

Childbirth and Housework in East Asia

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1. Introduction

It is crucial to pay attention to the share of housework between husband and wife when discussing the relationship between declining birthrate and women's work. Japanese husbands do not so much contribute to housework even they have very young child. According to the Cabinet Office (2015), Japanese husbands who have child under the age of six contribute to housework only one hour and seven minutes per day. This is half or one-third of that of husbands in European countries and the United States. The low contribution to housework by husbands has been pointed out as one of the causes of the declining birthrate in Japan. For example, an increase in husband's contribution to housework has a positive impact on fertility (Cooke 2009; Mizuochi 2010, 2011; Nagase and Brinton 2017).

This study uses three sets of panel data collected in Japan, China (Beijing), and Korea (Seoul) to investigate the effect of childbirth on couple's contribution to housework. In particular, we examine the relationship between relative resource (income or paid work time) before childbirth and relative increase in housework by childbirth.

2. Data

The data used in the study are "Beijing Panel Survey on Gender, Work and Family Life (2004-2007)" for China and "Seoul Panel Survey on Work, Family and Gender (2003/2004-2007)" for Korea, both were conducted by Ochanomizu University. For the analysis of Japan, we use "Keio Household Panel Survey (2005-2009)" conducted by Keio University.

Our subjects of analysis are married male and female who are under the age of 44 and have no child at the first observation.

3. Estimation strategy

For the purpose of this study, we conduct regression analysis. Our dependent variable is the housework time (measured in minutes per day) which is the sum of the time for household chores and childcare. The independent variables are childbirth, respondent's and spouse's paid work time, household income, and respondent's age.

As an estimation method, the fixed-effect estimation is applied to control the individual effect caused by panel data structure. Hausman test reveals that the fixed-effect estimation is more valid compared to the pooled-ols estimation.

We firstly estimate the following equation using male sample and then obtain the coefficient of childbirth for husband's β_h for each country.

$$Housework_{it} = \beta Childbirth_{it} + Other\ variables + \mu_i + u_{it}$$

Next, we estimate the same equation using female sample and obtain the coefficient of childbirth for wife β_w for each country. Finally, we calculate the relative increase in housework of wife (β_w/β_h) and compare it with wife's income (or paid work time) share before childbirth for each country.

4. Results

The results obtained so far are as follows. First, childbirth increases both husband's and wife's housework time in all three countries. Second, wife's relative increase in housework by childbirth is largest in Japan: 9.9 for Japan, 2.4 for China, and 2.6 for Korea. Third, relative resource before childbirth and relative increase in housework is negatively related.

References

- Cabinet Office, 2015. *Declining Birthrate White Paper 2015*, Japan: Nikkei Printing. (in Japanese)
- Cooke, L. P., 2009. "Gender Equality and Fertility in Italy and Spain," *Journal of Social Policy* 38(1): 123-140.
- Mizuochi, M., 2010. "Husband's Childcare and Additional Childbirth: A Comparative Analysis of Five Developed Countries," *Journal of Population Studies*, 46: 1-13. (in Japanese)
- Mizuochi, M., 2011. "Fertility and Use of Childbirth-Related Leave by Father," *Quarterly of Social Security Research*, 46(4): 403-413. (in Japanese)
- Nagase, N. and M Brinton, 2017. "The Gender Division of Labor and Second Births: Labor Market Institution and Fertility in Japan," *Demographic Research* 36: 339-370.