

trade diversion within the US due to more liberal trade with Canada. She does this by estimating an equation which explains US imports from countries other than Canada as a function of tariff liberalization of the US with Canada, average tariff liberalization with other countries, the initial share of Canadian imports, and time dummies to control for macroeconomic effects. If the Canada-US trade agreement were trade diverting from the US perspective, one should find that reductions in US tariffs on Canadian imports actually lowered imports from other countries. What she found was that in all cases, the coefficients on the variables indicating tariff liberalization on Canadian goods were statistically indistinguishable from zero. There was no discernible relationship between the extent of tariff liberalization on Canadian produced goods and import growth in the US from countries in the rest of the world.

A more recent study by Romalis (2005) uses a similar approach to Schwanen and Clausing but estimates demand and supply elasticities on trade volumes and prices using six-digit HS classifications. He finds that the Canada-U.S. FTA increased bilateral trade between Canada and the U.S. by 5.35% while NAFTA resulted in a 24% increase in trade between Canada and Mexico. However, Romalis also found that there were minimal impacts from either trade agreement on welfare due to the small reduction in prices largely being offset by reduced duties collected. Furthermore, contrary to the findings of Clausing, Romalis finds support for some trade diversionary effects under both the FTA and NAFTA.

A second category of studies use the gravity model of international trade to impute the impact of the FTA-NAFTA for Canada. The main variables used to explain trade are GDP levels, real exchange rate variables, and distance between country pairs. The popularity of this approach is primarily explained by the relative ease with which one can obtain the data necessary to implement a statistical model of bilateral trade. One estimates the model across a number of countries over time and adds a dummy variable intended to pick up the introduction of the trade agreement. Since the estimation includes countries both in and out of the agreement, the potential variation between these groups ought to help explain the added effect on trade that can be attributed to the existence of a RIA after controlling for the other variables. This approach has yielded almost no consistent results. Coefficients are highly unstable, insignificant, and often of the wrong sign, and very sensitive to the data period chosen. However if one has to conclude, almost all these studies find no impact of FTA-NAFTA on trade volumes. The major problem with this particular approach is the high degree of correlation between a number of macro variables and the introduction of the FTA, as has already been discussed. Estimating a model *ex post* over this period, most studies find that US income and the exchange rate changes "explain" most of the growth in Canada-US trade. The variable capturing the introduction of FTA-NAFTA actually does very little to add explanatory value. Other problems, as discussed by Frankel (1997), include the small number of observations and the fact that GDP and trade are both endogenous to the overall economic system. Examples of this type of approach include Frankel (1997), Krueger (2000), Gould (1998) and Soloaga and Winters (2000). Acharya, Sharma and Rao (2001) pursue a variant of this approach but are even more limited in that they look only at