Import Competition and Employment Dynamics

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In order to quantify the effect of foreign competition in domestic industries and to elucidate the cross-country differences that have been observed in response to intensified import competition, this paper presents and estimates an open industry model under monopolistic competition and aggregate uncertainty. It provides a novel method for rigorously characterizing how firms adjust to intensified import competition and aggregate shocks in a structural framework. In the model, heterogeneous firms face competition both from outside the country through imports and from inside the country in the domestic market. Firms react to changes in the competitive environment through both hiring and firing on the intensive margin and entry and exit on the extensive margin.

Plant-level panel data are used to estimate the model's parameters, including the sunk start-up costs faced by new firms, fixed per period costs, the stochastic process that governs firms' idiosyncratic productivity shocks, and the adjustment costs associated with changing employment levels. Then, with the estimates of the structural parameters, the model is used to characterize and quantify the effects of intensified import competition on job turnover patterns, productivity distributions, and entry and exit patterns of the firms. The model also characterizes the interactions among intensified import competition, labor market regulation and exchange rate regime. Thus it elucidates the cross-country, cross-industry differences that have been observed in response to heightened import competition.

The model predicts the associated changes in aggregate productivity, employment, job flow patterns and mark-ups in the new long-run equilibrium as well as the nature of the transition process when openness changes, and the role of adjustment costs in shaping firms' behavior.

KEYWORDS: Industry Dynamics, Monopolistic Competition, Aggregate Uncertainty, Import Competition, Job Creation and Job Destruction