Cocco, Gomes, and Maenhout (2005) REMARK

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Abstract

This paper contains the highlights from the REMARK file in Code>Python folder.

Keywords Hic heac hoc

JEL codes XXX

GitHub: http://github.com/econ-ark/REMARK/REMARKS/CGMPort

(In GitHub repo, see /Code for tools for solving and simulating the model)

CLICK HERE for an interactive Jupyter Notebook that uses the Econ-ARK/HARK toolkit to produce our figures (warning: it may take several minutes to launch). Information about citing the toolkit can be found at Acknowleding Econ-ARK.

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All numerical results herein were produced using the Econ-ARK/HARK toolkit; for further reference options see Acknowleding Econ-ARK. Thanks to Chris Carroll and Sylvain Catherine for comments and guidance.

1 Introduction

2 The Problem

2.1 Setup

The consumer solves an optimization problem from period t until the end of life at T defined by the objective

$$\max \mathbb{E}_t \left[\sum_{n=0}^{T-t} \beta^n \mathbf{u}(\mathbf{c}_{t+n}) \right]$$
 (1)

where $\mathbf{u}(\bullet) = \bullet^{1-\rho}/(1-\rho)$ is a constant relative risk aversion utility function with $\rho > 1$. The consumer's initial condition is defined by market resources \mathbf{m}_t and permanent noncapital income \mathbf{p}_t .

¹The main results also hold for logarithmic utility which is the limit as $\rho \to 1$ but incorporating the logarithmic special case in the proofs is cumbersome and therefore omitted.

 $^{^2}$ We will define the infinite horizon solution as the limit of the finite horizon problem as the horizon T-t approaches infinity.