Saving and Retirement Behavior under Quasi-Hyperbolic Discounting^{*}

Lin Zhang^{\dagger}

Graduate School of Economics, Osaka University, Japan

Abstract

This paper investigates saving and retirement behaviors in a quasi-hyperbolic discounting model, à la Laibson (1997) by incorporating endogenous labor supply. Those behaviors under quasi-hyperbolic discounting are characterized by: (i) comparing those with the long-run optimal behaviors, which are obtained under exponential discounting; and by (ii) comparing the behaviors of sophisticated consumers with those of naïve consumers. In so doing, the self-control and discounting effects are decomposed. Consumers with present biases, either naïve or sophisticated, definitely under-save and at the same time, if the wage rate is sufficiently low, get retired earlier than long-run optimizer would do. Consistent with empirical studies, therefore, under-saving and early-retirement can take place simultaneously.

Keywords: Saving, Retirement, Quasi-Hyperbolic discounting

^{*} I am very grateful to Shinsuke Ikeda for his invaluable guidance through my research. I am thankful to Kouichi Futagami, Tatsuro Iwaisako and Yoshiyasu Ono for their comments and advice. I also thank to Shoko Morimoto for her helpful suggestions. All errors remain mine.

[†]Graduate School of Economics, Osaka University, 1-7, Machikaneyama, Toyonaka, Osaka 560-0043, Japan. Email address: <u>kge017zl@mail2.econ.osaka-u.ac.jp</u>