

# Unemployment dynamics in an OLG economy with public pensions

Tetsuo Ono<sup>\*</sup>

Graduate School of Economics, Osaka University  
1-7, Machikaneyama, Toyonaka, Osaka 560-0043, Japan  
Email: tono@econ.osaka-u.ac.jp

## Abstract

Pension benefits in old age establish a disincentive to save in youth, thereby yielding lower levels of capital stock and the wage rate. As a result, the trade union has an incentive to change the composition of its two targets: employment and the wage rate. This paper develops a model that includes employment effects of public pensions via capital accumulation and union wage setting. Within this framework, we consider how contribution rates to the pension system influence the level and time path of the unemployment rate. It is demonstrated that (i) a higher contribution rate results in a lower unemployment rate, and (ii) the economy with a high (low) contribution rate experiences monotone convergence towards (oscillatory convergence towards or a period-2 cycle around) the steady state.

**Keywords:** Public pensions; Unemployment insurance; Unemployment dynamics; Overlapping generations

**JEL Classification:** E24; H55; J51

---

\* 連絡先: 小野哲生, 大阪大学大学院経済学研究科, 560-0043 大阪府豊中市待兼山町1-7.