Misallocation in a Global Economy

Lorenzo Caliendo, Yale University

Fernando Parro, Federal Reserve Board

Aleh Tsyvinsky, Yale University

March 4, 2016

Abstract

What are the global effects of reducing misallocation in a given country? We develop a general equilibrium model where, as in recent multi-sector Ricardian trade models, producers purchase intermediate goods from the lowest cost supplier in the world. Different from them, however, factor prices, productivities and domestic frictions (misallocation) affect the mobility of goods across sectors within a country. In our model, changes in misallocation in a given country have welfare implications in foreign countries through two main mechanisms. First, a reduction in misallocation in a given country impacts production costs, and foreign countries benefit from the access to cheaper goods as a result. Second, lower domestic frictions allow countries to substitute foreign intermediate for domestic ones, which leads to a decline in production and wages in foreign countries. The relative importance of each of these two channels determines the international welfare effects of reducing domestic misallocation. Our model also departs from current models by incorporating frictions of moving final goods as well as frictions of moving goods from a different sector and country. All these departures are guided by world's input output data that show the pattern of substitution of intermediate materials and final goods across sectors and countries, and over time.

Using information from the world's input output databases, we are able to separate changes in productivity from changes in misallocation, and from changes in international trade frictions in final and intermediate goods, for a large number of countries over the last two decades. Using these estimates, we run counterfactual experiments to compute the welfare effects across countries of reducing misallocation in China, and the U.S. welfare effects of reducing misallocation in other countries. We also present other counterfactual experiments that shed light on the quantitative importance of reducing misallocation for the global economy.