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論文内容の要旨

氏 名 (小 島 健)

論文題名

Changing Tastes, Self-Control, and Consumer Dynamics
(嗜好の変化と自制および消費者動学)

論文内容の要旨 Suboptimal behavior is a serious social and economic issue. A large number of economic studies have investigated this area, offering evidence and theories on its mechanism (e.g., Ainslie, 1992; Laibson, 1997; Loewenstein and Prelec, 1992; O'Donoghue and Rabin, 1999). Based on the development of research in suboptimal behavior, the present study aims to describe consumer dynamics under changing tastes due to self-control problems. This work will pay particular attention to the two types of self-control problem under changing tastes. The first relates to the implication of present-biased time preferences for consumer dynamics, in which a self-control problem arises out of time-inconsistent preferences, with taste change occurring in the form of preference reversal. The second is on consumers' self-control or restraint as regards the consumption of tempting goods, in which case preferences change owing to willpower depletion.

Using an overlapping generations model, Chapter 1 describes the interactions between naive and sophisticated hyperbolic discounters in general equilibrium. In this work, consumers are categorized under two types: Sophisticates, who incorporate their time-inconsistency into their consumption/saving choice; and naïfs, who do not. Naïfs overestimate their future propensity to save, thereby overforecasting future equilibrium asset prices, whereas sophisticates correctly forecast future asset prices by incorporating the naïfs' misforecasts. Consequently, naïfs are exploited through capital transactions by sophisticates. Capital losses play a part in naïfs' fall into bankruptcy, which may occur when they are highly present-biased, highly patient, and small in proportion. This chapter shows that under permissive conditions, the equilibrium is globally stable and Pareto inefficient in the ex-post sense.

Chapter 2 discusses an overlapping generations economy inhabited by two types of present-biased consumers: sophisticates and naïfs, who may not be hyperbolic consumers. Under sufficient conditions, demonstrated using myopic separability, a type of equilibrium may exist in which naïfs, because of their misforecasts, are exploited by sophisticates through Dutch Book transactions. The sufficient conditions are as follows: (i) the sophisticates' population is sufficiently small; (ii) savings for all consumers do not decrease when a current interest rate increases; (iii) the savings ratio for middle-aged consumers is sufficiently small in steady-state equilibrium; (iv) and short-selling is prohibited.

In Chapter 3, by incorporating the dynamic interaction between depletable willpower and self-control (or restraint in the face of tempting consumption), the study re-examines consumption/saving choices in the presence of tempting and non-tempting goods. Willpower functions as a substitute for wealth in that willpower depletion or restoration occurs in parallel with wealth accumulation or decumulation. Willpower is a source of patience for curbing tempting good consumption. As such, a good-specific time preference depends on how tempting a good is and how much willpower a consumer has. Empirical findings in existing literature indicate that an increase in external self-control tasks raises time preference with respect to the tempting good and then shifts consumption from the non-tempting good to the tempting one. In the long run, tempting goods are Giffen goods. Naive consumers, who are incognizant of the presence of the dynamic willpower constraint, consume more tempting goods and have more willpower depleted in the long run compared with sophisticates, who are aware of the willpower constraint. In the case of naïfs, whether impatience is increasing or decreasing with respect to their wealth depends on whether a domain good is tempting or non-tempting. When self-control has a strong willpower-bolstering effect, willpower can relate positively to tempting good consumption, its time preference, and wealth holding.

要旨引用文献

- [1] Ainslie, G., "Picoeconomics," Cambridge University Press, (1992).
- [2] Laibson, D., "Golden eggs and hyperbolic discounting," *The Quarterly Journal of Economics*, 112 (1997), 443-478.
- [3] Loewenstein G., and D. Prelec, "Anomalies in Intertemporal Choice: Evidence and an Interpretation." *Quarterly Journal of Economics*, 107 (1992), 573-597.
- [4] O'Donoghue, T., and M. Rabin, "Doing it now or later," *American Economics Review*, 89 (1999), 103-124.

論文審査の結果の要旨及び担当者

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論文審査の結果の要旨

[論文内容の要旨]

Suboptimal behavior is a serious social and economic issue. A large number of economic studies have investigated this area, offering evidence and theories on its mechanism (e.g., Ainslie, 1992; Laibson, 1997; Loewenstein and Prelec, 1992; O'Donoghue and Rabin, 1999). Based on the development of research in suboptimal behavior, the present study aims to describe consumer dynamics under changing tastes due to self-control problems. This work will pay particular attention to the two types of self-control problem under changing tastes. The first relates to the implication of present-biased time preferences for consumer dynamics, in which a self-control problem arises out of time-inconsistent preferences, with taste change occurring in the form of preference reversal. The second is on consumers' self-control or restraint as regards the consumption of tempting goods, in which case preferences change owing to willpower depletion.

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[審査結果の要旨]

本研究では、選好の変化によって自制問題が発生する場合の消費者行動を、双曲割引、近視眼的分離可能性、意志力の枯渇と可鍛性という要因を考慮することによって動学的に記述し、新しい消費・貯蓄理論を展開している。以上から、博士（経済学）に値すると判断する。