

The impact of increased competition in Canada can be seen following the implementation of the CUSFTA and NAFTA. Increased competition from imports caused the number of firms in the domestic economy to decrease as smaller and less efficient firms closed, allowing more efficient firms to expand and become even more productive. In the six years following the CUSFTA, the number of manufacturing plants declined by 21 percent while output per plant in Canada increased by 34 percent. This reduction in number of firms was found to be largely induced by the reduction in tariffs (Head and Reis 1999).

The notion that increased imports from trade liberalization results in the closing of some domestic firms may at first appear to be a negative outcome. But it is important to realize that this is one of the main mechanisms by which increased competition makes the domestic market more efficient: firms that were compelled to shut down did so because they could not compete with the quality or price of foreign imports, while those domestic firms that remained were more efficient and better able to face the increased competition from abroad. In this way, imports cause a reallocation of domestic resources to more efficient uses. Plant turnover (closing of some companies and opening of others) contributed between 15 percent to 20 percent of manufacturing productivity growth during the 1988-1997 period (Baldwin and Gu 2002).

Not only does competition force out less productive plants, but the surviving firms are also compelled to become even more productive in domestic economy. Baldwin and Gu (2009) looked at 7,000 Canadian manufacturing plants for the period 1984 to 1990 and found that plants in industries with the largest tariff changes also experienced the

largest increases in product-run length, and increased plant size. This was due both to increased competition from imports and from gains in exporting accruing from greater access to the U.S. market.

Studies from other countries support these findings. For example, Liu (2010) showed that greater import competition in the United States led multi-product firms to drop peripheral products and focus on core production. Gibson and Harris (1996) investigated the effect of trade liberalization on manufacturing in New Zealand and found that liberalization caused smaller-sized, higher-cost plants to close, while low-cost specialized plants were more likely to survive. In Chile, Pavcnik (2000) showed that the trade liberalization undertaken in that country in the late 1970s and early 1980s resulted in plant level productivity improvements that were mainly due to the reshuffling of resources and output from less to more efficient producers.

CGE models can also be used to show the impact of imports on competition. For example, Cox and Harris (1985) show that by incorporating scale economies, imperfect competition, and capital mobility into these models, the estimated gains from trade to Canada under the CUSFTA increase by a significant factor (in the order of 8 to 10 percent of GNP) through rationalization of industries, greater production runs, lower price-cost mark-ups, and increases in factor productivity.

Imports also encourage innovation in an economy, first, by obliging domestic producers to innovate to improve their products and production processes in order to compete with foreign goods and services; and second, the imports themselves produce spill-over