

Job Matching and Adjustment Costs in Mexican Manufacturing Establishments

By

Stephen G. Bronars
University of Texas at Austin
bronars@eco.utexas.edu

David Kaplan
ITAM
kaplan@cie-itam.net

Mexico's Maquiladora Program reduced steep tariffs on imported raw materials and equipment and encouraged foreign investment, especially by the United States, near the U.S.-Mexican border. These policies fueled spectacular growth in manufacturing output, employment, and population along the U.S. Mexican-Border. These substantial changes in the Mexican manufacturing sector were accelerated by Mexico's entry into GATT in the 1980's, and NAFTA in the 1990's.

One purpose of this project is to examine, measure, and model the expansion and contraction in employment in the Mexican manufacturing sector using a unique microeconomic data set that links employers and employees. We develop theoretical and empirical models of dynamic labor demand and apply these models to data from the Mexican manufacturing sector. This study is unique because changes in the size and scope of manufacturing establishments in Mexico are rather large and have occurred relatively quickly compared to other countries. In addition, Mexico's labor market and product market shocks due to financial crises and demand fluctuations are substantially larger than the typical shocks encountered in the United States and Western Europe, where most studies of dynamic labor demand have been conducted. These observations make the Mexican experience an important laboratory for understanding and measuring the way in which firms and establishments expand and contract their employment.

A second important goal of the study is to combine economic models of job matching and adjustment costs to provide a more complete picture of the structure of adjustment costs. This project is the first study to link the adjustment cost framework to job matching and job search models. One of the primary goals of this project is to develop a rigorous structural model relating the costs of adjusting employment at the establishment level to the job search, screening, and matching decisions made by firms in the presence of incomplete information. The fundamental insights of the new model of dynamic labor developed in this research project are that (1) adjustment costs are likely to occur because firms that attempt to fill job vacancies quickly tend to obtain lower quality and less durable employment matches, and (2) establishments that appear to adjust more slowly to labor market shocks and innovations should also be more selective in their hiring decisions, in order to reduce the costs of future turnover caused by less durable employment matches.

In our preliminary empirical research using the matched employer-employee data in Mexico, we find some evidence that job matches are less durable when establishments hire relatively large numbers of workers in a given period, and make a more rapid adjustment to a labor market shock. More rapid adjustments in employment today appear to generate higher turnover rates in the future. This finding is important because it has implications for not only the functional form of adjustment costs, but the economic rationale for these costs.

We will also look for direct evidence that establishments that adjust slowly to labor market shocks are more selective in their hiring decisions. For example, we hypothesize that more experienced workers, and workers with more stable employment

histories, are more likely to have more durable new employment matches. We then examine whether employers that appear to face more substantial adjustment costs are more likely to select more stable employees.