

1.2 Sources Of Noise

As a general statement, assessment of an impact can be thought of as attempting to decompose the "causes" of an event into constituent elements. With perfect understanding and data that accurately describes what has happened, each of the elements would be properly weighted, and taken together, would "explain" the event perfectly, every time. But this almost never happens, and some "noise", or unexplained residual element, is always present to confuse the issue. This noise can follow from a variety of factors, including improper measurement of either the event, or one of the "causative" elements, or mis-specification of the relationship between the event and those things that are thought to explain it. The object of rigorous research is to reduce the amount of noise. Assessment of the economic effects of the FTA will be confronted with classic causes of such noise.

A rigorous assessment of the FTA's effects on the Canadian economy will have to start with a determination of what was changed in each year (much of which will be couched in legal and other, non-economic, terms), and an evaluation of how this directly influences the economy at the margin in that year, and beyond. For example, the FTA includes an agreement to reduce Canadian and American tariffs, beginning on January 1, 1989. In Canada, this should directly reduce the price of American-originated goods imports, and raise the quantities imported, the amount depending on whether tariffs, quantitative or other restrictions were previously effective in restricting imports. Canada's exports and export prices will also be directly affected by the reduction of U.S. tariffs (and customs user fees).

As a second example, changes in tariffs, and in investment rules, access to market rules, or other provisions of the FTA may also directly alter changes in behavior of Canadian, U.S. and other-foreign investors in productive plant and equipment. Such provisions may "cause" a Canadian (or foreign) investor to judge that the strategic setting in which operations occur has changed, leading to altered intentions about what products to produce, how production in an enterprise will be carried out and at what scale, and for these reasons intentions about how much to invest, and where. Both negative and positive effects on output, employment and incomes can be expected.

Thus, the first point at which "noise" can be introduced into any analysis will be the extent to which events have occurred, and what these directly mean in economic (market-measured) terms.

Using tariff effects as an example, it is possible to audit the changes in tariffs as the starting point for evaluating direct effects. Notice that the FTA cannot itself be considered to necessarily document what can be expected here, since Article 4.1.1 provides for an acceleration in the schedule of tariff reductions. Further, importers may neglect to take advantage of a tariff reduction. And, of course, GATT agreements about tariffs (and NTBs) will be changing over time.

Given an appropriate audit of events, a second source of "noise" is introduced when attempts are made to translate them into fairly directly measurable consequences. Thus, any change in tariffs collected will have