

The impact on labor market when Japan's baby boomers retire and need long-term care

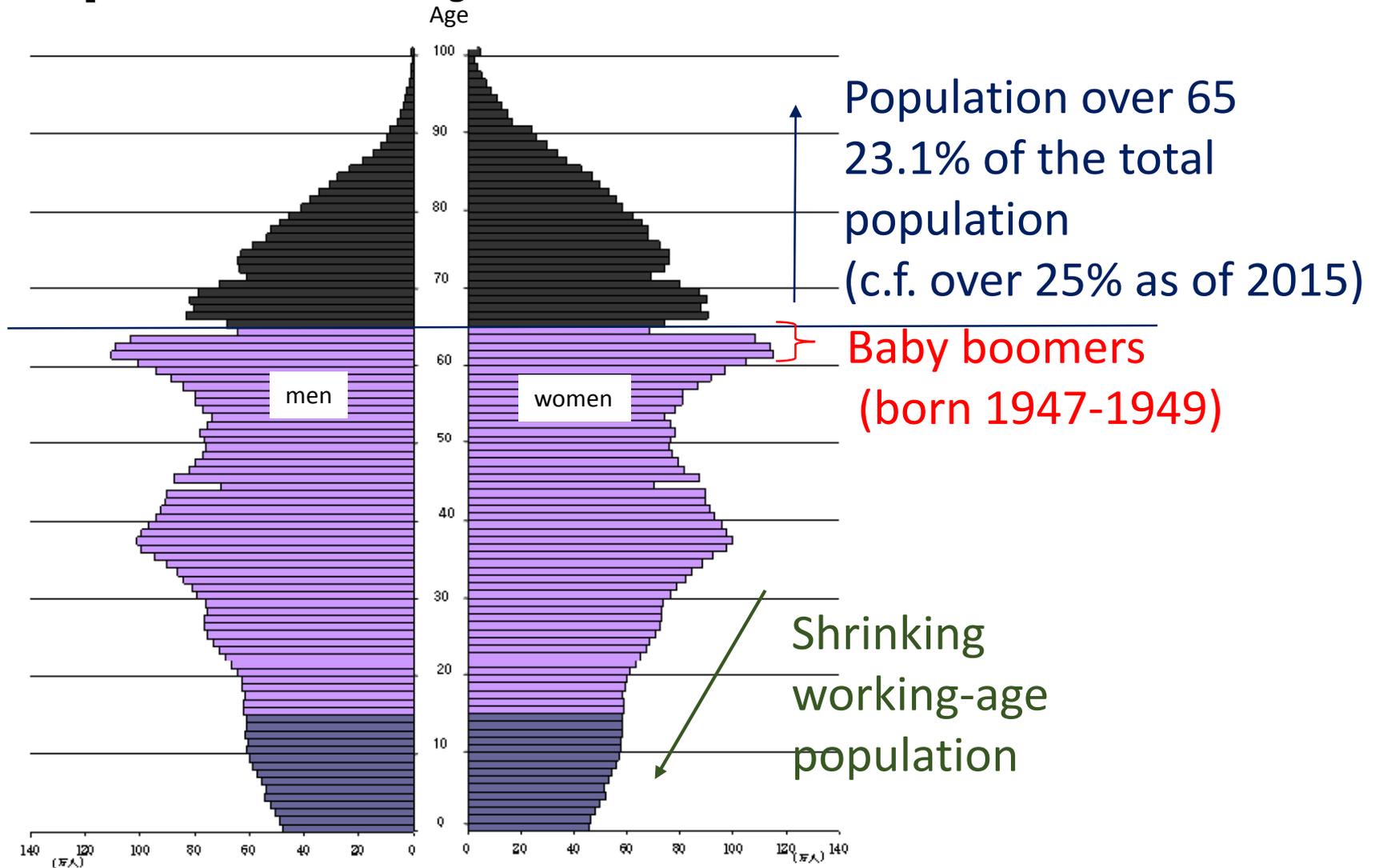
Ayako Kondo

The University of Tokyo, TCER and IZA

Outline

1. Basic facts about population composition and labor supply of elderly in Japan
2. Legislative reforms in the 2000s
 - Pension reforms
 - Elderly Employment Stabilization Law
3. Impact of “retirement” of baby boomers
 - Increase in the number of workers in their 60s
 - Earnings of men in their 60s
 - Substitution effect for younger workers?
4. Next stage: the impact of long-term care needs of the baby boomers?

Population Pyramid (as of 2010)

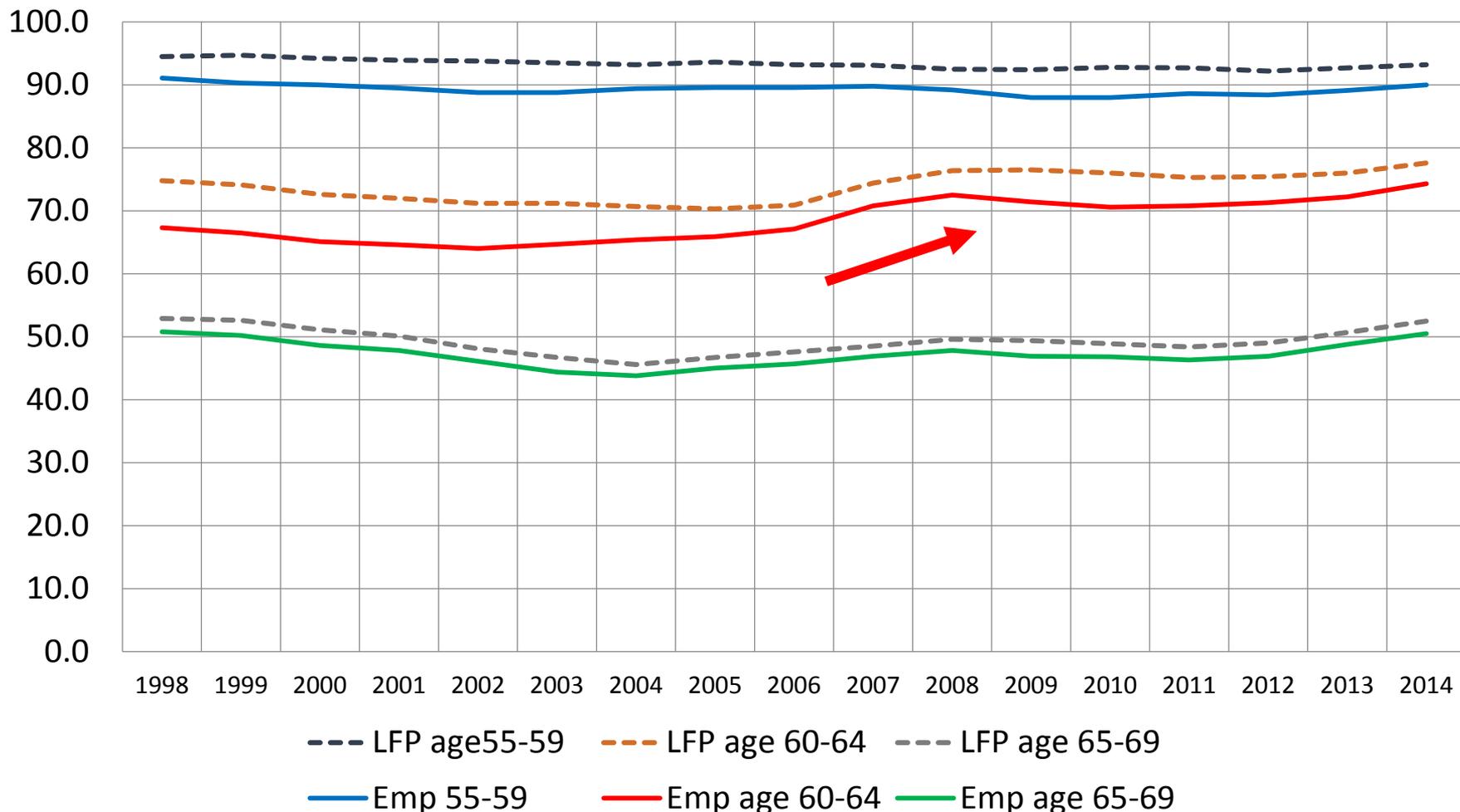


Employment rates of elderly, selected OECD countries (as of 2011)

	Male age 60-64	Male age 65-	Female age 60-64	Female age 65-
Japan	70.9	27.6	44.2	13.1
US	54.7	21.3	47.2	13.1
UK	55.1	11.9	34.2	6.3
Germany	52.2	6.6	36.3	3.1
France	20.4	2.8	17.4	1.4
Italy	29.5	5.6	12.8	1.3
Sweden	68.4	15.7	58.5	8.0
Korea	69.6	39.6	41.3	21.4

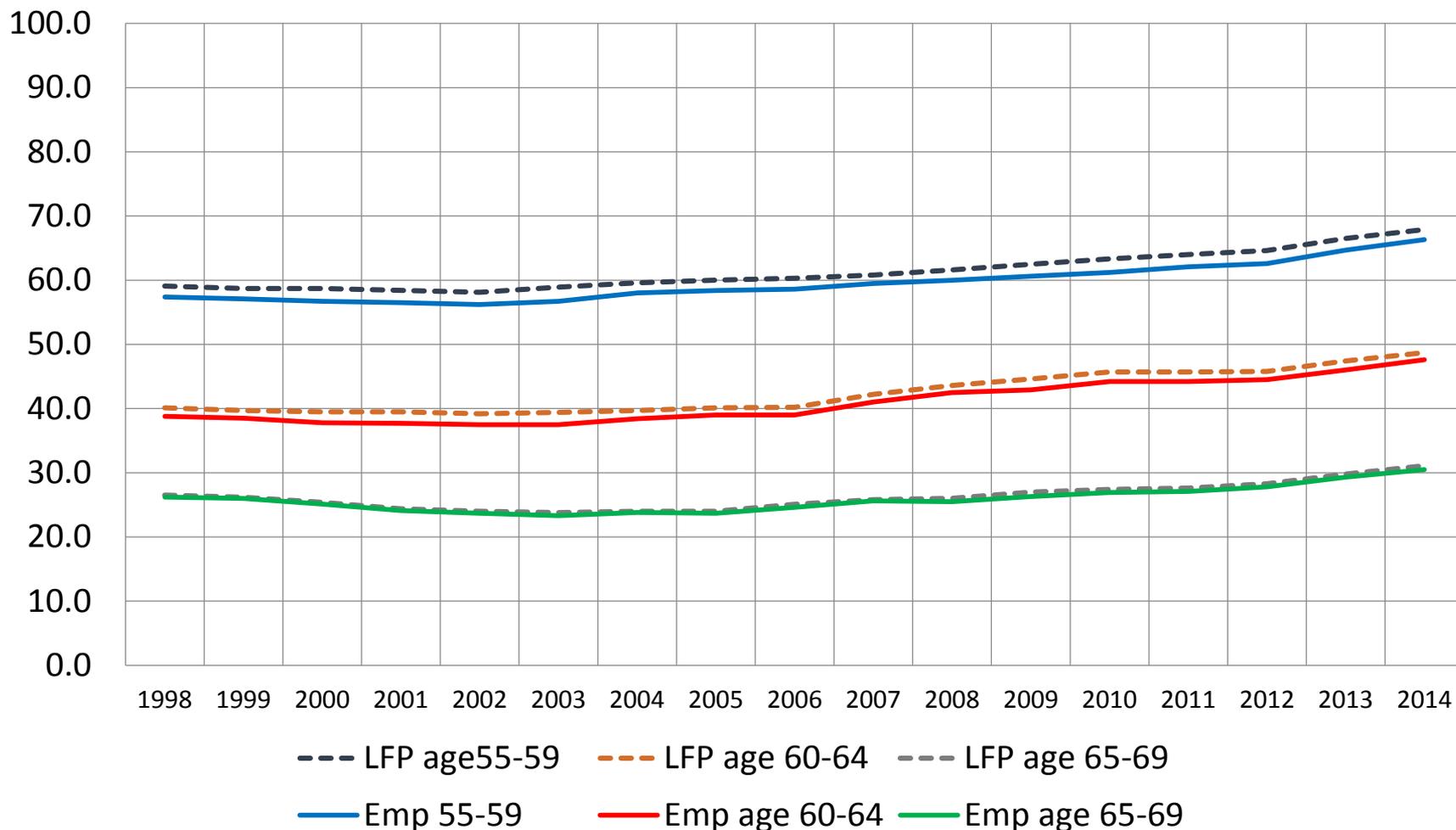
Source: OECD Database

Labor force participation rate (LFP) and employment to population rate (Emp) by age: (1) Men



Source: Labour Force Survey

Labor force participation rate (LFP) and employment to population rate (Emp) by age: (2) Women



Source: Labour Force Survey

Legislative Reforms in the 2000s

- Two major changes
 - Pension reforms
 - Revision of Elderly Employment Stabilization Law (EESL; 高年齢者雇用安定法)
- Pension reforms come first, and then the EESL was revised accordingly
- Both reforms mainly affected men in their early 60s
 - Target was regular employees reaching 60, the mandatory retirement age
 - Most female workers in these cohorts are non-regular workers
 - Little legislative changes for those older than 65

Pension Reforms in the 2000s

- Both reforms affected people who were employees before retirement
- Gradual rise in the eligibility age
 - Eligibility age for full pension benefit was 60 until 2000 (for those born before March 1941), then gradually rose up to 65.
 - For baby boomers (born in 1947–1949), the eligibility age of the basic part (about 60,000 yen/month) was rising, while that of the proportional part (proportional to past earnings) remained as 60.
- Reform in the earnings test of Employees Pension
 - The amount of monthly pension benefit is reduced as the recipient's earnings increase => discourage labor supply
 - The reform in 2005 intended to encourage labor supply by abolishing a part of this penalty

EESL revision in 2006

- The Elderly Employment Stabilization Law
- Before 2006 revision
 - The EESL prohibited to set mandatory retirement age younger than 60
 - Until 2001, eligibility age for full pension benefit was also 60 => most people can work until they can start to receive full pension benefit
 - But, since 2001, people can no longer receive full pension benefit right after mandatory retirement
- The revision in 2006 intended to fill this gap between mandatory retirement and pension eligibility age
- The revised EESL mandated employers to “institute a system to continue employment” up to the pension eligibility age

“institute a system to continue employment”

- The employers have to offer job opportunities for continued employment until the age specified by the law.
- Not equal to raising the mandatory retirement age
 - Raising the mandatory retirement age means that the employer continues to hire the worker on the same contract.
- “Continued employment” in the EESL does not rule out
 - Mandatory retirement (= the termination of regular employment contract) at age 60 accompanied with re-employment as a non-regular staff with much lower wages.
 - offering financial incentive to retire earlier by setting higher severance pay bonus conditional on early retirement
- This kind of continued employment after the mandatory “retirement” was quite common even before the EESL revision

Timings of policy changes by cohort

Cohort born	Age until which employers are legally obliged to continue employment	Eligibility age for full pension benefits
1940	60	60
1941	60	61
1942	60	61
1943	60	62
1944	60	62
1945	60	63
1946	63	63
1947	64	64
1948	64	64
1949	65	65

Pension Reform 2001-

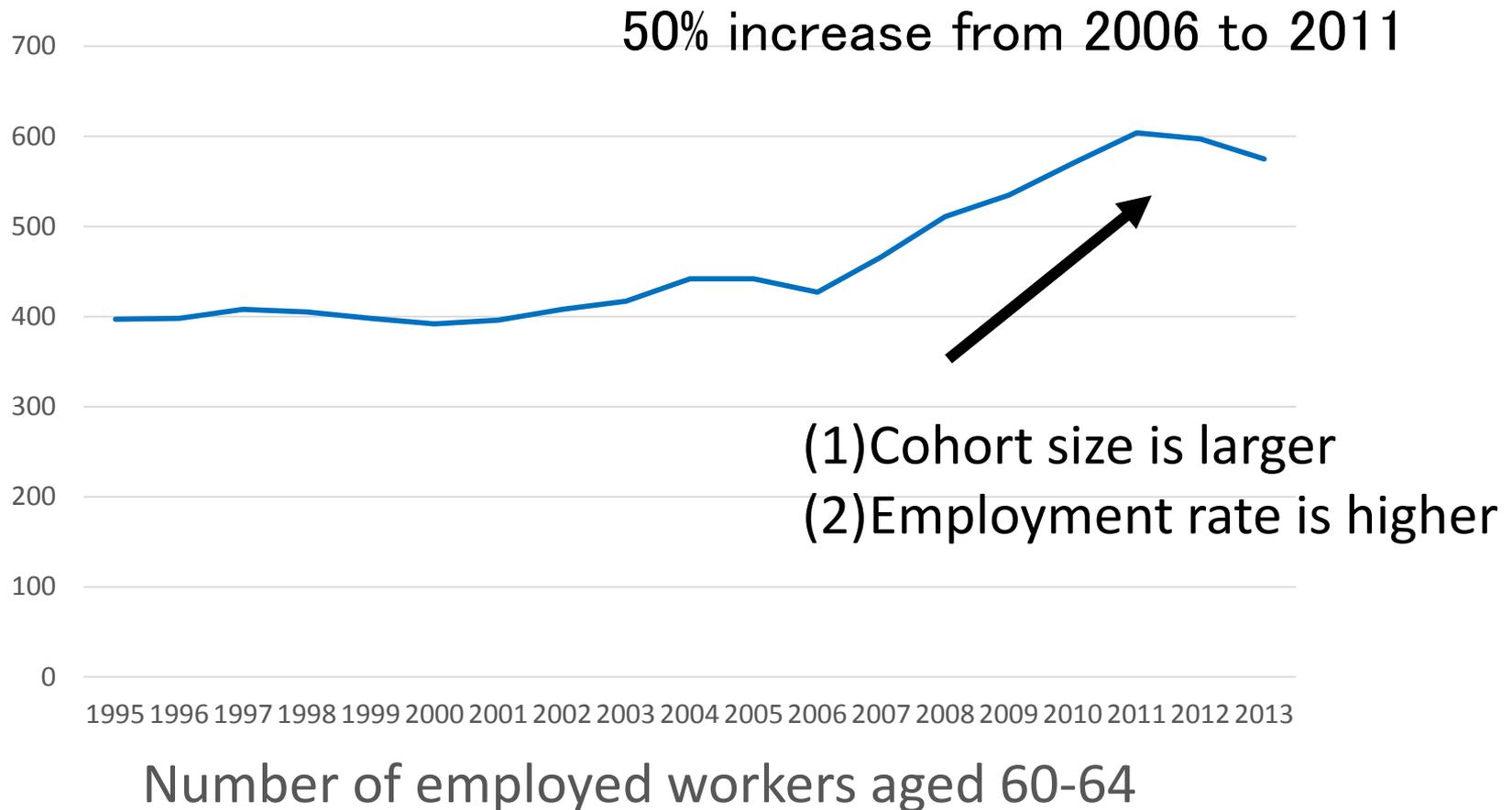
EESL revision 2006

The baby boomers were affected both changes.

Empirical evidence of the effect of these reforms on elderly employment

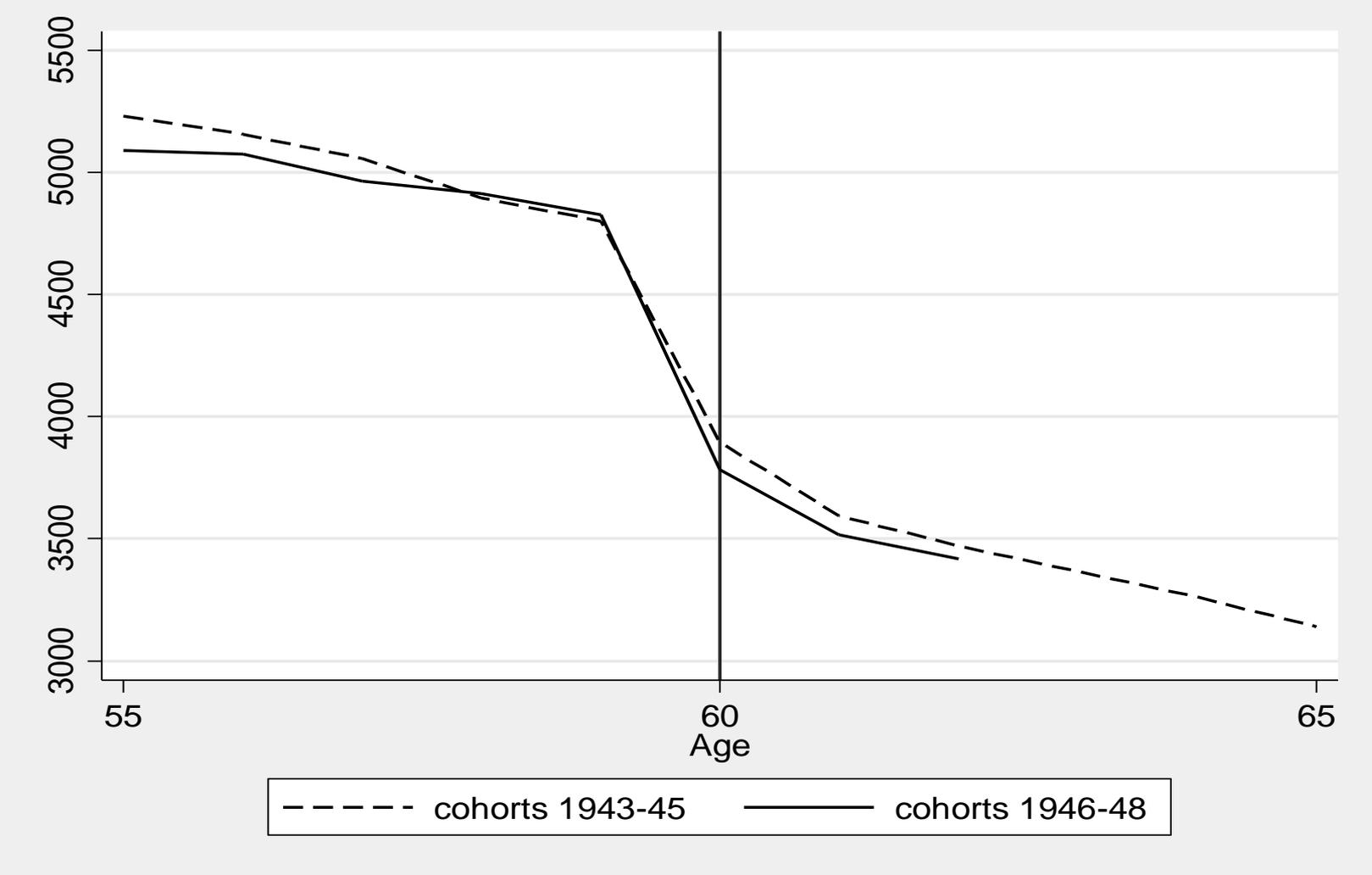
- The earnings test reform affect labor supply of men: Abe (2001), Oishi and Oshio (2000)
 - Evidence from the previous reforms in 1989 and 1994.
- The effect of the rise in eligibility age is not clear
 - There seems to be some positive effect, though not robust (Kondo and Shigeoka 2016, Ishii and Kurosawa 2009)
- EESL: Kondo and Shigeoka (2016) has found
 - The EESL revision in 2006 actually increased the employment rate of men in their early 60s.
 - The effect is concentrated on employees at large-sized firms, as expected.
 - Potential complementarity between pension reform and the revised EESL

Increase in the number of workers in their 60s



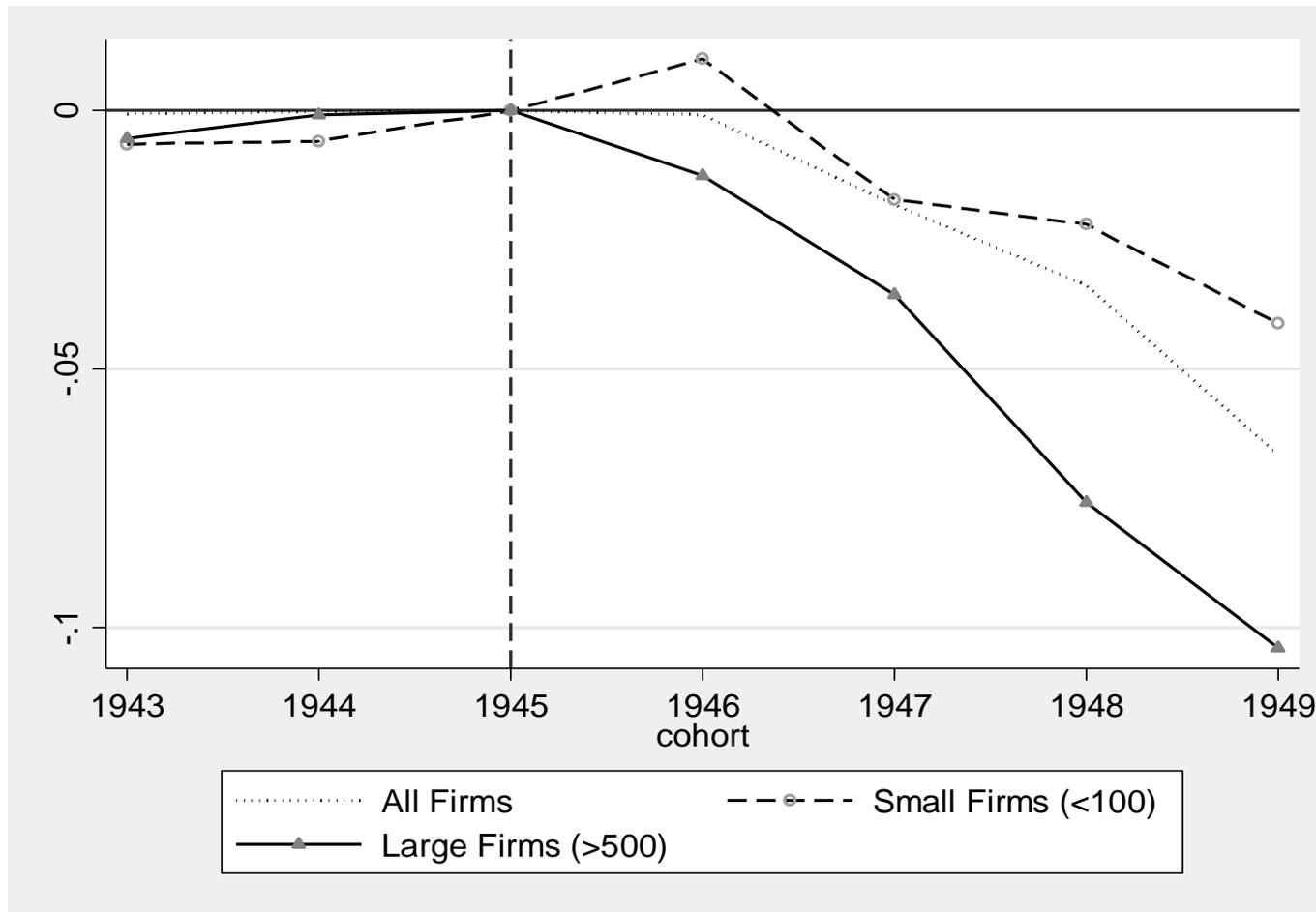
Source: Labour Force Survey

Earnings profile of age 55–65, by cohort



Kondo (2016a) Figure 3

The estimated drop in earnings at age 60 relative to 1945 cohort, by cohort and firm size



Existing research on the substitution effect for younger workers

- No direct, clear evidence yet.
 - Lack of firm level panel data.
- Suggestive evidence against substitution between hiring of new school graduates and re-employment of elderly workers
 - Establishment level DID: Kondo (2016a)
 - Establishment level cross section: Nagano (2014)
 - Aggregate statistics: Oshio, Shimizutani and Sato Oishi (2010)
- But middle aged female part-timers might have been crowded out (Kondo 2016a)
 - The job content of workers on the continued employment is closer to female part-timers than to young regular workers

Impact of “retirement” of baby boomers

- They did not retire at age 60, the prevailing mandatory retirement age. They stayed in the labor force, mostly on “continued employment”.
- As the labor supply increased, wages fell
- Effect for younger worker’s employment is limited probably because
 - Adjustment was done through lower wage rate of old workers
 - Young regular workers cannot be substituted by older workers
 - (This is just a speculation) working age population is shrinking, so employers actually wanted to keep baby boomers

The impact of long-term care needs of the baby boomers?

- When the baby boomers reach age 75 in the early 2020s, the demand for long-term care will increase.
- Three major concerns:
 - The burden of informal care may have a negative effect on the labor supply of their children
 - Labor shortage caused by the increased demand for formal care
 - Funding of the long-term care cost under shrinking working age population

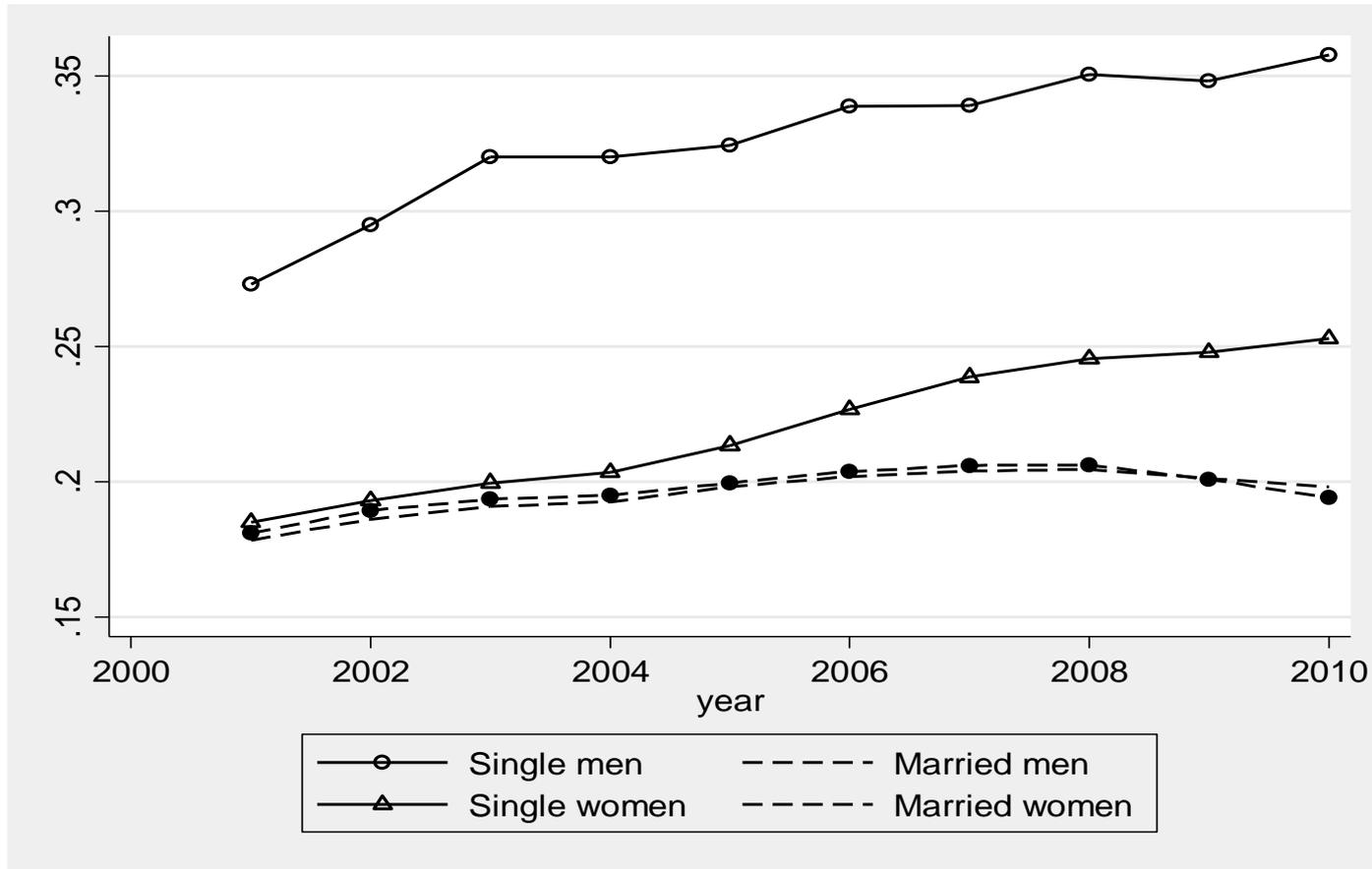
Existing empirical research on informal parental care and children's labor supply

- Despite the popular perception that informal parental care is a major obstacle for labor supply of middle-aged women, currently, the actual impact seems to be limited.
 - No direct effect on female labor supply after controlling for endogenous selection of caregiver (Oshio&Usui 2016)
 - No evidence that increased capacity of formal care encourage labor supply of those living with elderly over 75 (Kondo 2016b)
- This is probably because informal care is provided mainly by daughter or daughter-in-law who are not the breadwinner
 - Their labor supply would be low even without the need for informal care.

Concerns for future generation

- Compared to older cohorts, baby boomers' children are characterized as follows.
 - Their marriage rate is lower
 - They have fewer siblings
 - More women continue working full-time
- ⇒ Baby boomers are less likely to have a married daughter(-in-law) who can take parental care fulltime
- More people will face trade-off between work for living and parental care
- Particularly serious problem for unmarried children living with old parents
 - And they are increasing

Changes in ratio of cohabitation with a person older than 75 by gender and marital status among those aged 45–60



Note:
About 19% of men and 18% of women are single in this sample.

Source: Kondo (2016) Figure 5.

References

- Abe, Yukiko. 2001. “Employees’ Pension Benefits and the Labor Supply of Older Japanese Workers, 1980s–1990s.” In *Aging Issues in the United States and Japan*, Seiritsu Ogura, Toshiaki Tachibanaki, and David Wise (eds). The University of Chicago Press, pp. 273–305.
- Ishii, Kayoko, and Masako Kurosawa. 2009. “Pension Reform and the Labor Supply Effect for Elderly Males.” *The Japanese Journal of Labour Studies*, 589: 43–64 (*in Japanese*).
- Kondo, Ayako, 2016a. Effects of increased elderly employment on other workers’ employment and elderly’ s earnings in Japan. *IZA Journal of Labor Policy*, 5:2.
- Kondo , Ayako, 2016b. “Availability of Long-term Care Facilities and Middle-aged People’ s Labor Supply in Japan” JCER Working Paper AEPR series No.2016-1-4.
- Kondo, Ayako and Hitoshi Shigeoka, 2016. The Effectiveness of Government Intervention to Promote Elderly Employment: Evidence from Elderly Employment Stabilization Law. *Industrial and Labor Relations Review*, forthcoming.
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2341680
- Nagano, Hitoshi, 2014. *Koureisou no Koyo to Hoka no Nenreisou no Koyou – Koyo-doko-chosa Jigyoshohyo Kohyo Data no Bunseki*, The Japanese Journal of Labour Studies, No. 643 (*in Japanese*)
- Oishi, Akiko, and Takashi Oshio. 2000. “Social Security Wealth and Retirement Decision.” *The Japanese Journal of Social Security Policy*, 35(4): 405–419.
- Oshio, Takashi, Satoshi Shimizutani, and Akiko Sato Oishi, 2010. Does Social Security Induce Withdrawal of the Old from the Labor Force and Create Jobs for the Young? The Case of Japan. In Jonathan Gruber and David A. Wise Eds, *Social Security Programs and Retirement around the World: The Relationship to Youth Employment*, University of Chicago Press, pp 217 – 241.