

RIETI-IZA World of Labor Policy Symposium

Reforming Labor Market Institutions to Promote Elderly Employment

Handout



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Relations between Employment Situation and Legislative Reform of Elderly Employment

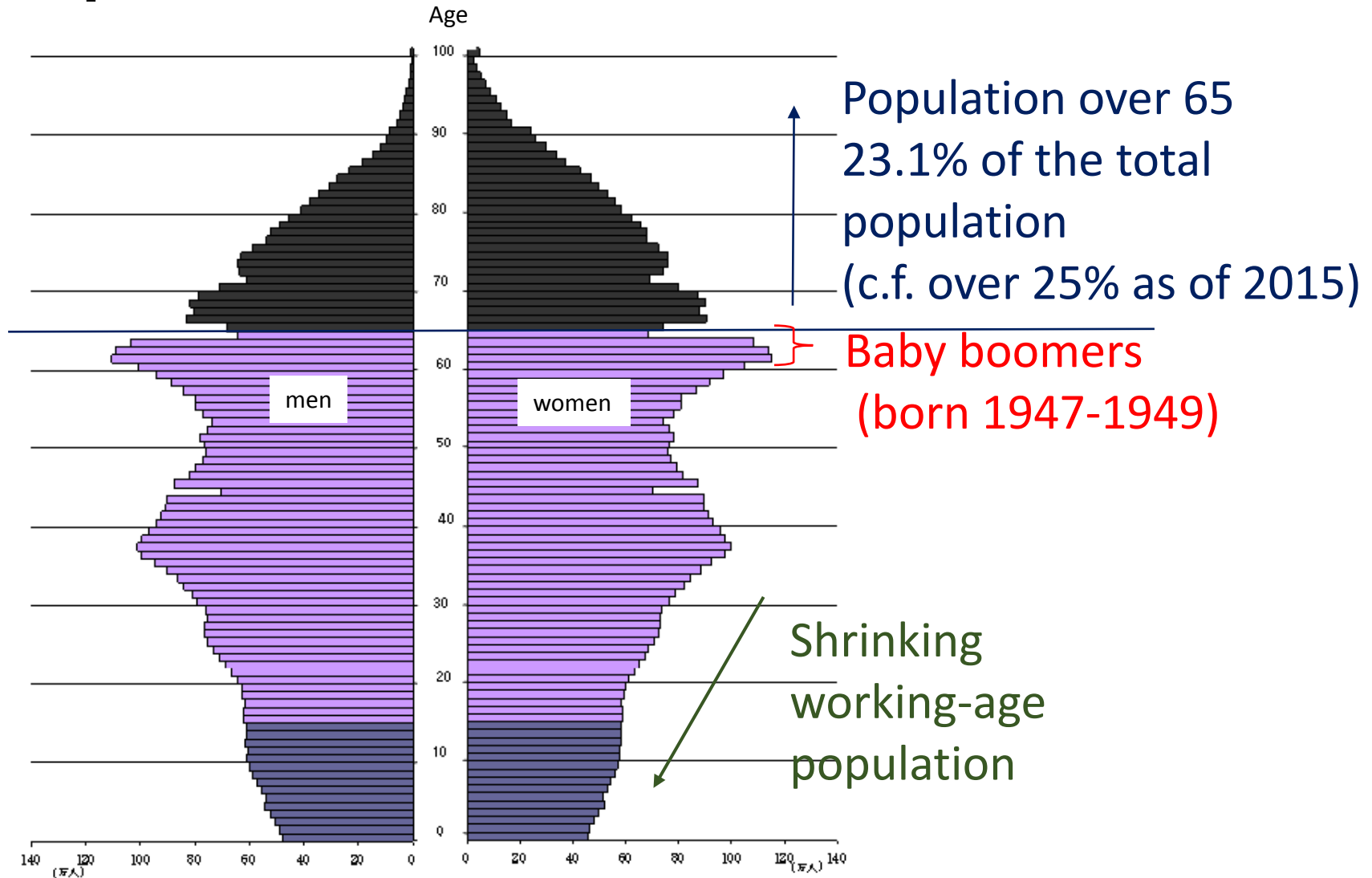
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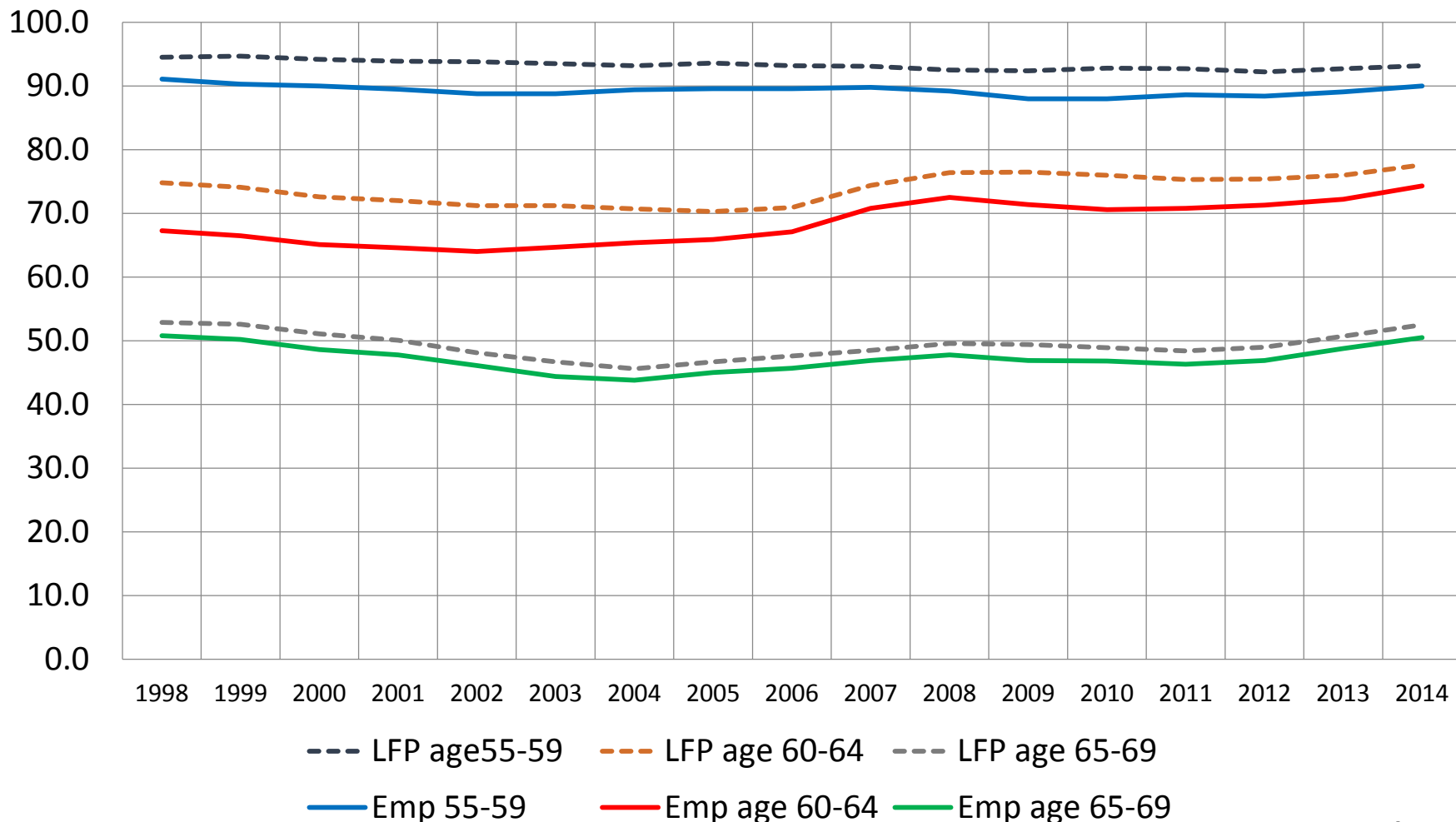
Outline

1. Basic facts about elderly employment in Japan
2. Legislative reforms in the 2000s
 - Pension reforms
 - Elderly Employment Stabilization Law
3. Who were affected by the reforms
4. Preview of existing empirical research in Japan
 - Pension reforms and elderly labor supply
 - Effects of the EESL revision on employment
 - Substitution effect for younger workers
5. What we need to learn

Population Pyramid (as of 2010)

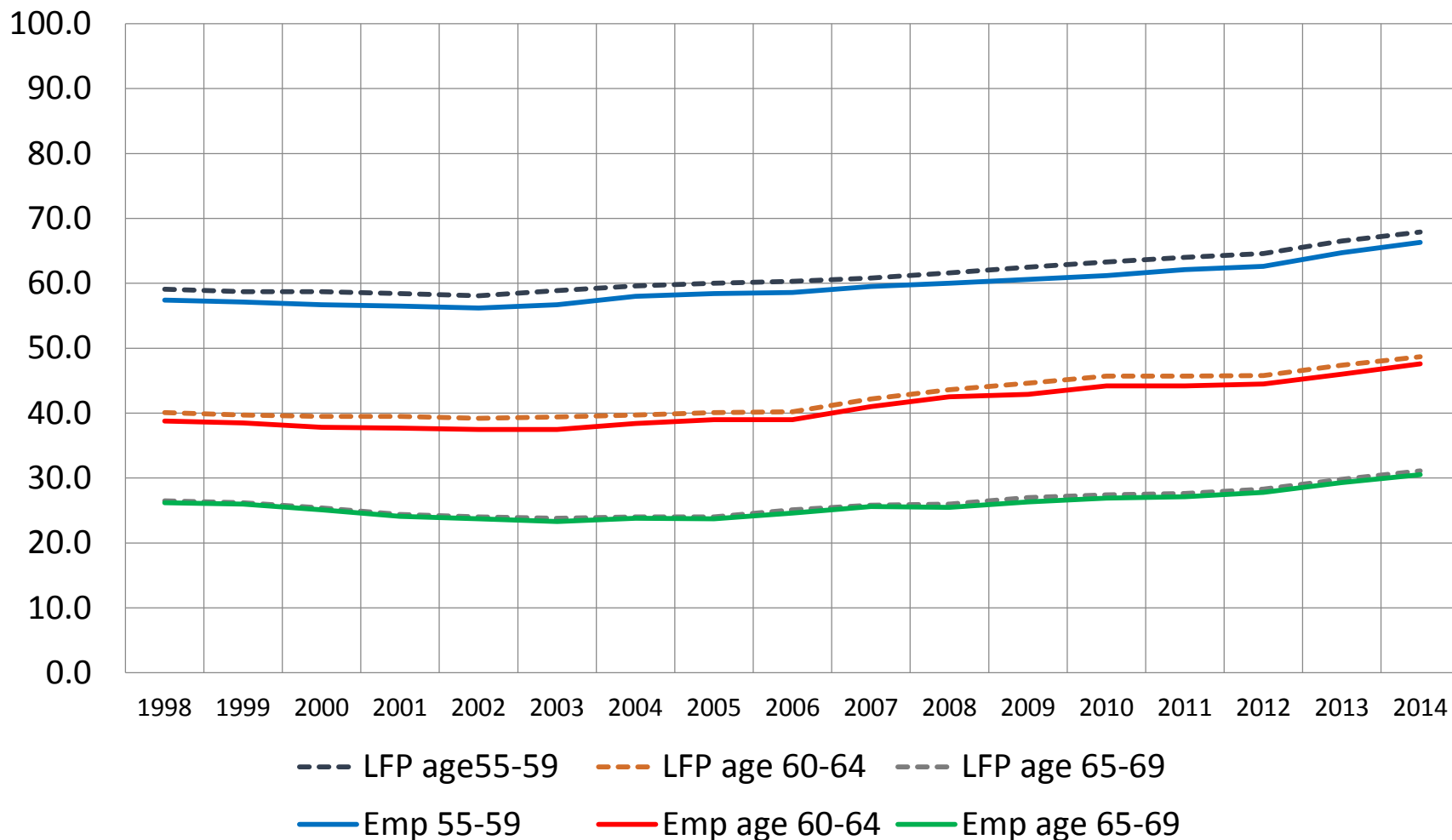


Labor force participation rate (LFP) and employment to population rate (Emp) by age: (1) Men



Source: Labour Force Survey

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



Source: Labour Force Survey

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

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

Public Pension System in Japan

- National Pension (国民年金): basic pension for everyone, eligibility age is 65. About ¥60,000 per month. No changes except for minor changes in the amount of contributions and benefits.
- Employees' Pension (厚生年金) for private company employees and Mutual Aid Pension (共済年金) for public sector employees
 - Basic part (定額部分): equivalent to National Pension except that eligibility age was 60 until 2000 (for those born before March 1941), then gradually rose up to 65 (for those born after April 1949)
 - Proportional part (報酬比例部分): additional benefit proportional to earnings in the past, eligibility age remained 60 until 2013.

Reform in the earnings test of Employee's Pension (在職老齡年金制度)

- The amount of monthly pension benefit is reduced as the recipient's earnings increase => discourage labor supply of workers older than pension eligible age
- Until April 2005,
 - All recipients with positive earnings suffered a 20% reduction in their pension benefits, regardless of their earnings.
 - In addition, if pension benefit + earnings > ¥280,000/month, $(\text{pension benefit} + \text{earnings} - 280,000)/2$ is subtracted from the pension benefit. Equivalent to 50% tax on extra earnings.
 - if pension benefit + earnings > ¥460,000, $(\text{pension benefit} + \text{earnings} - 460,000)$ is subtracted from the pension benefit.
- In April 2005, to weaken this discouragement effect, the 20% reduction of all with positive earnings was abolished.
 - This change was applied not cohort by cohort, but everyone above 60 since April 2005

EESL revision in 2006

- EESL: intended to protect employment of older workers.
- Before 2006 revision
 - The EESL was 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
1938	60	60
1939	60	60
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

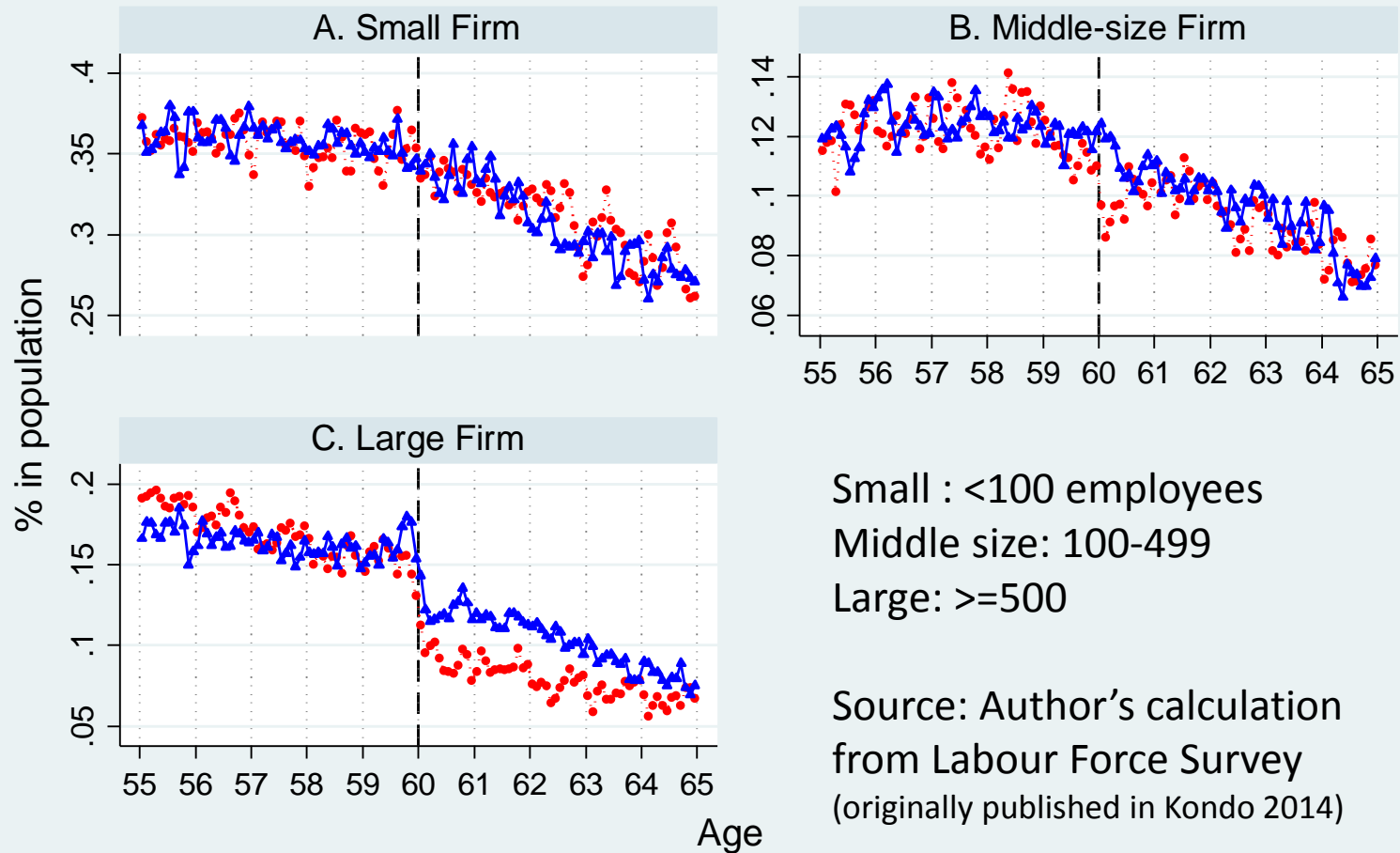
Who were affected by the reforms

- Only salaried workers should be affected
 - Pension eligibility age for people who were self-employed is 65, so no gradual rise.
 - The EESL is also irrelevant to the self employed.
- About 75% of men aged 59 are salaried workers.
 - 15% are self-employed, 10% are not employed.
- Women are less likely to be affected because
 - Most of them are non-regular workers who were not protected by the EESL
 - Pension eligibility age of female workers in private sector raised 5 years later
- Among male salaried workers, employees in large firms are affected more (continued to next slide)

Difference in the effects across firms size

- Employees in large firms are affected more by the policy changes, especially the EESL revision, because
 - Mandatory retirement policy is likely to be implemented more strictly in large firms
 - Many workers in smaller firms continued to work after age 60 even before the policy reforms

Population ratio of employees at large firms and small firms (men, age 55–65)



.....●..... cohort: 1943-1945 —▲— cohort: 1946-1948

Graphs by categ

Differences in retirement policy between small and large establishments, before and after EESL revision

	2004 (before revision)		2008 (after revision)	
	small	large	small	large
Mandatory retirement age at 65 or older (incl. no mandatory retirement)	38.2%	1.7%	40.7%	2.5%
% workers who continued to work after 60 (among establishments with formal rule of reemployment /employment extension)	77.1%	27.4%	82.2%	53.5%

Source: Survey on Employment Conditions of Older Persons (高年齢者就業実態調査)

Small: establishments with 5-29 employees, large: establishments with 100- employees.

Existing research (1) pension and elderly labor supply

- The earnings test reform affect labor supply of men near the threshold: 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 2015, Ishii and Kurosawa 2009)
- Combined with the revised EESL, the pension reform may have stronger effect (Kondo and Shigeoka 2015)

Existing research (2) effect of the EESL revision on employment

- Kondo and Shigoka (2015) 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: the impact of an increase in pension eligibility age on elderly employment is slightly larger after the EESL revision
- However, the magnitude of the effect is not large to explain the entire increase in employment of men aged 60–64 during the 2000s

Table 4: The effect of EESL revision on the population ratio of salaried workers at firms of different sizes (Difference-in-Difference 1945 vs 1946)

	(1)	(2)	(3)	(4)
	Salaried workers (total)	Employed at Large-sized firm	Employed at Medium-sized firm	Employed at Small-sized firm
1946 cohort	0.024***	0.019	0.005	-0.004
× age 60 dummy	[0.006]	[0.011]	[0.009]	[0.007]
1946 cohort	0.032***	0.019*	-0.002	0.010
× age 61 dummy	[0.007]	[0.010]	[0.008]	[0.006]
1946 cohort	0.016	0.016*	0.004	-0.008
× age 62 dummy	[0.013]	[0.009]	[0.009]	[0.011]
1946 cohort	-0.010	0.002	-0.005	-0.010
× age 63 dummy	[0.012]	[0.010]	[0.007]	[0.009]
1946 cohort	-0.009	0.010	0.001	-0.025***
× age 64 dummy	[0.008]	[0.009]	[0.008]	[0.007]
Sample size	98,554	98,554	98,554	98,554
R2	0.050	0.022	0.006	0.007

Note: Standard errors with clustering for year×cohort group are presented in brackets. *, **, *** indicate coefficients are statistically significantly different from 0 at the 10%, 5%, 1% level, respectively. Salaried workers do not include the self-employed. The size of firms is as follows: large-sized firm (500–), medium-sized firm (100–499), and small-sized firm (–99). Control variables omitted from the table include age dummies, cohort dummy, regional unemployment rate, region dummies, and population size of men in the same age and region.

Existing research (3) substitution effect for younger workers

- No direct, clear evidence yet.
 - Lack of firm or establishment level panel data.
- Suggestive evidence against substitution between hiring of new school graduates and re-employment of elderly workers
 - Establishment level DID: Kondo (2015)
 - Establishment level cross section: Nagano (2014)
 - Aggregate statistics: Oshio, Shimizutani and Sato Oishi (2010)
- But there might have been some negative effect for middle aged workers
 - Substitution effect for female part-timers? (Kondo 2015)

What we need to learn

- Effect on female labor supply
 - Changes in employment opportunities of elderly men can affect their spouses' labor supply
 - Also, there may be substitution between re-employed male workers and female part-time workers
 - Promotion of female labor supply is as important as promotion of elderly employment, given the shrinking population and relatively low female labor force participation.
- Impact on firms' productivity/profitability
 - Forcing the firms to keep workers may hurt its labor productivity.
 - If wages do not adjust accordingly, it also hurts profitability.
 - But wages of elderly workers are actually decreasing

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