タイトル：

Cross-Country Heterogeneity in Production-Environment Nexus and International Trade

報告言語：

英語

要旨：

We examine the interactions between trade and the environment in a two-country, two-sector dynamic model. In each country, an environmental stock evolves subject to the environmental burden from the resource-good and manufacturing sectors, and this, in turn, affects productivity in the resource- good sector. The two countries differ in the sectoral ranking of per-unit labor environmental burden and export their respective “dirtier” goods under trade. We employ phase diagrams to explore the transition from autarky to trade and utilize the welfare-neutral locus to analyze the welfare impact of trade. Trade harms the environment in both countries, albeit not necessarily during the transition. Welfare impact arises via productivity, dynamic terms-of-trade, and (the conventional) static terms-of- trade changes. A smaller pre-trade comparative advantage and/or greater trade-induced environmental deterioration increase the likelihood of both countries losing in the trade steady state. Because cross-country heterogeneity generates nonconvexity in production technology, multiple steady-state equilibria may exist under free trade. In that case, different equilibria have opposite welfare implications for the two countries.