Accepted Manuscript

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PII: S0165-1889(18)30201-X
DOI: https://doi.org/10.1016/j.jedc.2018.08.001
Reference: DYNCON 3612

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

Received date: 5 May 2018
Revised date: 27 July 2018
Accepted date: 2 August 2018

Please cite this article as: Kuan-Jen Chen, Angus C. Chu, Ching-Chong Lai, Home Production and Small Open Economy Business Cycles, *Journal of Economic Dynamics & Control* (2018), doi: https://doi.org/10.1016/j.jedc.2018.08.001

Home Production and Small Open Economy Business Cycles*

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July 2018

Abstract

This paper incorporates home production into a real business cycle (RBC) model of small open economies to explain the different empirical patterns of international business cycles between developed economies and emerging markets. It is well known in the literature that in order for the RBC model to replicate quantitatively plausible empirical moments of small open economies, the model needs to feature counterfactually a small income effect on labor supply. This paper considers home production that introduces substitutability between market consumption and home consumption, which in turn generates a high volatility in market consumption in accordance with the data, even in the presence of a sizable income effect on labor supply. Furthermore, the model with estimated parameter values based on the simulated method of moments is able to match other empirical moments, such as the standard deviations of output, investment and the trade balance and the correlations between output and other macroeconomic variables. Given that home production is more prevalent in emerging markets than in developed economies, the model is able to replicate empirical differences between emerging markets and developed economies in the volatility of market consumption and the volatility/countercyclicality of the trade balance.

JEL classification: D13, E32, F41, O11

Keywords: small open economy; home production; emerging markets; business cycles.

*The authors are deeply grateful to the Editor, Professor B. Ravikumar, an Associate Editor, and two anonymous referees for their insightful comments, which substantially improved the paper. The authors would also like to thank Juin-Jen Chang, Nan-Kuang Chen, Yi-Chan Tsai, and Shu-Chun S. Yang for providing helpful suggestions in relation to earlier versions of this article. The usual disclaimer applies.

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