Learning by Doing and Business Cycles in Small Open Economies

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Abstract

Emerging small open economies are characterized by high volatility of consumption relative to that of output and strong countercyclicality of trade balances. These features contrast with the case of developed small open economies and has been explained by various factors, including trend productivity shocks. However, little has been mentioned about the relationship between trend productivity shocks and the high output growth rate in emerging economies. This paper shows that there is a positive relationship between the output growth rate and the relative volatility of consumption. In other words, the high rate of output growth in emerging economies is related to their large fluctuations of consumption. Then, I attempt to explain both this positive relationship and the stylized facts on the business cycles described above. For this purpose, I introduce an endogenous growth mechanism through learning by doing in Aguiar and Gopinath's (2007) real business cycle model. The learning-by-doing mechanism determines the economy's growth rate, and extends a transitory shock to a more persistent component. Therefore, both the growth rate and the business cycle moments are characterized by a single parameter of learning by doing. The simulation results show that the model can characterize both emerging and developed economies depending on the rate of learning by doing. These results suggest that the learning-by-doing mechanism is a possible source of trend shocks.

Keywords: Emerging economy, Endogenous growth, Learning by doing, Trend productivity shock, Small open economy, Output growth rate

JEL classification: E32, F41, F44

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