

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

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 all of the paper's figures (warning: it may take several minutes to launch). Information about citing the toolkit can be found at [Acknowledging Econ-ARK](#).

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All numerical results herein were produced using the [Econ-ARK/HARK](#) toolkit; for further reference options see [Acknowledging 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

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

where $u(\bullet) = \bullet^{1-\rho}/(1-\rho)$ is a constant relative risk aversion utility function with $\rho > 1$.^{1,2} 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 $\rho \rightarrow 1$ but incorporating the logarithmic special case in the proofs is cumbersome and therefore omitted.

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