Optimal Funded Pension for Consumers with Heterogeneous Self-Control

Kazuki Kumashiro *

Graduate School of Economics, Kobe University

August 18, 2015

Abstract

We consider a public funded pension scheme. In standard models, it is well known that a funded pension does not improve social welfare since the consumers can maximize their lifetime utilities by private savings. In contrast, recent works show that if consumers suffer from their temptation on spending, the funded pension can have a beneficial effect on social welfare. This is because the funded pension has a property as a commitment device, which private savings does not have. However, though it is natural that the degree of temptation varies among individuals, this is not reflected in existing pension policies. We provide the pension scheme that regards this point and maximizes social welfare. A government, that does not know the degrees of the temptation of each consumer, proposes a list that consists of some pairs of pension premium and pension return to consumers, and each consumer chooses one of this before the decision of consumption. The problem is how to design this list. Under the assumption that a utility function for consumption c is $\log(c)$, we show that the optimal pension scheme does not transfer incomes among consumers. This result does not depend on the distribution of the degrees of temptation.

Key Words: Self-Control; Overconsumption; Funded Pension

*Corresponding address: Graduate School of Economics, Kobe University, 2-1 Rokkodai-cho, Nada-ku, Kobe, Hyogo, 657-8501, JAPAN. E-mail: 111e103e@stu.kobe-u.ac.jp