#### Abstracts

Did Increasing Childcare Availability Raise the Female Employment Rate and Birth Rate? An Evaluation of the Recent Childcare Policy in Japan

Taiyo Fukai (The University of Tokyo)

With the developing trend of a low birth rate and ageing population, improving the birth rate and securing the labor force has become an urgent challenge. Various policies have been implemented in order to realize a society in which young families can balance the demands of work and family. This paper investigates the extent to which the continuous provision of childcare services since the mid-1990s has contributed to the intended policy goal of raising the employment rate of women and the birth rate. Up until now, the policy of increasing childcare availability has been focused mainly on young children up to the age of two years old. In 2000, the proportion of one and two year olds who were attending childcare center was approximately 19%. By 2018 this figure had risen to around 47%. In this paper, we make use of the Population Census and Vital Statistics to focus on presenting an empirical analysis that evaluates this childcare policy, and show that the provision of childcare services did indeed raise the employment rate of women and the birth rate. In particular we find that; as a result of the provision of childcare center, individuals who were previously making use of informal channels of support for child-rearing, such as grandparents, have begun to use nurseries; the younger the age of the child, the larger the positive effect on employment; and the birth rate among young women has risen. Therefore it can be said that the policy can play a role as a countermeasure to the ageing population and low birth rate. However, the importance of childcare provision for the continuance of work following childbirth, whether there is any effect on the birth of a second child, and whether it increases the number of couples giving birth are left as topics for future research. Additionally, beyond just the quantitative aspect of childcare provision, the analysis of other important characteristics such as quality of childcare service and child development are essential topics for future research.

### Unintended Consequences of Childcare Policies

Shintaro Yamaguchi (The University of Tokyo)

This paper provides an accessible summary of papers that estimated the effects of childcare use on maternal labor supply in Japan. I point out two major issues. First, the expansion of childcare does not necessarily increase maternal labor force participation. Indeed, evidence shows that the expansion of childcare crowded out informal childcare provided by grandparents and did not increase maternal labor force participation. Second, families really in need of subsidized childcare may not be able to use it due to the rationing rule. The rationing rule for subsidized childcare gives a higher priority to those who already have a full-time job compared to those who hold a part-time job or are currently searching for a job. Because some full-time job holders could use childcare modes other than subsidized childcare, giving them a slot of subsidized childcare does not increase maternal labor force participation. Instead, the effects of subsidized childcare.

## Supply-Demand Balance and Policy Issues of Childcare Services: GIS-based Geo-Visualization Approach

## Hitoshi Miyazawa (Ochanomizu University)

Yoshiki Wakabayashi (Tokyo Metropolitan University)

Using GIS-based geo-visualization, this paper clarifies the regional and spatial gaps in supply and demand of childcare services in Japan, and evaluates the effects of various measures implemented to narrow these gaps. The measures dealt with in this paper are the promotion of small-scale childcare, the establishment of childcare facilities in station buildings or near stations, the extension of childcare hours, and the introduction of the "pick-up childcare service." Among these measures, the analysis results show that the effect of narrowing the supply-demand gap by the establishment of small-scale childcare facilities is limited in metropolitan areas where the problem of children on waiting lists is serious. Further, the results suggest that the pick-up childcare service has high potential for narrowing regional and spatial supply-demand gaps in local governments where such gaps are significant. However, this service may impose a considerable physical and mental burden on the children who use it. When emphasis is placed on the welfare of children, it is necessary not only to promote diversification and flexibility of childcare services, but also to implement comprehensive work-life balance support in coordination with efforts to reform working styles.

#### Time Allocation within a Household

#### Miki Kohara (Osaka University)

This paper examines the determinants of household time allocation in Japan, focusing on working couples with a child. We specifically test the following two hypotheses: Firstly, whether or not a mother raises her labor supply in reaction to an exogenous shock of the father unexpectedly losing his job; secondly, how the couple change their time allocations in reaction to an inevitable change in a spouse's commuting time. Using individual panel data containing the spouse's information, we firstly find that mothers would increase their labor supply if the father lost his job, especially when economic conditions are good. We secondly find that those who faced an increase in their own commuting time would increase their working hours in the market and decrease their household production time, while their spouses would reduce their working hours and raise their household production time. Such a substitution in household chores between mothers and fathers was unobserved before 2000. Specifically, a father did not increase his household production time even if the mother's commuting time was prolonged. We can say that fathers changed their behavior after 2000. That is, they would substitute their working time for household production time when the mother faced the longer commuting time. Further researches are needed to clarify how working environments such as work-life balance policies at the mother's and father's firms affect their time allocations.

# The "First-Grade Barrier" and After-School Care in Japan

## Reo Takaku (Hitotsubashi University)

In Japan, a significant number of mothers leave the labor market when their children start elementary school, despite the fact that they were in employment while their partner was also working before their child started school. This is attributed to the lack of after-school care and other such factors that are collectively referred to as the "first-grade barrier" (*shōgakkō ichinensei no kabe*). This research explores whether it is possible to identify such a "barrier" using data from the Comprehensive Survey of Living Conditions from 1995 to 2010. The analysis was conducted using a regression discontinuity design focused on the children's age in months at the time of the survey. The results showed that in the period investigated the employment rate of mothers decreased by roughly 10 percent at the time of their children starting elementary school. There was also a notable decline in the employment rate of mothers in shortterm employment. This result indicates that the lack of after-school care and other such factors may be making it difficult for mothers with children in the lower grades of elementary school to both work and raise children. As improving both the quality and quantity of after-school care is relatively inexpensive, it is considered essential to increase the after-school care for said age group in order to also ensure the increase of mothers in employment.

## Measuring the Effectiveness of Career Education Using a Natural Experiment: Effects of Career Education on Student's Career Consciousness

### Tomotaka Hirao (Setsunan University)

In this paper, we analyze the effects of career education on career consciousness in a Japanese national university. The government has promoted higher education reforms aimed at creating career development programs for college students. The objective of this policy is to help students secure a job soon after their graduation. In response to this policy decision, many higher education institutions have implemented innovations in educational functions, such as career-oriented education, career guidance, and internships. In Japan, however, there is little literature on the relevance of career education to students' actual career consciousness. This study was undertaken to more accurately measure the effects of career education on career consciousness. Our study uses the data set of an original questionnaire survey that targeted students from a Japanese national university. The empirical results, based on estimation in a regression discontinuity model controlling for selection bias, show that career education in a Japanese national university has positive effects on students' career consciousness (Career Vision, Career Action). Our findings suggest that we have to share good practices in Japanese universities to promote career education in a broad sense.