

Multi-product firms, markup adjustment and import competition

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Abstract:

This paper studies the pro-competitive effects of increased import competition on product-level markups, using highly disaggregated data on Danish manufacturing firms in the period 1999-2012. In the past 20 years, import shares have gradually increased across time and across sectors in the Danish economy, especially after China's accession in the WTO in 2001 and abolishment of tariff barriers. Being part of the European single market, Denmark has also experienced increasing imports from other European countries as well further contributing to a more competitive landscape for Danish manufacturing firms at home. Previously, the literature has studied firm-level outcomes of import competition without taking into account the potential heterogeneity in markup responses and product level adjustments in multi-product firms. More than half of all Danish manufacturing firms produce more than one product and these are responsible for the majority of industrial output. Hence, studying the within firm markups effects stemming from import competition, has important policy implications. The results suggest that import competition has a differential impact across products within a firm and is negatively correlated with product level markups, lending strong support for pro-competitive effects at the product level. Import shares have on average increased by 10% points in the Danish manufacturing sector during the sample period, leading to a reduction of markups by 28% on average. Following an increase in import competition, firms adjust the markups of their core products more relative to their peripheral products. These observations are consistent with theoretical models of multi-product firms where core products have the highest markup and thus have greater room for adjustment. The endogeneity of import shares is tackled with an IV approach relying on the insights by Hummels et al. (2014), where the world export supply at the product level is used. Product-level markups are estimated following the approach by De Loecker et al. (2016), incorporating the potential effect of import competition in the methodology. The findings have crucial policy implications as they suggest that import competition has heterogeneous effects not only across firms but also within firms.