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ORIGINAL ARTICLE

## Putting Canada in the penalty box: Trade and welfare effects of eliminating North American Free Trade Agreement

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### Abstract

Three years ago, very few economists would have imagined that one of the newest and fastest growing research areas in international trade is the use of quantitative trade models to estimate the economic welfare losses from *dissolutions* of major countries' economic integration agreements (EIAs). In 2016, "Brexit" was passed in a UK referendum. Moreover, in 2019, the existence of the entire North American Free Trade Agreement (NAFTA) is at risk if the US withdraws—a threat President Trump has made if the proposed US–Mexico–Canada Agreement is not passed by the US Congress. We use state-of-the-art econometric methodology to estimate the partial (average treatment) effects on international trade flows of the six major types of EIAs. Armed with precise estimates of the average treatment effect for a free trade agreement, we examine the general equilibrium trade and welfare effects of the elimination of NAFTA (and for robustness US withdrawal only). Although all the member countries' standards of living fall, surprisingly the smallest economy, Mexico, is not the biggest loser; Canada is the biggest loser. Canada's welfare (per capita income) loss of 2.11% is nearly *two times* that of Mexico's loss of 1.15% and is nearly *eight times* the US' loss of 0.27%. The simulations will illustrate the important influence of trade costs—international *and intranational*—in contributing to the gains (or losses) from an EIA's formation (or elimination).

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