

# Employment, Training and Welfare Situations of Older People in Korea: Current Problems and Future Challenges

Nov, 2013

Woo-Yung Kim  
Department of Economics  
Kongju National University  
Chungnam, Korea

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    - Old-Age Dependency Ratio
  
  - ◆ Labor Market Outcomes of Older People
    - Labor Force Participation Rates of Older People
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      - Low Rate of Social Welfare Coverage.
  
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    - Proportions of Older Workers by Industry
    - Changes in Demands for Older People
    - Changes in Survival Rates of Older People.
  
  - ◆ Job Training of Older People (Kim, 2009)
  
  - ◆ Current Problems and Future Challenges



## 1. Aging of the Korean Society

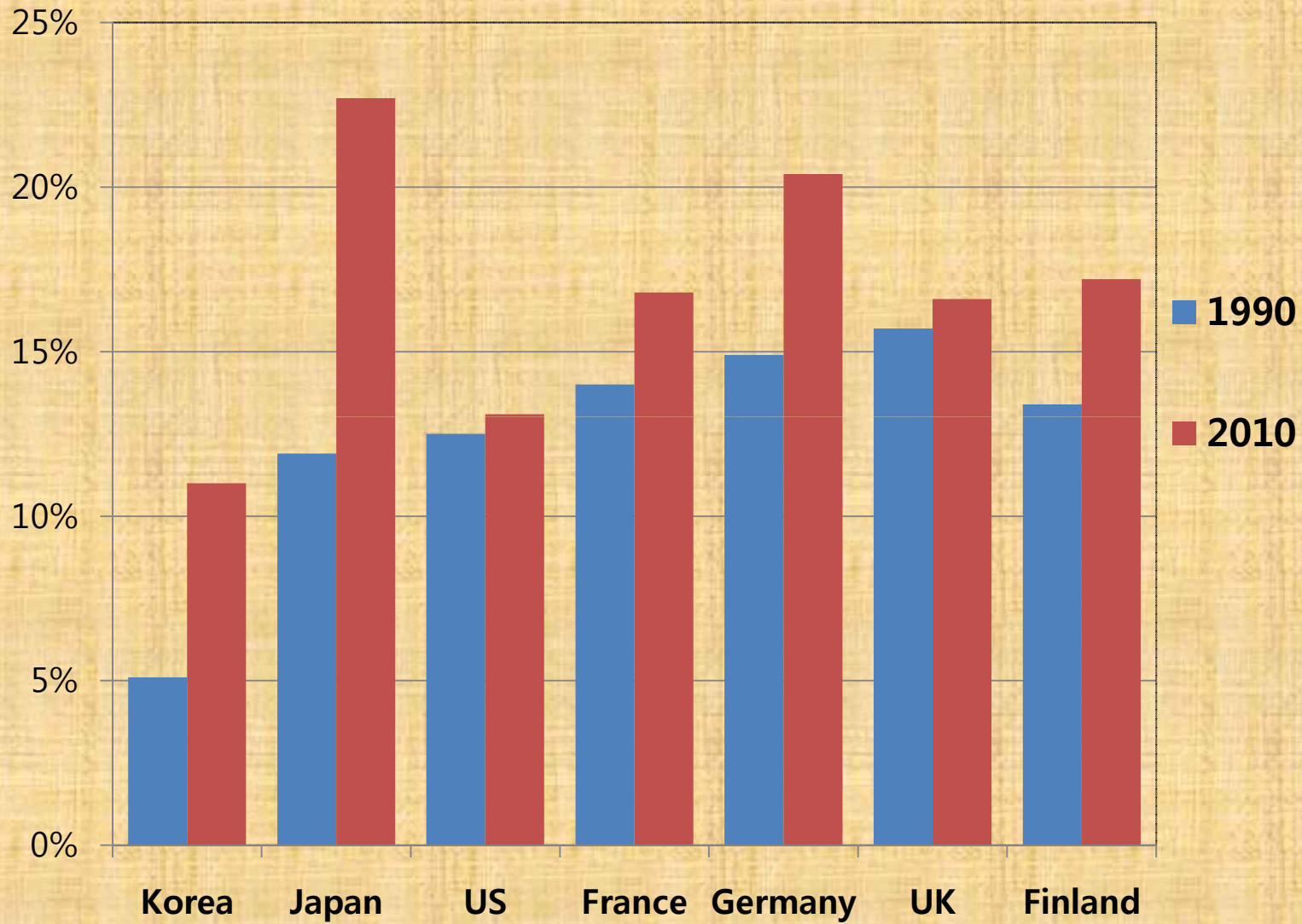
- The proportion of older people (65 and older) in Korea is relatively low compared to other OECD countries and so is the old-age dependency ratio.
- However, the speed of ageing is rapid.
- Also the burden of younger generation to support older generation has increased drastically in Korea.

## Trend of Aging Population (1990~2010)

	Country	1990	2000	2010
% of people aged 65 and over	Korea	5.1	7.2	11.0
	Japan	11.9	17.2	22.7
	US	12.5	12.4	13.1
	France	14.0	16.1	16.8
	Germany	14.9	16.3	20.4
	UK	15.7	15.8	16.6
	Finland	13.4	14.9	17.2

\* proportion of people aged 65 and over.

## Trend of Aging Population (1990~2010)



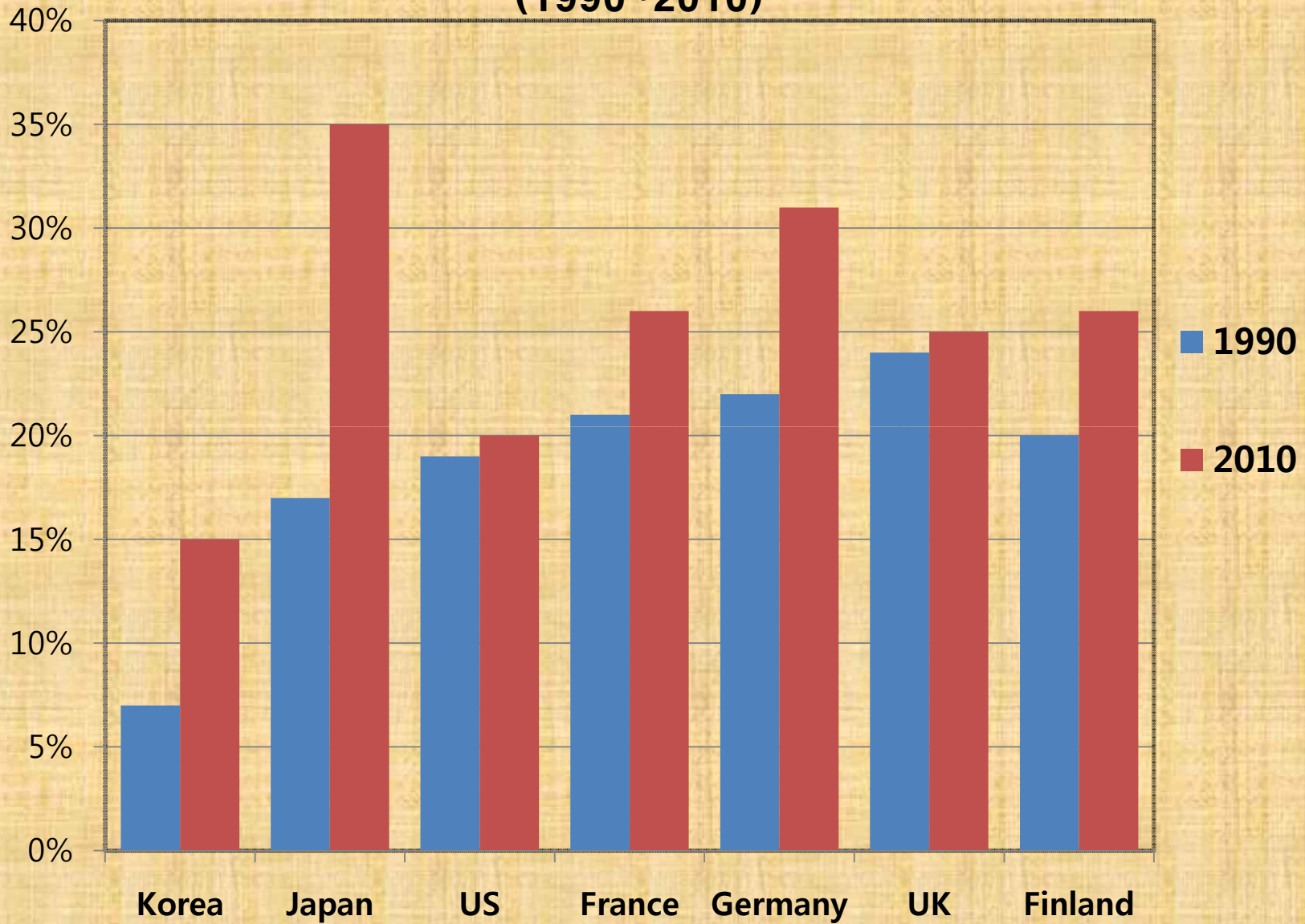
## Trend of Old-Age Dependency Ratio (1990~2010)

	Country	1990	2000	2010
older generation /younger generation (%)	Korea	7	10	15
	Japan	17	25	35
	US	19	19	20
	France	21	25	26
	Germany	22	24	31
	UK	24	24	25
	Finland	20	22	26

- $A/B \times 100$ . A=Number of people aged 65 and over,
- B=Number of people aged 15 - 64.

# Trend of Old-Age Dependency Ratio

(1990~2010)



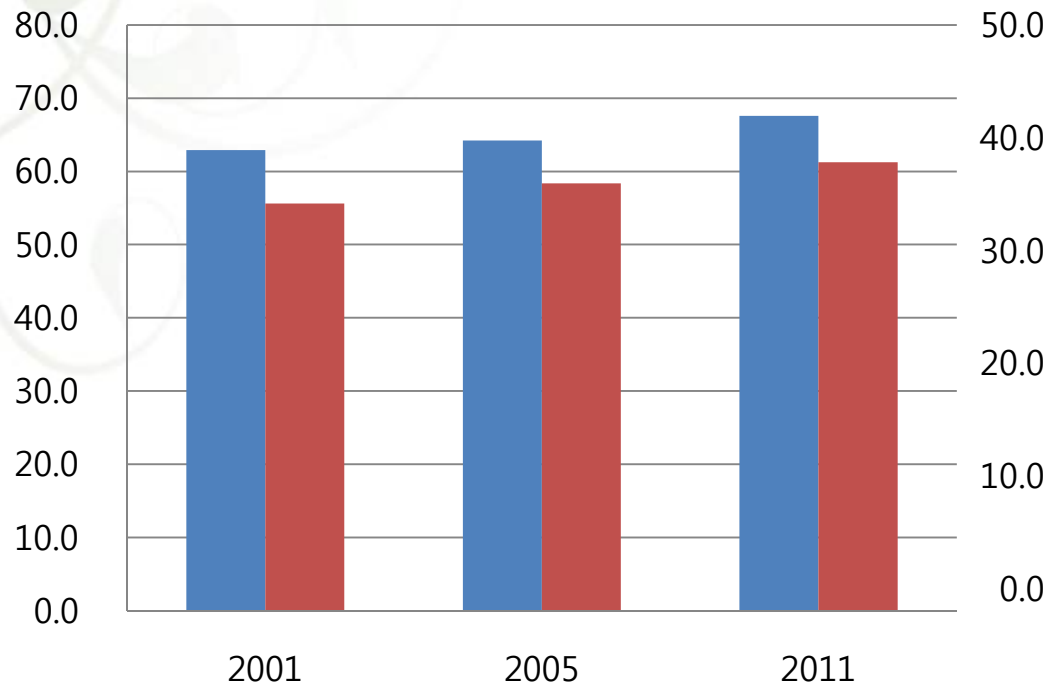


## 2. Labor Market Outcomes of Older People

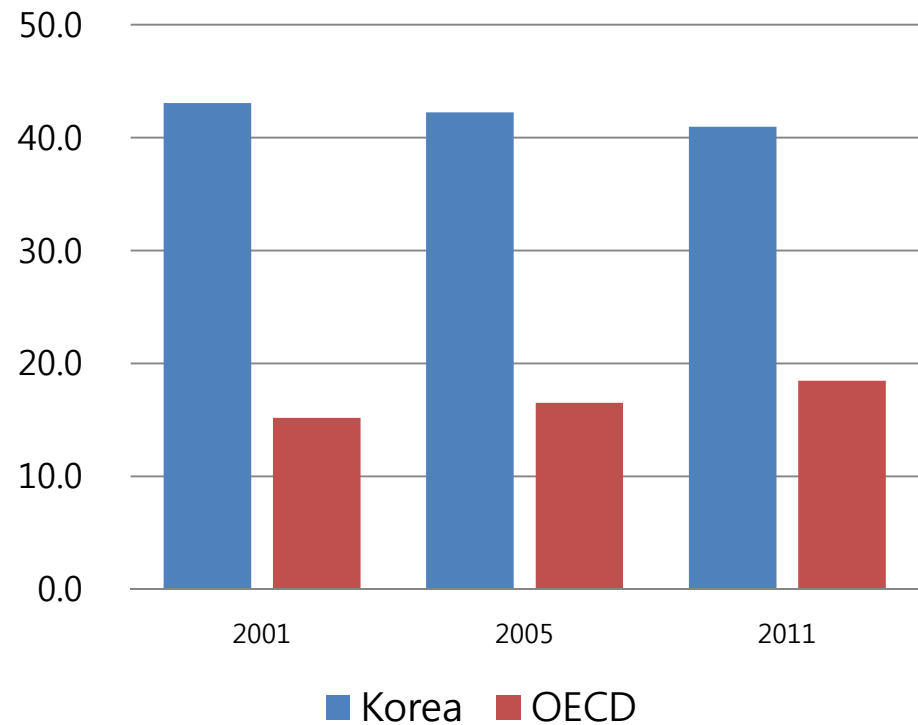
- The labor force participation rate of older people in Korea is higher than that of the OECD counterparts.
- Reasons for the high rates are
  - High self-employment rates
  - Low rates of social welfare coverage.

# Labor Force Participation Rates of Older People

## People Aged 50~64

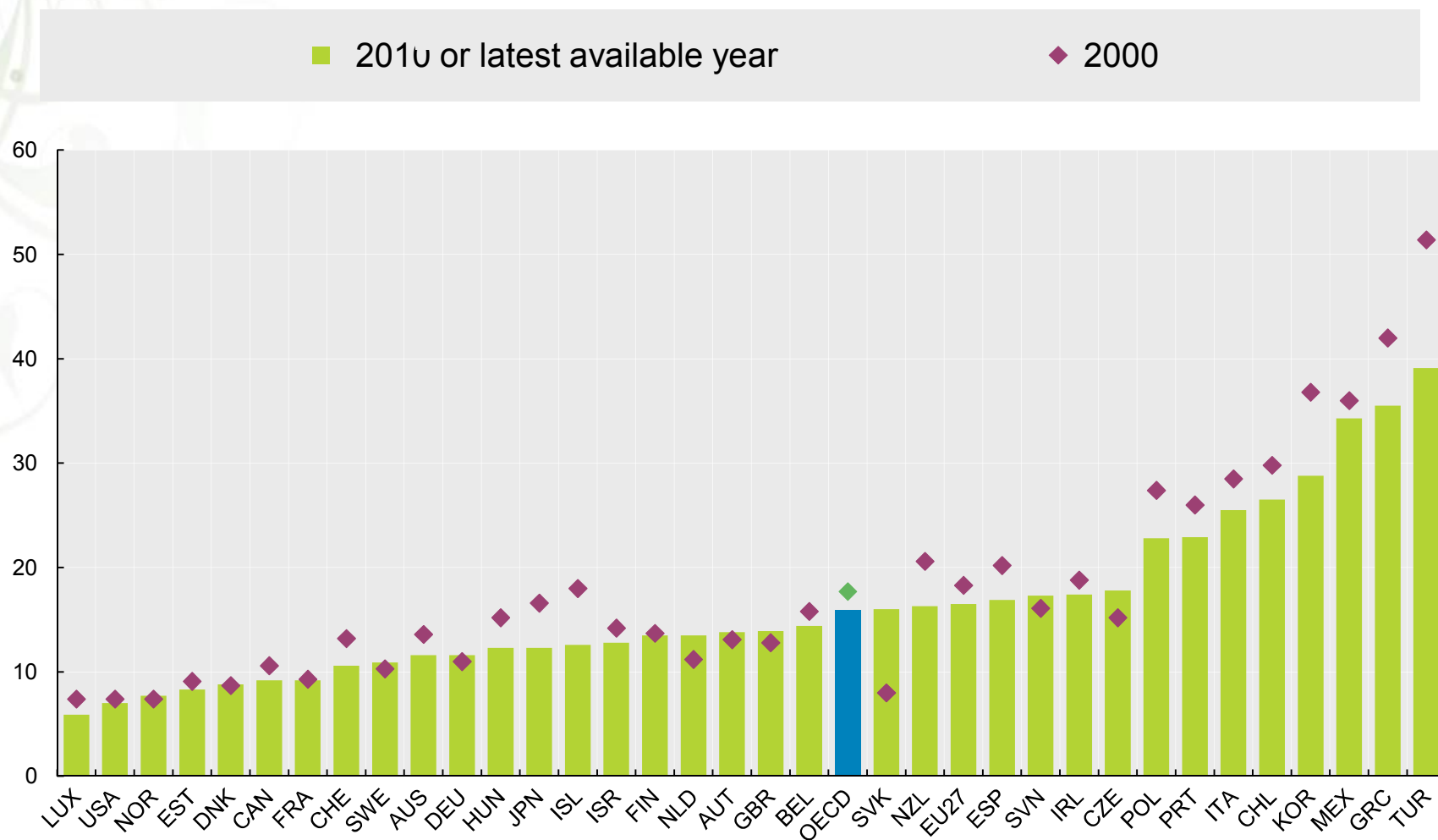


## People Aged 65~69



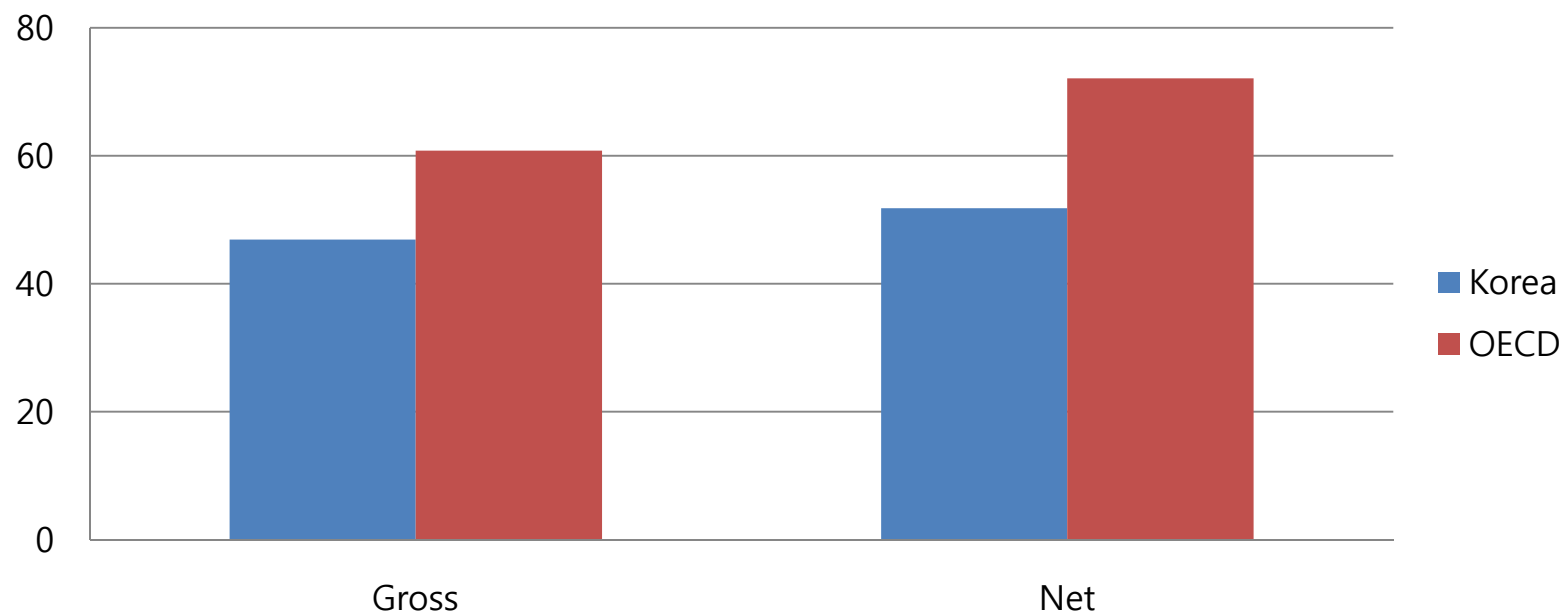
# Self-Employment Rates

As a percentage of total employment

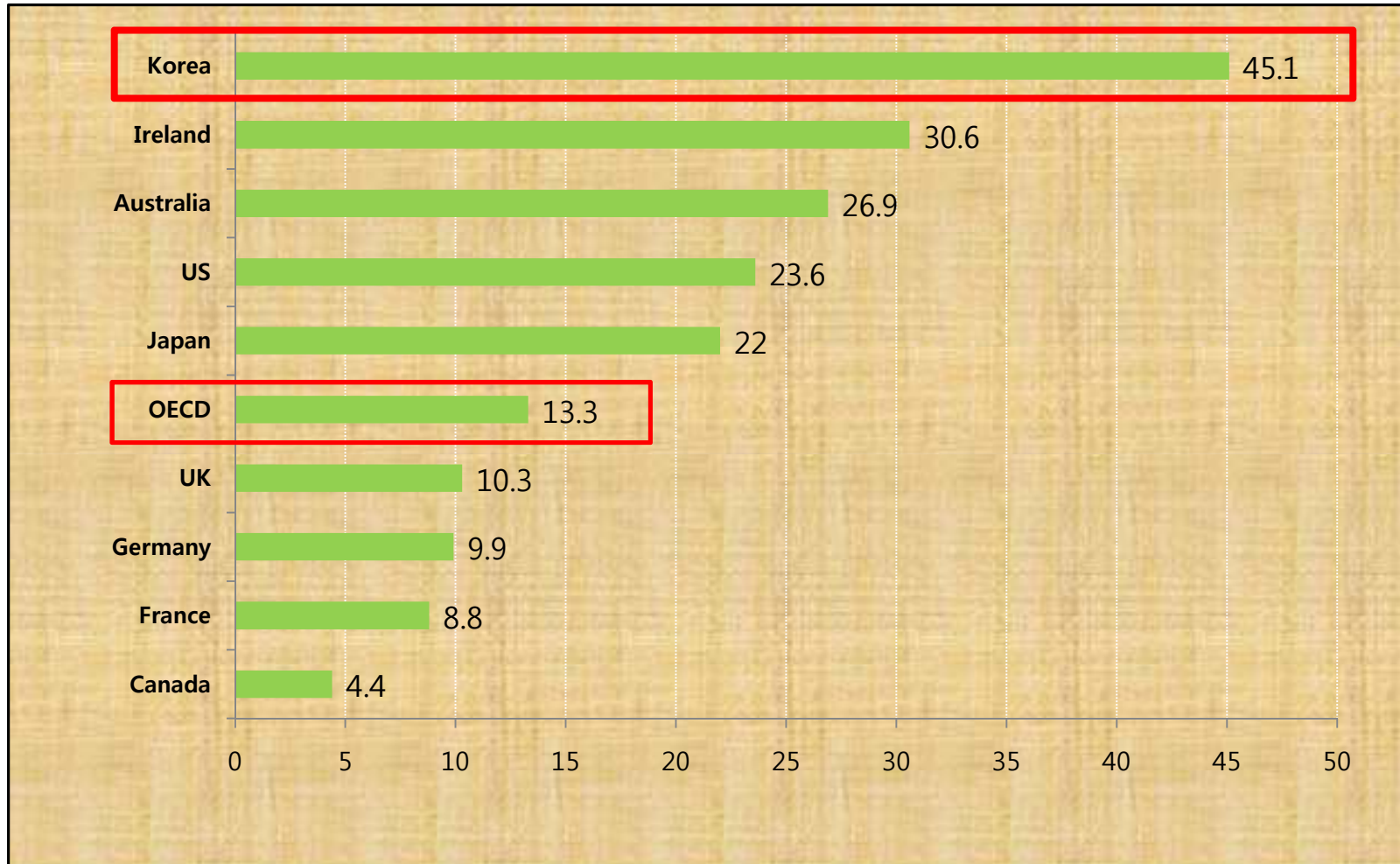


# Pension Replacement Rates from Mandatory Pensions by Earnings, Median Earner

Replacement Rates(Public and Private), 2011



## Poverty Rate of Older People(age 65 and over) in Korea, 2005



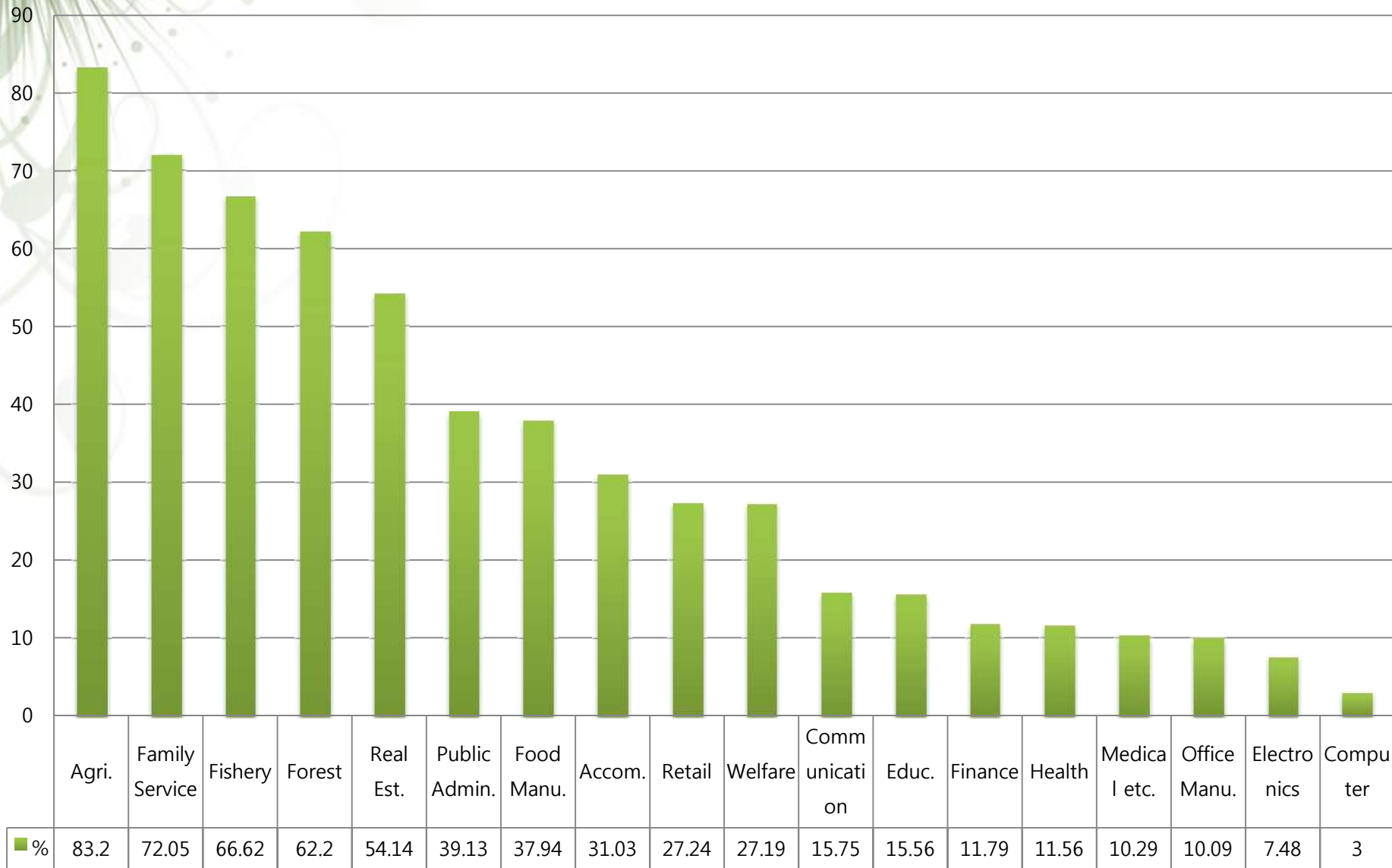
\* OECD(2009) Pensions at Glance



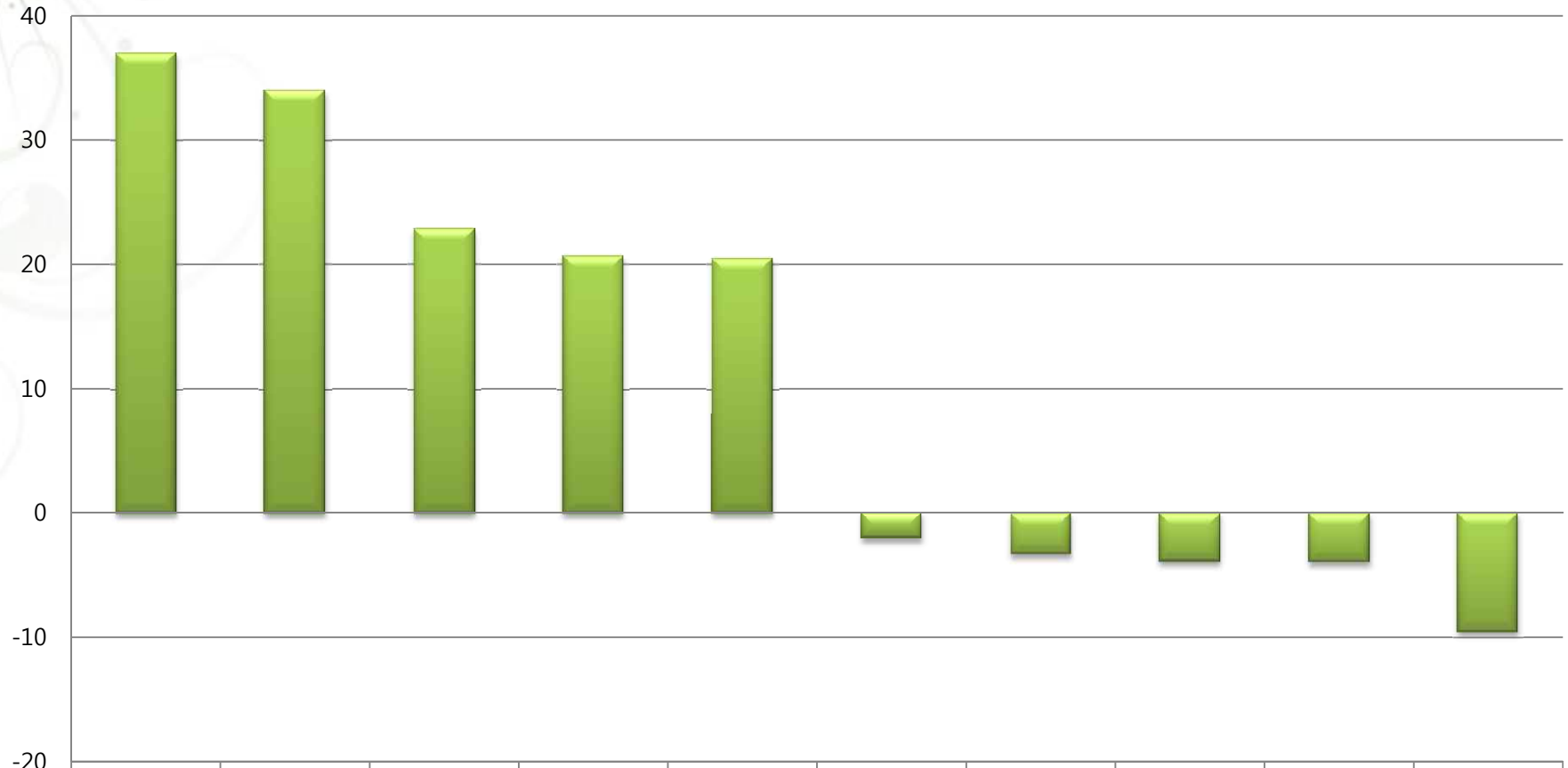
### 3. Industry Side: Aging of Industries

- According to the aging index (proportion of workers aged 50 and over), agriculture and family service industries have the highest proportions while information and computer industries have the lowest.
- Changes in the proportion of older workers are also highest in family service, leather, and tobacco industries.

# Percentage of Workers Aged 50 and over, Selected Industries, 2010



## Changes in Percentage of Workers Aged 50 and over, Selected Industries, 2001~2010



	Family Service	Leather	Tobacco	Public Admin.	Fishery	Real Est.	Recycling	Foreign	Pub. Utility	Forest
■ % Change	36.95	34.03	22.84	20.68	20.48	-2.11	-3.3	-3.83	-3.9	-9.57



### 3. Aging of Industries: Relative Demand for Older Workers

- The structure of industries has changed over time so that the demand for younger workers has increased, while the demand for older workers has decreased.

## Relative Demand for Older Workers (Murphy and Katz 1992, Lee 2012)

$$\frac{\Delta D_k}{E_k} = \frac{\sum_j \alpha_{jk} \Delta E_j}{E_k}$$

$D_k$  : Demand for Age Group  $k$

$E_k$  : Employment of Age Group  $k$

$E_j$  : Employment of Industry  $j$

$\alpha_{jk}$  : Proportion of Age Group  $k$  in Industry  $j$



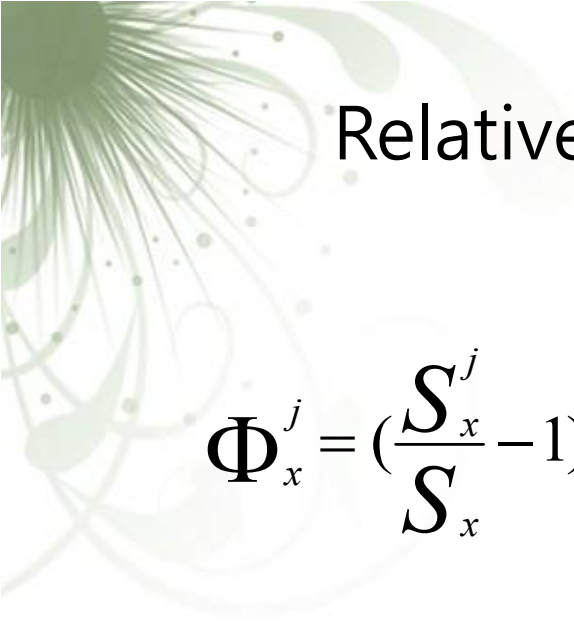
## Relative Demand for Age Groups(2001-2010)

	25~44	50~59	60~69	70over	50over
All	0.0349	-0.0082	-0.0181	-0.0170	-0.0433
Men	0.0277	-0.0057	-0.0119	-0.0127	-0.0304
Women	0.0624	-0.0162	-0.0353	-0.0286	-0.0802



### 3. Aging of Industries: Survival Rate

- Older workers survive longer in family service and agriculture industries while they stay shorter in high-tech manufacturing industries such as electronics and medical instruments.
- Also, the changes in industry structure affected the survival rate of older workers adversely between 2001 and 2010.



## Relative Survival Rate of Older Workers (Lee 2012)

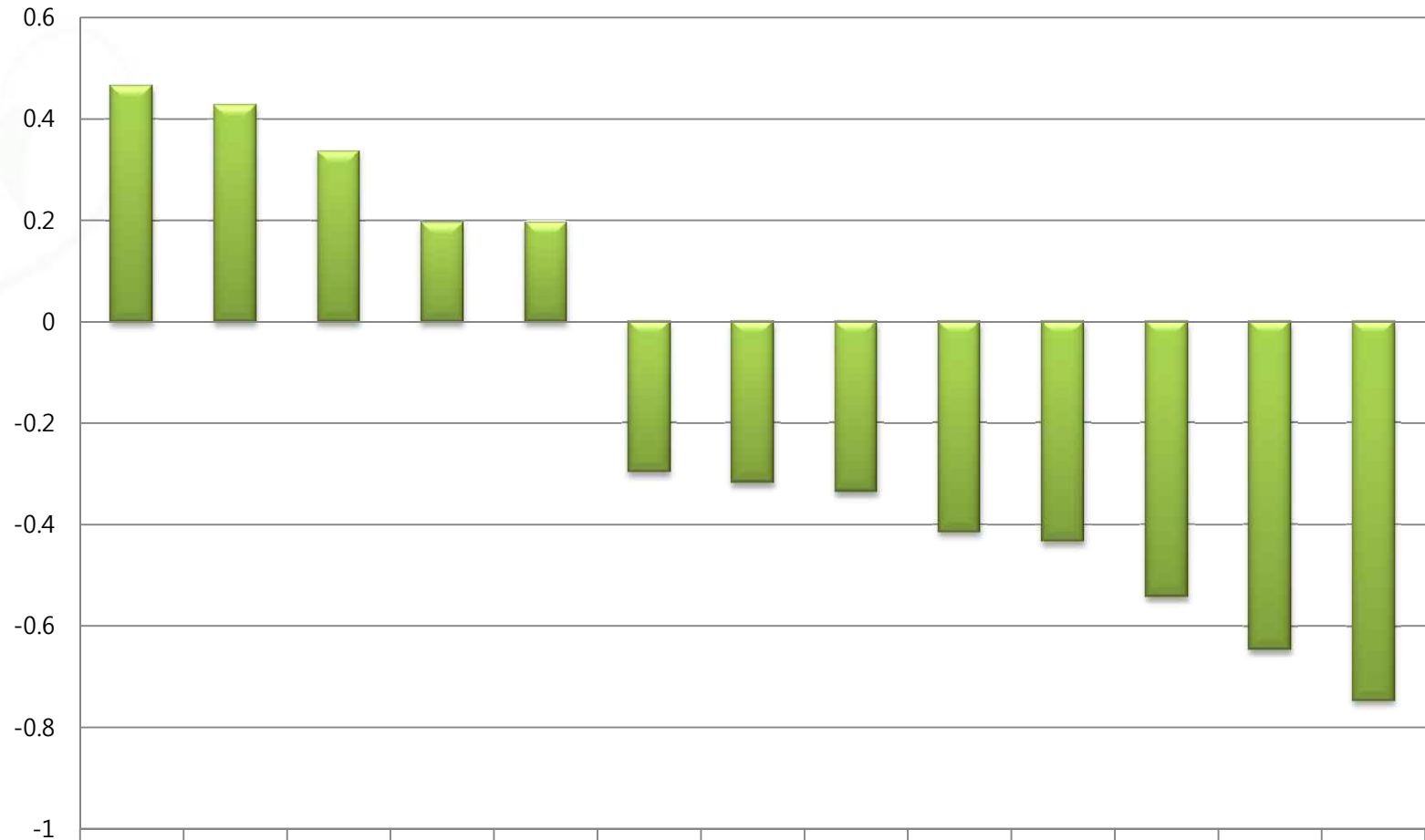
$$\Phi_x^j = \left( \frac{S_x^j}{S_x} - 1 \right)$$

$\Phi_x^j$ : *Relative Survival Rate of Age Group x in Industry j*

$S_x^j$ : *Survival Rate of Age Group x in Industry j*

$S_x$ : *Survival Rate of Age Group x*

## Relative Survival Rates of Workers Aged 50-54, Selected Industries, 2005-2010



■ Relative Survival Rate(%)	0.4656	0.4279	0.3365	0.1976	0.1946	-0.296	-0.3168	-0.3351	-0.4147	-0.4324	-0.5423	-0.6458	-0.7458
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The Effect of Changes in Industry Structure on Relative Survival Rates of Older Workers (2001-2010)

	All Industries		Non-Agriculture	
	50~54	55~59	50~54	55~59
2001	-0.011	-0.023	-0.011	-0.023
2005	-0.020	-0.025	-0.020	-0.025
2010	-0.023	-0.028	-0.023	-0.028



## 4. Job Training of Older People

- It is known that the participation rate for job training in Korea is lower than that for OECD (Choi, 2012).
- The participation rate for informal job training is about 16% in 2011.

## Participation Rates for Informal Job Training in Korea (2011)

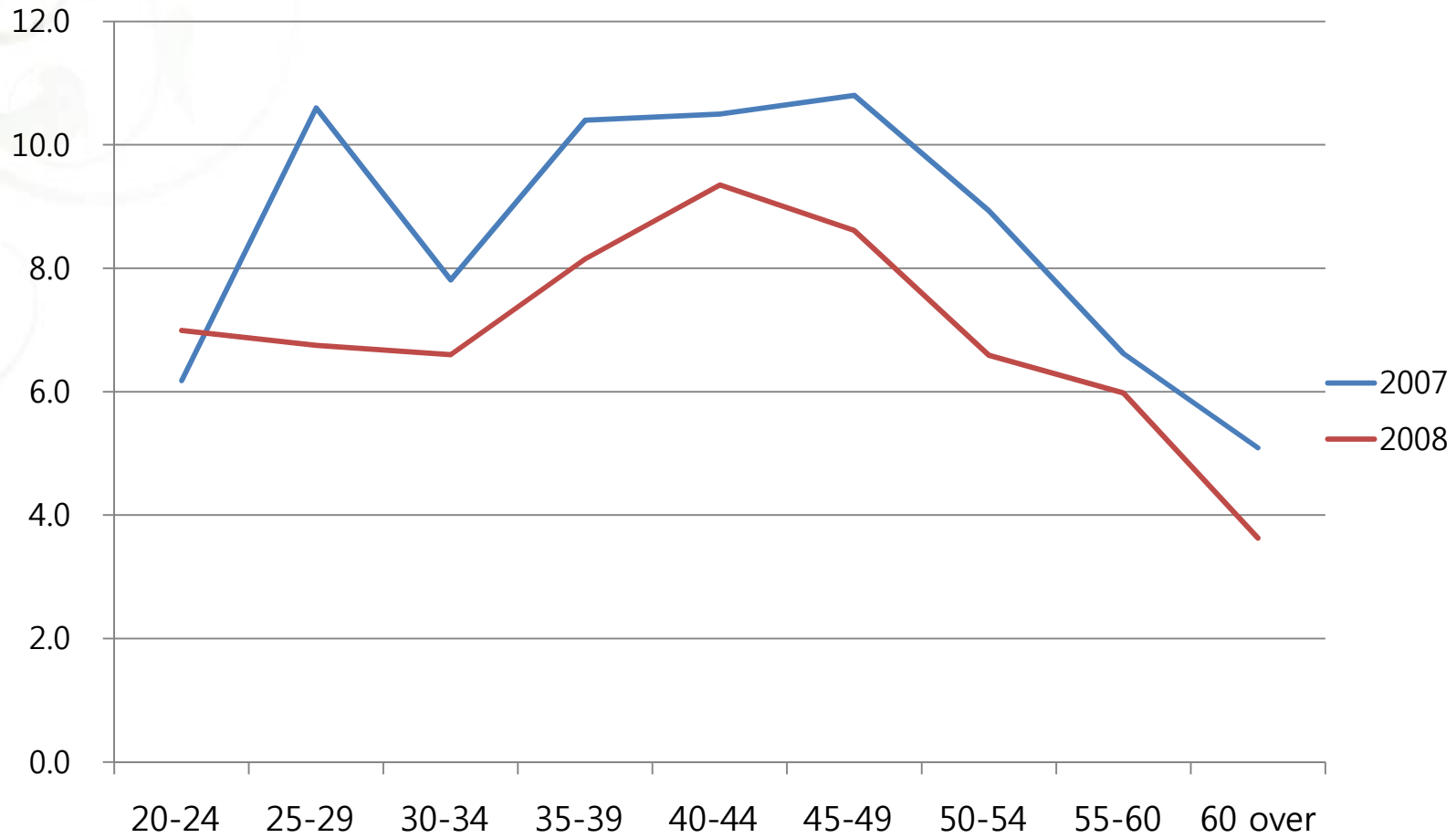
Age Group	Middle	High	University	Total
25~34	5.0	16.7	28.0	23.6
35~44	10.0	10.2	21.8	16.5
45~54	7.5	11.1	16.8	12.1
55~64	8.3	11.0	15.0	10.4
Total	8.0	12.0	22.8	16.0



## 4. Job Training of Older Females

- According to Kim (2009), older females have generally a lower level of participation in job training.
- Also, the participation in training is particularly low for the self-employed or unemployed.
- There is evidence that the participation in training has a positive effect on employment for older females.

## Training Participation Rate of Older Females (Age 45 and over, Kim 2009)





## Training Participation Rate of Older Females

	2007	2008
paid workers	13.9	11.7
Self-employed	10.3	9.7
more than 18 hours	12.8	9.7
less than 18 hours	1.8	0.1
unemployed	3.4	1.8
total	7.9	6.2

**The effect of training on employment between 2007 and 2008 (Probit estimates, Kim 2009)**

	(1)	(2)	(3)
age	-0.077(0.008)**	-0.173(0.022)**	-0.119(0.026)**
elem	1.065(0.103)**	2.404(0.301)**	0.880(0.363)**
mid	0.513(0.102)**	1.139(0.248)**	0.420(0.353)
coll	-0.254(0.254)	-0.494(0.569)	0.702(0.826)
univ	-0.113(0.168)	-0.144(0.379)	-0.041(0.554)
divorce	0.029(0.099)	0.021(0.213)	-0.164(0.336)
children	0.338(0.040)**	0.760(0.112)**	0.552(0.142)**
healthy	0.457(0.075)**	1.017(0.188)**	0.061(0.259)
welfare	-0.183(0.270)	-0.373(0.557)	-0.839(0.912)
training	1.140(0.153)**	2.371(0.397)**	0.212(0.496)
emp(-1)	—	—	10.81(1.385)**



## 5. Current Problems and Future Challenges

- Even though the proportion of older people in Korea is relatively low compared to other OECD countries, the speed of aging is so fast that Korea is expected to enter a highly aged economy in near future.
- The labor force participation *per se* does not seem to be a major problem for older Koreans.
- In fact, the labor force participation rate of older Koreans is higher than that of OECD counterparts.



## 5. Current Problems and Future Challenges

- What seems to be the problem is the low quality of their jobs. Jobs for older people are concentrated in self-employment sector which is in Korea considered a low paying sector.
- As a result, despite the high rate of labor force participation, the poverty rate of older Koreans is much higher than the OECD average.



## 5. Current Problems and Future Challenges

- Changes in industry structure also pose serious problems for older workers in Korea.
- A disproportionately high share of older people works in family service and agricultural industries, while a small portion works in industries based on information and communication technology.
- Furthermore, the changes in industry structure has affected the survival rate of older workers in an adverse way.



## 5. Current Problems and Future Challenges

- Under these circumstances, there is a great need for training older people in Korea.
- Since the current older generation in Korea has a low level of education and skills, measures to increase lifelong learning are needed for those people.
- Less demand for and lower survival rates of older workers suggest that assisting older people to find jobs is urgent when they are displaced. For that, we need an effective job placement service for older people.



## 5. Current Problems and Future Challenges

- Finally, a particularly low rate of part-time jobs in Korea can be a problem for older people because older people require more flexible work environments.
- A reduction of working hours and an increase in flexi-jobs may help increase re-employment chances of older people and hence increase their employment rates as well as the quality of life.



## References

Choi, J. H. (2012), How to Improve Job Training Policies for Activating Older Labor Force in Korea, KRIVET.

Kim, W. Y. (2009), Labor Market Turnovers and Training of Older Female Workers, Second Symposium on Korean Longitudinal Survey of Women and Families, Korean Women's Development Institute.

Lee, C. H. (2012), Changing Industrial Structure and Employment of Older Workers, Korean Journal of Labor Economics.

Murphy, K. and Katz, L. (1992), Changes in Relative Wages, 1963-1987: Supply and Demand Factors, Quarterly Journal of Economics.

OECD (2012), Pensions Outlook.

OECD (2011), Factbook.

OECD (2011), Pensions at a Glance.

OECD (2009), Pensions at a Glance.