

Myopic separability and general equilibrium with naïve and sophisticated consumers*

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Abstract

I consider an overlapping generations economy that is inhabited by two types of time-inconsistent consumers: sophisticates, who incorporate their time-inconsistency into their consumption/saving choice, and naïfs, who do not. Under myopically separable utility, I provide sufficient conditions for the existence of equilibrium in which naïfs suffer capital losses and sophisticates have excess returns through Dutch book transactions since naïfs' expected asset returns are higher than the actual asset returns. The sufficient conditions are that (i) population for sophisticates is sufficiently small; (ii) savings for all consumers do not decrease when a current interest rate increases; (iii) saving ratio for the middle-aged is sufficiently small in steady state equilibrium; (iv) and short-selling is prohibited.

Keywords: Time-inconsistency, Myopic separability, Naïf, Sophisticates, Dutch book, General equilibrium.

JEL Classification Numbers: D51, D91.

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