The Difference in Development Stages and the Costs of Monetary Union

—A New Open Economy Macroeconomics model

Vu Tuan Khai

International School of Social Sciences

Yokohama National University

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Abstract

This paper deals with the problem of how the difference in development stages affects the costs of monetary union by analyzing the responses of the countries to symmetric shocks in a New Open Economy Macroeconomics model. Focusing on differences in sectors such as differences in the degree of price rigidity, technology level, the coefficient regarding labor input of firms between the developed and developing countries, the model emphasizes the extremely important role of the movement of labor across sectors in the transmission mechanism of shocks. Some of the main findings are as follows. In the short run, a symmetric increase in money supply can cause GDP to rise sharply in the developed country and to fall in the developing country, while a symmetric technology shock to the agricultural sector has opposite effects. In addition, a symmetric positive technology shock to the industrial sector could raise GDP more in the developing country than in the developed country. The results suggest that the difference in development stages is important because it affects the costs of monetary union.