

Learning to Learn:

The Role of Imitation and Trade in Technological Diffusion *

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Abstract:

An endogenous growth model is developed demonstrating both static and dynamic gains from trade for developing nations due to the beneficial effects of trade on imitation and technological diffusion. The concept of learning-to-learn in both imitative and innovative processes is incorporated into a quality-ladder model with North-South trade. Domestic technological progress occurs via innovation or imitation, while growth is driven by technological advances in the quality of domestically available inputs, regardless of country of origin. In the absence of trade, Southern imitation of Northern technology leads to asymptotic conditional convergence between the two countries, demonstrating the positive effect of imitation on Southern growth. Free trade generally results in a positive feedback effect between Southern imitation and Northern innovation yielding a higher common steady-state growth rate. Immediate conditional convergence occurs. Thus, trade in this model confers dynamic as well as static benefits to the less developed South, even when specializing in imitative processes.

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