

# Career Interruptions and Subsequent Wage in Japan -Reexamination from new Japanese Longitudinal Data-

Yukiko Asai<sup>1</sup>

## Abstract

In this paper, I use a Japanese longitudinal data to reexamine the effect of time out of work on worker's subsequent wage. Absence from work even for short time is often labeled as being unmotivated or unenthusiastic in Japan; therefore opportunity cost for a worker to have a career interruption expected to be high. For the analysis of the wage determination process, I use the human capital model of Mincer and Polachek (1974) which distinguishes employment history as participation period and non-participation period. The wage growth will stagnate during the period of non-participation.

A worker's hourly wage rate is determined by years of education, work-experience segments, home-time segments, and other factors (e.g. job training, mobility, health, number of children, number of days of work and hours of work). Kunze(2002) extended Mincer and Polachek (1974) model and distinguished different types of time out of work (childbirth/childbearing,

---

<sup>1</sup> She is currently a visiting scholar at University of California Berkeley and working on her PhD dissertation at Keio University, Tokyo, Japan.

unemployment and other interruptions such as job/academic training) in order to analyze each interruption's short-term and middle-term effect on worker's subsequent wage. I employ the Kunze(2002)'s model and reexamine the model with the Japanese wage determination process.

The data used in this paper are obtained from the Keio Household Panel Survey (KHPS) of Keio University, a new longitudinal survey in Japan. The KHPS surveyed approximately 4,000 households and 7,000 individuals nationwide, aged 20 to 69, between 2004 and 2011. Information from the respondents' husbands/wives is available in these data. They are asked to answer the same question as the primary respondent; therefore there are two individuals from 1 household if the primary respondent is married. An additional survey on a cohort of about 1,400 households and 2,500 individuals was initiated from 2007. A questionnaire was sent out in January of each year; thus, the answers obtained described the participant's situation in the previous year.<sup>2</sup> The hourly wage rate is calculated by dividing earnings by the number of contractual working hour<sup>3</sup>.

---

<sup>2</sup> The data for this analysis, Keio Household Panel Survey, was provided by Keio/Kyoto Joint Global COE Program, Japan. The copies of the questionnaires used in this paper are available on the following website.  
<http://www.gcoe-econbus.keio.ac.jp/english/>

<sup>3</sup> Hourly wage rate is calculated from wage divided by national contractual working hours. The reason for using national contractual working hours rather than actual working hours is that voluntary and unpaid over-time work is quite common in Japan (therefore it shows considerable dispersion), and actual working hours are unlikely to reflect "paid work hours". Also, actual working hours are observed as weekly average, therefore calculating wage rate from this information is likely to induce a measurement error.

The contractual working hours for regular working is 8 hours per day or 40 hours per a week. Respondents answered type of compensation (Monthly Salary, Weekly Salary, Daily Wage, Hourly Wage, and Annual Salary) and the amount of compensation. Monthly and Weekly salary are divided by 160 (8 hours of work for 20 days), Daily wage is divided by 8 (8

Using the Keio Household Panel Survey (KHPS) from 2004 to 2011 (8 waves), I found no evidence that career interruptions leads to subsequent wage loss both in short-term and middle-term.

## Reference

- Mincer, J. and S. Polachek (1974): Family investment in human capital: Earnings of women, *Journal of Political Economy*, 82, S76-S108.
- Kunze, A. (2002) The Timing of Careers and Human Capital Depreciation, IZA Discussion Paper No. 509.