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# The Pension System in Republic of Korea

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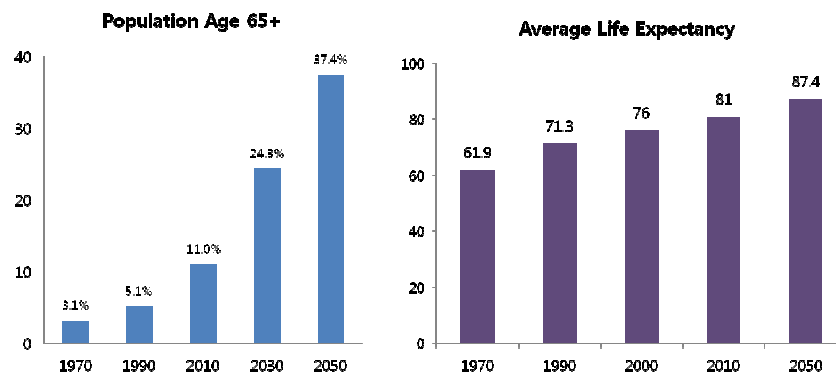
# 1. Demographic Structure

## Population Aging

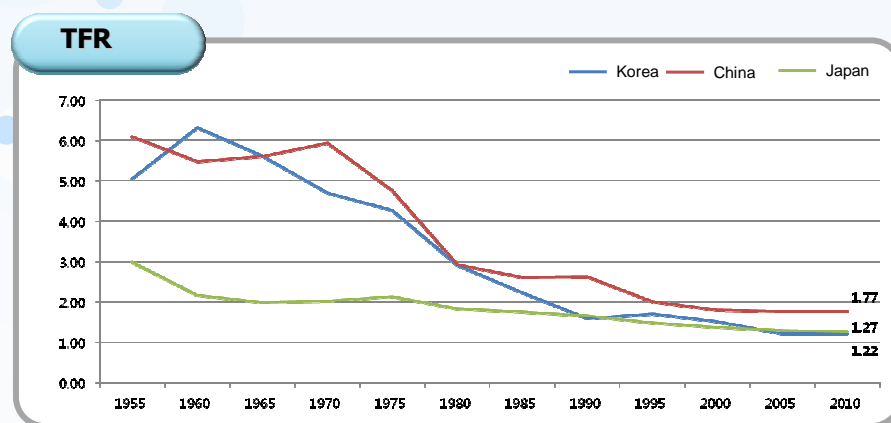
- Korea has experience ever-fast aging of its population along with low fertility rate & increasing life expectancy.
  - Total Fertility Rate(TFR) was 6 in 1960, but it dropped to 1.9 now.  
(Average TFR of OECD countries: 1.73 in 2009)
  - Average Life expectancy has increased by 20 years over the last 40 yrs.  
(61.0 yr in 1970 to 81.2 yr in 2011)

## Population Aging

### Changes of Population and Life Expectancy

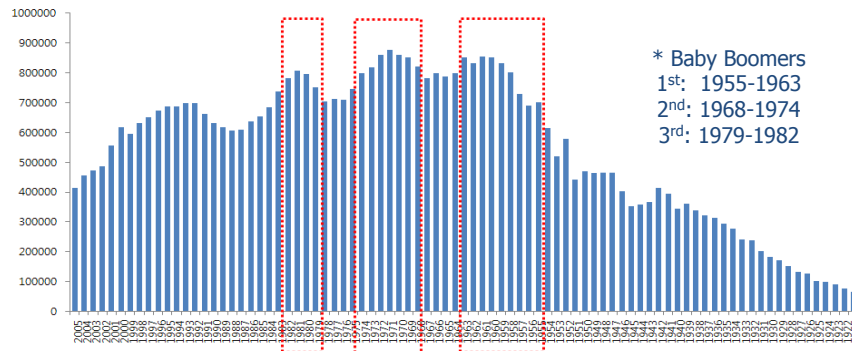


## Trends of Fertility



Source : UN, World Population Prospects

## Demographic Structure & Baby Boomers



Source: Statistics Korea.

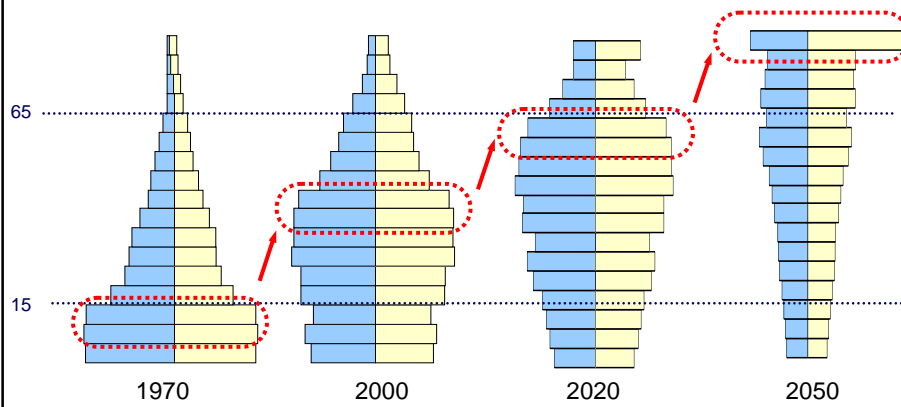
- First baby boomers in Korea are those who were born from 1955 to 1963 & their number is about 7.6 million.

## Demographic Structure & Baby Boomers

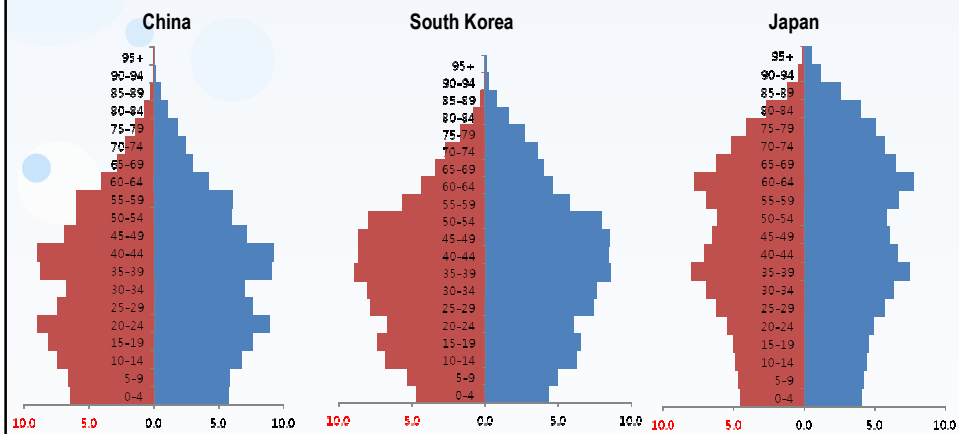
### □ Projection of Future Population



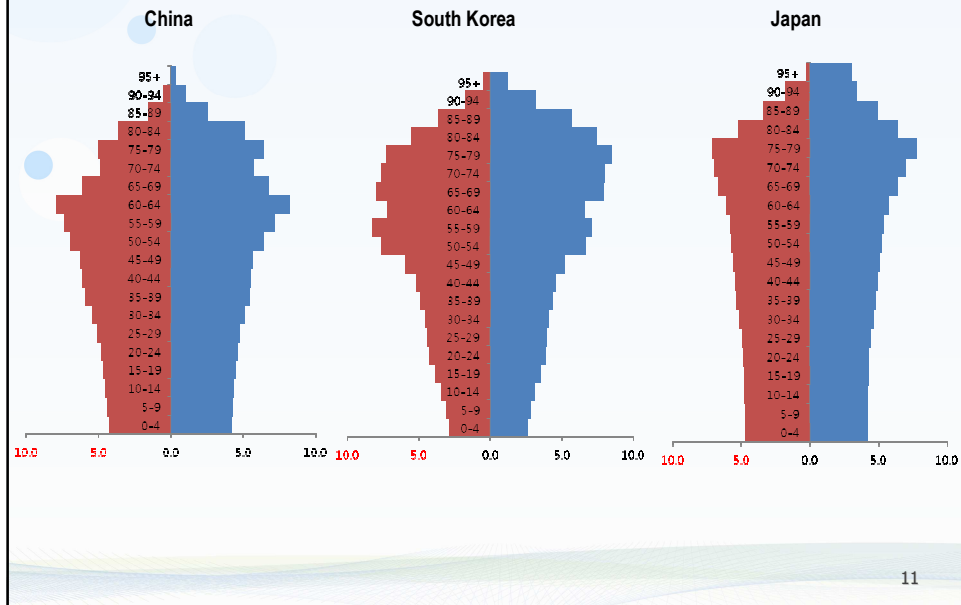
## Population Ageing Trends



## Population Pyramid for 2010

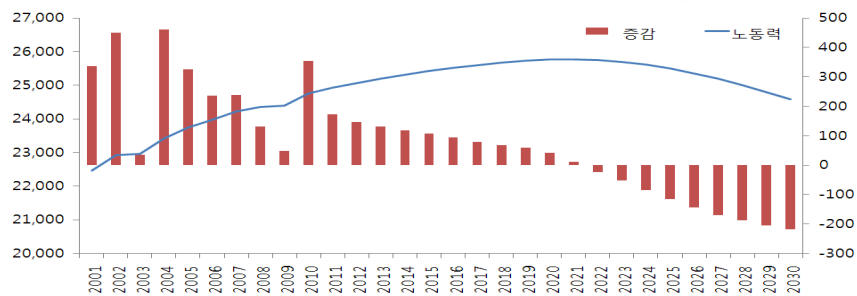


## Population Pyramid for 2050



## Demographic Structure

### □ Projection of Economically Active Population



○ Retirement of baby boomers is expected to bring the change in supply & demand in labor force. **Shortage of labor force supply will start when baby boomers retire.**

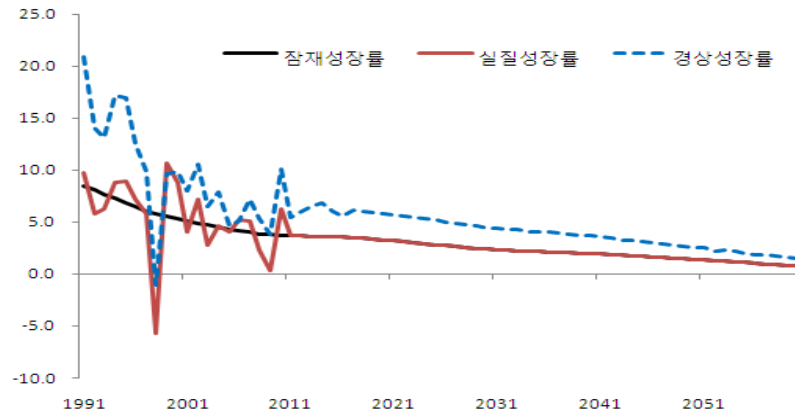
- To prevent drastic decline in labor force, there needs immediate interventions with overall labor participation rate & employment rate.

## Long-term Projection of GDP

(Projection of potential, real & current growth rate)

rate)

(Unit: %)



Source : National Assembly Budget Office

## An Increasingly popular policy

(with increased social spending)



## 2. Old Age Income Security System in Korea : Overview

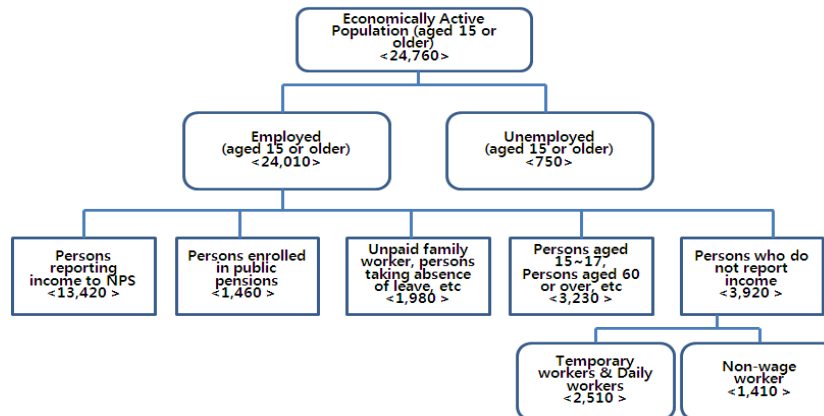
### Old-Age Income Security

- ☐ Public Pensions
  - National Pension Scheme (NPS)
  - Special Occupational Pension Schemes (SOPS)
  - Basic Old-age Pension
- ☐ Retirement pensions (or allowance)
- ☐ Personal pension & saving



## Economically Active Population & NPS Subscribers

### □ NPS Subscribers Compared to Economically Active



## Old-Age Income Security : Overview

(Unit: person, year)

<b>3rd Pillar</b>	Personal Pensions (1.6 million, 2009)			
<b>2nd pillar</b>	Severance Allowance		Retirement Pension/Allowance (3 million, 2011)	
<b>1st pillar</b>	Special Occupational Pensions (Approximately 1.5 million)			
			National Pension Scheme (NPS) (20.7million, 2013)	
<b>Basic Security (0 pillar)</b>	Basic Old-Age Pension & Disability Pension (70% of the elderly aged 65 or older)			
	National Basic Livelihood Security System(NBLSS) (1.4 million)			
	Employees in public sectors	Employees in private sectors	Self-employed	Economically non-active population

Source: NPS updated as of 2013.

## Total population aged 15-64

### □ Total Population Aged 15-64 (37,344 thousand, as of 2012)

Total population aged 18-59: 32,848 <sup>4)</sup> (100.0%)					
Economically Inactive Population: 10,626 <sup>6)</sup>	Economically Active Population: 22,222 <sup>5)</sup>				
	Population ineligible for the public pension: 568 <sup>8)</sup>	Population eligible for the public pension: 21,654 <sup>7)</sup>			
		Population eligible for the National Pension: 20,240 <sup>9)</sup>			Occupational Pension: 1,414 <sup>12)</sup>
		Insured persons exempted from contribution payments: 4,665	Potential Contributors: 15,575	Insured persons paying contribution: 14,322 <sup>11)</sup>	
			Long-term defaulted: 1,253 <sup>10)</sup>		
32.4%	1.7%	14.2%	3.8%	43.6%	4.3%
Potential Shadow Area where population can be excluded from the public pension coverage: 17,112(52.1%)				Potential beneficiaries: 15,736(47.9%)	

Source: National Pension Service (2012).

## 3. National Pension Scheme

## | National Pension Scheme: Summary

- NPS was first introduced for workplaces employing more than ten people in 1988.
- NPS had a coverage expansion to farmers & fishers & to the self-employed in urban areas in 1999.
- Applied to all residents in Korea aged from 18 to 59 regardless of their income level.
- In 2012, total 20.2 million people were enrolled in NPS while 4.7 million people were exempted from contribution.

## | National Pension Scheme

- Requires 10 years of contributions to receive benefit.
- There were two reforms of NPS in 1998 & 2007.
  - With full 40 years of contributions, the Income Replacement Rate (IRR) is expected to be lowered to 40% by 2028 from 47% in 2014 currently, from 70% in 1988.
  - Pensionable age will increase from current 61 to 65 by 2033. (one year increase every five yrs starting 2013)

## Contributions of NPS

- ❑ Calculation of Contributions
  - Monthly Income X Contribution rate
  - Upper Ceiling : KRW 3,980 Thousand (monthly income as of 2012)

### ❑ Contribution Rates

<b>Workplace based</b>	'88.~'92. 3%	'93.~'97. 6%	After '98 9%
<b>Residence based</b>	'92.4.~'00.6. 3%	'00.7.~'05.6 4~8%	After Jul.2005 9%

## Characteristics of NPS

- ❑ Universal Coverage
- ❑ Single insurer (non-profit corporation)
- ❑ Balancing the redistributive component and the earnings-related component

## Characteristics of NPS (Cont')

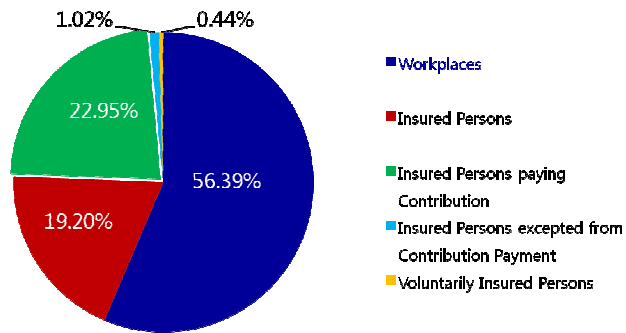
- ❑ Partially funded system
- ❑ Intergenerational redistribution  
(Low burden-high benefit)
- ❑ Adjusting mechanism for long-term sustainability
  - Actuarial valuation (every 5 years)

## | National Pension Scheme (NPS)( Cont')

- ❑ Enrollment Classification in NPS
  - Insured persons
    - Contributor
    - Exempted
    - Delinquent
  - Not-insured persons
- ❑ Enrollment Type in NPS
  - Workplace-based insured
  - Individually insured
  - Voluntarily insured/Voluntarily & Continuously insured

## Composition of the insured(NPS)

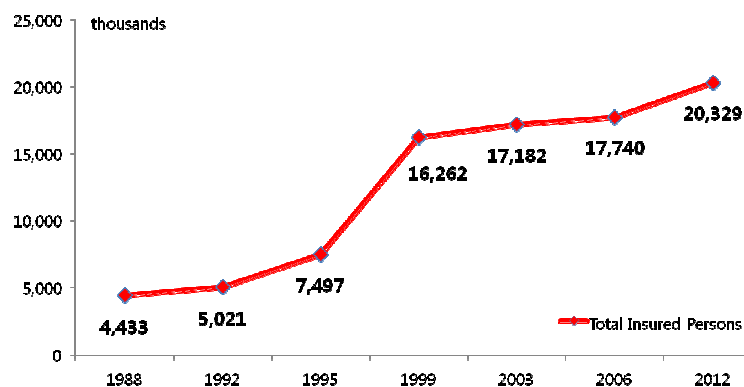
### Types of NPS insured person (2012)



Source: National Pension Service (2012).

## Trends in the # of the Insured (NPS)

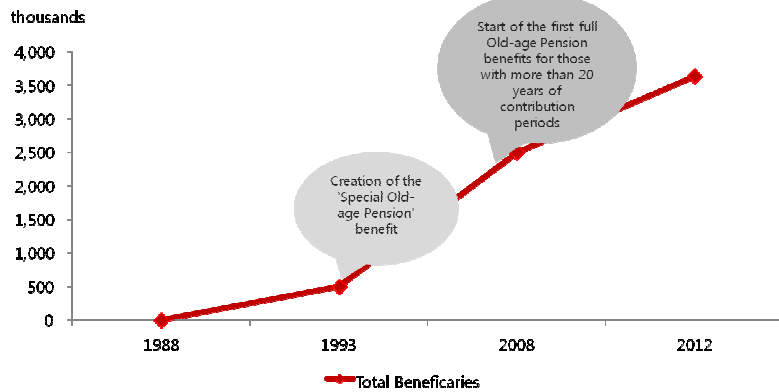
### Change in number of insured persons



Source: National Pension Service (2012).

## Trends in # of Beneficiaries (NPS)

### Change in the # of beneficiaries



Source: National Pension Service (2012).

## Average amount of NPS

### Average pension benefits

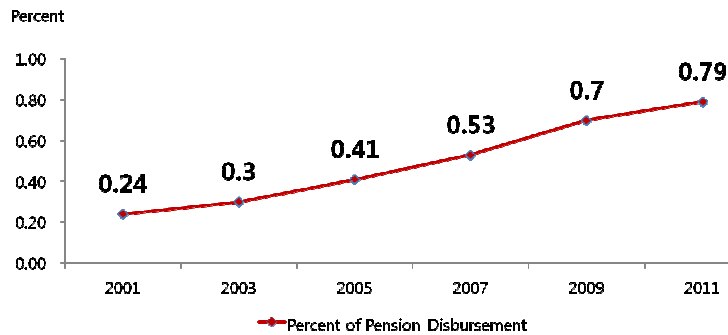
(KRW)

Type of Pension	Average
All (w/o 'Special Old-age')	301,010 (397,140)
Old-age Pension (w/o 'Special Old-age')	308,880 (463,993)
Disability Pension	411,360
Survivor Pension	241,790

Source: National Pension Service (2012).

## Trends of NPS Expenditure (% of GDP)

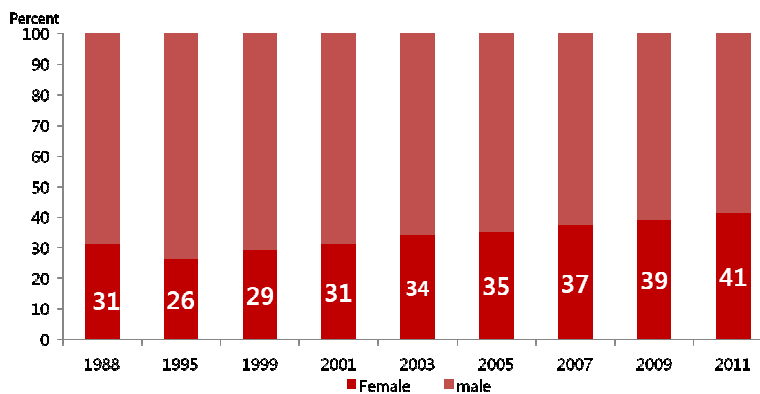
### □ Trends of pension disbursement over GDP (2001-2011)



Source: National Pension Service (2012).

## The # of Insured by Gender (NPS)

### □ Trends in the percent of insured persons by gender

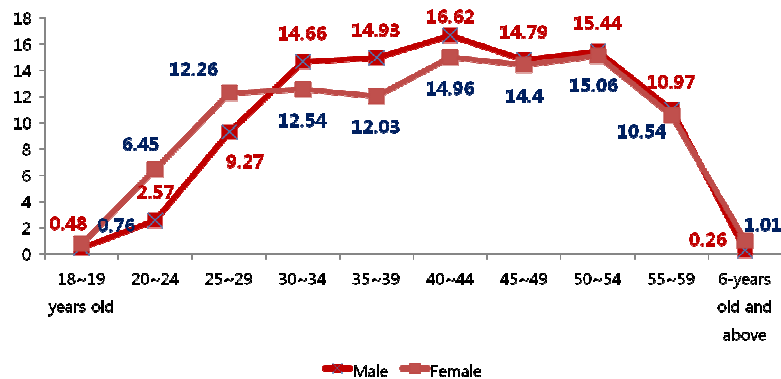


Source: National Pension Service (2012).



## The # of Insured by Age & Gender (NPS)

□ Percent of insured persons by age and gender (2012)



Source: National Pension Service (2012).

## The 2007 Reform of NPS

### □ Measures for Financial Stabilization

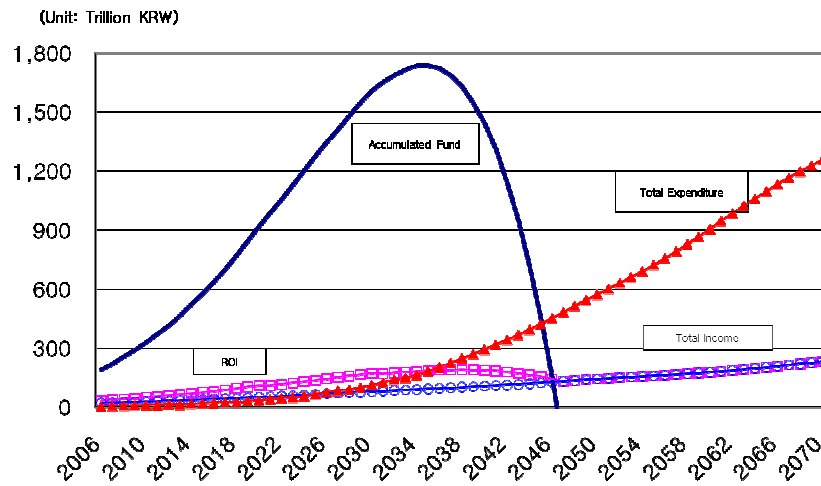
- Average Income Replacement Ratio(40yrs):
  - 60%(before 2008) → 50%(2008) → 40%(2028)
- Contribution rate(9%) is unchanged.

### □ Measures for Coverage Expansion

- Introduce "**Pension Credit System**":
  - Childbirth credit(12~50 months)
  - Military service credit(6 months)
- Increase government subsidies for farmers and fishermen
  - Subsidies of max. 1/2 of their contributions

## Financial Projection of NPS

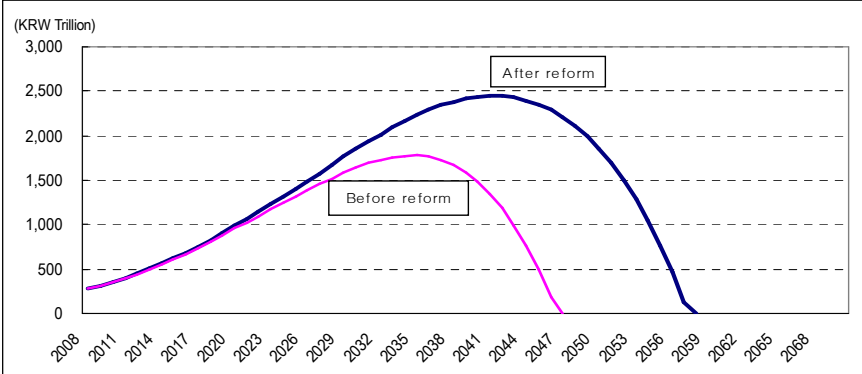
(Before 2007 Reform)



Source: Author's calculation (2007).

## Long-Term Financial Prospects of NPS

### □ Before & After Reform in 2007

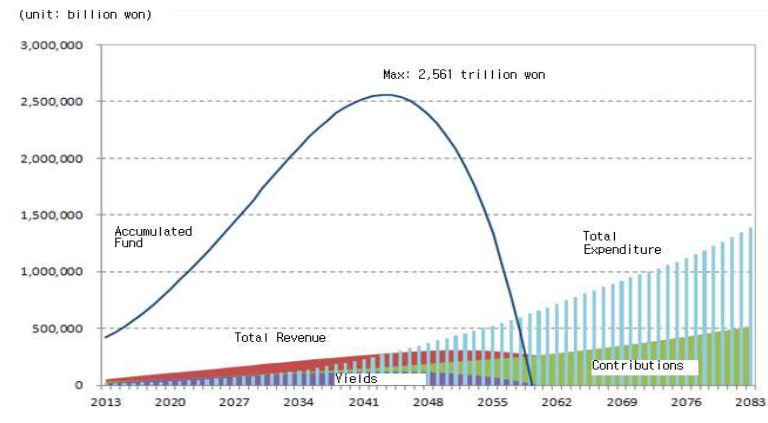


- Before 2007 reform, National Pension Fund was to be exhausted by 2047.
- The reform delays the fund exhaustion to 2060.

Source: Author's calculation (2007).

## Financial Projection of NPS (in 2013)

### ② NPS will be depleted in 2060 (2013 Actuarial Valuation)



Source: The Committee for 3<sup>rd</sup> actuarial Valuation of NPS (2013).

## 4. Socio-economic Status of the Elderly & Basic Old-age Pension

## 4.1 Socio-economic Status of the Elderly

### The harsh truth for Korea's Senior



## Idle elderly men without support



Elderly men relax outside Tapgol Park in Seoul's Jongno district



Korea Institute for Health and Social Affairs

## Economic Status of Elderly



**An elderly woman  
pulls recyclable  
materials into a scrap  
yard.**

**A common way for  
the elderly to earn  
small amounts of  
money**

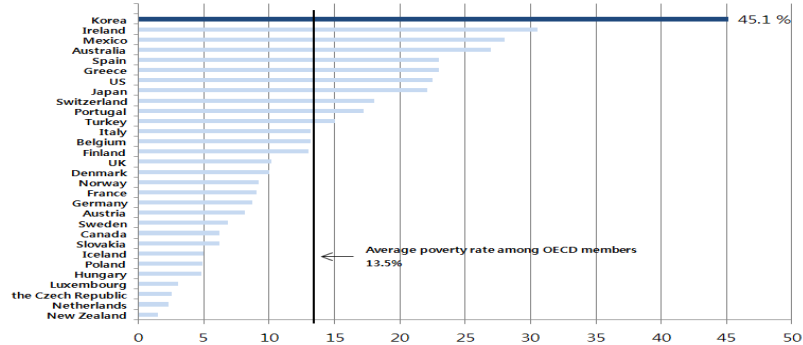


Korea Institute for Health and Social Affairs

## Elderly Poverty Rate (in terms of Relative Poverty)

### □ Current Status of Elderly Poverty and Income Distribution

#### ✓ Elderly Poverty Rate Comparison among OECD Members

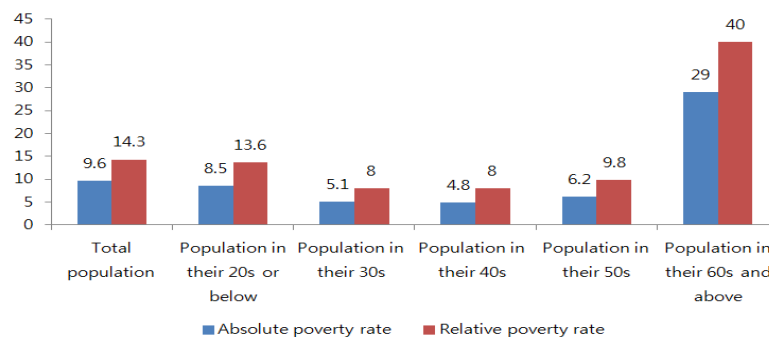


Source : OECD, *Pension at a Glance*, 2011.

## Poverty Rate by Age

### □ Current Status of Elderly Poverty and Income Distribution

#### ✓ Poverty Rate by Age of the Household Head: Based on Disposable Income (as of 2011)



Source : Yun Suk-myeong(2013), KIHASA

## Trends of Poverty Rate by Household

### □ Trends of the Elderly Poverty Rate

(Unit: %)

	Household including the elderly		Households composed of only the elderly	
	Poverty rate		Poverty rate	
	2007	2012	2007	2012
Total	32.5	34.3	61.0	66.0
Aged 65~74	41.4	43.5	57.7	60.9
aged 65 and above	43.6	47.2	61.0	66.0
Aged 75 and above	48.6	54.0	67.6	74.7
	Total households			
	2007		2012	
	Poverty rate	Extreme poverty rate	Poverty rate	Extreme poverty rate
	14.8	4.4	14.6	4.6

Source : Yun Suk-myung(2013), KIHASA

## 4.2 Overview of Basic Old-age Pension

## Basic Old-age Pension (BOAP)

### □ Basic Old-Age Pension

- Introduced in 2007 in response to high poverty rate (45% in 2006) of the elderly aged 65 or older.
  - Average poverty rate of the elderly among OECD countries was 13% in 2006.
- Coverage is high while benefit level is low.
  - 70% of the elderly receive Basic Old-age Pension.
  - Benefit amount is 5% of average income of NPS recipients.
- Exposed to problem of sustainability in long term.

## Beneficiaries of BOAP

### □ BOAP beneficiaries in the population aged 65 years and older

(In persons, percent)

Year	Population at age 65 and over (A)	Basic Old-age Pension beneficiaries (B)	Both Basic Old-age Pension and the NP beneficiaries (C)	Proportion	
				B/A (%)	C/B (%)
2008	5,069,273	2,897,649	402,724	57.2	13.9
2009	5,267,708	3,630,147	719,030	68.9	19.8
2010	5,506,352	3,727,940	823,218	67.7	22.1
2011	5,700,972	3,818,186	915,543	67.0	24.0
2012	5,980,060	3,933,095	1,023,457	65.8	26.0

Source: National Pension Service (2012).



## Selection Criteria of BOAP

### □ Trends in the thresholds of the Basic Old-age Pension

(KRW in thousand)

Classification	2008	2009	2010	2011	2012
Single	400	680	700	740	780
Couple	640	1,088	1,120	1,184	1,248

Source: National Pension Service (2012).

## Trends of BOAP Benefits

### □ Basic Old-age Pension benefits

(KRW in thousand)

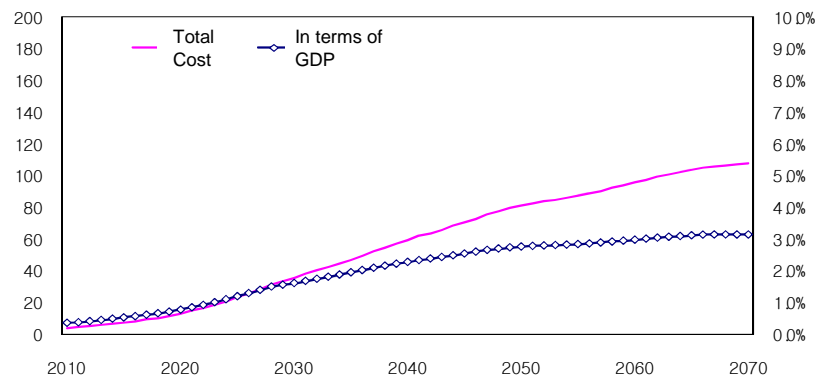
	2008 ~ 2009.3	2009.4 ~ 2010.3	2010.4 ~ 2011.3	2011.4 ~ 2012.3	2012.4 ~ 2013.3
A-value (Average income of the insured)	167	175	179	182	189
Benefits; Single (Couple)	8.4 (13.4)	8.8 (14)	9 (14.4)	9.1 (14.6)	9.4 (15.1)

Source: National Pension Service (2012).

## Projection of Basic Old Age Pension

### □ Under Current Coverage (70% of Age 65+)

(Constant Value, KRW Trillion)



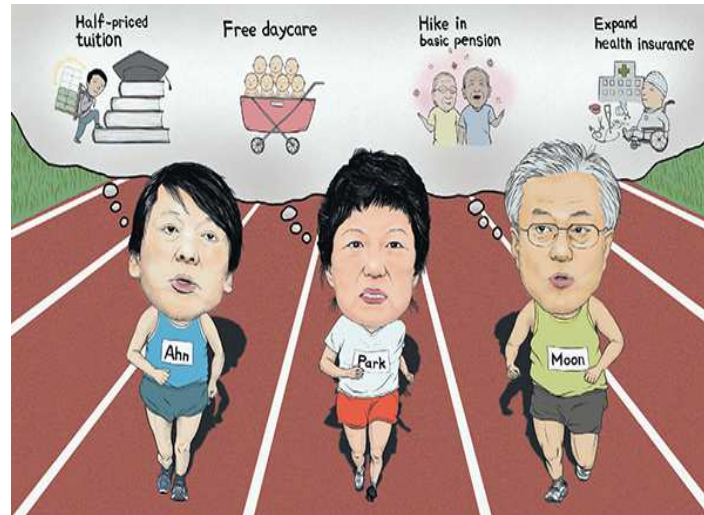
Source: Author's calculation (2011).

## 4.3 Reform Proposals of Basic Old-age Pension

## Welfare race is on

**2012  
Presidential  
election  
has been  
dubbed  
"the  
welfare  
war"**

**as the  
candidates  
compete on  
expanded  
social  
welfare  
policies**



## During campaign, President Park promised universal pension

**Park pledged to  
increase the basic  
old-age pension**

**to 200 thousand won  
for all senior**

100세 시대, 어르신들의 건강한 웃음이 더욱 커집니다.

**어르신 소득 안정을 위해  
기초연금 도입**

**새누리당의 진단**

- 노인빈곤율과 노인자살률 등이 OECD 국가에서 가장 높아 현재 노인계층의 삶의 질이 낮은 상태
- 국민연금만으로는 노인 빈곤해소에 기여하지 못하면서 장기 재정불안정 문제를 안고 있음.
- 기초노령연금의 급여수준(2012년 94,600원)이 너무 낮아 일생동안 우리 나라의 경제발전이 애스신 어르신의 경제적 어려움을 덜어주지 못하고 있음.

**새누리당의 약속**

- 기초연금 도입
  - 기본방향 : 현행 기초노령연금 및 장애인연금을 기초연금화하고 국민연금과 통합 운영함으로써, 사각지대나 재정 불안정성 없이 모든 세대가 행복한 연금제도로 개편
  - 대상 및 내용 : 기초연금은 도입 즉시 65세 이상 모든 어르신과 중증 장애인에게 현재의 2배(A값의 10%) 지급

**새누리당의 실현**

- 「기초노령연금법」의 「기초연금법」 전환(2013년)
- 기초연금과 국민연금의 통합적 운영을 위한 「국민연금법」 법률 개정 추진

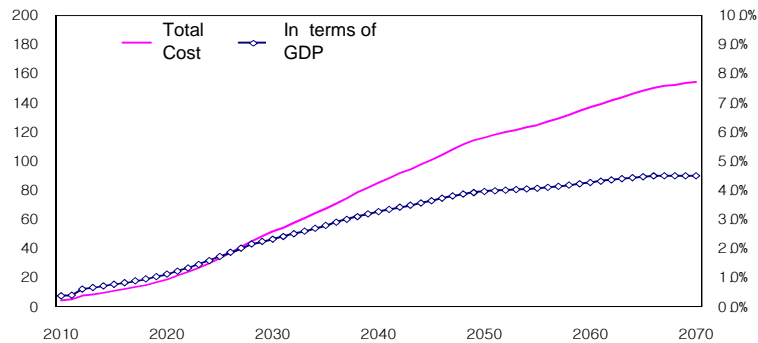
이투데이

## Long-Term Projection of the BOAP

### □ In Case of Extending Coverage ( to 100% of Age 65 +)

- Replacement Rate : 5% of NPS average income gradually increase to 10% in 2028

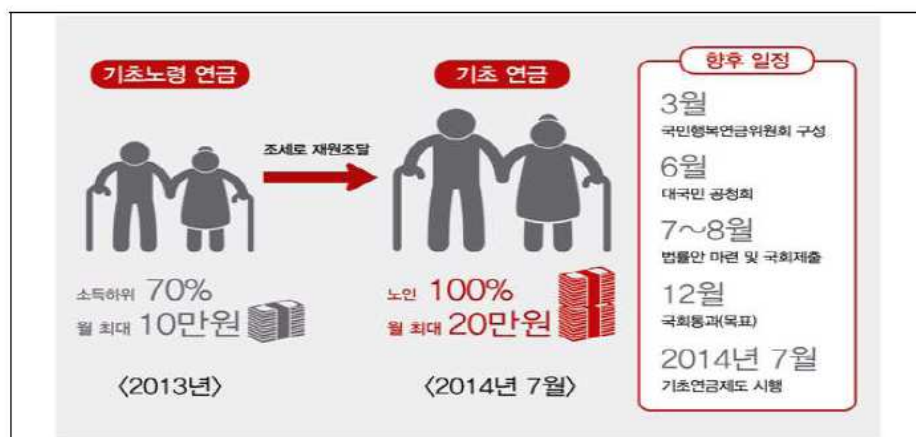
(Constant Value, Trillion KRW)



Source: Author's calculation (2011).

## 국민행복연금 추진 일정

### [그림 17] 기초연금을 포함한 국민행복연금 추진 일정



자료: 보건복지부 2013년 업무계획

## Government Proposal for Basic Pension



생활이 어려운 어르신을  
튼튼하게 지원하고, 자녀세대의 부담은 줄이는  
기초연금제도를 2014년 7월 시행합니다.

□ 65세 이상 어르신 생활에 안정을 더하겠습니다.

- 경제적 도움이 시급한 어르신을 우선적으로 생각합니다.
- 353만명\*의 어르신은 20만원을 받습니다.

\* 기초연금 대상자 (70%) 중 90%

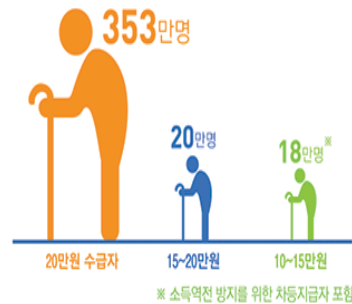
65세 이상  
대부분의 어르신이 20만원의  
연금을 받으실 수  
있습니다.



□ 함께 그리고, 같이, 연금제도에 든든함을 더 하겠습니다.

- 기초연금 대상에 속하는 어르신들은 모두  
최소한 10만원을 보장 받습니다.

기초연금액 분포



## Government Proposal for Basic Pension



모든 세대가 만족하고,  
함께 행복할 수 있는 기초연금!  
행복한 노후시대의 밑거름이 되겠습니다.

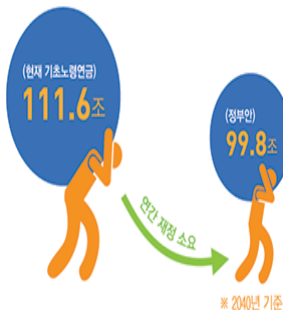
□ 어르신의 생활이 더 여유로워집니다.

- 어르신의 한 달 생활비가 조금 더 넉넉해집니다.



□ 미래의 우리 자녀세대의 어깨는 더 가벼워집니다.

- 기초노령연금은 국민연금과 연계되지 않아  
국민연금 급여수준이 늘어나도 재정은 지속적으로 증가합니다.
- 기초연금은 우리 손자녀의 부담을 줄여줍니다.



# Government Proposal for Basic Pension

받으시는 국민연금금은 그대로,  
기초연금의 혜택은 더하여  
안정적인 노후를 보장합니다.

□ 국민연금 수급자는 국민연금을 그대로 받으면서  
기초연금을 추가로 함께 받습니다.

- 국민연금 수급자의 대부분은 20만원을 받습니다.
- ※ 국민연금 수급자 88만명 중 70%(61만명)가 20만원 수령
- 국민연금액이 아무리 많아도(오래 가입하더라도)  
최소 10만원의 기초연금을 받으실 수 있도록 하였습니다.

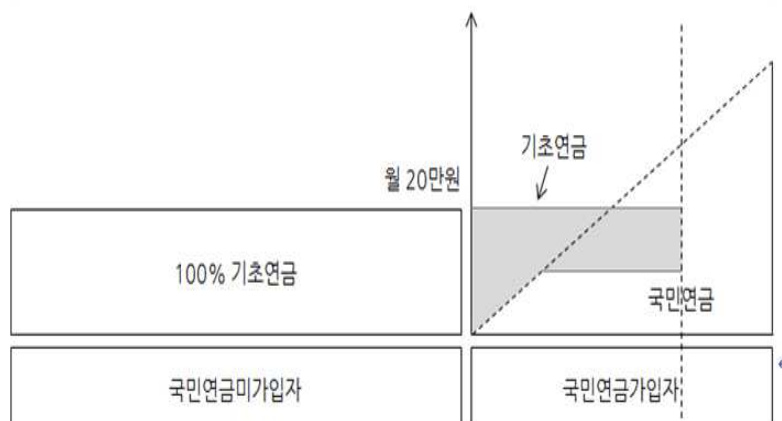


□ 국민연금 기금은 사용하지 않습니다.

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-기초연금은 전액 조세로 마련됩니다.



## Government's Basic Pension plan (released by Sept. 25)



## Government's Basic Pension plan

(released by Sept. 25)



Korea Institute for Health and Social Affairs

## Government's Basic Pension plan

(released by Sept. 25)



### Pension plan revised amid budget woes

#### New draft for basic pension program

The new basic state pension plan, proposed by the government on Wednesday, covers only seniors making up the poorest 70 percent, in terms of income and assets, starting July next year.

#### Distribution of seniors qualified to receive basic pension

(As of Dec. 2012, among a total of 5.98 million seniors aged 65 and over)



Source: Ministry of Health and Welfare  
Graphic by Nam Kyung-don

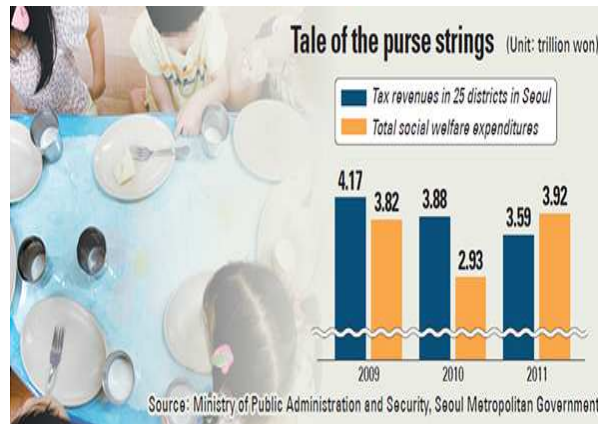
Korea Institute for Health and Social Affairs

## Conflicts b/w Central and Local governments on the issue of financing

24 Seoul districts  
rebel on day care

All area but  
Gangnam refuse  
to offer benefits  
to 3- to 5-year-  
olds next year

(as of Nov 14, 2012)



## Conflicts b/w Central and Local gov'ts on the issue of financing Basic pension





## 4.4 Ongoing Disputes of over the Basic Pension

### Minister of Health & Welfare offered to resign

**Resigned Minister  
Chin Young enters  
a meeting room  
before saying a  
goodbye at the  
ministry.**

**The reason of Chin's  
"protest  
resignation"**

**"I am still opposed to  
the basic pension plan.  
How could I hope to  
persuade the public to  
support it? This is the  
matter of conscience."**



## Lawmakers collide over basic pension



**Lawmakers from rival parties clashed over the Park Geun-hye government new basic pension**

**proposed to pay less to subscribers of the existing contributory pension scheme**



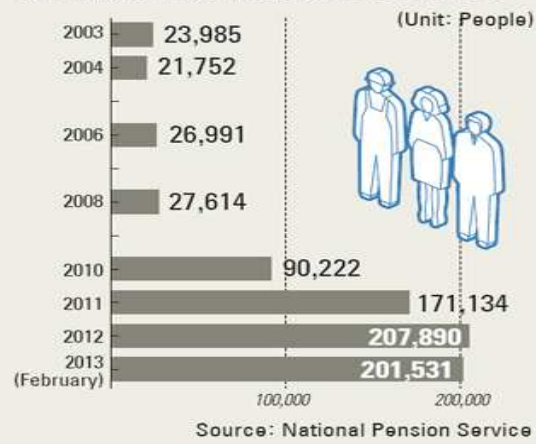
Korea Institute for Health and Social Affairs



Korea Institute for Health and Social Affairs

## Trends of voluntary subscribers

### Voluntary subscribers to the National Pension Service

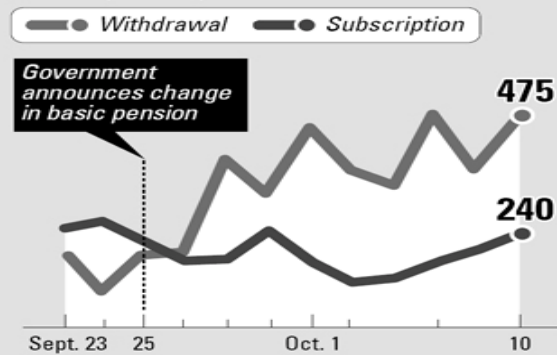


## Pension scheme concerns mount

### Pension withdrawals

(Unit: Person)

\*Out of 186,114 voluntary subscribers to the national pension plan as of Oct. 10



Source: Representative Choi Dong-ic

## 5. Retirement (Corporate) Pension

## Retirement Pension(or Allowance)

- Retirement pension (or allowance) is applied to the workers of workplaces of one or more workers.
- Among 8.7 millions of regular workers, about 30%, 2.7 million were enrolled in retirement pension as of 2011.

## Retirement Pension by the size of firms

### Introduction Rate of Retirement Pension by the size of firms

	Less than 10 workers	10 - 29	30 - 99	100 - 299	300 - 499	More 500
<b>Business Offer plans</b>	121,781	53,369	20,978	5,369	873	1,118
<b>Total Business</b>	1,273,047	178,396	54,720	10,969	1,425	1,293
<b>Introduction rate (A/B)</b>	9.6	29.9	38.3	48.9	61.3	86.5

Source: National Pension Service (2012).

## Retirement Pensions by Pension Plan Type

### By Type of Pension Plan

(Thousands, percent)

	DB	DC	IRP	Total
2012.12	2,770 (63.3)	1,519 (34.7)	88 (2.0)	4,377 (100.0)
2011.12	2,276 (69.3)	930 (28.3)	78 (2.4)	3,284 (100.0)
Change (Δ)	494	589	10	1,093

Source: National Pension Service (2012).

### Retirement Pension reserve by type of pension plan

(KRW in billions)

Year	Defined Benefit (DB)		Defined Contribution (DC)		Individual Retirement Plan(IRP)				Total	
					Business		Individual			
	Value	%	Value	%	Value	%	Value	%	Value	%
'05	6.4	39.0	6.1	37.2	3.9	23.7	-	0.0	16.3	100
'07	1,827.6	66.3	703.3	25.5	131.5	4.8	92.7	3.4	2,755	100
'09	10,051.9	71.7	2,983.3	21.3	376.2	2.7	613.5	4.4	14,024.8	100
'11	37,539.4	75.2	8,107	16.2	609.3	1.2	3,661	7.3	49,916.8	100

Source: National Pension Service (2012).

## 6. Personal Pension

## Personal Pension and / or Saving

- Personal pension and / or saving is available to prepare for after-retirement income security.
- It is voluntary to subscribe personal pension & saving & tax exemption is available to encourage the enrollment.
- The current subscribers of retirement pensions or personal pensions **are limited,**
  - Especially to people with higher income.

## Subject of Analysis & Survey Sample

### Subject of Analysis

- Subject of analysis is baby boomers who are expected to retire in the next 10 yrs.
- **3,000 households** with a head of household who is from 30 yrs old to 60 yrs old.

### Survey Sample

- The survey sample was chosen from 2005 Census using the sampling with probability proportionate to size.
- Total 300 survey areas were sampled & then 10 households from each survey area were sampled by systematic sampling.  
(95% confidence level with error value of  $\pm 5.8\%$ )

## Sample Size Equation

### Sample Size Equation

$$n = \frac{\sum_{k=1}^4 N_k^2 p_k a_k / a_k}{N^2 D + \sum_{k=1}^4 p_k a_k}$$

- $a_k$  is percentage of observed value in  $k$  tier.
- $p_k$  is percentage of tier  $D = B^2/4$  allowable error.

## Retirement Pension Reserve by Type

### Retirement Pension reserve by type of pension plan

(KRW in billions)

Year	Defined Benefit (DB)		Defined Contribution (DC)		Individual Retirement Plan(IRP)				Total	
					Business		Individual			
	Value	%	Value	%	Value	%	Value	%	Value	%
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Source: National Pension Service (2012).



## Enrollment of Personal Pensions by Income Quintiles (Survey

### Results)

(Unit: person, %)

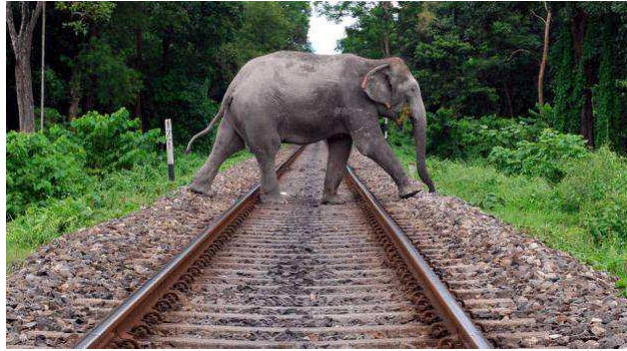
Age	Y/N	Fifth					Total
		Lowest	Second	Middle	Fourth	Highest	
Born before 1955	Yes	22 (19.5)	10 (15.3)	8 (11.4)	23 (30.0)	15 (24.6)	79 (20.2)
	No	93 (80.5)	54 (84.7)	64 (88.6)	54 (70.0)	47 (75.4)	311 (79.8)
Born b/w 1955 & 1963	Yes	21 (9.5)	27 (18.7)	37 (22.2)	51 (27.5)	138 (61.7)	274 (29.0)
	No	204 (90.5)	117 (81.3)	129 (77.8)	135 (72.5)	86 (38.3)	671 (71.0)
Born after 1963	Yes	31 (11.7)	107 (26.8)	108 (28.8)	144 (43.3)	188 (59.2)	578 (34.2)
	No	234 (88.3)	291 (73.2)	267 (71.2)	189 (56.7)	130 (40.8)	1,111 (65.8)

Source: Yun Suk-myung (2013).

## The Public Pension Crisis in Taiwan



Pension systems are a lot like elephants: large, grey, popular with the public and very difficult to move.



**The Pension Reforms is a never-ending story.**

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**Thank you for Attention.**