

1985 prices), and that special gains in manufacturing labour productivity are achieved. A comparison of productivity differences between Canada and the United States, detailed by industry, suggests these gains would be concentrated in secondary manufacturing. These are phased in over 1988-1997, to register a 5 per cent improvement in output per person-year beyond that achieved in the base case. This assumption constitutes a direct reduction in employment of 120,000 person-years in 1998.

- * It is assumed that the level of economic activity in the United States and elsewhere is unchanged by the agreement, and that there is no diversion of United States imports from other sources to Canada, which implies a small understatement of the export benefits to Canada.
- * In all impact cases, we have assumed that a surcharge on personal income taxes is imposed by the federal government equivalent to the loss of customs revenues that would have been otherwise realized, and offsetting some of the real income benefits to consumers provided by lowered prices. In 1992, this surcharge reaches \$3.6 billion (at nominal prices) and is 2.8 per cent of federal revenues projected in the base case. By 2005, the amount rises to \$8.3 billion, or 2.3 per cent of total revenues.
- * We have assumed in all cases that the Canadian exchange rate adjusts to changes in the current account balance, inflation, growth and interest rates and that the Bank of Canada targets on maintaining the same "real" interest rate as is reported in the base case.
- * To reflect the possibility of increased protectionism in the United States, we have assumed that tariffs and non-tariff barriers are increased three-fold beyond those that currently prevail. This is approximately equivalent to a 10 per cent tariff surcharge; and it would generate reduced economic activity in both the United States and Canada.

Method of Analysis

To measure the national impacts of these assumptions, we have used The Informetrica Model (TIM) of the Canadian economy and simulation studies of the United States developed by Wharton Econometric Forecasting Associates of Philadelphia. TIM uses nonlinear and dynamically specified equations to combine a detailed Keynesian final demand framework with adjusted input-output tables that provide sectorally detailed estimates of industry output, employment, and prices. This is formally simultaneous so that relative as well as aggregate price and wage formation is measured and feeds back into the final demand estimates. Approximately 50 export and import equations are available, by direction of trade (United

