Prices, Markups and Trade Reform

(joint paper with Pinelopi K. Goldberg, Amit K. Khandelwal and Nina Pavcnik)

Abstract:

This paper examines how prices, markups and marginal costs respond to trade liberalization. We develop a framework to estimate markups from production data with multi-product firms. This approach does not require assumptions on the market structure or demand curves faced by firms, nor assumptions on how firms allocate their inputs across products. We exploit quantity and price information to disentangle markups from quantity-based productivity, and then compute marginal costs by dividing observed prices by the estimated markups. We use India's trade liberalization episode to examine how firms adjust these performance measures. Not surprisingly, we find that trade liberalization lowers factory-gate prices and that output tariff declines have the expected pro-competitive effects. However, the price declines are small relative to the declines in marginal costs, which fall predominantly because of the input tariff liberalization. The reason is that firms offset their reductions in marginal costs by raising markups. Our results demonstrate substantial heterogeneity and variability in markups across firms and time and suggest that producers benefited relative to consumers, at least immediately after the reforms. Long-term gains to consumers may be higher to the extent that higher firm profits lead to new product introductions and growth. Indeed, firms with larger increases in markups had a higher propensity to introduce new products during this period.