

Comments on
“Female Labor Supply: Short-run and
Long-run Tradeoffs,” by Masahiro Abe

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Background

- Population of Japan is shrinking and aging
 - Population projected to fall from 128 million in 2010 to 97 million in 2050
 - Share of the population age 65 plus projected to rise from 23 percent in 2010 to 39 percent in 2050
- Unless these demographic trends can be offset, real output will fall sharply
- Strong and growing interest in policies to
 - Strengthen labor force attachment of existing population
 - Women, elderly, young adults
 - Increase the size of the working age population
 - Fertility, immigration
 - Improve labor productivity
 - Allocation of resources, capital investment, innovation
- Opportunities available to women are central to achieving all three goals!

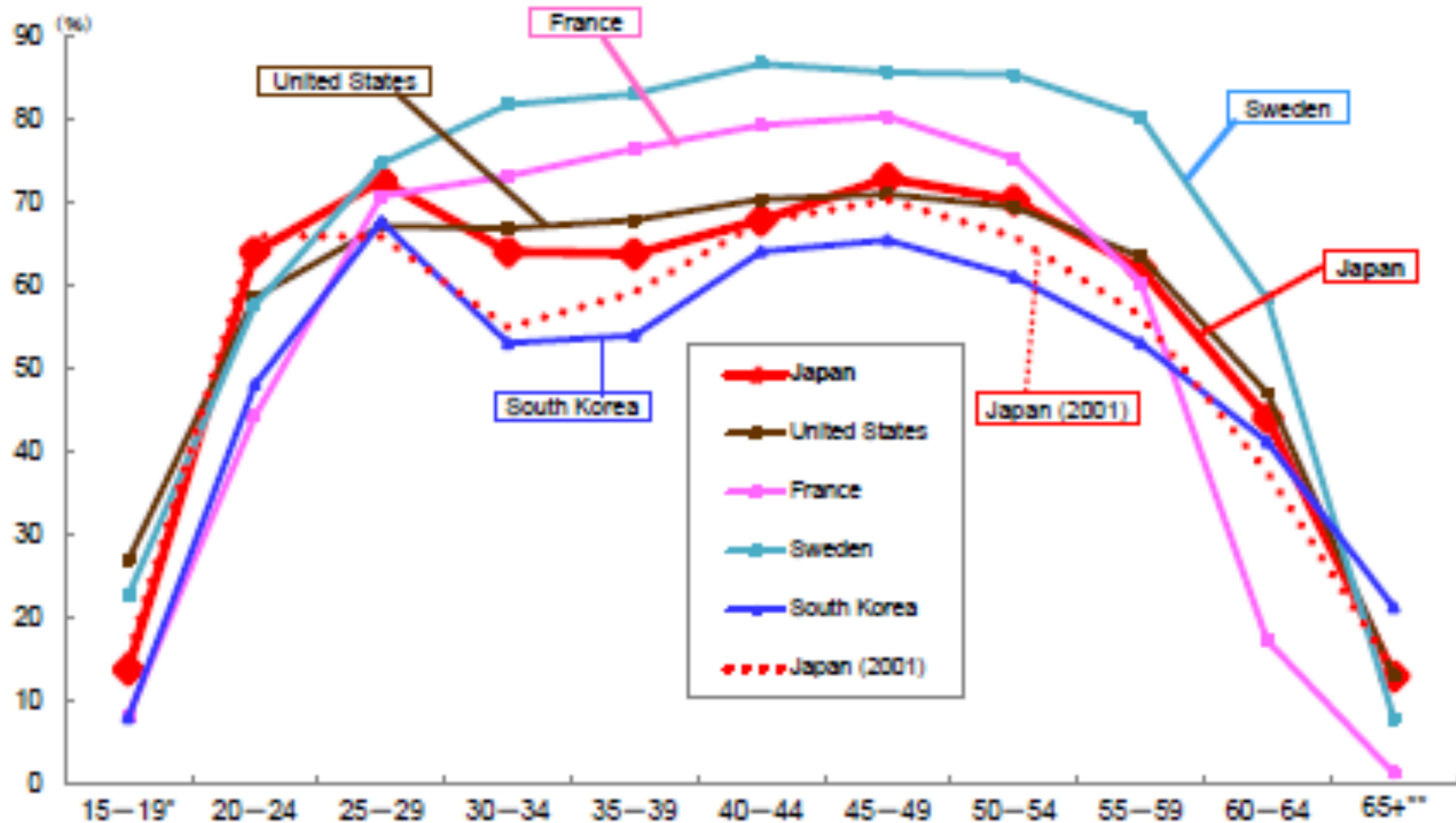


Paper addresses potential tradeoff between female labor force attachment and fertility

- Japanese women are poorly integrated into the labor market
 - Female labor force participation rates are low
 - Few women hold career jobs, especially after the birth of a child
- Efforts to draw women into the labor force and into regular employment could boost output in the short run... but if such efforts cause birth rates to fall, there will be a long-run tradeoff
- Paper explores the relationship between women's labor force attachment and fertility, discusses policy implications



Female employment rates by age group (2011)



Source: JILPT Databook of International Labor Statistics 2013

* Data is for ages 16-19 in the cases of the United States and Sweden.

** Data is for ages 65-74 in the case of Sweden.

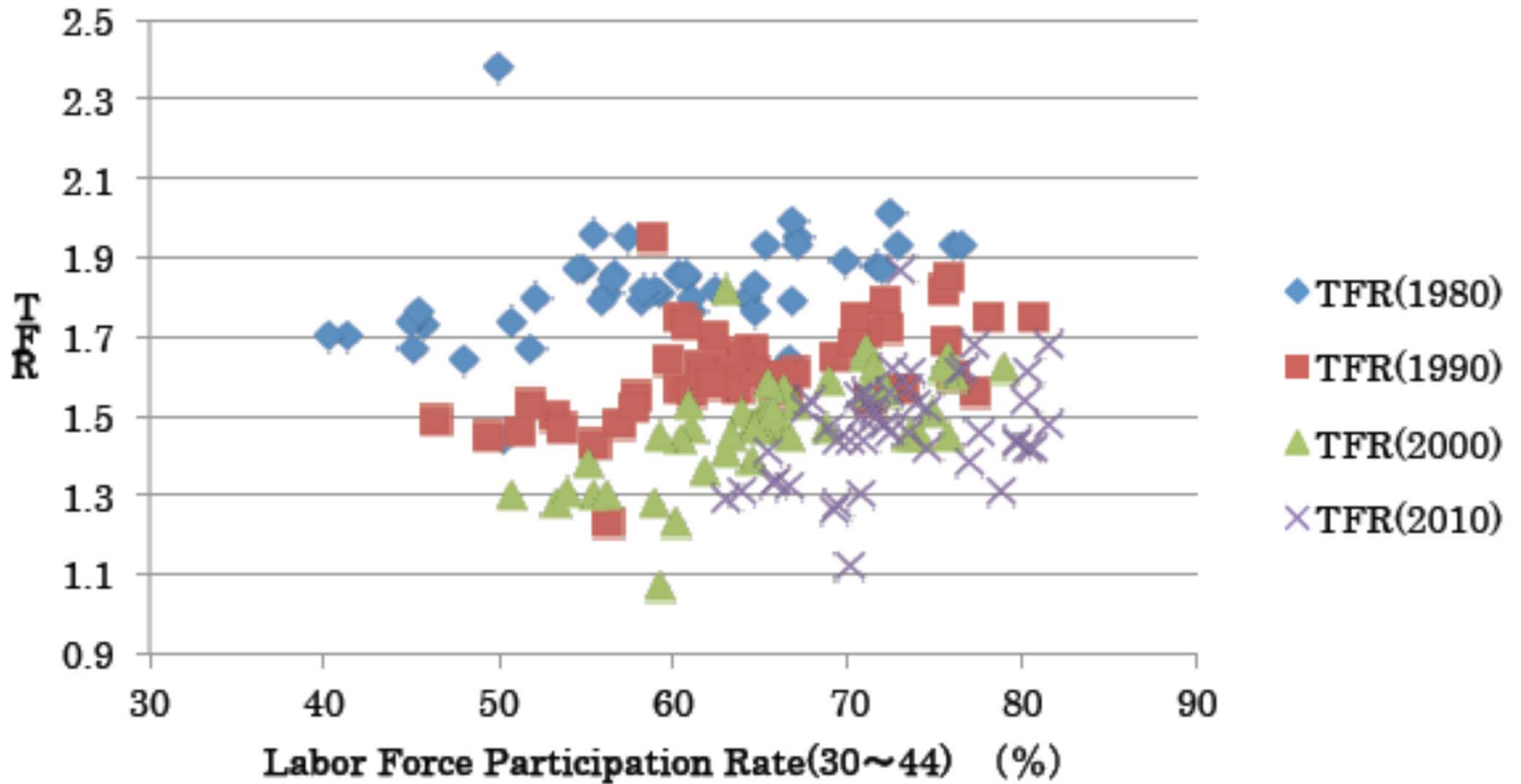
Source: Atsuko Muraki, "From Abenomics to Womenomics," 2013.

Evidence in paper on association between fertility and participation

- Variables of interest measured at prefecture level in 1980, 1990, 2000 and 2010
 - Overall fertility rate
 - Labor force participation rate for women aged 30-44
- Data examined in several different ways to identify association (not causal relationship)
 - Fertility rate *positively* correlated with level of female participation in all four years
 - *Change* in fertility rate *negatively* correlated with female participation in 1980-1990 and 1990-2000, but *positively* correlated in 2000-2010
 - In a pooled fixed effect model with fertility rate regressed on the participation rate, participation rate coefficient negative, but... different patterns by decade suggest relationship is not fixed and pooling may not be appropriate

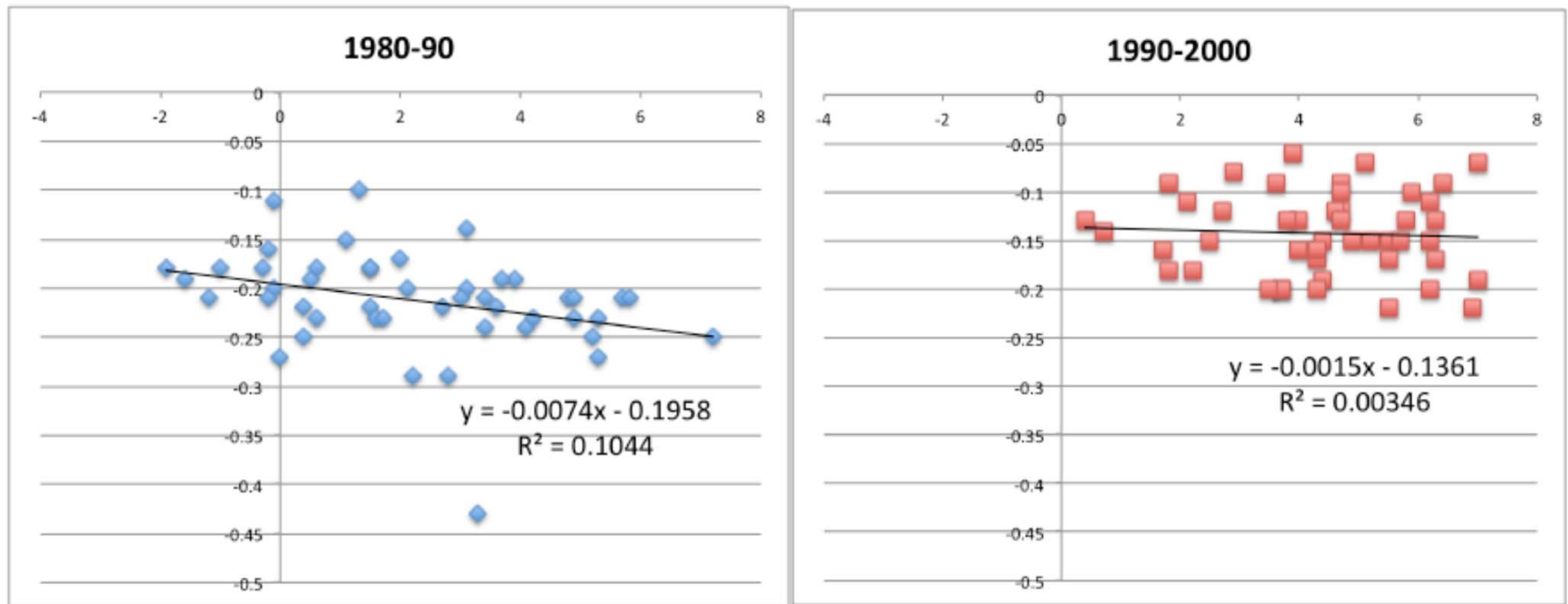


Figure 2: Labor Force Participation Rate for Women Aged 30-44 and Total Fertility Rate, by Prefecture



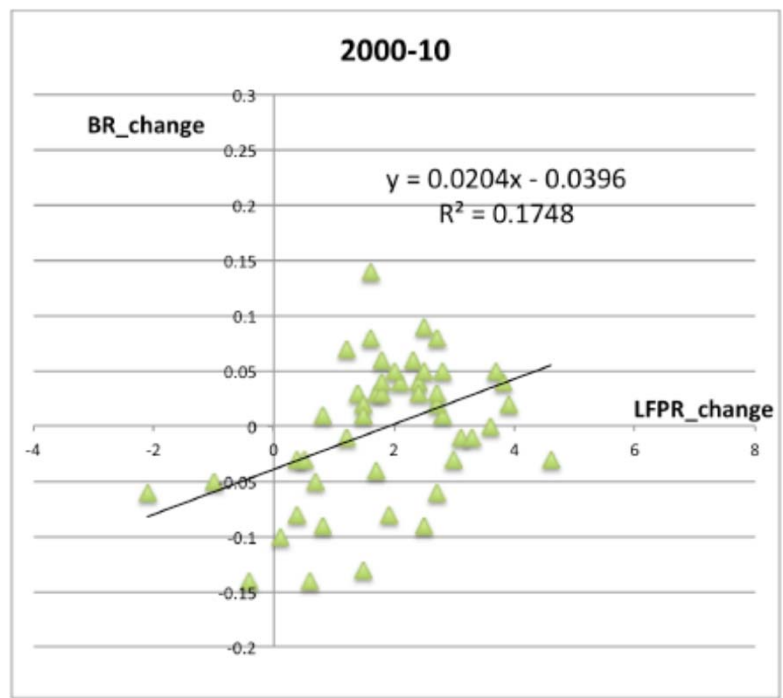
Source: M. Abe, "Female Labor Supply: Short-run and Long-run Tradeoffs," July 2015

Figure 3: Change in Labor Force Participation Rate for Women Aged 30-44 and Change in Total Fertility Rate, by Prefecture



Source: M. Abe, "Female Labor Supply: Short-run and Long-run Tradeoffs," July 2015

Figure 3: Change in Labor Force Participation Rate for Women aged 30-44 and Change in Total Fertility Rate, by Prefecture (continued)



Source: M. Abe, "Female Labor Supply: Short-run and Long-run Tradeoffs," July 2015.

Evidence in paper on women's educational attainment and fertility

- Analysis of panel data for women in their late 20s surveyed in 1993, 1997, 2003, 2008 and 2013 and followed to present
- Cox proportional hazard model used to estimate effects of education and cohort on age at marriage and age at first birth
 - Main finding: More educated women marry later and have their first child later (possibly never)
 - Suggest testing model assumptions that the effect of education is uniform at all ages (feature of proportional hazard structure) and across all cohorts (no interaction terms), but doubt basic findings would be different in a more flexible model.
- Even absent societal changes, implications for the future are unclear
 - Associations within a cohort likely to reflect influence of unobserved factors
 - Effects of changes in education over time likely to be smaller
 - If education affects both timing of births and completed fertility, effect of rising education on total fertility rate will be larger in short run than long run
 - Total fertility rate based on current-period birth rates for women at each individual year of age
 - If age at which women give birth is rising, total fertility will fall
 - Once ages stabilize at their new (higher) levels, fertility will rebound



Increasing job options for educated women could boost output significantly

- If groups of workers are excluded from certain jobs, overall productivity will suffer
 - Losses result from reduced incentives for affected workers to invest in human capital and from inefficiency in the allocation of people to jobs
- Eliminating barriers to employment so that women may sort to any job could raise productivity significantly
- U.S. experience may be relevant
 - As of 1960, highly educated white women worked primarily as teachers and nurses
 - By 2008, occupational distribution among highly educated white women much more similar to that of highly educated white men
 - Occupational distribution among educated blacks also has become more similar to that of educated white men, but they are a smaller group
 - One study found that, between 1960 and 2008, changes in opportunities available to educated women and minorities may have raised overall output as much as 15 percent, due mostly to improved allocation of women to jobs (Hsieh, Hurst, Jones and Klenow 2013)



Reasons for low labor market attachment among Japanese women with children

- Limited availability of child care
- Employment practices associated with the lifetime employment system
 - Men who hold regular jobs work very long hours; less available to help at home
 - Women who have children often fall off the career employment track, so that wages if they return to work are low
- Tax system reinforces incentives for married women to stay at home or work in low-paid jobs
 - Various provisions create a high implicit tax rate on earnings above a very modest level
- Social role expectations limit some women's careers
 - Women may not aspire to career advancement and may encounter barriers when they do



Large increases in female participation likely to require multiple approaches

- Paper emphasizes creation of child care places
 - Agree that this is an important part of what is needed
- Also need to address other factors that are limiting female participation
 - Rethink policies that encourage lifetime employment and discourage labor market mobility
 - Reform tax system to reduce the high implicit tax rate on second earners
 - Take steps to create and highlight female role models
- Evidence for other countries on the importance of cohort effects suggests it may take time for full effect of policy actions to be realized



Summary of comments

- Evidence on whether there is a tradeoff between fertility and female labor force participation seems rather mixed
- Convinced that education is associated with lower probability of a woman marrying and having a first child, but unclear what this predicts for the effects of *changes* in educational attainment over time
- Removing barriers to the employment of educated women in full range of skilled occupations could raise overall productivity (allocative efficiency)
- Appropriate policies could ameliorate any effects of increasing female labor force attachment on fertility and allow women's skills to be more fully utilized, but full effects will take time to realize

