

# Urbanization, Wait-listed Children and Childcare Support in a Two-Region Overlapping Generations Model

Hiroyuki Hashimoto

<sup>a</sup>*University of Hyogo*  
8-2-1 Gakuennishi-machi Nishi-ku Kobe Hyogo, 6512197 JAPAN  
E-mail hiro@mba.u-hyogo.ac.jp

Tohru Naito

<sup>b</sup>*Doshisha University*  
Karasuma-higashi-iru Imadegawa-dori Kamigyō-ku Kyoto, 6028580 JAPAN  
E-mail tnaito@mail.doshisha.ac.jp

---

## Abstract

This paper explores how the probability that children are on the waiting list for childcare facilities affects regional distribution of population and social welfare in a two-region model of overlapping generations with endogenous fertility. The exploration finds the channels through which “*wait-listed children*”, fertility in each region, regional disparity in wages, inter-regional migration and urbanization are linked together. In the setting where the childrearing needs a portion of time of parents, we demonstrate that a change in the probability of being on the waiting list directly affects the fertility rate of households, but an induced change in the wage rate affects the residential choice of households. The analysis shows that these two channels have the opposing effects on demographic change in the economy. Therefore the effect of a change in the probability on the fertility rate of the economy is ambiguous in general. However, we found that a fall in the probability of urban with lower fertility increases the urban population ratio and the welfare of households with plausible parameter sets in the possible three steady-state comparisons: agglomeration-to-agglomeration, dispersion-to-dispersion and agglomeration-to-dispersion.

*Key words:* Wait-listed children, Child care policy, Standby probability, Urbanization, OLG model

---

\* This work was supported by JSPS KAKENHI Grant-in-Aid for Scientific Research (C) (18K01585).