International Business Cycles and Demand Shocks

Hideaki Hirata*

The international dynamic stochastic general equilibrium (DGE) models assuming complete markets and driven only by productivity shocks have failed to answer to some important puzzles in international macroeconomics (Obstfeld and Rogoff (2001)), although they have succeeded in replicating the basic facts of business cycles in many respects (Backus et al. (1992, 1994), Baxter (1995) and many others). Those puzzles include the lower cross-country correlation of consumption than that of output (the consumption correlation puzzle) and the very volatile terms of trade (the terms of trade puzzle). In addition, the two-country DGE models typically generate much less volatile consumption and labor than in the data (say the consumption-labor volatility puzzle), economists seldom notice this anomaly.

This paper tries to solve those discrepancies simultaneously by introducing idiosyncratic demand characteristics: taste shocks along with standard productivity shocks in the global economy. Lower consumption and labor volatilities and too high consumption comovements generated by the standard models imply that the dynamics of the representative household's labor supply and consumption schedule are subject to country-specific demand shocks. Taste shocks shift the labor supply curve through the preference's trade-off between leisure and consumption.

^{*} h-hirata@hosei.ac.jp. Department of Business Administration, Hosei University. I thank workshop participants at the Brandeis University, Kobe University, and Hosei University for helpful comments and suggestions.