James Uguccioni (Centre for the Study of Living Standards)

Estimating Total Factor Productivity Growth: Canadian Freight Railways, 1986 to 2009

Canadian railways are a vital part of the country's transportation sector, moving goods and people across the country. We perform firm-level productivity analysis of Canadian freight railways for 1986 to 2009, focusing on the two railways which dominate the market: Canadian National (CN) and Canadian Pacific (CP). We obtain total factor productivity (TFP) estimates from firm-level data both by constructing productivity indices and econometrically estimating of cost functions. The strong TFP growth at both firms considerably outpaced aggregate TFP growth in Canada over the period of interest. Equally impressive labour productivity gains are found to be primarily attributable to both rapid capital deepening and robust TFP growth. We pay special attention to the productivity effects of the 1995 privatization of CN. While CN enjoyed much stronger productivity growth over the 1986-2009 period than CP, its performance was equally superior before and after the 1995 privatization.