

Essays in International Trade Agreements

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Preferential Trade Agreements as Dynamic Farsighted Networks

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In the presence of multilateral negotiations, are preferential trade agreements (PTAs) necessary for, or will they necessarily lead away from, global free trade? This question is explored using a novel dynamic network theoretic model in which countries are farsighted and asymmetric in terms of market size. I develop a new equilibrium concept that endogenizes the order of negotiations. When two countries have a PTA, one member's formation of an additional PTA may create incentives for its original partner to form a PTA with its new partner. When considering forming an additional PTA, the current member therefore recognizes the potential for erosion of its preferential access in both partner markets. This fear of preference erosion undermines its willingness to form the additional PTA. Global free trade is attained when countries fear of preference erosion is sufficiently small. Even when countries are symmetric in terms of market size, the discount factor determines the importance of preference erosion. Since greater asymmetry increases rents protected by members, preference erosion becomes more costly and the scope for global free trade falls. However, under high enough asymmetry, some future PTAs do not form. This eliminates the fear of preference erosion for certain countries and dramatically increases the extent to which PTAs are necessary for global free trade. The model provides insights into the dynamics of recent trade negotiations involving the US. It also suggests that the ambiguities inherent in GATT Article XXIV may actually promote global free trade.

Preferential Trade Agreements: an Empirical Network Approach (in progress)

Competitive liberalization is a consistent theme in domestic policy discussions surrounding preferential trade agreements (PTAs). This view posits that countries compete to gain a foothold in desirable export markets. Put simply, the value of preferential market access gained in any particular market varies inversely with the number of other countries who already have preferential access. This provides a strong foundation for the proposition that the structure of the global trade network is an important determinant of the ever increasing pace of PTA formation. The empirical model used extends the empirical model of Christakis, Fowler, Imbens and Kalyanaraman (2010) to a setting of repeated network observations. Because the network structure makes direct use of the likelihood function computationally impractical, a Bayesian Markov chain Monte Carlo procedure is used to draw from the posterior distribution of the parameter vector. Estimation of parameters governing how the network structure affects the attractiveness of PTAs enables predictions regarding the future state of the global trade network. Consideration of counterfactual states of the global trade network, such as the absence of NAFTA, are also possible.

Tariff Transitions and Binding Overhang (with Maia Linask, U of Richmond)

Little theoretical work explains why governments routinely set tariffs below their WTO commitments, a practice known as binding overhang. In a dynamic lobbying model, we view government as being captured by importers or exporters. Initially, importers control tariff policy. To pre-emptively avoid exporter lobbying, importers are content with a lower tariff when the time varying opportunity cost of lobbying is low. Thus, the average tariff falls as lobbying becomes easier, which increases binding overhang. However, eventually importers cannot prevent exporter lobbying, and exporters gain control of tariff setting. Then, binding overhang falls as lobbying becomes easier because exporters accept a higher average tariff to maintain control. The size of the economy also affects binding overhang. In particular, a larger economy increases the opportunity cost of lobbying, which lowers the variance of binding overhang. Hence, the model offers empirically testable predications relating the first and second moments of binding overhang to the ease of lobbying and the size of the economy.