

find a direct link between increases in the wage premium of skilled workers and changes in trade intensity. Sectors where import competition increased the most (labour-intensive, product-differentiated and natural resources sectors) also saw the largest increases in the wage premium of non-production workers. However, these results are not directly comparable to those above, as the authors examine changes in relative wages at only a sectoral level and do not provide evidence for manufacturing as a whole.

Schwanen (1997) finds some evidence that, in the immediate post FTA period, manufacturing wages grew faster those sectors that had previously been open while sectors newly exposed to the FTA did not fare as well. Beaulieu (2000), on the other hand, while finding an effect on employment finds no evidence of any impact on earnings for either skilled or less-skilled workers. Townsend (2004), using micro-level data and controlling for worker's characteristics such as education and experience, explores a number of questions relating to the impact on workers of the FTA. He finds that relative wages fell in those industries faced with the deepest tariff cuts, and tended to be low-end manufacturing workers. Lemieux (2005) explores a slightly nuanced version of this question asking whether wages rates in Canada and the U.S. have converged post FTA. He finds that wage rates between the two countries were quite comparable in 1984 but have diverged to some degree since then, most notably in the wage premium associated with higher education rising much more in the U.S. than in Canada.

On balance, one could conclude that the FTA contributed mildly to job losses in Canada in the early 1990s, but the overall effect was relatively modest and was likely off-set by employment gains elsewhere in the economy. Similarly, while there may have been some skill bias in wages resulting from the FTA, this effect too was not overly pronounced and likely relatively small compared to other changes ongoing in the economy at the time.

Productivity

The productivity effects of the FTA have been the most controversial of the ex post FTA results after employment. Many ex ante studies of the FTA, including my own (Harris 1984), suggested the FTA could significantly raise productivity in Canadian industry through a variety of channels—improved scale economies, longer production runs, improved resource allocation across sectors due to better exploitation of comparative advantage, and increased competition due to more open markets. The debate on productivity effects was given added impetus by an increase in the labour productivity gap between Canada and the US, which accelerated after 1994 as discussed by Bernstein, Harris and Sharpe (2002). From 1977 to 1994 the Canada-US gap in output per hour in manufacturing averaged 14 percent. Since 1994, however, Canada's relative gap has risen 20 percentage points from 12 percentage points in 1994 to 32 percentage points in 2001. Output per hour in Canadian manufacturing fell from 88 percent of the US level in 1994 to 68 percent in 2001. Clearly productivity did not increase as was expected, but worse, it actually declined in the latter part of the 1990s. The determinants of productivity growth are quite complex, and the story of the late 1990s is as much about the acceleration of US productivity growth and the US