International Productivity and Factor Price Comparisons

Topic: Analyzing productivity Author: Kathryn Gail Marshall

Using OECD input-output tables for a diverse group of 33 countries in the year 2000, I attempt to replicate Trefler (1993)'s findings that substantiated productivity-adjusted factor price equalization. I compute factor payments for aggregate labor and capital using value-added data adjusted for self-employment by sector, a correction which differs notably for low income countries from a widely used economy-wide self-employment correction. I find a distinctive bias in the relationship between factor productivity and factor prices depending on whether a country has a high or low wage to rental ratio compared to the United States. I explain this bias by industry-based differences in production technology together with less than unitary elasticity of substitution between factors.