

Identification and Testable Implications of the Ramsey-Cass-Koopmans Model

Yuhki Hosoya^{*†}

Graduate School of Economics, Keio University

Abstract

This paper aims to provide a method for calculating the utility function and discount rate of the discrete-time Ramsey-Cass-Koopmans model from the policy and production functions. In contrast to similar works, our method ensures the uniqueness of the utility function up to positive affine transformations. Further, we provide a similar result in a stochastic model.

JEL codes: D11, C61, E13, O41

Keywords: Ramsey-Cass-Koopmans model, Dynamic programming, Utility function, Infinite product, Stochastic shock.

^{*}1-50 1601 Miyamachi, Fuchu-shi, Tokyo, 183-0023, Japan.

[†]E-mail: stairlimit(at)moon.cims.jp, Tel: +81-90-5525-5142