

Household Production and Consumption over the Life Cycle in Japan: NTA and NTTA summaries by gender from 1999 to 2014



Setsuya FUKUDA / Itaru SATO

(National Institute of Population and Social Security Research)

Kazuyuki TERADA / Takahiro TORIYABE / Hidehiko ICHIMURA / Naohiro OGAWA

(The University of Tokyo)

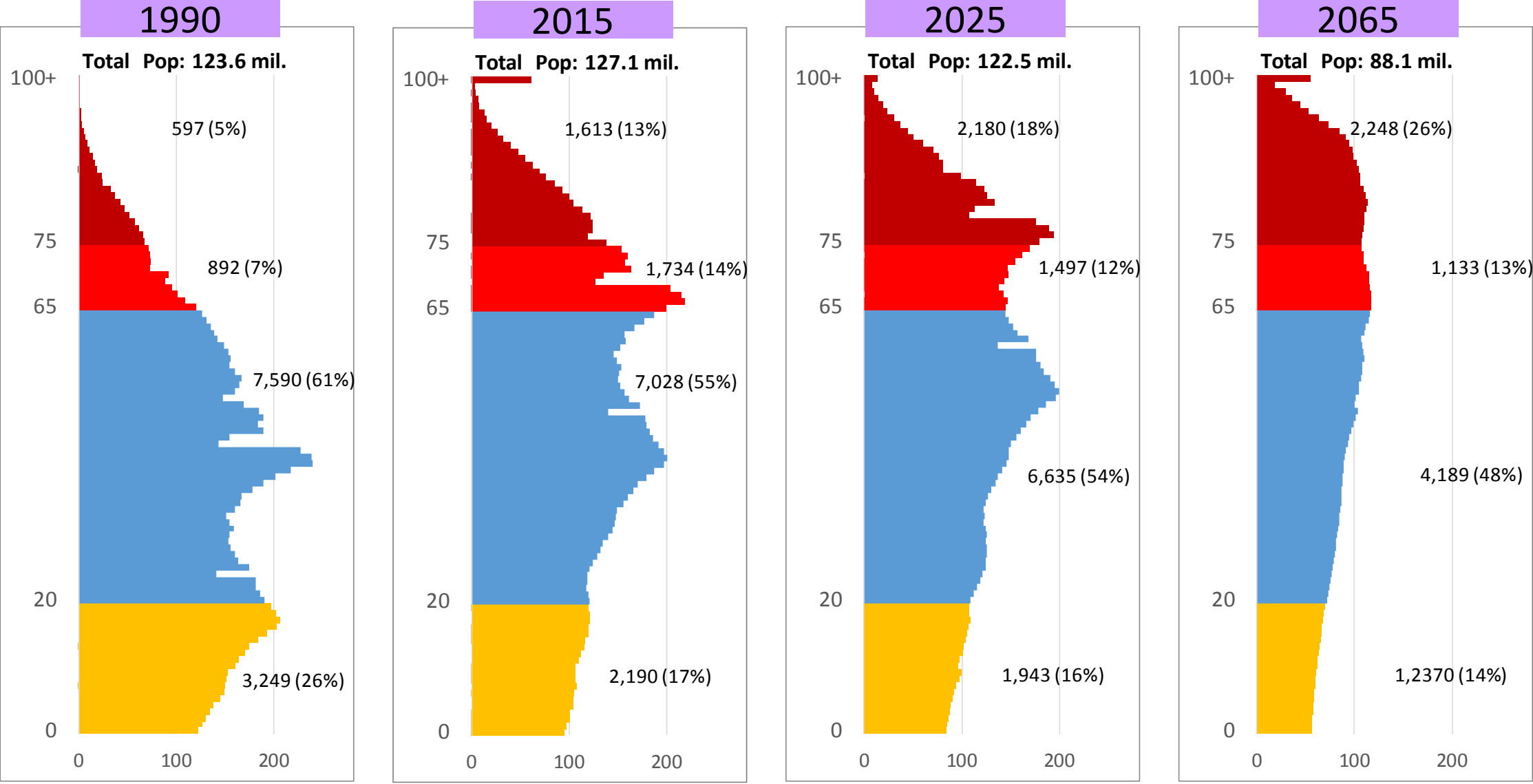
Rikiya Matsukura (Nihon University)

1. Aim of the paper

1. Updating Japanese NTA in terms of data and method
2. Providing descriptive figures of generational economy in comparison with gender during the 2000s in Japan
3. Assessing various policy reform using the NTA / NTTA life cycle accounts

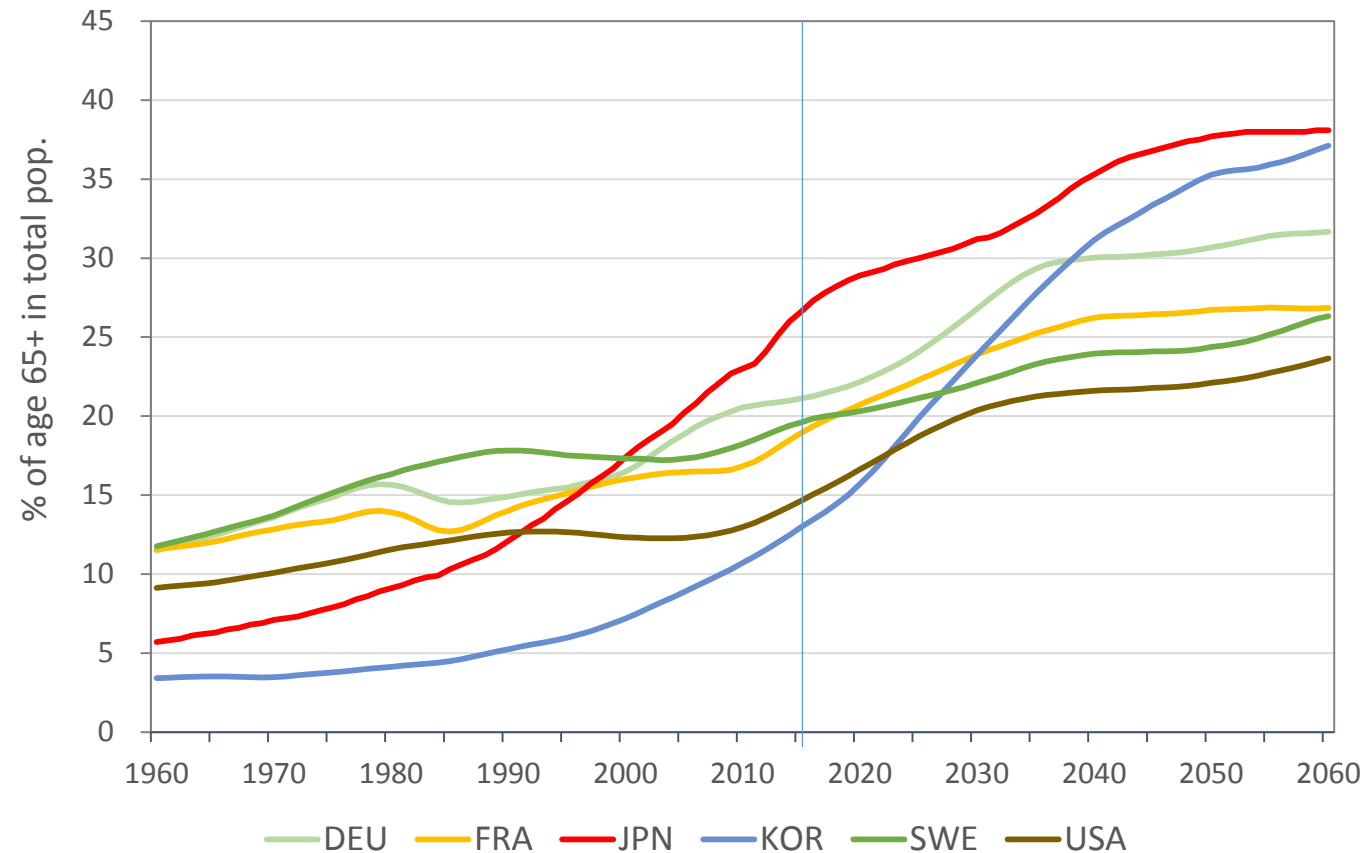
2. Background

2-1. Population aging and decline



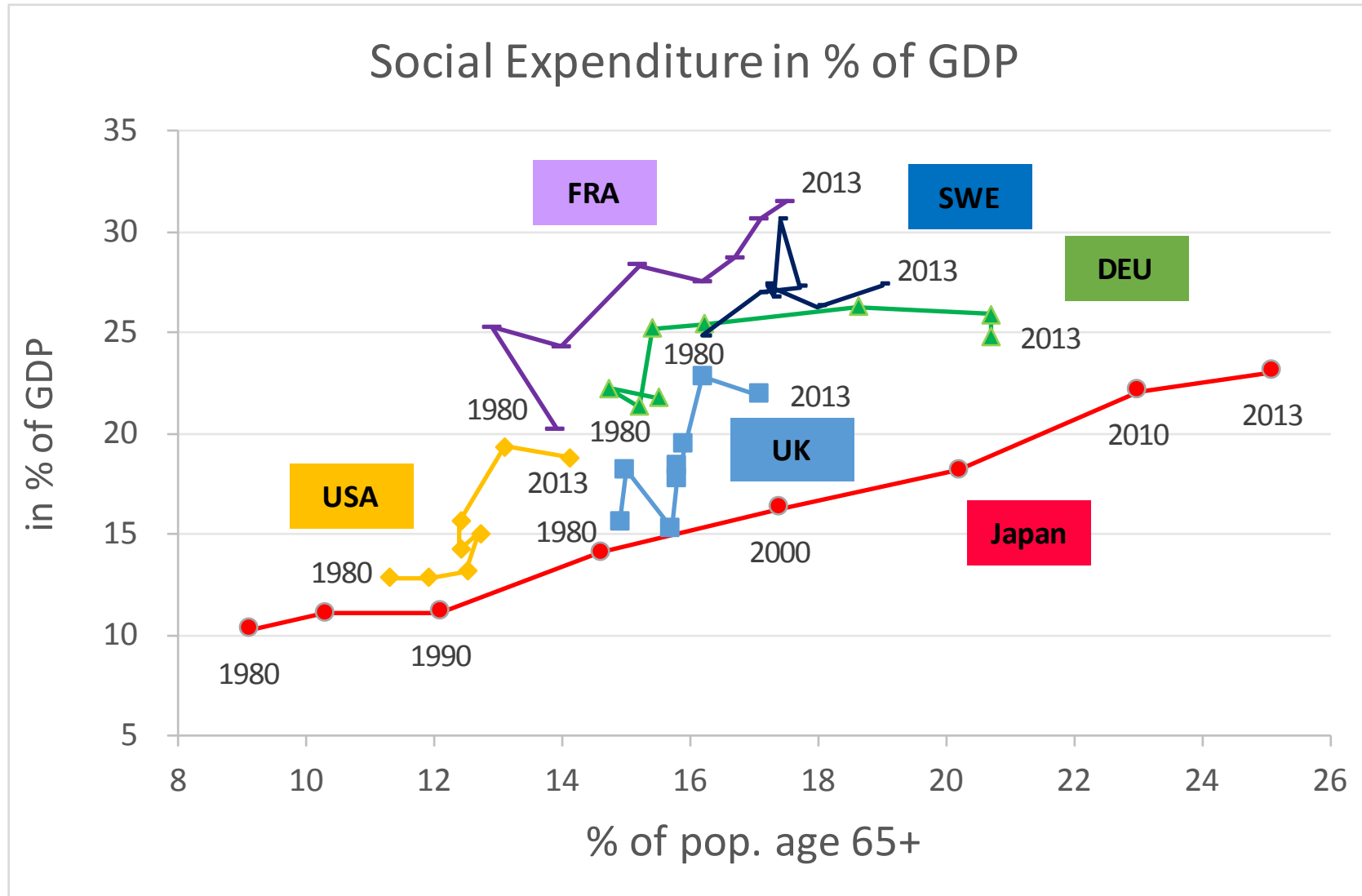
Sources: Statistics Bureau, *Population Census of Japan* and NIPSSR (2017) *Population Projection of Japan: 2016-2065*.

2-2. Prospects of population aging



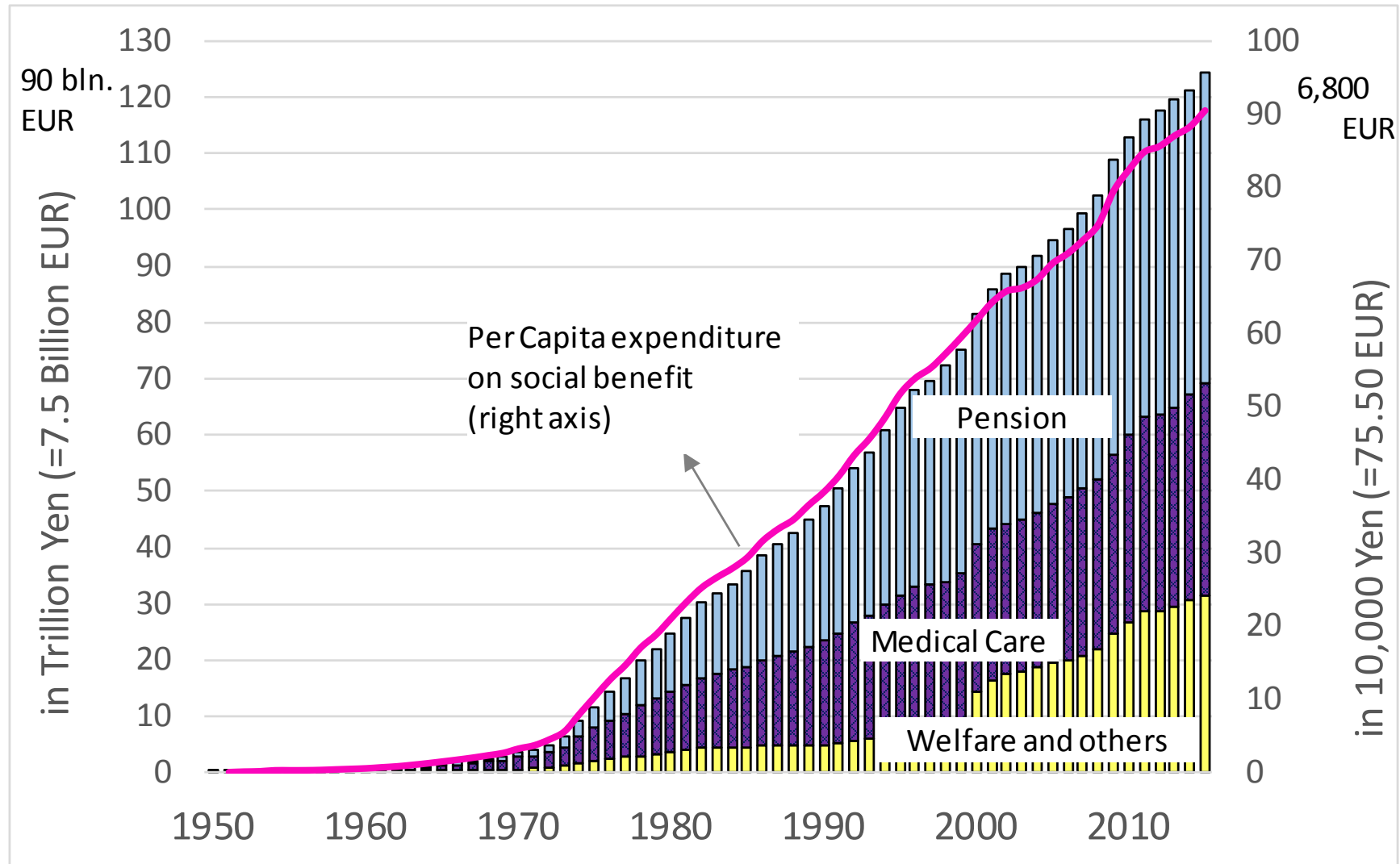
Sources: World Bank *World Development Indicators* for 1960-2015. UN (2017) *The World Population Prospects, The 2017 Revision* for 2016-2060. NIPSSR (2017) *Population Projection for Japan: 2016-2065* for Japan.

2-3. Population aging and social expenditure



Sources: OECD (2016): OECD Social Expenditure Database, OECD Health Statistics 2016.

2-4. Social security expenditure in Japan



Sources: NIPSSR (2017) *Financial Statistics of Social Security in Japan 2015*.

3. Policy Reforms during the 2000s

- (Formal childcare: Creating more slots in big cities, but no time-series data)
- Formal education (High school)
- Female employment
- (Long work hours / Dependent spouse privileges in tax, pension and health care: stalled...)
- Elderly care
- (Medical care: various adjustments on the price of medical services)
- (Pension: Increases in pension age and contribution fee)

4. Focus

- Focus 1: 1999 vs 2004

Introduction of the new social insurance for elderly care (2000.4)

- Changes in monetary and physical costs of elderly care in the households and government

- Focus 2: 2009 vs 2014

Introduction of free tuition fee for high school + child allowances (2010.4)

- Changes in monetary costs of education in the household

- Focus 3: 1999 vs 2014

Gradual expansion of policy support for female employment (1999.4 -)

- Changes in gender gaps in paid and unpaid work during the 2000s

5. Data

	Data and Year	Description
NTA <ul style="list-style-type: none"> Private sector Public sector Macro controls 	<p>Family Income and Expenditure Survey (1999, 2004, 2009, 2014)</p> <p>Education</p> <ul style="list-style-type: none"> - Statistical abstract on education, culture, sports, science and technology <p>Health</p> <ul style="list-style-type: none"> - Survey of medical care benefit expenditures, - Estimates of National Medical Care Expenditure <p>Elderly care</p> <ul style="list-style-type: none"> - Annual report on the long-term care insurance <p>SNA2008</p>	<p>Around 60,000 households and 170,000 individuals</p> <p>Statistics from the government reports</p> <p>The specialist replacement method</p>
NTTA <ul style="list-style-type: none"> Time Use Data 	<p>Survey on Time Use and Leisure Activities (1996, 2001, 2006, 2011)</p>	<p>Over 70,000 households and 170,000 individuals</p>

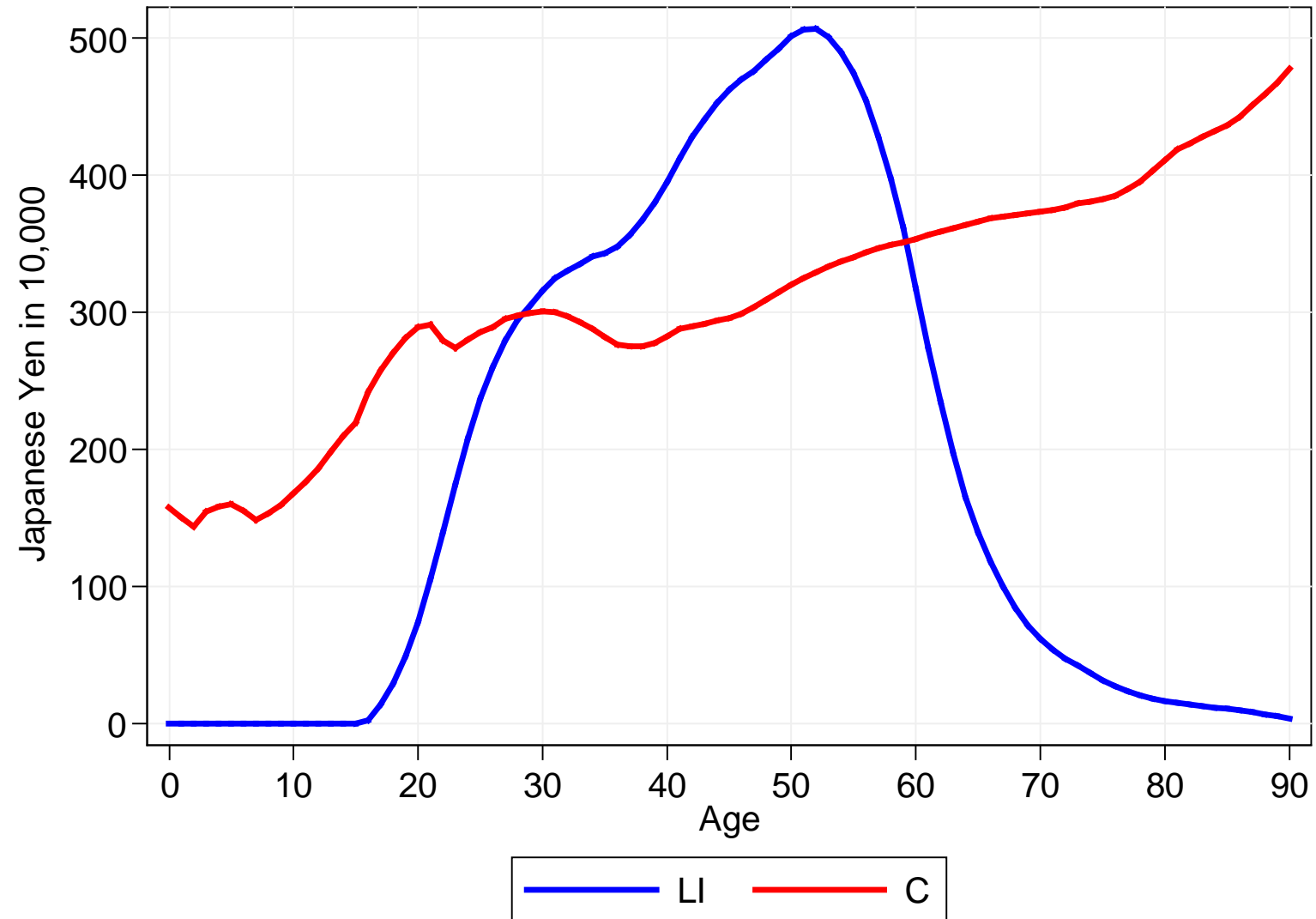
6. Limitation

- Only life cycle accounts
- Ignoring institutionalized population
- Ignoring heterogeneity other than age and sex
- Not final values

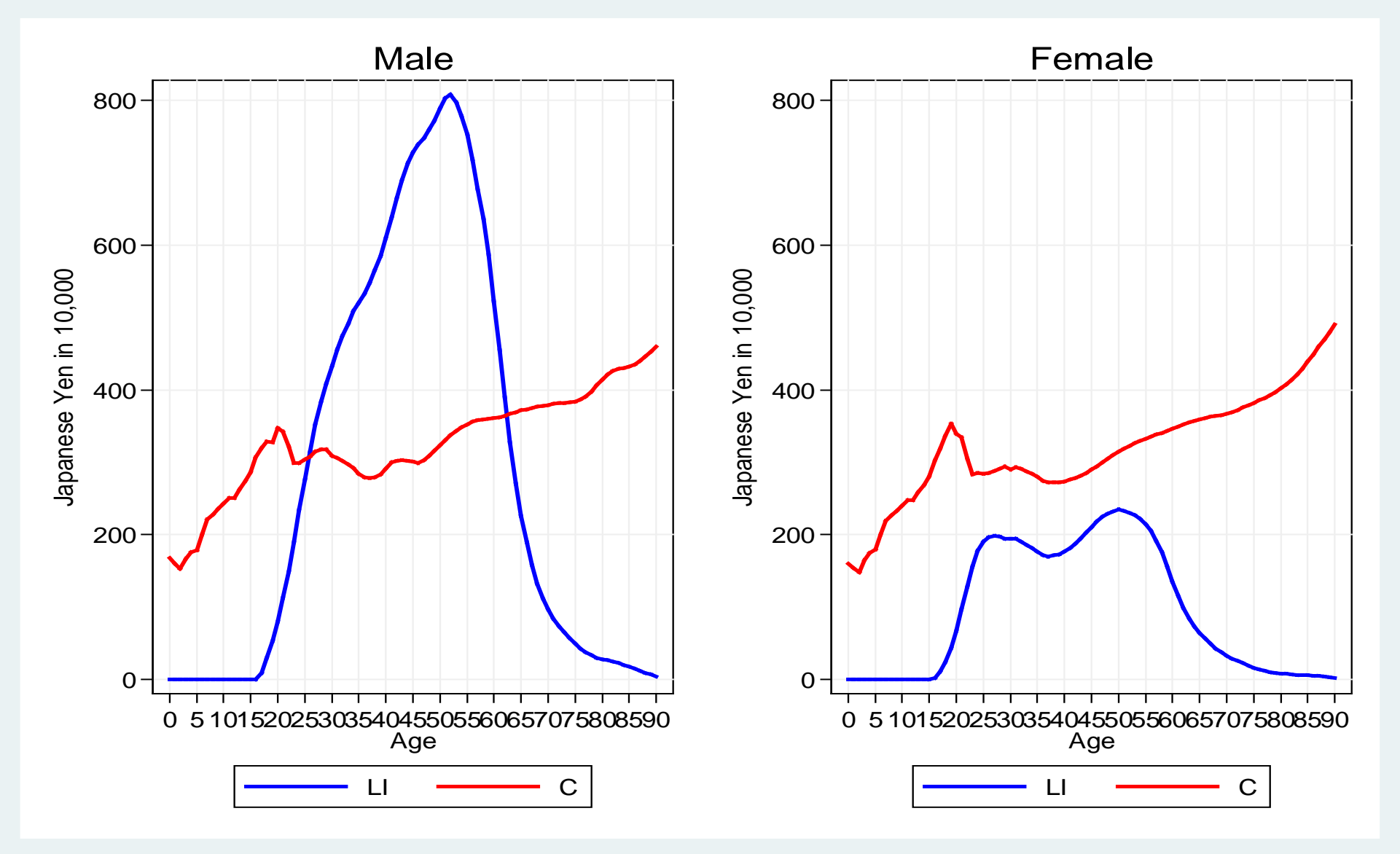
7. NTA / NTTA overview for 2014

7-1. Economic Life Cycle in 2014

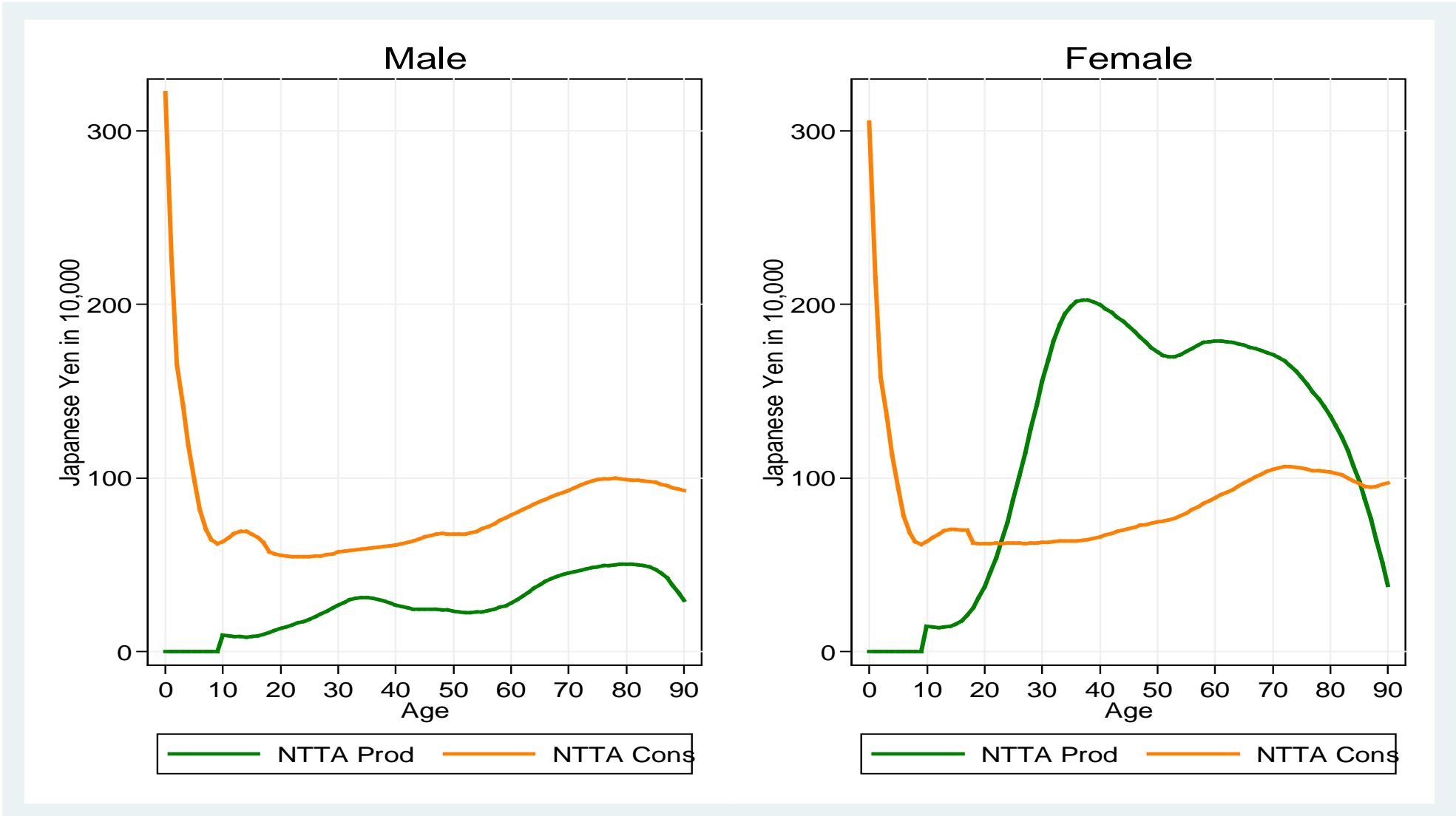
Per Capita value



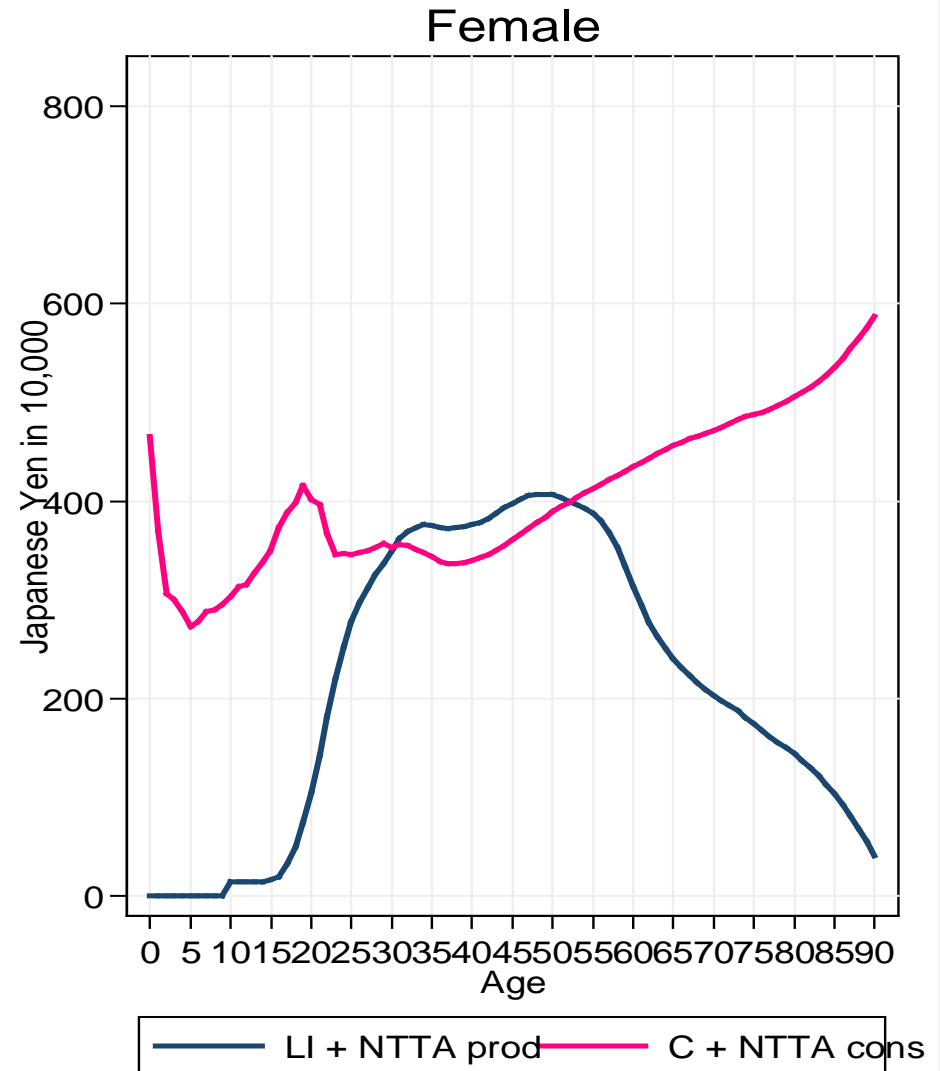
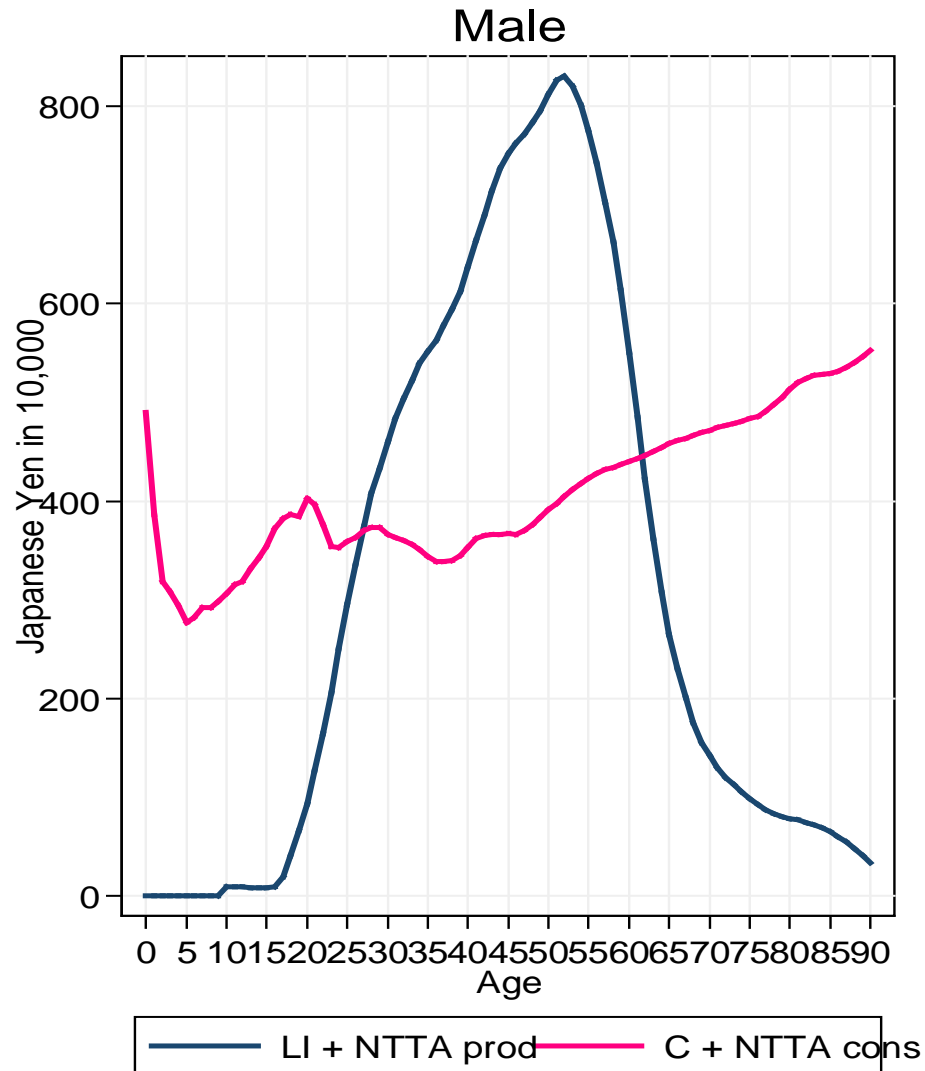
7-2. Economic Life Cycle in 2014 by Sex



7-3. NTTA in 2014 by Sex

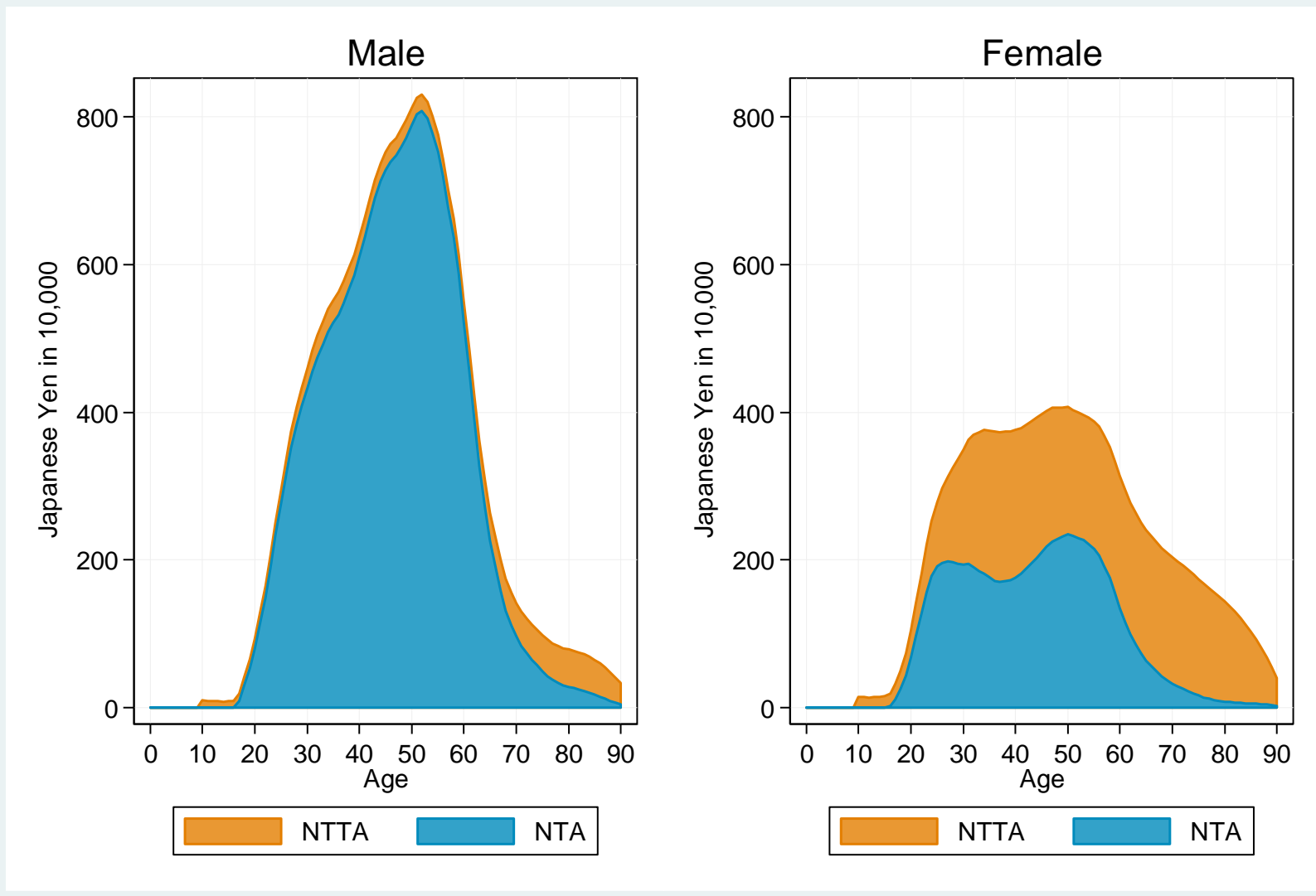


7-4. NTA + NTTA in 2014 by Sex



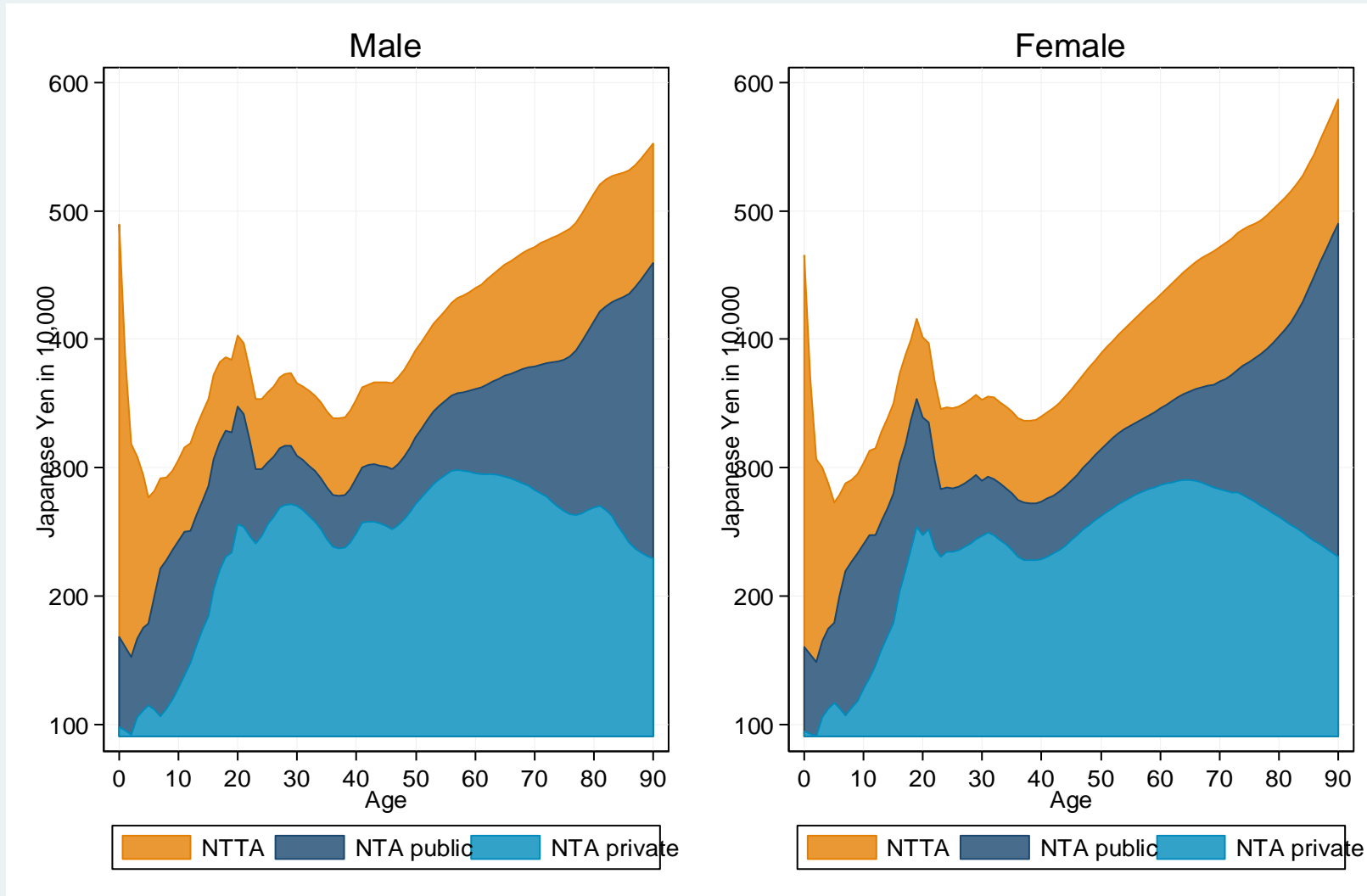
7-5. NTA+NTTA: Production in 2014 by Sex

2014



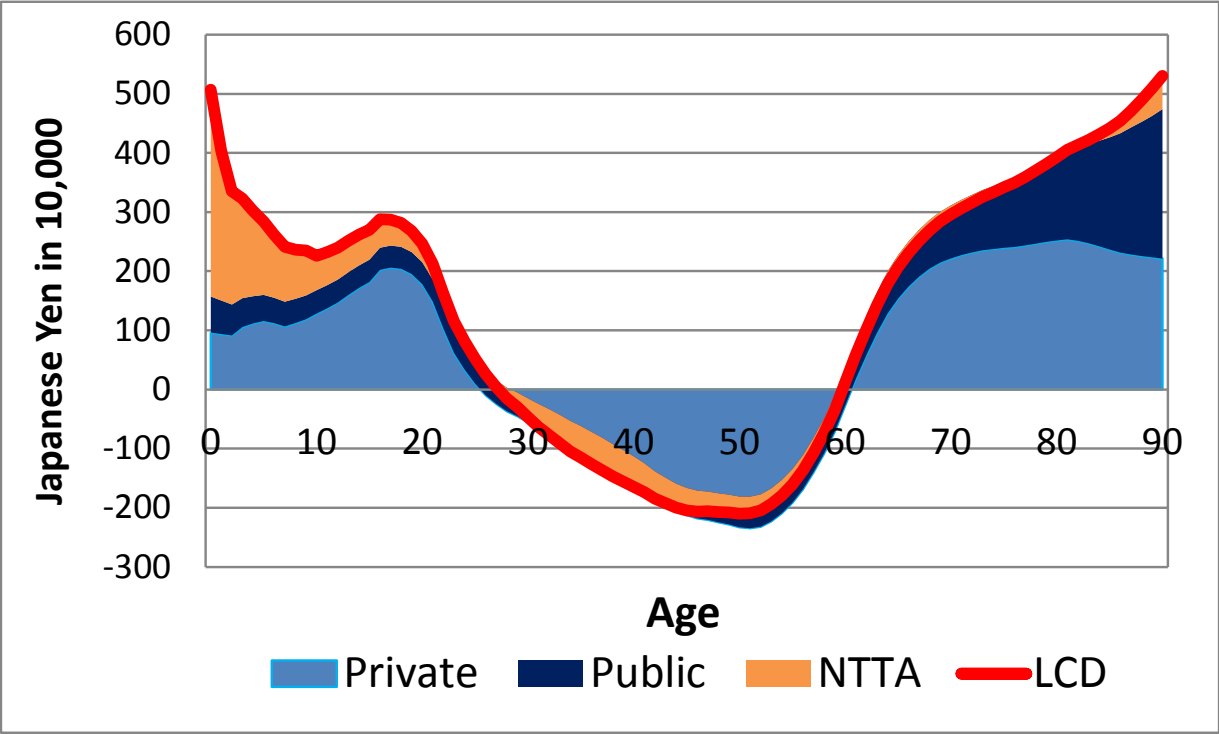
7-6. NTA+NTTA: Consumption in 2014 by Sex

2014

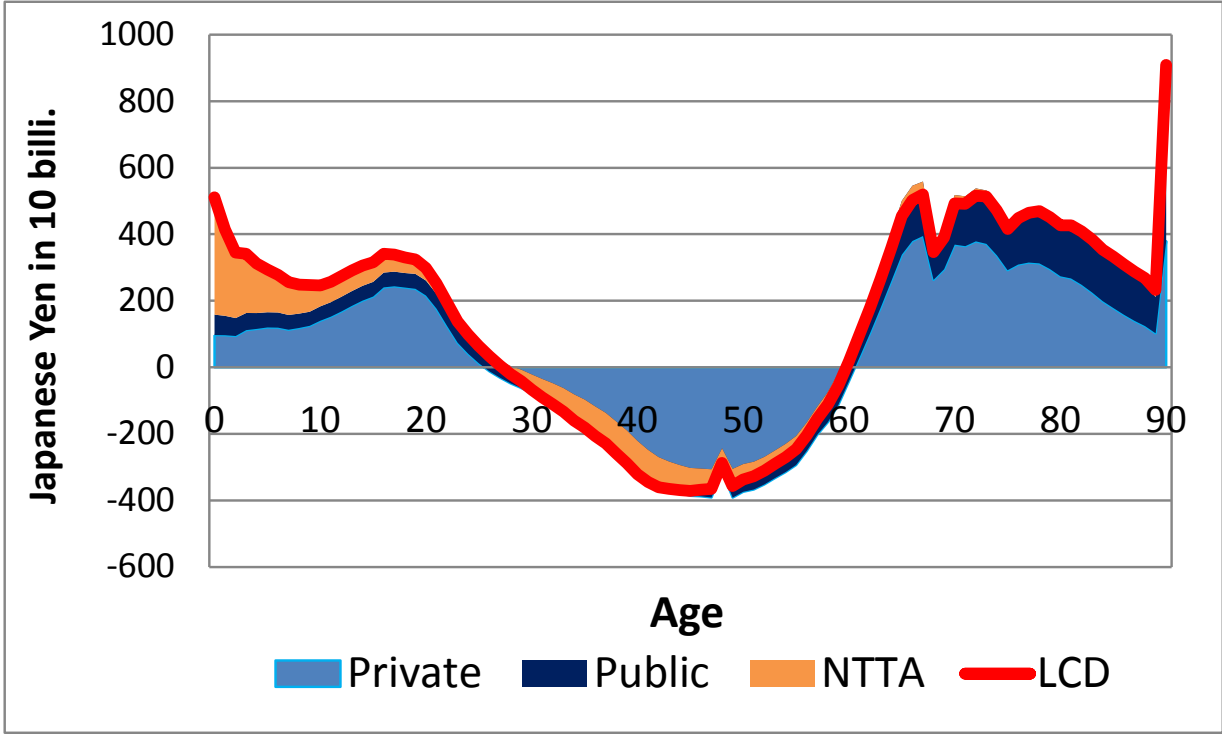


7-7. Life Cycle Deficit in 2014

1. Per Capita

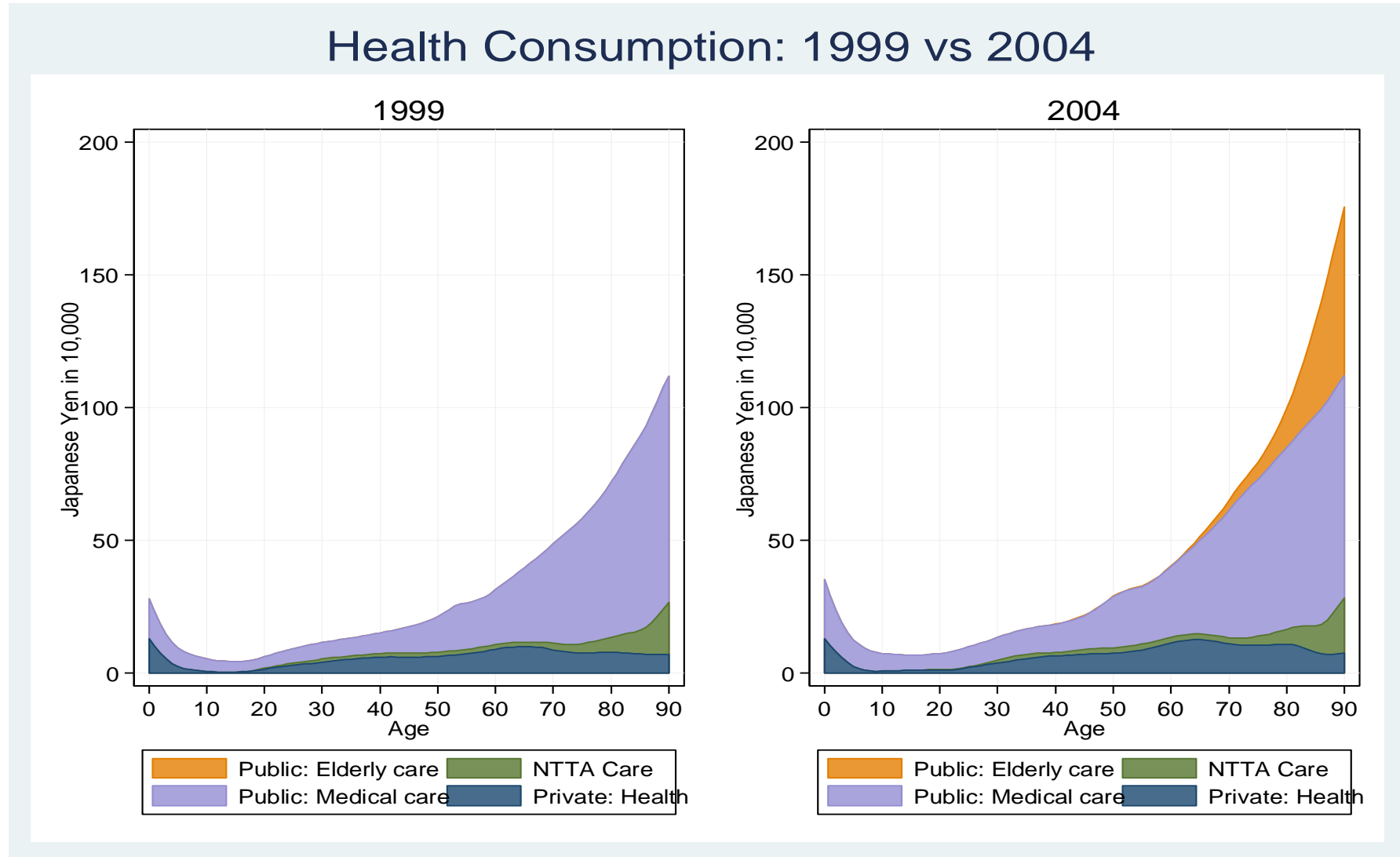


2. Population Aggregate

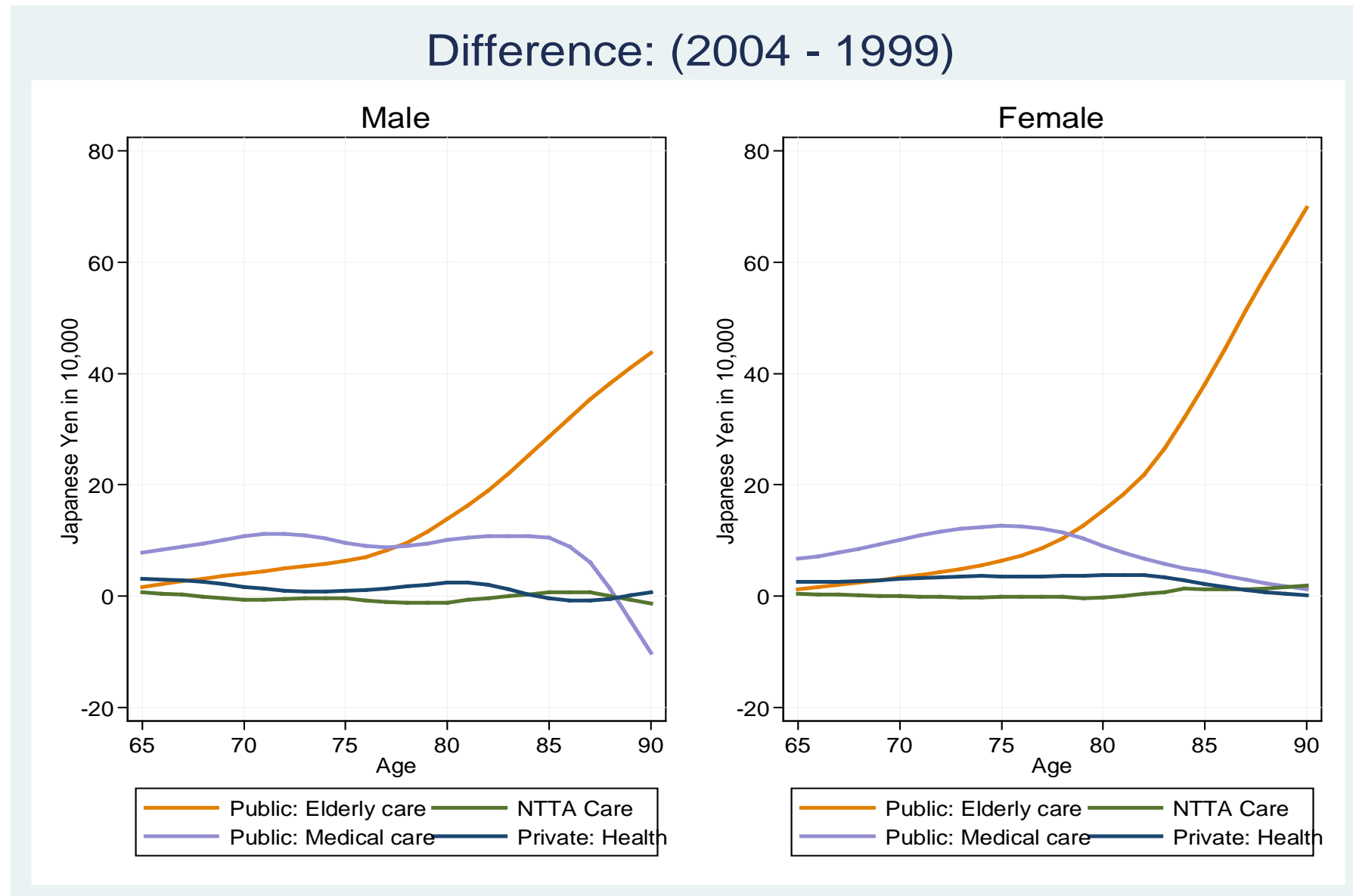


8. Examination of the Focus Points

8-1. Introduction of “the long-term care insurance” (2000.4)

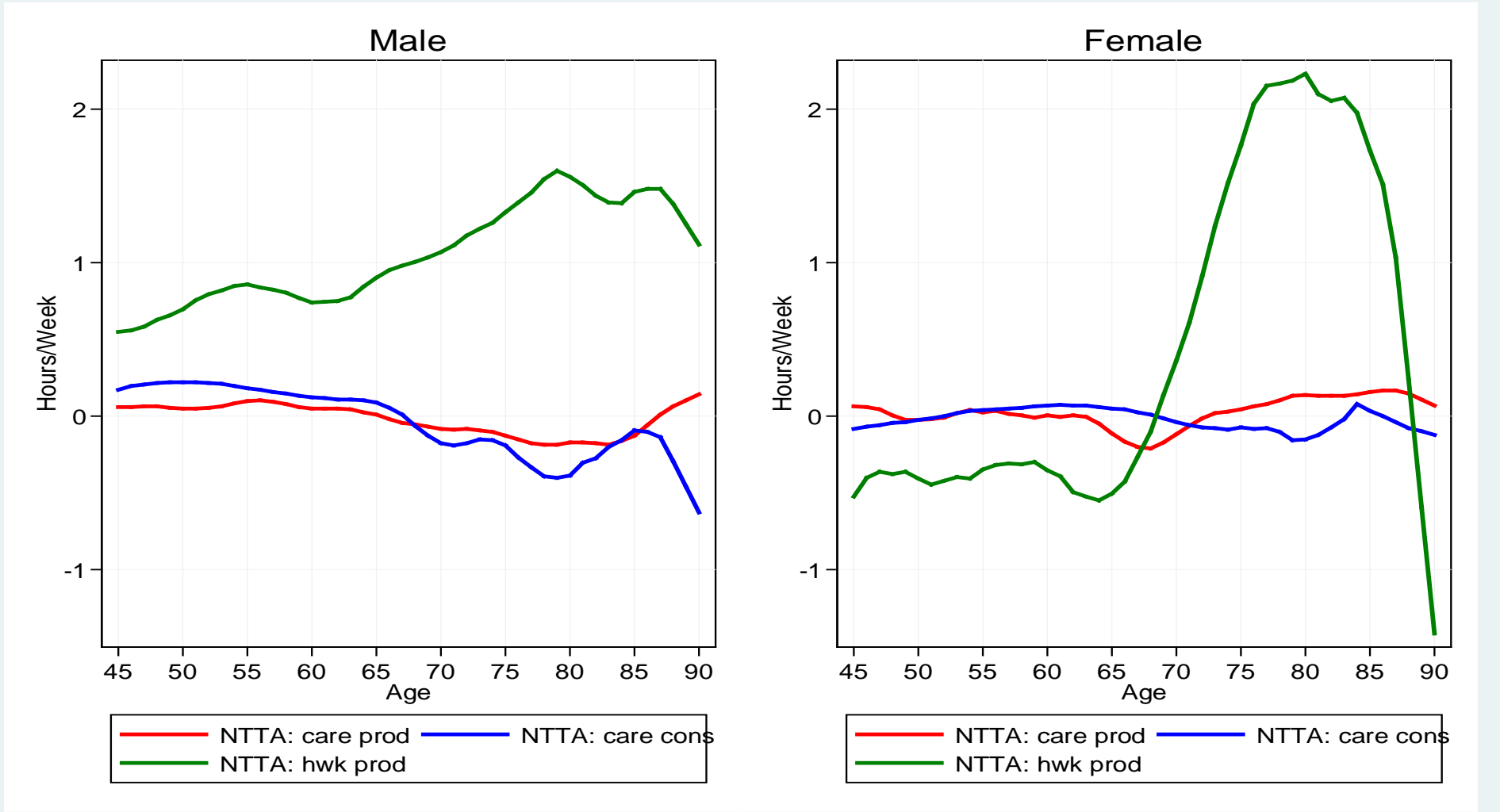


8-2. NTA differences before and after the LT care insurance

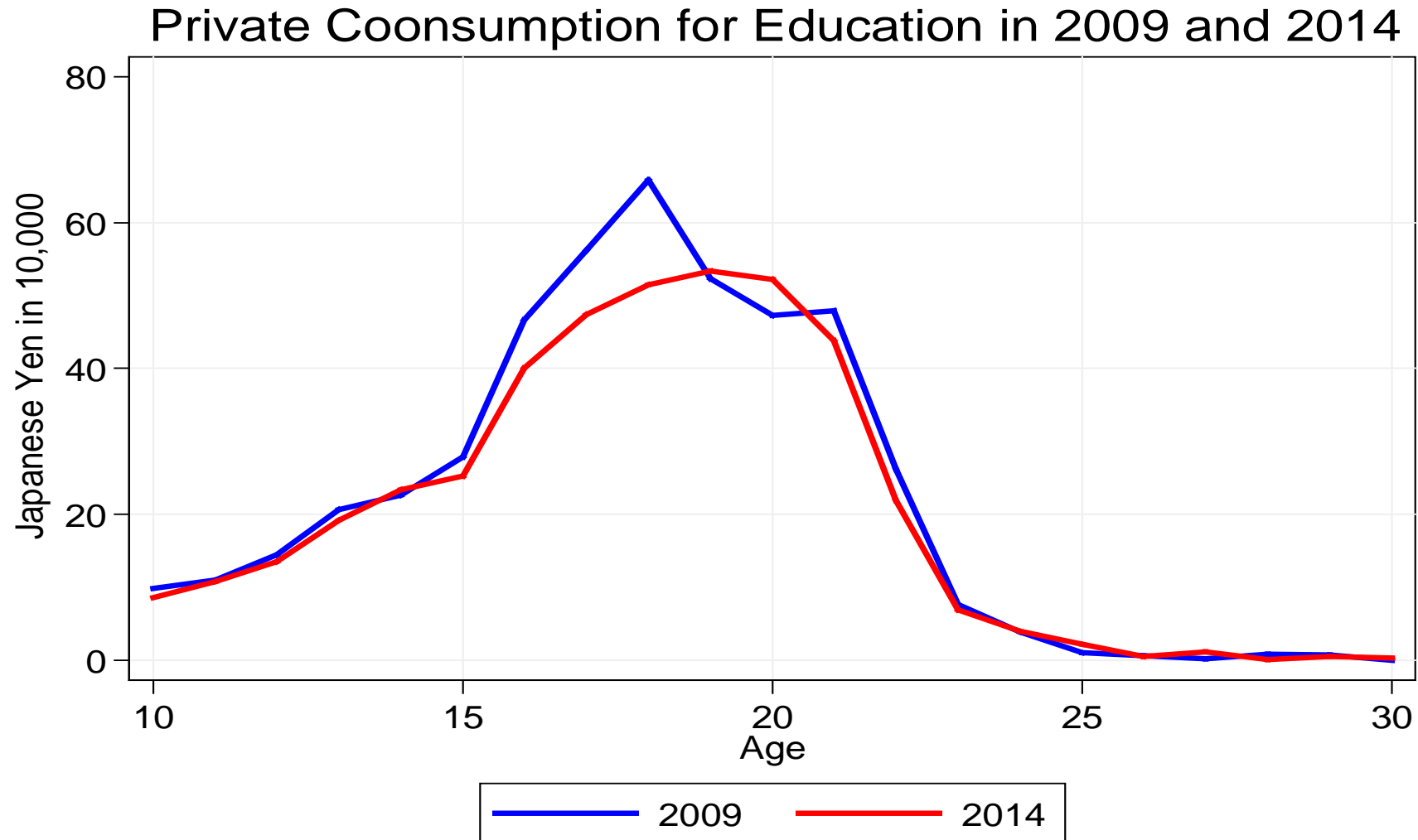


8-3. NTTA differences before and after the LT care insurance

Difference: (2004 - 1999)

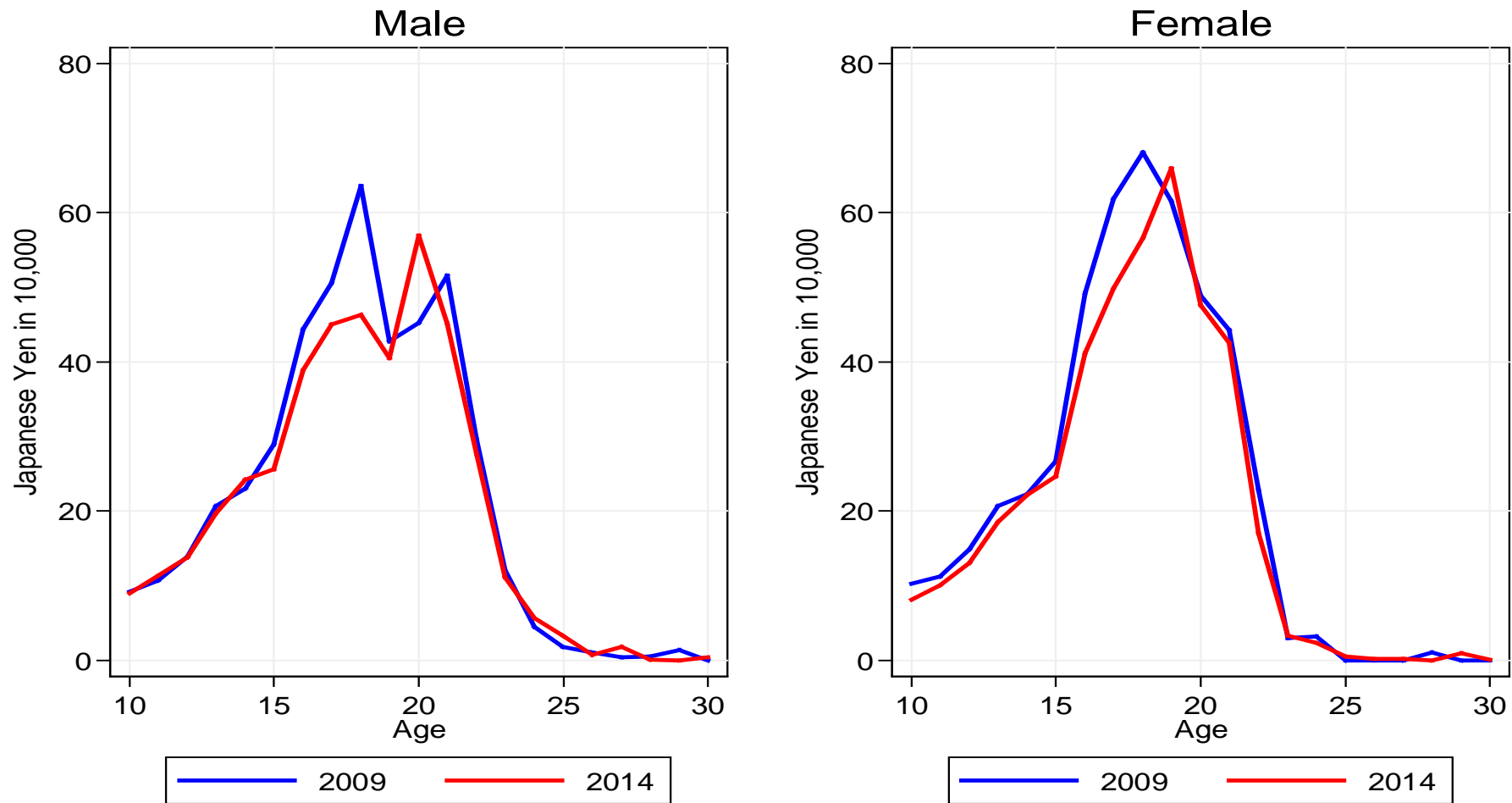


8-4. Introduction of “free tuition fee for high school” + “child allowances” (2010.4)



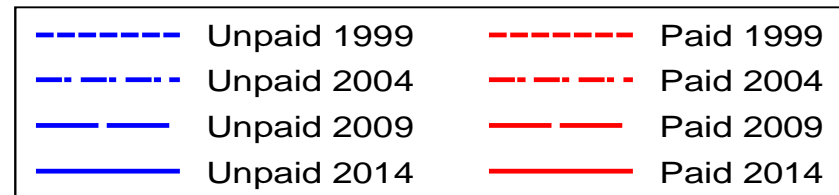
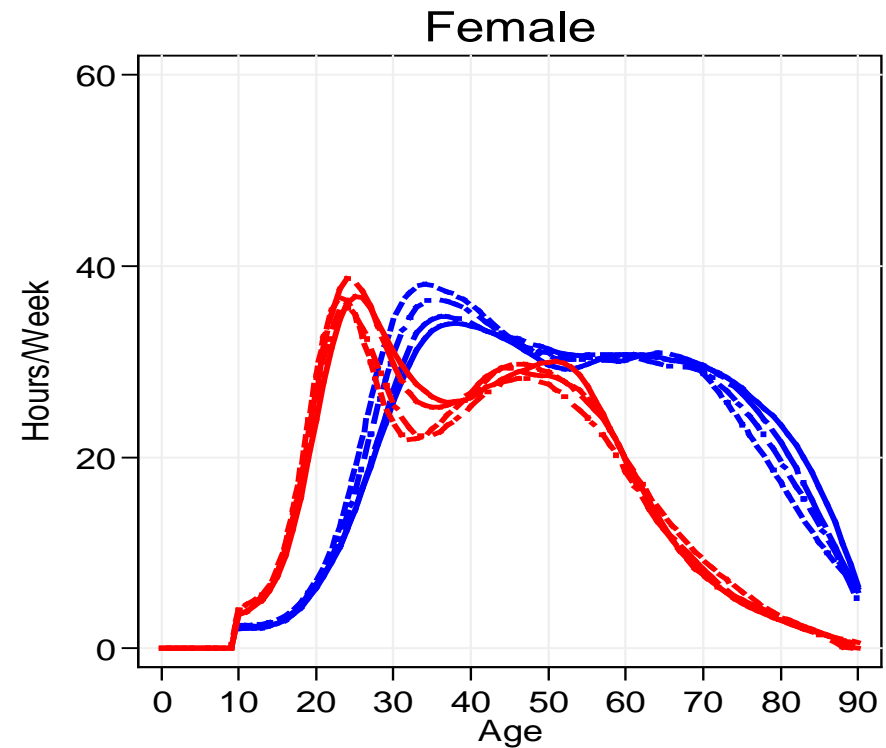
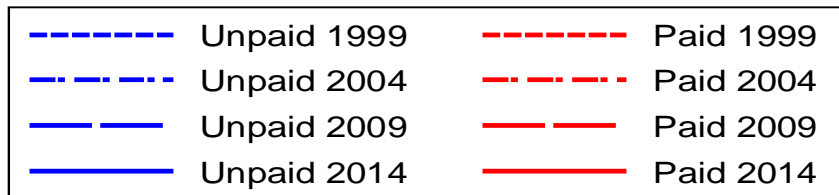
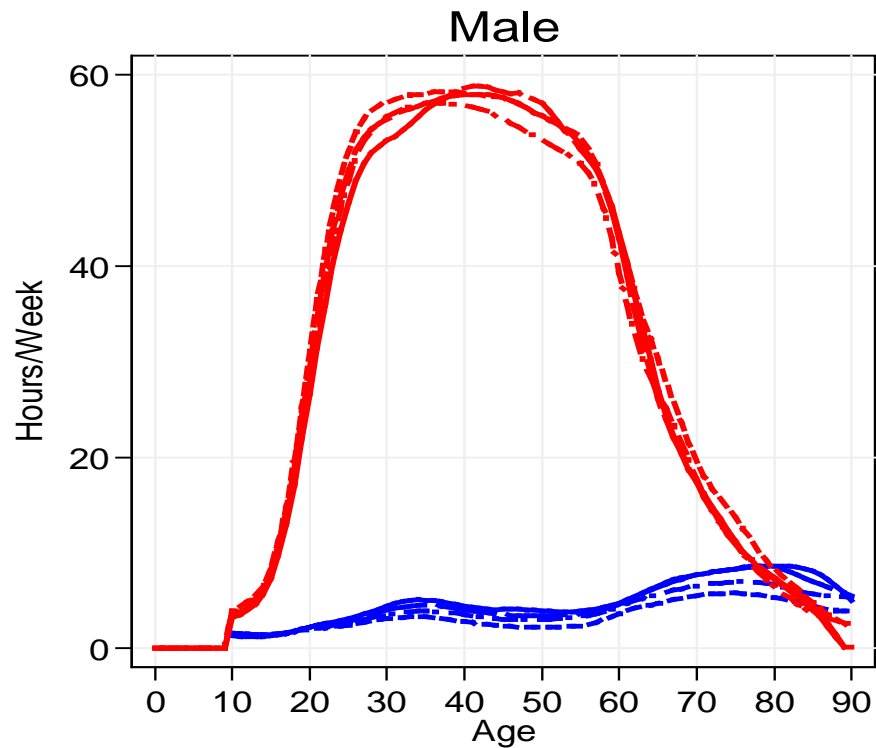
8-5. Introduction of “free tuition fee for high school” + “child allowances” (2010.4)

Private Consumption for Education: 1999 vs 2004

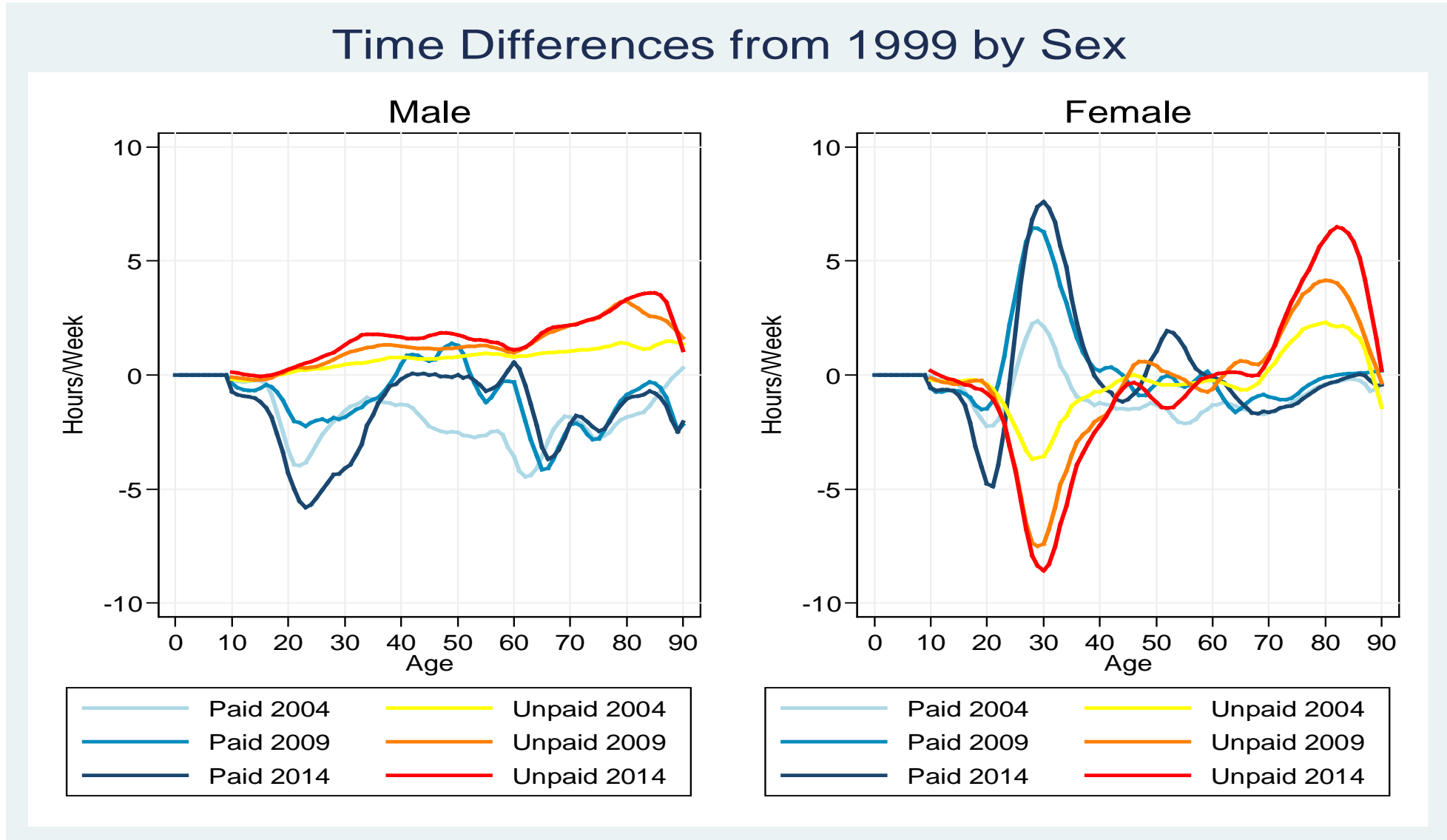


8-6. Gradual expansion of policy support for female employment (1999.4 -)

Hours Spent for Paid and Unpaid Work by Sex

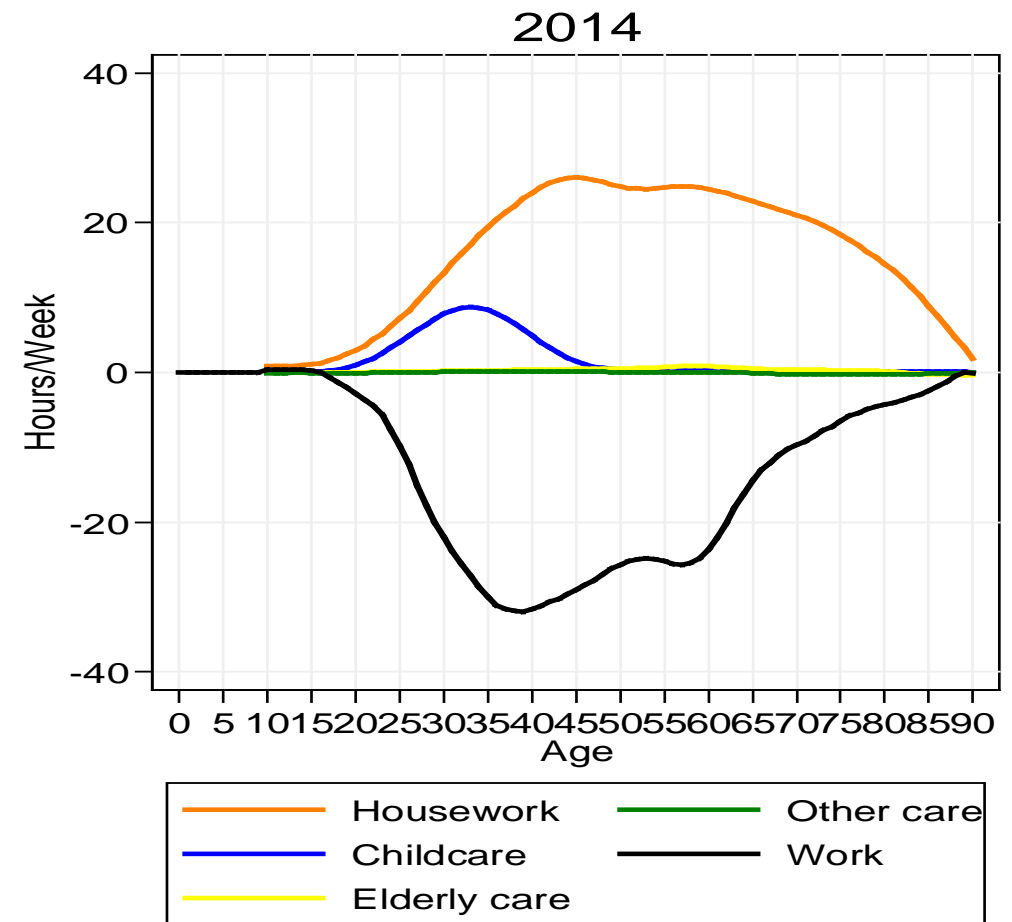
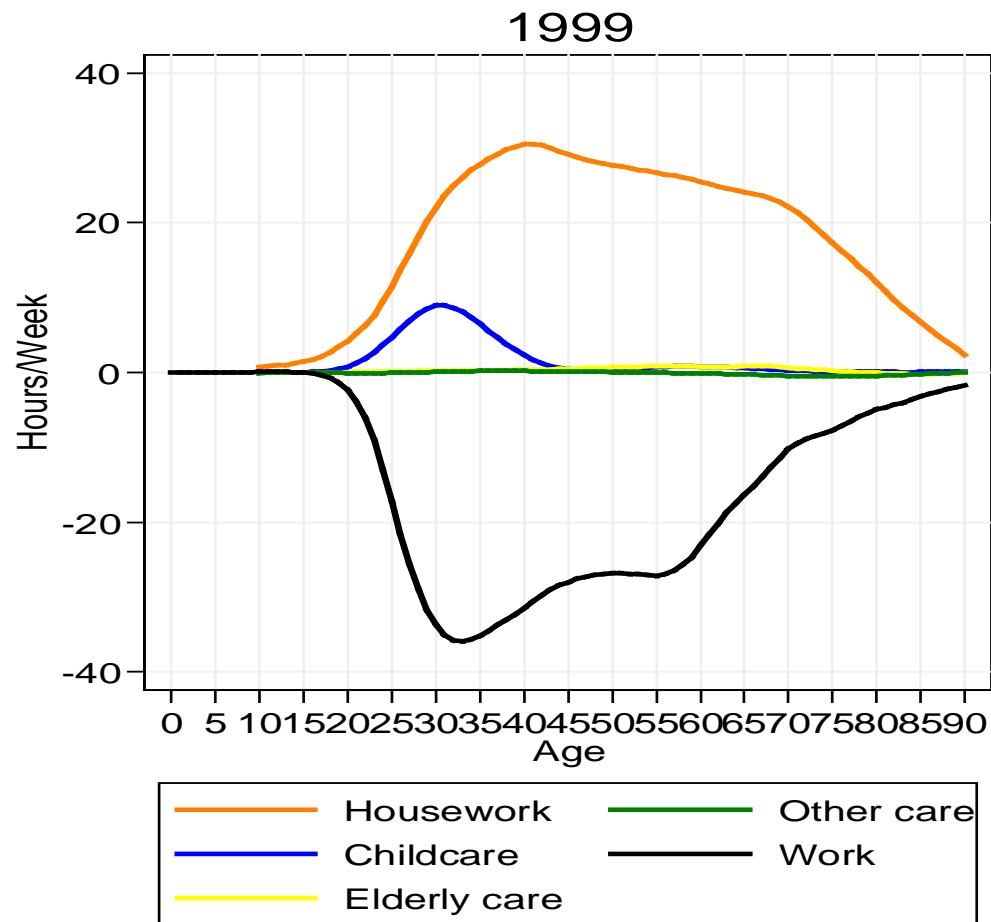


8-7. Period differences in time use for paid and unpaid work by sex: 1999-2014



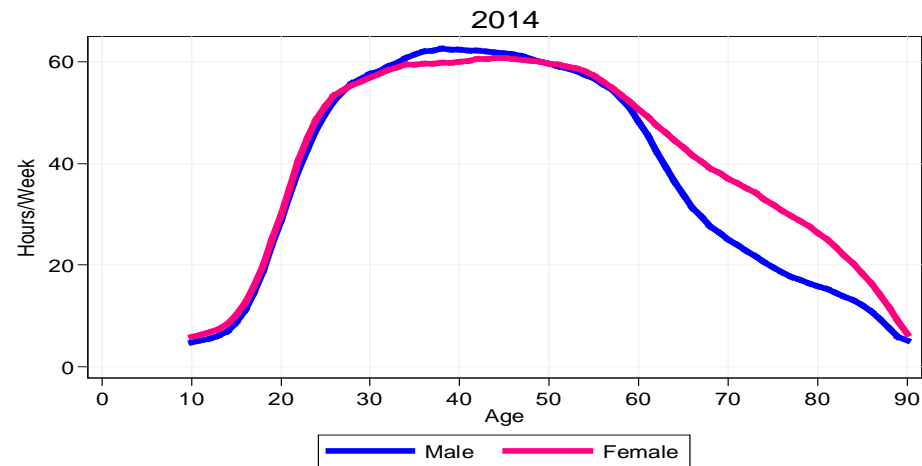
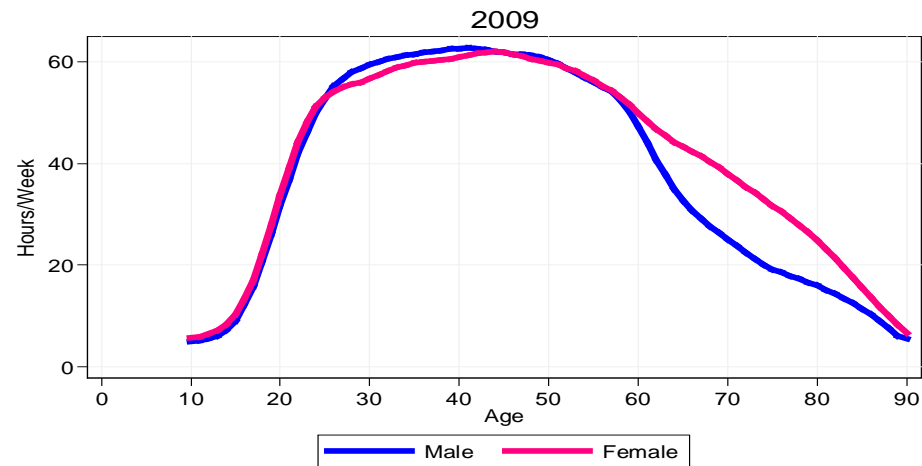
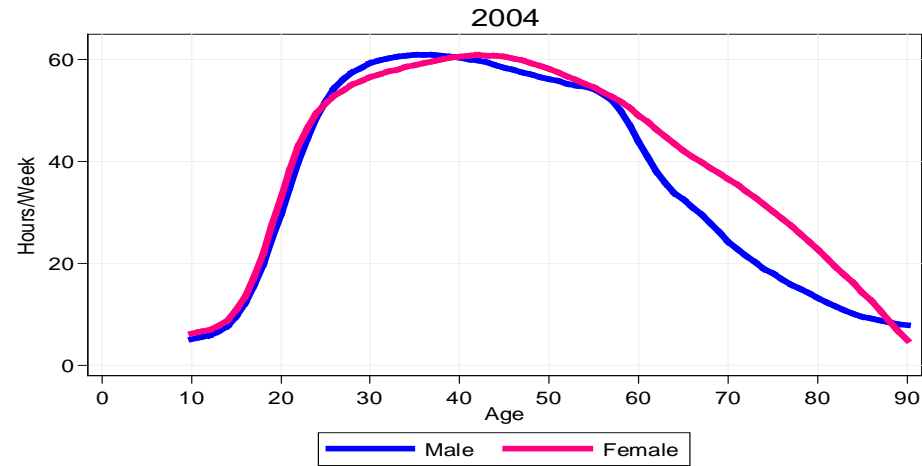
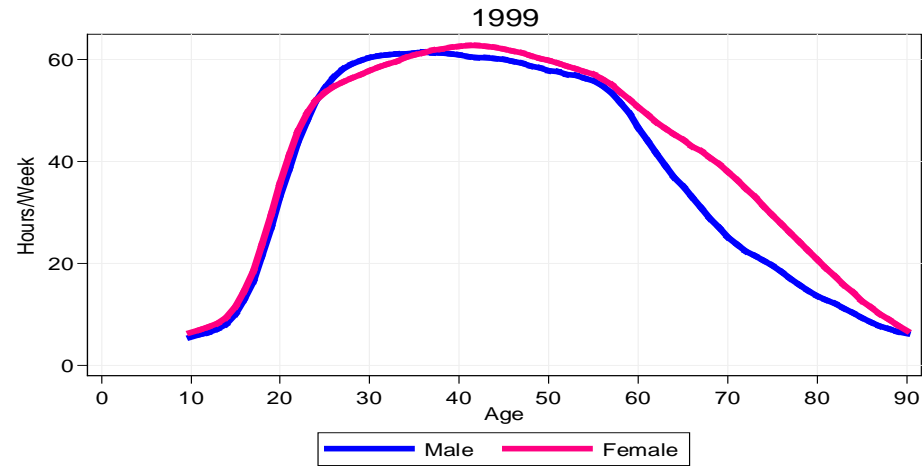
8-8. Gender differences in time use for paid and unpaid work 1999 vs 2014

Time Use, Female - Male Differences



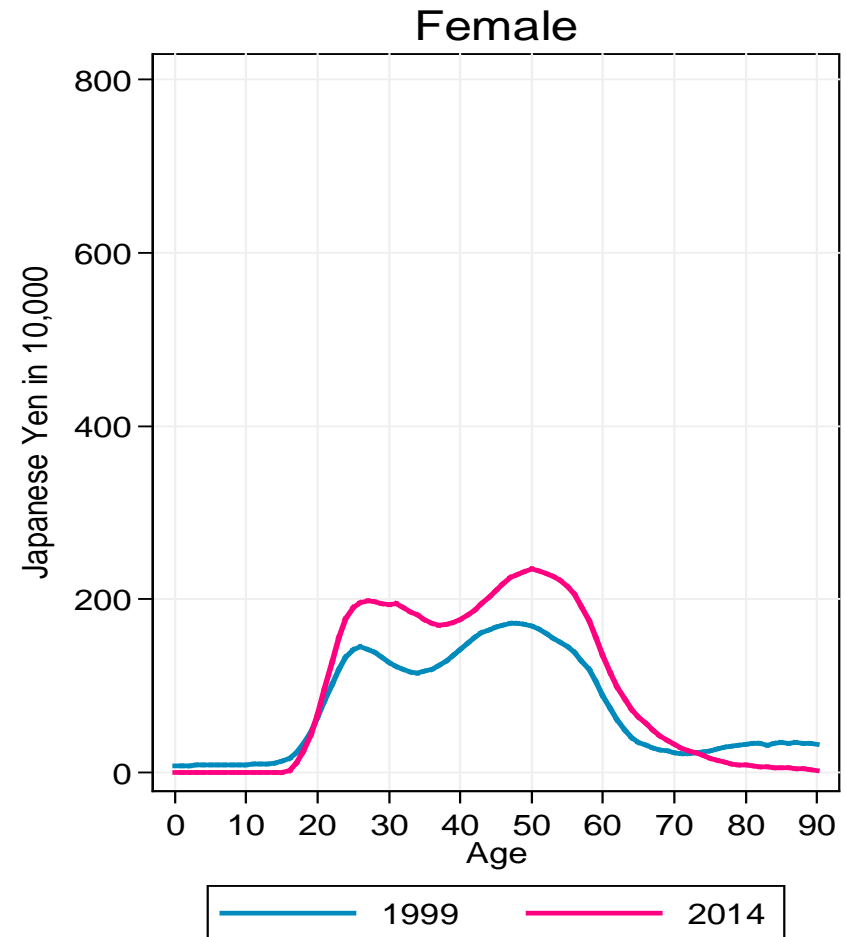
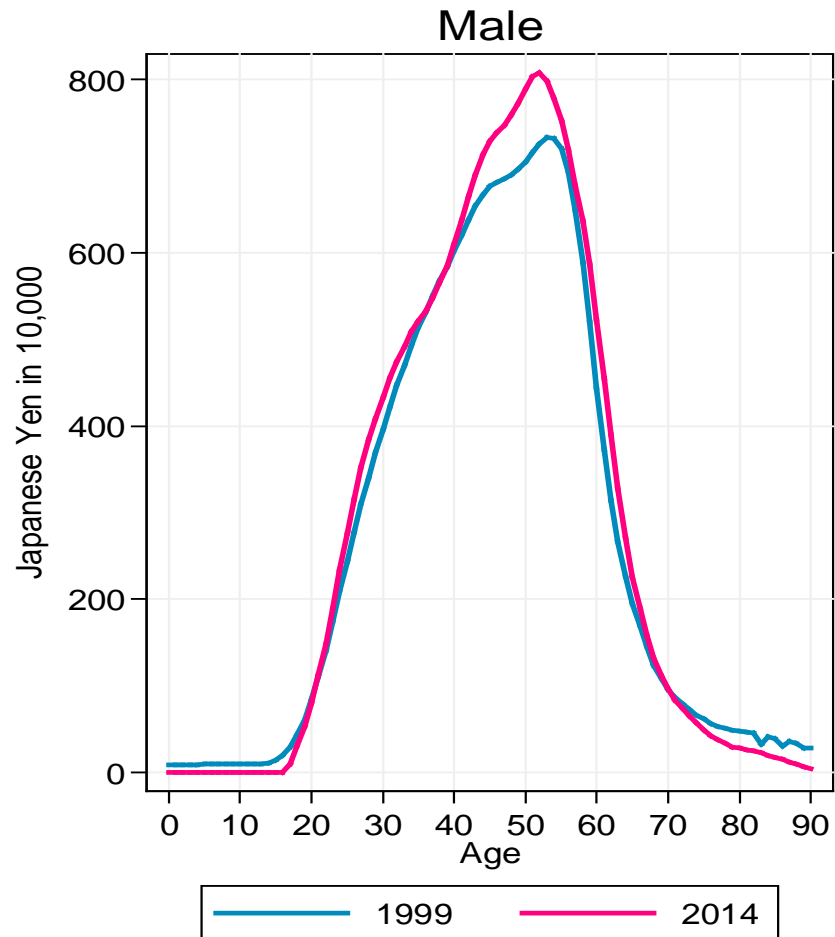
8-9. Gender comparison of total production time

NTA+NTTA Production Hours by Sex



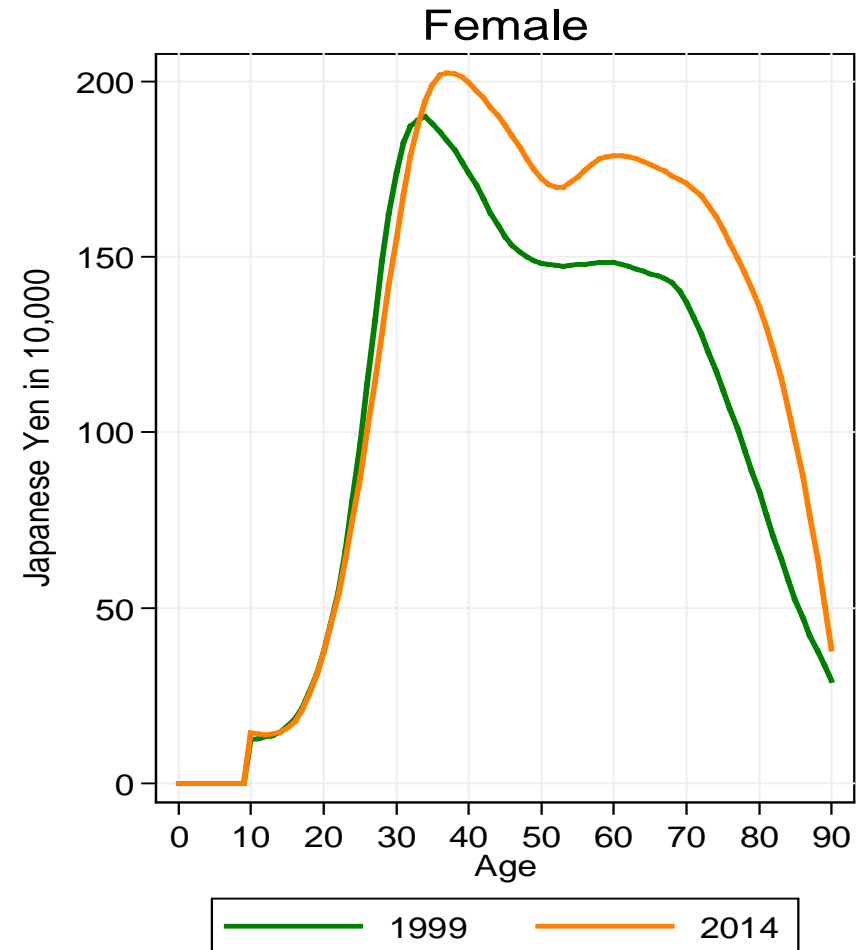
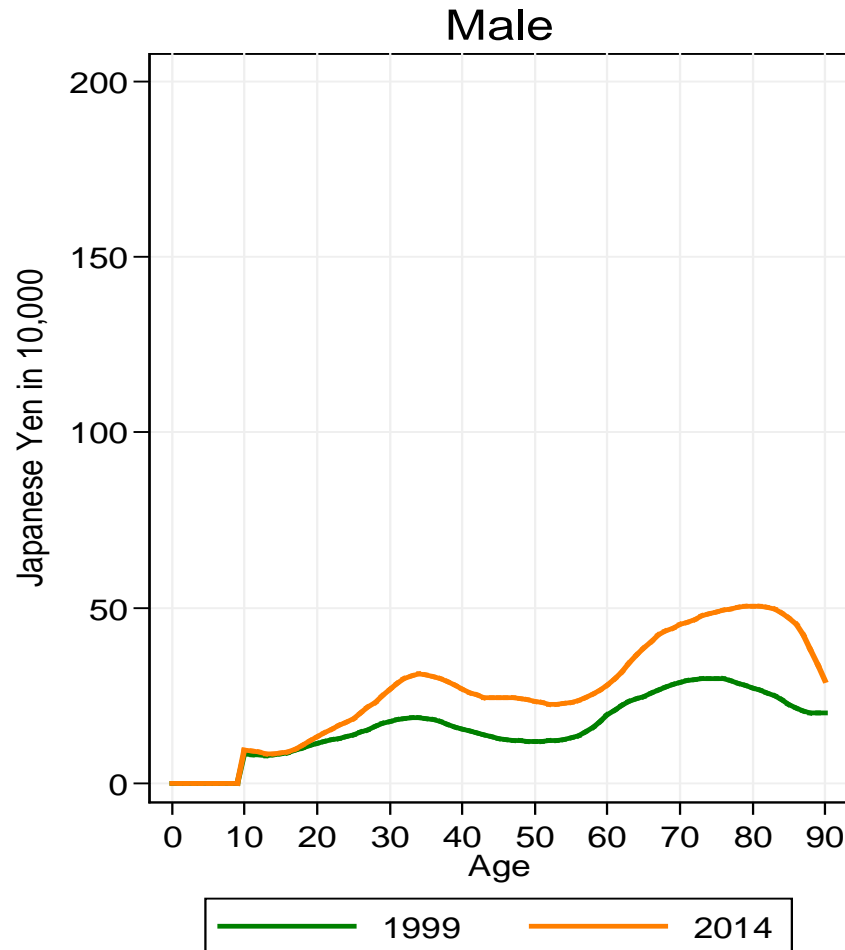
8-10. Gender differences in labor income in 1999 and 2014

Labor Income by Sex: 1999 vs 2014



8-11. Gender differences in unpaid work wages in 1999 and 2014

Unpaid work wage by Sex: 1999 vs 2014



9. Conclusion

- ✓ NTA/NTTA as a necessary tool for Japan to monitor & analyze the aging society!
- Focus 1: Socializing elderly care increased total public costs for elderlies, but reduced both medical costs and disabled elderlies
- Focus 2: Free high school tuition and child allowances decreased household education costs for secondary education, while those of post-secondary education increased
- Focus 3: a. There is a large gender gap in paid and unpaid work in Japan both in time and monetary basis.
b. The gender gaps narrow a bit in both paid and unpaid work by age of 40.

10. Future work

- Examination of the shifts or changes in focused points
- Running regression models to control for demographic and socio-economic components behind the age and sex

Thank you!

✉@: fukuda-setsuya@ipss.go.jp

