

# Trade Liberalization and Third Market Effects

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September 2013

## **Long abstract**

We explore a large policy shock, which may be interpreted as a quasi-natural experiment, to study how changes in a country's trade policy affect the trade flows to countries not directly involved with the policy change. That is, we measure and seek to explain the mechanisms behind "trade policy externalities." The trade policy shock we study is the end of the quota system for textiles and clothing products in 2005. We analyze the reaction of Chinese producers vis-à-vis the markets where policy did not change.

Exports of some textile and clothing products to the European Union, to the United States and to Canada were restricted by binding import quotas under the Multifibre Arrangement (MFA) until January 1st, 2005, when all quotas were lifted. The restrictions—and hence their elimination—affected exporters from China disproportionately. This large, sudden, easily measured and statistically exogenous trade policy shock provides a suitable environment to study the impact of trade policy changes on firms' export behavior to third markets. Critically, the end of the quota system affected only some, not all textile and clothing products. This allows us to compare firms' export behavior for restricted against non-restricted products, before and after the policy change. Hence, we rely on a difference-in-differences methodology where we can take into account the effects of other exogenous shocks that affected the overall demand for and supply of Chinese textiles and clothing goods.

Our goal is to investigate how the end of the MFA altered the behavior of Chinese exporters in markets other than those affected by the policy. To do so we use Chinese customs export data for years 2000-2006, which are defined at the firm-product-destination level. Our identification strategy relies on the fact that many firms never obtained a quota license and therefore could not enter the restricted destinations before 2005 despite potentially large profits there. For those firms, the end of the quota system generated an exogenous increase in their potential export profits to those destinations for a large number of previously restricted products. But our focus is on third-country effects, so we study Chinese firms' export decisions (volume, physical quantity, price, entry and exit) not to the markets that implemented the policy change, but to Africa, Latin America, Asia and Oceania—i.e., to

the Rest of the World (ROW). Alternatively, we also look at a restricted set of ROW countries (the combined markets of Japan, Australia and New Zealand) that are strong net importers in the sectors under analysis.

According to standard neoclassical trade theory, where firms operate under constant returns to scale and markets are linked by arbitrage conditions, the opening of a large importing market should raise the world price in that sector. In turn, this should reduce sectoral imports in other importing countries where policy has not changed and those products have become relatively more expensive. Or put differently, the liberalization should induce Chinese exporters to divert their foreign sales to the liberalizing markets, and away from alternative destinations, which have become relatively unattractive. Similarly, if Chinese firms faced finance or capacity constraints, or any other form of decreasing returns to scale, we should also expect to observe a reduction in Chinese exports to the economies where policy did not change.

Interestingly, we find a strong *positive* impact of the end of the quotas on the volume of trade from China to ROW. The effect is both statistically and economically significant. There is an additional 18 percentage points in the growth rate of Chinese exports to ROW after the reform (compared to before) for restricted products (compared to non-restricted products). The increase reflects mainly changes in quantities, not in prices. This result is explained by an expansion of the extensive margin, driven by an increase in the number of exporting firms of restricted products to ROW, which rises by an additional 7 percentage points per year after the end of the MFA, relative to the number of firms exporting unrestricted products.

Those empirical results seem statistically unequivocal. What could be driving them? A natural candidate may be increasing returns to scale, broadly understood. For example, once the restricted markets open up, some investment in capacity or in better production technology may become advantageous, and this can make entry in other markets worthwhile. However, this cannot be the whole (or even the main) story: strikingly, we find qualitatively identical results even when we restrict the sample to the firms that sold MFA restricted products in the European, the American and the Canadian markets neither before *nor after* the change in policy in 2005. Hence there must be other forces at play beyond scale economies. In particular, those findings seem to suggest that de-location forces may have played an important role, in line with the predictions of models like Melitz & Ottaviano (2008).