Gizem Kutlu, University of Virginia

Gains from Trade with Heterogeneous Households

Trade costs have fallen significantly recently, but this will not affect households uniformly. I address how trade costs affect the welfare of poor versus rich households within a country and how welfare gains/losses of agents with different wealth levels depend on their education. My key contribution is to consider the effect of households’ expenditures and intertemporal consumption-savings decisions on their gains from trade. I also develop a framework which provides an accurate measure for the distribution of gains within a country by taking into account transition dynamics. Hence, I can measure gains depending on wealth, income and education instead of calculating average gains by comparing steady states and analyze the long-run welfare effects of trade costs.

To provide motivating evidence, I use the Bureau of Labor Statistics Consumer Expenditure Surveys and document the variation between consumption bundles of households with different levels of wealth and income in the United States (U.S.). I also show households’ expenditures vary with income in Mexico by using National Survey of Household Income and Expenditure published by National Institute of Statistics and Geography. The data confirm that the shares of manufacturing goods and services in total expenditure are increasing in income and wealth, whereas the share of agricultural goods is decreasing.

Therefore, I develop a two-country, multi-sector dynamic model of trade with households heterogeneous in their earning abilities, wealth and education levels. It features non-homothetic preferences, idiosyncratic income shocks, endogenous consumption-saving decisions and capital-skill complementarity. I calibrate the model to the U.S. and Mexico to analyze the distributional consequences of the North American Free Trade Agreement (NAFTA). I compute the steady states and the transition path to quantify the welfare effect of reducing import tariffs.

I find that in both countries, high skilled workers (college graduates) gain more from an unanticipated permanent reduction in the import tariffs compared to low skilled (non-college) workers because of the rise in the wage premium. In addition, these lower tariffs relatively favor the poor within skill groups. The gap between the gains of college graduates and non-college workers rises as wealth decreases. The results also suggest that an anticipated, permanent reduction in the tariffs results in lower gains than the unanticipated fall especially for the poor.

JEL Classifications: E21, E24, F10, F16, F41, F62
Keywords: welfare, consumption, saving, wealth, trade, factor price