates substantially.

<Table> Regression Results (Probit)

Dependent Variables	Individually Insured		Self-employed / employer		Wage Workers	
	model1	model2	model3	model4	model5	model6
Gender	0.0175 (0.039)	0.0075 (0.039)	0.0059 (0.052)	-0.0004 (0.052)	0.0120 (0.053)	-0.0217 (0.055)
Education	0.0119* (0.006)	0.0142** (0.007)	0.0076 (0.008)	0.0101 (0.008)	0.0026 (0.009)	0.0060 (0.009)
Age	0.0162 (0.018)	0.0190 (0.018)	0.0204 (0.026)	0.0222 (0.026)	0.0042 (0.023)	0.0103 (0.024)
Age ²	0.0000 (0.000)	-0.0000 (0.000)	-0.0001 (0.000)	-0.0001 (0.000)	0.0002 (0.000)	0.0001 (0.000)
ln d_income ¹⁾	0.1762*** (0.032)	0.1825*** (0.033)	0.0805** (0.032)	0.0858*** (0.033)	0.2747*** (0.048)	0.2923*** (0.049)
d_agri		0.1953*** (0.053)		0.0939* (0.053)		0.3076*** (0.061)
# of obs.	1,240	1,240	690	690	706	706
Log pseudolikelihood	-779.7	-774.4	-419.9	-148.6	-425.6	-414.1

Robust standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1

¹⁾ adjusted for family size using \sqrt{n}



V - 6. Policy Implications(1)

- ▶ There is a strong possibility that the provision of contribution subsidy can substantially increase the compliance rates of atypical workers with low wages.
- ▶ Contribution subsidy can be considered as a pre-emptive social investment, as it will alleviate poverty among the elderly in the future.
- ▶ It is much less costly compared to the introduction of non-contributory demogrant-type basic pension.

V - 6. Policy Implications(2)

▶ How to design subsidy scheme:

- provide incentives both to workers to participate in the NPP
- and to employers to convert the individually insured workers into workplace-based insured.

※ example: $\left\{ \begin{array}{l} 3\%(G)-3\%(E)-3\%(W) \text{ for very low-paid workers} \\ 2\%(G)-3.5\%(E)-3.5\%(W) \text{ for low-paid workers} \end{array} \right.$

- need to consider the equity issue between workers and self-employed.

Thank You

