

Pay As You Go Pension System
with Heterogenous Households
– Capital Accumulation, Welfare and Income Inequality –

Takao Fujii^{a*} and Jun Iritani^{b†}

^aKobe City University of Foreign Studies, 9-1, Gakuenhigashi-machi, Nishi-ku,
Kobe, 651-2187, Japan

^bFukuyama University, 1 Gakuen-cho, Fukuyama, Hiroshima 729-0292, Japan

Abstract

In this paper, we study the effects of pay-as-you-go pension system on capital accumulation, welfare and income inequality under a two-period overlapping generations model with heterogeneous agents. We focus attention on a policy, that is, an increase of constant contribution financed by decreasing income proportional contribution, while leaving constant and income proportional benefits intact. We establish three results. The first is that the policy increases capital accumulation. The second is that the policy increases Negishi-type social welfare, while other social welfare such as Benthamian or Rawlsian welfare does not necessarily increase. The third is that we present a necessary and sufficient condition for the policy to decrease lifetime income inequality measured by coefficient of variation.

*Corresponding author. E-mail: fujii@inst.kobe-cufs.ac.jp

†E-mail:iritani@fuec.fukuyama-u.ac.jp