

Asset Prices in Affine Real Business Cycle Models

Aytek Malkhozov



www.elsevier.com/locate/jedc

PII: S0165-1889(14)00119-5
DOI: <http://dx.doi.org/10.1016/j.jedc.2014.05.011>
Reference: DYNCON3004

To appear in: *Journal of Economic Dynamics & Control*

Received date: 19 May 2011
Revised date: 30 July 2012
Accepted date: 6 April 2014

Cite this article as: Aytek Malkhozov, Asset Prices in Affine Real Business Cycle Models, *Journal of Economic Dynamics & Control*, <http://dx.doi.org/10.1016/j.jedc.2014.05.011>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting galley proof before it is published in its final citable form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Asset Prices in Affine Real Business Cycle Models

Aytek Malkhozov

*Desautels Faculty of Management, McGill University,
Bronfman Building, 1001 Sherbrooke St West, Montreal, QC, Canada H3A 1G5,
Email address: aytek.malkhozov@mcgill.ca*

Abstract

I describe a tractable way to study macroeconomic quantities and asset prices in a large class of dynamic stochastic general equilibrium models. The proposed approximate solution is analytical, log-linear, and adjusted for risk. Therefore, it is well suited to investigate economic mechanisms, describe the time series properties or estimate the model, and deal with stochastic volatility. I explain the pitfalls encountered by previous attempts to use simple approximation techniques, in particular with models featuring recursive preferences. Finally, I show the theoretical relationship between my solution and higher-order perturbation methods.

Keywords: approximation methods, asset prices, stochastic volatility.

JEL: C63, G12, E32.

1. Introduction

Recursive preferences and time variation in means and volatilities have become important features of consumption-based asset pricing literature. Introducing these features in the real business cycle framework allowed researchers to study the joint behavior of real and financial variables along the business cycle. Because the analysis of asset prices requires computing risk adjustments, simple log-linearization is inadequate. Furthermore, numerical methods such as the value-function iteration are computationally expensive and ill-suited for problems with a large number of state variables.

Download English Version:

<https://daneshyari.com/en/article/5098508>

Download Persian Version:

<https://daneshyari.com/article/5098508>

[Daneshyari.com](https://daneshyari.com)