On the convergence in female participation rates

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Presentation at "Science of Broadening Participation of Women in Science and Education Fields and the Workforce," Kyushu University, Nov. 16, 2015

This presentation is based on Abe (2015) "On the convergence in female participation rates" (mimeo, Hokkaido University), in which the author uses microdata of the Employment Status Survey (ESS) made available by the Ministry of Internal Affairs and Communication of Japan under Article 33-2 of the Statistics Act. Part of the analysis using Census data is based on the data provided by the Center for Spatial Information Science, University of Tokyo. This research is supported by the Japan Society for Promotion for Science Kakenhi (Grant Numbers 23530261, 25285094, 26590045, and 15H03358).

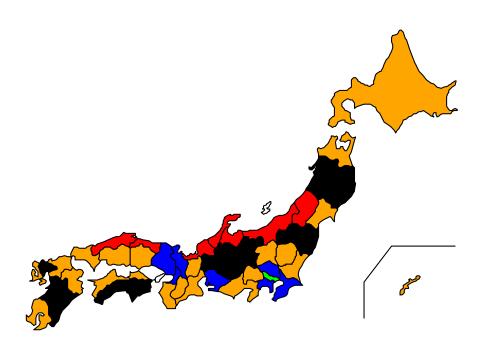
Summary

- Regional variations in female participation is large in Japan.
- Participation rate is lower in urban than in nonurban areas.
- Traditional gender division of labor has been an urban norm.
- Dispersion compressed over time, much of it is due to compositional changes in marital status and education
- Among the highly educated, compression in teacher participation has been dramatic.

Data & definition

- OData: (1) Aggregate Census data from 1930 to 2010; (2) Micro-data of the Employment Status Survey (ESS) from 1982 to 2012
- 5 region groups are defined as follows:
 - **O** (1) Tokyo
 - (2) Urban (Saitama, Chiba, Kanagawa, Aichi, Kyoto, Osaka, Hyogo)
 - (3) Northern coastal region (Yamagata, Niigata, Toyama, Ishikawa, Fukui, Tottori, Shimane)
 - (4) Non-urban-High---relatively high participation in 1975 (Nagano, Iwate, Fukushima, Akita, Saga, Kochi, Tokushima, Miyazaki, Kumamoto, Gifu)
 - (5) Non-urban-Low---relatively low participation in 1975

Five regions



Blue: Urban

Green: Tokyo Red: Northern Coast

Black: non-urban-high

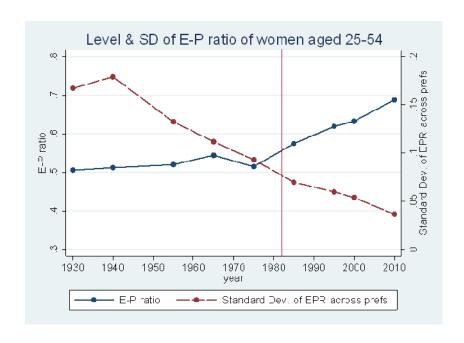
Orange: non-urban-

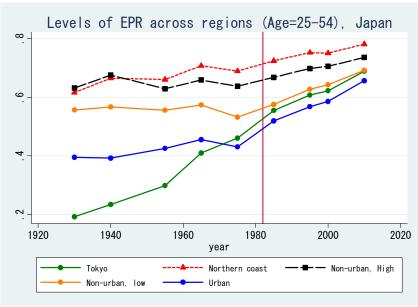
low

Regional variation in female participation over the history

Level of EPR and its SD

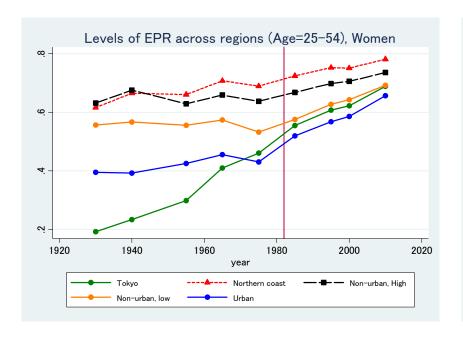
Levels in 5 macro areas

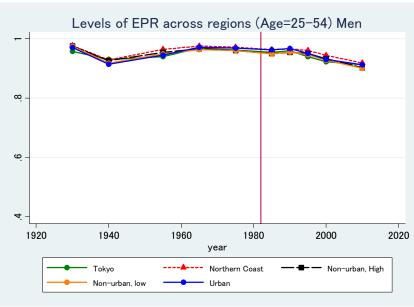




Comparison of women and men 5 macro areas

Women Men

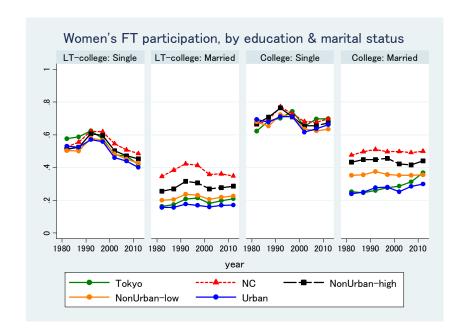


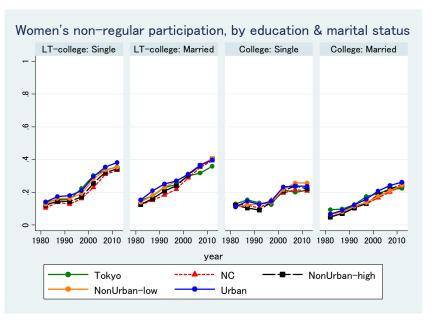


Regular FT vs. Non-regular

Regular FT

Non-regular

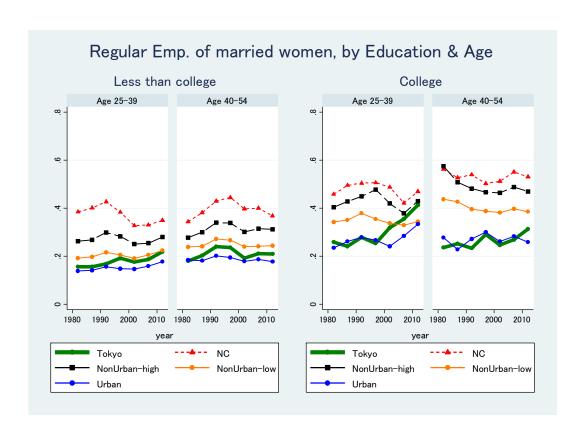




Observations from the statistics by marital status

- Dispersion is small for single women but is large for married women.
- Dispersion is large for married women's regular fulltime employment. Non-regular employment has small regional dispersion, but the rate is higher in urban areas.
- The region that experienced a unique change was Tokyo in regular employment by married women with a college degree.
- As the following slides show, this fact become more apparent when we disaggregate sectors and age range.

Regular FT, by age group

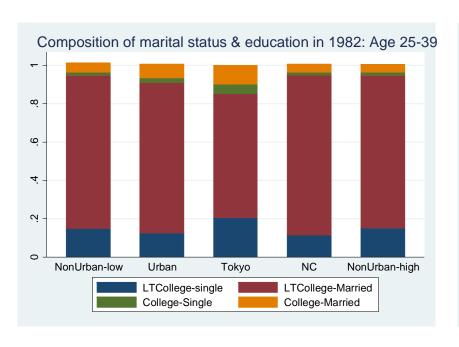


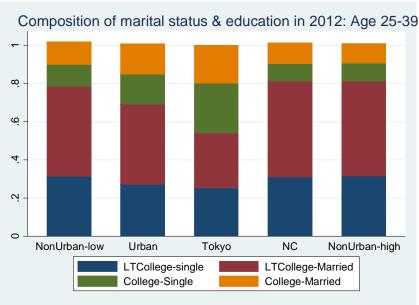
Why do we observe convergence overall?

- When disaggregated by education and marital status, convergence seems modest, except for young married women with a college education.
- Stable participation patterns in disaggregated data and convergence in the overall data can be reconciled by *compositional change*. In this case, compositional change accounts for 75% of the convergence for the age 25-39 group.

Composition of marital status & education: age 25-39

1982 2012





Summary

- Regional variations in female participation is large in Japan.
- The dispersion compressed over time.
- For those aged 25-39, the largest source of convergence is *compositional change* in education and marital status.