

Effect of International Trade on Wage Inequality with Endogenous Technology⁺

Tran Lam Anh Duong*

Graduate School of Economics, Hitotsubashi University

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Abstract

This paper proposes a framework to explain how technology frontier and labor composition of a country affect its as well as its partner's wage inequality through international trade. Based on the theoretical literature on general-equilibrium monopolistic competition model regarding international trade between two asymmetric countries, I derive a new version where firms' technology is endogenized. Firms in countries which are skilled-labor-abundant choose technologies that are appropriate to skilled labor, and vice versa for firms in countries which are unskilled-labor-abundant. In trade, the wage gap between each type of labor depends on the comparative technology frontier, the comparative ratio between unskilled and skilled labor in both countries, and the trade-off between two types of labor. These effects on wage inequality are partially absorbed by technology endogeneity. Furthermore, country with higher ratio of unskilled labor will exhibit larger wage inequality driven by skill differences.

Keywords: Monopolistic competition, Trade, Wage inequality, Endogenous technology

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* Correspondence address: Tran Lam Anh Duong, Graduate School of Economics, Hitotsubashi University, 2-1 Naka, Kunitachi, Tokyo 186-8601, Japan. Email address: anhduongtl (at) gmail.com