

## **Trade Blocs and Interstate Conflict: Member State Relations with the External World<sup>1</sup>**

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Abstract

Economic integration agreements – also called preferential trade agreements or regional trade agreements – have dramatically expanded in scope since World War II. While the economic agreements tend to increase intra-agreement commerce, there are strong reasons to believe integration affects relations with excluded states as well. Indeed, economic agreements may exacerbate tension and conflict between members and non-members. In particular, economic agreements reduce the salience of commercial ties between members and non-members and give rise to relative gains concerns through the process of trade diversion, thereby reducing the effectiveness of non-militarized coercive mechanisms like sanctions. To evaluate this argument, I conduct a large-N statistical test of dyad years from 1970 to 2001. Ultimately, I find strong support for the idea that economic agreements increase the use of military coercion between members and non-members, particularly if trade asymmetry is high and diversion occurs.

Economic integration agreements, also called regional or preferential trade agreements, are increasingly popular tools of commercial policy for states. While only a handful of agreements existed immediately after World War II, over two-hundred are in force today with many more in various stages of negotiation. The proliferation of agreements is accompanied by increasing complexity. Many economic agreements now incorporate external trade policy harmonization and factor mobility in addition to standard trade liberalization. The popularity of commercial agreements, however, is as much a reflection of political as economic goals. Specifically, while all agreements seek the expansion of trade and investment, many have underlying security dimensions as well. Several economic agreements, notably the European Coal and Steel Community as a precursor to the European Union, are specifically motivated by security threats between members (Schuman 1950). Consequently, economic integration may be as valuable for security as economic policy in the eyes of member states.

Yet economic agreements do not exist in a vacuum. Economic integration can profoundly affect the welfare of non-member states by altering trade patterns and investment decisions. In a process called trade diversion, for example, trade shifts from lower-cost producers to higher-cost producers due to the unequal removal of trade restrictions (Viner 1950, 43; Krugman 1993, 384-385). Furthermore, economic integration involves strategic decisions about which states are included and excluded from membership. Often these decisions are made based on security goals. Many states integrate economically to resist aggressive states or particularly strong threats they may face. For example, the Gulf Cooperation Council (GCC), with a stated goal of developing a common market, was created in part due to concern over the Iran-Iraq war. As Saudi Arabia's Interior Minister Prince Nayif ibn Abd al-Aziz indicated during one of the organizations meetings in 1982:

“Undoubtedly, the GCC has made great progress in all fields in a short period of time. Undoubtedly, the security field which all of you represent here is of paramount importance in the cooperation of GCC member states.” (Ramazani 1988)

Likewise, one of the motivators behind the creation of the Association of East Asian Nations (ASEAN) was the protection of member state through economic integration. Indeed, the Bangkok Declaration that established ASEAN declared as a core objective:

“... [to] ensure [states] stability and security from external interference in any form or manifestation in order to preserve their national identities in accordance with the ideals and aspirations of their peoples.” (ASEAN 1967)

Given their complexity, what effect might economic integration agreements have on security relations between members and non-members? Unfortunately, as I argue, there are strong reasons to believe policymakers advocating integration as external security policy risk exacerbating tensions. While liberal arguments suggest economic interdependence fosters peace, the dynamics of economic integration may reduce or impede the pacifying mechanism of commerce when viewed broadly. I specifically argue that economic agreements influence the relative utility of coercive policies between states both included in and excluded from membership. Economic integration reduces the salience of bilateral trade ties between members and non-members. This effect is compounded by the potential diversion of trade from non-members to members which may be framed as a relative loss for the former and gains for the latter. Ultimately, the marginalization of trade relationships between members and non-members implied by economic integration increases conflict and reduces the effectiveness of economic sanctions, leaving military action as a more attractive and viable policy choice for states.

### **Interdependence, Economic Integration, and Interstate Conflict**

Connections between economic interdependence and conflict span centuries and are most often associated with enlightenment philosophers. In particular, Immanuel Kant believed

economic interdependence reinforced legal systems and socialized states to prefer cooperation rather than conflict (1991 [1795]). Empirical assessments of Kant's general claims, however, assume more varied causal mechanisms. In the closest approximation of Kant's original thoughts, trade may pacify states through a socialization process that encourages the acquisition of resources through exchange rather than conquest (Keohane and Nye 1977; Rosecrance 1986; Soligen 1998; Hegre 2000). A more fully developed branch of the liberal peace holds that trade between nations confers tangible, material gains that provide incentives to avoid conflict. In short, benefits accrue to states engaged in trade through the mutual exchange of goods. War puts at risk these commercial ties and chances the long-term prosperity of the relationship. Trade therefore reduces conflict through opportunity costs inasmuch as trade is disrupted by war (Polachek 1992; Russett and Oneal 1997; 1999a; 1999b; 2001 for confirmatory evidence; See Barbieri 1996, 2002 for contrasting conclusions).

A third major causal mechanism is derived in part from the opportunity cost argument. Specifically, economic interdependence may increase the effectiveness of non-violent conflict resolution mechanisms that obviate the need for war. In other words, policies short of war may be substituted as a coercive means to achieve foreign policy goals. For example, economic sanctions may be used to selectively harm the economy of another state if interdependence is sufficiently high (Baldwin 1985, 189-195; Baldwin 1993; Whalley 1996; Mastanduno 2003, 176; Morrow 2003, 91; Stein 2003). Interdependence may also enhance states' ability to send costly signals. In particular, Garzke, Li and Boemer (2001) argue that severing mutually valuable commercial ties enables interdependent dyads to credibly signal resolve in conflict. Private information is therefore revealed concerning the disputant's willingness to fight. War is therefore unnecessary between interdependent states.

Economic integration agreements affect conflict largely by reinforcing these mechanisms. By reducing the barriers to commerce, goods and services flow more freely between member states owing to lower overall transaction costs. The potential gains from removing obstacles increase as the scope and depth of activities covered in agreements expands. Indeed, a robust body of literature exists in economics and political science details the ramifications of commercial integration. First, agreements tend to increase trade between member states due to reductions in tariff and non-tariff barriers (Baier and Bergstrang 2007; Carrere 2006). Second, the convergence of intra-agreement trade policy resulting from lowering barriers implicitly broadens the markets of member states. This is analogous to an exogenous increase in the size of domestic markets. Larger markets created by economic agreements may increase foreign direct investment into member states as corporations look to exploit newly realized economies of scale (Joumotte 2004). Finally, agreements are often “sticky” or difficult to rescind without suffering consequences from members states and domestic and international markets in general. In this way commercial agreements act as constraints on decision-makers and bind domestic policies to more open, liberal orientations (Whalley 1996). Accession to an agreement is therefore a signal of specific policy intentions (Fernandez and Portes 1998; Schiff and Winters 1998).

Empirically, research indicates trade agreements succeed in reducing conflict. Mansfield and Pevehouse (2000) explore the possibility that preferential trade agreements (PTAs), which include any agreement facilitating commercial exchange, reduce militarized conflict by increasing exchange and providing conflict resolution forums. They find the probability of conflict decreases as the absolute level of dyadic trade between states in an agreement increases. Subsequent authors refined the Mansfield and Pevehouse analysis to account for variations in the design of institutions. Bearce (2003) and Bearce and Omori (2005) test three potential causal

mechanisms behind the pacifying influence of economic integration – trade interdependence, elite interactions, and conflict resolution forums. Ultimately, they find a stronger role for the latter two in reducing conflict. Haftel (2007) more specifically addresses how institutional variation across economic agreements influences conflict. He argues that institutions incorporating broader scopes of activity and more regular meetings of elite politicians reduce conflict. He finds support for his argument using a sampling of agreements.

While the extant literature on interdependence suggests a strong role for integration in reducing conflict, there are important reasons to believe the formation of an economic agreement influences strategic relationships with non-member states. Economic integration between states may alter commercial relationships by swaying trade and investment flows away from non-members to members in a diversionary manner. Furthermore, even if trade flows are unaffected by integration, the context of trade relationships between members and non-members is affected such that ties become less salient. In the next section I argue that insofar as interdependence reduces conflict by increasing opportunity costs and promoting the effectiveness of economic sanctions, economic agreements are likely to exacerbate conflict between members and non-members by limiting interdependence. Furthermore, the consequence of forces set in motion by economic agreements is not simply an increase or decrease in conflict, but a change in how states approach the conflict process.

### **Economic Agreements and Coercive Tactics**

In evaluating the influence of economic agreements on conflict between members and non-members, I adopt a policy substitution framework in the spirit of Most and Starr (1984; 1989; 2000) and specifically applied to interdependence by Gartzke, Li, and Boehmer (2001). The essence of policy substitution is that states may pursue foreign policy goals using several

different means. In other words, states possess a menu of options with which they may address foreign policy issues. Within the universe of potential responses to conflict, particular alternatives are more attractive compared to others based on the ability of states to inflict harm and withstand retaliation (Starr 2000, 132; Cioffi-Revilla and Starr 2002, 232). Economic interdependence implicitly expands the menu of conflict resolution tools by enabling the effective use of economic sanctions as either a tool of punishment or as a costly signal (Gartzke, Li, and Boehmer 2001, 400). Commercial agreements, insofar as they foster greater interdependence between member states, simply enhance the utility of sanctions over war.

While economic agreements may promote interdependence between members, there are strong reasons to believe it comes at the cost of relations between members and non-members. Economic agreements may marginalize the salience of external trade ties and encourage states to view commercial relationships in terms of relative gains and losses. Ultimately, this process can result in increased tension and a systematic preference for military force over economic coercion.

### *Marginalization of External Trade Ties*

Economic agreements tend to promote exchange between member states by reducing commercial barriers. As tariffs, quotas, and regulations within agreements fall, the total amount of bilateral trade between members likely increases as states realize comparative advantages, economies of scale, and increased efficiency from production (Viner 1950; Johnson 1999). The reduction in barriers provides several other positive externalities, particularly a propensity to draw in investment from non-member states taking advantage of the implicitly expanded market. The formal arrangement of economic agreements also implies expectations about future interactions and policies. States that sign agreements signal both the importance of their commercial relationship and the desire to see it develop further. In other words, states seek

economic agreements to lock-in and enhance access to markets they view as important and critical for future development (Whalley 1996; Fernandez and Portes 1998; Schiff and Winters 1998). Given these factors, members likely identify their long-term economic interests with those of the agreement broadly and its constituent states.

The implication of the increased salience of ties between agreement members is a corresponding decrease in salience with non-members. Increased trade between members within an agreement dilutes the relative importance of each tie with non-member states (Martin, Mayer, and Thoenig 2008). Furthermore, shifting sources of imports and markets for export from non-members to members necessarily decreases the importance of those ties. As agreement members rely on partner states for greater portions of their trade portfolio, they correspondingly rely less on outside states for commercial viability and overall trade. Furthermore, economic interdependence is more than simply the sum of economic activity between states (Baldwin 1980; Keohane and Nye 1977; Crecenzi 2003). Hence, material exchange does not necessarily have to increase provided expectations of greater exchange or policy stability are generated. The more states look to the agreement for future commercial relations the less important become those excluded from the agreement. Reductions in salience, while not necessarily uniform in magnitude, are shared between members and non-members. While the former obviously are drawn to their agreement partners, the latter are likely to identify their long-term commercial interest with other states given the implicit barriers they face to exchange with the agreement. The salience of non-member ties with agreement members, therefore, is similarly impacted by the process of economic integration.

The marginalization of economic ties between economic agreement members and non-members influences conflict behavior by reducing the opportunity cost of both sanctions and

military force. One of the important reasons interdependence reduces conflict is the forgone benefits states incur by engaging in combat (Polachek, 1980; Doyle 1997). By diversifying trade partners, or even emphasizing certain ties over others, states necessarily decrease dependence on any one source. Agreement members therefore suffer less by initiating conflict with non-members by virtue of their more salient ties with other agreement partners. The notion that trade deters conflict is also in part based on a long-term expectation future trade relations will be hurt by war (Doyle, 1997; Oneal & Russett, 1997). By erecting an implicit barrier between members and non-members, economic agreements marginalize the future utility of trading relationships in ways that similarly impede their deterrent effect. This holds for both members and non-members as the agreement signals intentions of future trading relations. Furthermore, Crescenzi (2003a; 2003b) argues that states facing lower “exit” costs – or a greater ability to replace lost trade – are less constrained in conflict. Economic agreements, in turn, may lower the exit costs for member states by providing established trade networks. Likewise, Martin, Mayer, and Thoenig (2008) argue that decreases in systemic trade costs, part of which is associated with barriers, reduce the multilateral impact of bilateral conflict. That is, lower systemic trade costs allow states to shift trade to other nations thus reducing the negative externalities of conflict. Consequently, as economic agreements reduce trade costs for members, the ability of members to leverage intra-agreement ties in potentially absorbing excess trade affected by hostilities with non-members reduces the overall cost of those conflicts. Given the overall marginalization of ties between members and non-members, the deterrent effect of integration is likely restricted.

### *Relative Losses and Strategic Vulnerability*

The marginalization of salient trade ties between members and non-members, while limiting the deterrent effect of interdependence, does not in and of itself indicate the start of

acrimonious relations or an increase in conflict. However, economic agreements also possess characteristics that emphasize relative gains concerns and strategic vulnerabilities. Economic agreements are inherently discriminatory in that they liberalize only specific geographic areas, thereby disadvantaging excluded states in some fashion (Bhagwati 1993). Furthermore, economic agreements may simply divert trade from non-members to members without actually increasing aggregate trade flows. This process was first identified by Viner (1950). In short, goods are shifted from lower- to higher-cost producers due exclusively to the selective removal of trade restrictions (Viner 1950; Krugman 1991; 1999; Findlay and Panagariya 1994; Pomfret 2001). Figure 2 depicts a hypothetical process of trade diversion according to Viner (1950). Imagine three countries called Alpha, Bravo, and Charlie. Assume Alpha imports wheat from Bravo and Charlie based exclusively on price. Furthermore, it has a 20% tariff on both countries. Bravo and Charlie export wheat for \$1.10 and \$1.00 a bushel respectively. With the tariff applied to both states, it is easy to see that Alpha imports wheat from Charlie given its lower price (\$1.20 compared to \$1.32). Suppose now that Alpha and Bravo sign an agreement that eliminates barriers to the wheat trade. As a result, Bravo can export to Alpha at a total cost of \$1.10. Charlie, however, is still assessed a tariff of 20% maintaining its total export cost at \$1.20. Consequently, Alpha shifts its trade from Charlie to Bravo despite its relative inefficiency.

---- **Figure 2 Approximately Here** ----

Empirically, numerous studies either using gravity models to predict baseline levels of trade or case studies identify trade diversion across several trade agreements (see Schiff and Winters 2003, 190 for a review, as well as Bayoumi and Eichengreen 1995; Eichengreen and Frankel 1995; Baldwin, Forslid, and Haaland 1996; Yeats 1997; Gupta and Schiff 1997; Chang and Winters 2002; Magee 2008). Trade agreements also incentivize protectionism among

agreement members vis-à-vis the external world which potentially compounds the issue of trade diversion. First, depending on the agreement type, barriers between members and non-members may actually increase once agreements are signed (Viner 1950). Furthermore, both Krugman (1991; 1993) and Schiff and Winters (1998) show formally that agreement members have strong incentives to raise external barriers and generate trade diversion as a welfare-maximizing strategy. As an example, Brazil lobbied heavily for the inclusion of extensive information technology trade liberalization in Mercosur negotiations, but subsequently opposed a similar potential multilateral agreement (Schiff and Winters 2003, 72). Higher external barriers may be part of a state-led strategy of insulating infant industries to build industrial capacity by specifically limiting external trade (Pomfret 2001, 352; Foroutan 2000). Despite the fact that it is bad economic theory, trade diversion may be good politics. Constituencies within agreement members that benefit from trade diversion have strong incentives to maintain and accelerate the process (Winters 1996; Olarreaga and Soloaga 1998). Furthermore, independent of observed trade effects, diversion worsens the terms of trade for non-members as they are forced to lower prices to remain competitive (Schiff and Winters 2003; Chang and Winters 2002). A similar process occurs with respect to investment. Economic integration can also divert investment from non-members to members by firms seeking access to the relatively larger market created by the agreement. Baldwin, Forslid, and Haaland (1996), in particular, find that the European Single Market Program diverted investment from European Free Trade Area countries.

While trade diversion has clear welfare consequences in the economic sense for all states involved, the more important dynamic for conflict behavior is the material shift in trade. Using the previous example, a trade linkage is severed resulting in a clear loss for Charlie given it no longer exports to Alpha. However, while it clearly suboptimizes trade, it is not clear that Alpha

suffers any absolute losses from trade diversion. Indeed, Alpha obtains goods at lower cost with liberalization. Agreement members, therefore, likely experience increases in aggregate economic activity while states excluded from economic agreements are more likely to experience absolute declines in trade or terms of trade. Consequently, trade diversion may imply relative losses for excluded states and corresponding gains for agreement members. Given the strong incentives agreement members have to increase trade barriers to the external world, the simple possibility of diversion may influence state behavior. In other words, the fear of trade diversion, marginalization, and associated relative losses may be as compelling as the realization of loss. The codified nature of economic integration also signals the persistence of relative losses resulting from the resilient policies instituted by the agreement.

Relative losses stemming from exclusion may intensify conflict between members and non-members of agreements. Economic integration may be viewed by states as a zero-sum game where members gain strategic advantages at the expense of non-members. Asymmetries resulting from trade diversion may develop for members that translate to a form of vulnerability on the part of excluded states. States that achieve greater wealth and productive capacity from an economic agreement may, in turn, convert their commercial advantages into military power to be used against excluded states (Hirschman 1981; Gilpin 1981; Grieco 1988; Grieco 1993; Gowa 1994; Mearsheimer 1994; Barbieri 1996). Vulnerabilities are compounded if agreements exclude states from particularly important or strategic markets or resources. For example, both Britain and Germany pursued economic agreements in the interwar period to lock-in strategic markets and exclude the other from gaining footholds which ultimately fueled distrust and aggression (Eichengreen and Frankle 1995, 96). Trade diversion does not necessarily need to occur, furthermore, for relative gains concerns to manifest. While the direct bilateral relationship

between members and non-members may remain symmetrical (i.e., equal levels of trade) after trade diversion, agreement members gain strategic advantages by increasing trade through mechanisms necessarily excluding non-members.

### *Implications for Conflict and Coercive Tactics*

The consequences of economic agreements, in the form of marginalized trade ties and relative gains concerns, are likely evident in both the frequency and nature of conflict between states. Through the process of economic integration, member states likely gain strategic advantages at the expense of non-member states. First, economic agreement members benefit from their association with an exclusive commercial area. Members gain wealth and productive capacity stemming from increases in intra-agreement trade that generally do not privilege the excluded state. Second, the process of trade diversion may actually transfer gains from non-member states to member states. Trade in this capacity may be viewed as a zero-sum game where members gain at the explicit expense of non-members.

As such, an asymmetrical economic relationship between members and non-members may develop that encourages conflict. Asymmetry may manifest in trade relations as members depend less on external states for trade while non-member reliance is static. Alternatively, the asymmetry may simply result from the strategic advantage afforded the member over the non-member. For non-members, acute vulnerabilities may compel excluded states to adopt more aggressive policies in the security arena to counteract perceived weaknesses and strategic imbalances (Gilpin 1981; Mearsheimer 1990; Liberman 1996). Furthermore, relative losses may outweigh the potential gains from trade for excluded states. In such cases, the pacifying effect of economic exchange may short-circuit such that conflict is less costly overall. Members, on the other hand, may press their advantages against non-members by making bolder demands given

both their strategic advantage and relative insulation from the costs of conflict. Paradoxically, however, greater demands implicitly narrow the range of acceptable solutions to both parties which, in turn, increases the likelihood of violent conflict (Morrow 2003). This dynamic between members and non-members leads me to my first hypothesis:

*H<sub>1</sub>: Economic agreements increase the likelihood of conflict between members and non-members of the agreement.*

In addition to simply increasing the occurrence of conflict, however, economic agreements and the processes they set in motion also change the nature of conflict between members and non-members. Economic agreements marginalize the salience of member state ties with the external world. Members of agreements tend to rely on intra-agreement trade for higher portions of their trade portfolio and economic activity, thereby reducing the overall importance of ties with the outside world. This is compounded to the extent trade diversion takes place, as it represents a direct and material shift in trade patterns away from non-members. Even if trade flows are unchanged, however, membership in an economic agreement is a signal of intent to pursue closer ties with particular states, which in turn may reduce the long-term salience of member/non-member relations. The marginalization of ties is furthered by any asymmetries that develop between states. Non-member states may view what trade ties do exist in a negative light given their relative vulnerability, thereby reducing their salience. Consequently, member state ties with the external world are proportionately less important as a result of economic agreements.

The broad implication of marginalization is a reduced opportunity cost of conflict between members and non-members. If ties prove less important, either because trade declines or is viewed negatively, the overall cost of severing them through conflict declines. Perhaps

more importantly, however, are the disparate effects marginalization has on economic sanctions and military conflict. The ability of economic sanctions to compel policy change in a target state is in large part a function of the interdependence between contending parties. This is true whether the sender state desires to subdue targets with economic force or signal resolve. Sanctions are only costly to the target if the sender can sever enough trade to compel policy change. Likewise, sanctions are only costly signals if the sender sacrifices trade. A lack of interdependence between sender and target limits the ability of sanctions to do either. In turn, economic agreements limit interdependence between members and non-members by either materially affecting trade or altering the context within which it occurs. Economic sanctions, when used between members and non-members of agreements, may fail to convey either the punishment or costly signal required to be successful. When engaging in conflict, therefore, the only viable option to states on opposing sides of an economic agreement may be the use of military force. As a consequence, members and non-members of agreements embroiled in conflict should demonstrate systematic preferences for military force over economic sanctions. This leads to two additional hypotheses:

*H<sub>2</sub>: Economic agreements increase the likelihood of military force between members and non-members of agreements.*

*H<sub>3</sub>: Economic agreements decrease the likelihood of economic sanctions between members and non-members of agreements.*

## **Conceptualization and Operationalization**

To empirically test my theory that economic integration increases conflict between members and non-members of agreements, I use a large-N statistical analysis of all dyads from 1970 to 2001. There are two dependent variables necessary for my analysis. First, I am

generally concerned with both the occurrence of conflict *and* the strategies use by states when it does take place. As such, I consider a broad conception of military force that include threats as well as the use of force. I operationalize military force using participation in a militarized interstate dispute (MID) within the dyad. I code this variable 1 if dispute occurs between states in the dyad year and 0 otherwise. I obtain data for this variable from the Maoz dyadic MID dataset (Maoz 2005). Second, I consider economic sanctions in a similar manner by including both threats and imposition. I code a variable 1 if economic sanctions are threatened or imposed for political reasons in a dyad in a given year and 0 otherwise using the Threats and Imposition of Sanctions (TIES) dataset (spanning from 1970 to 2001) (Morgan, Krustev, and Bapat 2009).

My primary explanatory variable is the presence of an economic agreement within the dyad. In general, my treatment of economic agreements is identical to the conventional use of regional trade agreements. The World Trade Organization defines a regional trade agreement as a territory that maintains separate tariffs or regulations for a “substantial part of the trade of such territory” (WTO 1947, Article XXIV).<sup>2</sup> In short, economic integration agreements are formal arrangements between states designed to lower barriers to trade. Because I am interested in how economic agreement members relate to non-members, two dyadic relationships are important. First, only one state in a dyad may be a member of an agreement – which I will refer to as “*one agreement dyads*.” Second, both states may be members of separate economic agreements – which I will call “*opposing agreement dyads*.” I code a dichotomous variable for each of these groups separately. In this way, dyads without agreements serve as a baseline, comparison group. Not all agreements are threats to every state, however. An agreement between Paraguay and Uruguay is more salient to Argentina than Thailand. Consequently, I only consider

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<sup>2</sup> The WTO and other global trade organizations (such as the Generalized System of Preferences) are not included in my analysis as a result. Economic agreements specifically go beyond the requirements of the WTO, and therefore are exclusive in nature.

“economically relevant” agreements where the non-member is either contiguous to or a top 10 trade partner of an agreement member. I obtain data by extending and updating the dataset from Mansfield and Pevehouse (2000) from 1985 to 2001.

My theory hinges not only on agreements proper, but also the economic relationships that exist between members and non-members. In other words, economic agreements structure both the material relationships between members and non-members and how they are viewed by each. Three additional concepts are important in this regard. First, trade interdependence captures the extent to which states in the dyad interact, which is important for traditional notions of opportunity cost. I measure this using total dyadic, bilateral trade as a share of GDP (exports + imports / GDP). The lowest score in the dyad is used to represent the minimum degree of interdependence. Higher scores on this variable indicate greater interdependence. Second, the symmetry of trade, as I argue, influences heavily the willingness of states to engage in conflict. I operationalize trade symmetry with the same measure as trade interdependence, but by including the highest score in the dyad in accordance with Oneal and Russett (1997).<sup>3</sup> Higher scores reflect greater asymmetry. All trade data comes from the Correlates of War (CoW) (Barbieri, Keshk, and Pollins 2008) and GDP data from Gleditsch (2002). I interact each of these variables with the aforementioned agreement variables to capture their influence within the context of economic agreements.

A final primary explanatory variable captures trade diversion. A broad literature in economics explores the effects of agreements on bilateral trade flows using gravity models as a base (see Frankel 1997; Glick and Rose 2001; Rose and Wincoop 2001; Baier and Bergstrand 2007; Carerre 2006 for recent examples). Differences between gravity model estimates, which

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<sup>3</sup> An alternative specification using the absolute value of differences in trade interdependence ( $|Trade\ Dependence_i - Trade\ Dependence_j|$ ) yielded identical results.

provides a theoretical level of trade, and observed trade flows are attributed to the presence of an economic agreement (and therefore trade diversion). I therefore estimated a gravity model of trade that estimates the (logged) bilateral trade between states in a dyad using (log)GDP, (log)population, (log)distance, contiguity, alliances, and whether states shared a common language.<sup>4</sup> To account for zero trade flows, I use a Heckman selection model with the simple presence of trade in a dyad (coded 1 if trade occurs, 0 otherwise) as the selection criteria. Trade diversion due to economic agreements is calculated as the difference between the natural log of observed trade and logged predicted values of the gravity model. Higher values therefore indicate greater levels of trade diversion caused by membership in economic agreements.<sup>5</sup>

I also use a number of control variables to account for competing explanations of conflict between states. Four control variables – congruity, major powers, alliances, and capabilities – control for realist arguments of conflict. Contiguous states and major powers are more likely to fight due to greater opportunities for conflict (Most and Starr 1989). Allies, on the other hand, engage in combat less frequently given shared security goals (Bremer 1992). I code these variables dichotomously if states are contiguous (or separated by 150 miles of water or less), if either state is a major power, or if allied respectively. My control for capabilities is a relative measure using composite index of national capabilities (CINC) scores from the Correlates of War dataset. The measure is calculated as a (logged) dyadic ratio of the smaller CINC score over the larger. I obtain data for all three of these measures from the Correlates of War (Gibler and Sarkees 2004; Singer 1987).

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<sup>4</sup> Additional details of gravity model are available in the online appendix at the author's website.

<sup>5</sup> While I am interested in trade diversion, I do not limit this variable to *only* diversion (positive values in my variable). In this way, I permit economic agreements to *create* trade for excluded states. This may theoretically occur if economic agreements increase demand for materials with the agreement which are then sourced by neighboring states. Consequently, observed values on this variable run from negative (trade creation) to positive (trade diversion).

Two additional controls – democracy and IGO membership – account for liberal theories of interstate conflict. First, in accordance with the democratic peace literature, I control for regime type using composite scores from the Polity IV dataset scaled -10 to 10 from authoritarian to democratic (Marshall, Jaggers, and Gurr 2007). As with interdependence, I only include the lowest democracy score. Second, since many economic integration agreements are also international organizations proper, it is important to ensure the various integration variables are not simply reflecting the broader pacifying effect of IGO membership (Russett and Oneal 2001). I include a variable controlling for joint organization membership to control for this possibility. Data comes from the CoW dataset (Pevehouse, Nordstrom, and Warnke 2004).

## **Estimation and Results**

After account for missing data, my analysis includes approximately 250,000 observations, of which approximately 30% are either one agreement or opposing agreement dyads. The theory I posit depends in large part on the relationship between military force and economic sanctions as substitutable outcomes of similar policy processes. Treating these dependent variables independently, therefore, risks biasing estimates. Consequently, I use bivariate probit models to jointly estimate the influence of economic agreements on military force and economic sanctions. I specify two models differentiated by the agreement structure of the dyad such that one agreement and opposing agreement dyads are in separate models. I lag all independent variables one year to help control for endogeneity and protect the temporal integrity of the analysis.<sup>6</sup> Finally, MIDs and sanctions occur in less than 1% of observations.<sup>7</sup> Given the rarity of conflict, and the possibility events are not truly temporally independent, I include a

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<sup>6</sup> Additional corrections for endogeneity are included in the statistical appendix available on the author's website.

<sup>7</sup> Given the rarity of the dependent variable, I also tested sanctions and MIDs separately using rare-events logit (King, Tomz, and Zeng 1999). The results are identical to those reported here.

cubic polynomial variable capturing the number of years between either a sanction or MID (Beck, Katz, and Tucker 1998; Carter and Signiorino 2010).

**---- Table 1 Approximately Here ----**

Table 1 contains the results of the bivariate probit estimations. Consider first the top portion of Table 1 that models MID participation. First, the coefficients on the agreement variables – indicating dyads where either one state is a member of an agreement (left side) or both states are in opposing agreements (right side) – are positive and significant. Taken together, this suggests that members and non-members of agreements are more likely to engage in military conflict than dyads without agreements. Likewise, the interactions between agreements and the high value of dependence in the dyad are positive and significant. The more asymmetric trade relationships are between members and non-members, the more likely militarized conflict is between them. This holds for both one agreement and opposing agreement relationships. The interaction between interdependence and economic agreements only achieves statistical significance in the opposing agreements model. The lack of significance in the one agreement model suggests the influence of relative gains and losses. Members accrue benefits from the agreement that non-members are not privy to such that the former gains strategic advantage. The potential benefit of interdependence is consequently limited by perceptions of vulnerability. This effect is not evident in opposing agreements because both states possess established trade networks. Interdependence is able to perform a pacifying role because both states benefit from codified, entrenched trade relationships conferred by their respective agreements. Consequently, opposing agreements may be less contentious in principle than dyads where only one state is in an agreement. That said, trade diversion also appears to increase the probability of conflict between members and non-member given the positive and significant coefficient on the variable.

If relative gains and losses do manifest, despite the pacifying influence of interdependence, conflict is more likely.

Turning attention to the bottom half of Table 1 that models economic sanctions, some interesting results emerge. First, both one agreement and opposing agreement dyads are more likely to experience economic sanctions than dyads without an agreement. Exclusion from economic agreements is therefore associated with increased probability of both MID and sanctions, indicating a higher propensity for conflict in general. Second, the interaction term between agreement structure and high dependence does not achieve significance. Trade asymmetry between members and non-members, consequently, is statistically unrelated to the use of economic sanctions. Third, interdependence measured by the low score of trade in the dyad only achieves statistical significance in the one agreement model. The more interdependent the dyad, the more likely sanctions will be employed. Finally, trade diversion only achieves statistical significance in the opposing agreements model. Interestingly, trade diversion is therefore associated with increases in both sanctions and MID for this group.

Before discussing the overall implications of economic agreements on conflict between members and non-members, consider first the substantive effects of the key variables. Two means of interpretation are offered in this analysis. First, the average marginal effect across the range of values on explanatory variable for both MID participation and sanctions episodes is included in Table 1. Second, a set of graphs plotting the predicted probability of either a MID or sanctions against the primary explanatory variables provides a visual depiction of their relationship. For clarity and brevity, I focus here on interpreting the relationship between trade

asymmetry and trade diversion as the major findings in my analysis.<sup>8</sup> Furthermore, I limit my discussion to the graphic representation of substantive effects.

---- **Figure 2 Approximately Here** ----

First, according to the statistical analysis, trade asymmetry between members and non-members plays an important role in the initiation of military force and no relationship with economic sanctions. Consequently, Figure 2 displays the predicted probability of MID participation against trade asymmetry (measured using the high dependence score) for both one agreement and opposing agreement dyads. As the statistical results indicate, at approximate trade symmetry (where the high dependence score is near zero), dyads with both one agreement and opposing agreements are more likely to experience military conflict than dyads without an agreement. Hence, even when trade relations are symmetric, conflict is more likely between members and non-members. This may result from shifts in investment flows or simply the marginalization of commercial relationship implied by excluding certain states from economic agreements. As trade asymmetries increase, however, the probability of conflict between members and non-members is actually lower than for dyads without agreements. As asymmetries continue to increase, however, the probability of conflict between members and non-members once again eclipses no agreement dyads. This suggests a few possible forces at work. At middle-ranges of trade asymmetry, relative gains concerns are not sufficient to spark security concerns or confer advantages. Once asymmetries reach high proportions, however, security concerns (or advantages) manifest as relative losses (gains) become acute. It is also important to note that opposing agreements appear less conflict prone than situations where only one state in a dyad is a member of an agreement. This makes intuitive sense, as concerns over

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<sup>8</sup> Graphs depicting the substantive impact of trade interdependence, which achieves statistical significance only in the one agreement/sanctions and opposing agreement/MID models, are omitted for space.

relative gains are less acute if both states possess viable commercial alternatives. Where only one state is in an agreement, however, concerns are likely more pronounced given the advantages the member state possesses through a codified trade network.

---- **Figure 3 Approximately Here** ----

Second, trade diversion is associated with increases in military force in both agreement types *and* economic sanctions in the opposing agreements model. Given its influence on both outcomes, Figure 3 plots the predicted probability of both sanctions and military force as a function of trade diversion. Consider first the influence of diversion on coercion in one agreement dyads (contained in the left panel). There appears to be no meaningful effect on economic sanctions, which is to be expected given its statistical insignificance in the bivariate probit model. Trade diversion does have a large impact on military force, however. Once trade diversion actually occurs (indicated by positive values), the probability of conflict increases rapidly. As trade diversion represents relative gains/losses, this pattern suggests dynamics between members and non-members of agreements are highly sensitive to potential strategic vulnerabilities. The same effect is witnessed with the opposing agreement dyads. States in agreements where both are members of separate arrangements are highly sensitive to relative losses. Trade diversion also appears to increase the probability of economic sanctions. This may reflect the enhanced ability of agreement members to leverage trade networks for either coordinated sanctions or to offset trade lost sanctioning external states. While the effect of trade diversion on economic sanctions is statistically significant, however, it is much less pronounced than on military conflict. Agreements that shift trade away from non-members to members, therefore, appear to engender more aggressive security policies with states involved. Interestingly, negative values of the diversion variable – indicating trade *creation* – are

associated with higher probabilities of military conflict.<sup>9</sup> While this may reflect increased aggression, it is more likely due to the paucity of data at high levels of trade creation.

When taken together, the combined influence of economic agreements on MIDs and economic sanctions provides strong support for my argument. Exclusion from economic agreements is associated with both MIDs and sanctions, indicating a higher degree of conflict than other types of dyads. More importantly, however, trade asymmetry between members and non-members appears to increase conflict and the use of military force. The non-interacted high dependency scores, which indicate trade asymmetry, are negative and significant for MIDs and positive and significant for sanctions across both agreement types. In the absence of economic agreements, trade asymmetry tends to increase the use of economic sanctions and decrease the occurrence of military force. Dyads where one state possesses a preponderance of economic leverage and no economic agreements, therefore, tend to involve low-level conflicts. When economic agreements enter the mix, however, dynamics change. Trade asymmetry is associated with a higher likelihood of military conflict between members and non-members. This seems to support Crescenzi (2003a; 2003b) and the influence of exit costs. When one or more states are members of an economic agreement, they have a greater ability and incentive to source trade elsewhere. Members obviously have an established and robust trade network while non-members are marginalized by the threat of trade diversion and growing economic distance. Neither state is truly interdependent, thereby increasing the occurrence and severity of conflict.

Economic agreements also appear to structure the way members and non-members view their trading relationship. In the classic sense of the liberal argument, the diversion of trade due to economic agreements should not meaningfully influence state behavior. States instead tend to

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<sup>9</sup> I included a polynomial term of the trade diversion variable as a robustness check. It did not achieve statistical significance.

focus on extant trade and the benefits that accrue from it. The fact that trade diversion influences conflict behavior in my analysis suggests states do indeed care about the relative distribution of trade. Consequently, states may value trade differently depending on the context within which it exists. Trade diversion is a loss for the non-member and gain for the member, tending to create and/or exacerbate tensions. Furthermore, reductions in trade through diversion – or simply the concern over relative gains implied by diversion – seemingly reduces the effectiveness of economic sanctions, thereby incentivizing the use of military force. Economic agreements therefore appear to both generate conflict between states and encourage more violent engagements when it does occur.

The results of the remaining variables in my analysis also present some interesting findings. First, as might be expected, the presence of a major power in the dyad increases the use of both military force and economic sanctions. This is presumably due simply to the wide-ranging interests and capabilities of major powers. Second, and in a similar vein, contiguity only influences military force. This makes intuitive sense, as the ability of states to project economic power is less geographically dependent than military power projection. Third, power preponderance – indicated by the positive and significant coefficient on the capabilities variable – increases the use of both coercive tactics, likely reflecting the ability of capable states to project power in multiple ways. Alternatively, it may indicate the role of sanctions in signaling intentions to use military conflict. Fourth, IGOs increase the use of both coercive tools, which is somewhat counterintuitive. IGOs, in some ways, may provide additional opportunities for states to disagree, thereby giving rise to low level conflicts. Fifth, as the democratic peace literature predicts, more democratic dyads engage in less military conflict. This result may hold for economic sanctions as well, although the variable achieves statistical significance in only the one

agreement model. Finally, alliances do not appear to influence military force and, if anything, increase the likelihood of economic sanctions.

It is also worthwhile to note the appropriateness of the bivariate probit model vis-à-vis the estimation of my two independent variables. Specifically, the coefficient on the  $\rho$  statistic is statistically significant. This indicates that residuals from the economic sanctions and military force models are correlated. That is, economic sanctions and military force are affected by the same factors and in some fashion jointly determined. Considering them jointly is therefore an appropriate estimation strategy.

### **An Alternative Statistical Approach**

As I have argued, economic agreements influence both the occurrence of conflict and the manner in which it is conducted. Military force and sanctions, being outcomes of the same policy process, must be considered jointly as a result. The bivariate probit analyses I conduct are particularly well-suited to determine the overall use of military force and economic sanctions as related phenomenon. In this view of policy substitution, states select the coercive tools with which they are best able to achieve foreign policy goals. Bivariate probit can therefore shed light on the characteristics of states selecting particular policies. This approach, however, may be less well suited to answer questions concerning either the overall occurrence of conflict or the relationship between the start of conflict and how it is conducted.

In this section I offer an alternative statistical test using a Heckman selection model to account for the occurrence of conflict and subsequent selection of policy tools.<sup>10</sup> This view of the policy substitution process holds that states select into conflict and subsequently utilize specific policies to coerce. I therefore specify two addition models capturing selection effects.

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<sup>10</sup> The substantive results of the selection model are very close to those obtained through the average marginal effects and graphical analysis in the bivariate probit estimation. Consequently, I omit them here for brevity.

The selection variable I use is the initiation of any coercive activity. I code this variable 1 if either an economic sanction or MID occurs within a dyad in a given year. The outcome variable is subsequently when a MID occurs. In this way, the selection equation tests whether one agreement and opposing agreement dyads experience more conflict than other types of dyads. The outcome equation, in turn, reflects when states select military force over economic sanctions as a coercive policy.

In terms of estimation, the Heckman model depends in large part on the availability of exclusion criteria in the selection equation. This requires a slightly different model specification than exhibited in the bivariate probit estimations. For the outcome equation that captures the choice of military force over sanctions, I include my primary explanatory variables – agreement structure, high dependence, low dependence, trade diversion, and interaction terms – and alliances, capabilities, contiguity, and democracy as control variables. In the selection equation, I include all the variables appearing in the outcome equation plus IGO membership, major power status, the lowest logged GDP in the dyad, policy affinity, and the cubic polynomial controlling for temporal dependence.<sup>11</sup> Policy affinity scores reflect the similarity of preferences for states in dyad using Gartzke (2008) measures. These are based on UN vote correlations, for which I expect policy similarity to reduce the occurrence of conflict.

**---- Table 2 Approximately Here ----**

Table 2 contains the results of the Heckman selection model. The results broadly support the findings of the bivariate probit analysis. Consider first the outcome equation, reported in the top part of table 2, reflecting a state's choice between military force and economic sanctions.

The coefficient on the interaction term between agreement structure and high dependence score,

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<sup>11</sup> GDP is excluded from the bivariate probits and outcome equations due to collinearity with a number of other variables (notably capabilities and IGOs). Including GDP in these models only influences the trade diversion variable, which becomes statistically insignificant.

indicating trade asymmetry, is positive and significant for both one agreement and opposing agreement dyads. This is consistent with the results of the bivariate probit models reported in Table 1. Members and non-members with asymmetrical trade relations thereby appear to systematically prefer military force over economic sanctions as a tool of coercion. This is mitigated, however, by the degree of interdependence between them given the negative and significant coefficient on the low dependency score variable. The more interdependent members and non-members are, the more likely they are to opt for economic sanctions to coerce. This makes intuitive sense, as the effectiveness of sanctions is predicated in part on the degree of interdependence between states. Consequently, both the interdependence and asymmetry literature may be correct in some fashion.

Trade diversion only achieves statistical significance in the one agreement model. Take with the lack of significance in the opposing agreement model, this indicates that relative gains concerns are highest when the state possesses fewer exit options. Where both states are in an agreement, and therefore have alternative trade networks, the trade lost through diversion is less salient. Relative losses may be offset with gains from one's own agreement, thereby limiting negative perceptions of interdependence. If only one state is in an agreement, however, the threat of relative losses is more acute, the view of interdependence more negative, and conflict behavior more aggressive as a result. Interestingly, and deviating from the results of the bivariate probit models, the agreement variable fails to achieve statistical significance in the outcome equation. Exclusion from economic agreements therefore only influences the selection of coercive policies to the extent it materially alters trade patterns.

Turning to the selection equation, which captures whether any coercive action takes place, support is once again found for the bivariate probit models. First, the agreement variable

is positive and significant for both the one agreement and opposing agreement dyads. Hence, while actual exclusion from an agreement does not influence the selection of military force over sanctions, it does influence the frequency of conflict between members and non-members. States on opposite sides of agreements are more likely to engage in coercive activity than other dyads. Likewise, the interaction term with high dependence is positive and significant. Asymmetric trade relations between members and non-members increases the probability of coercion. Consequently, asymmetry is associated with both an increase in coercion and the systematic preference for military force over economic sanctions. This finding lends credence to the results of the bivariate probit models.

Likewise, trade diversion also increases coercive activity for both one agreement and opposing agreement dyads. For one agreement dyads, this indicates that relative gains and losses impact both the overall occurrence of conflict and the willingness to use military force when engaged. Opposing agreement dyads are more likely to engage in conflict, but show no systematic preference for military force or economic sanctions. Interdependence, given by the statistical insignificance of the low dependence variable, does not appear to restrain members and non-members from engaging in coercive activity. Consequently, while interdependence encourages states on opposite sides of agreements to use economic sanctions, it bears little influence on the frequency with which states engage in conflict. Finally, as with the bivariate probit, the  $\rho$  coefficient is statistically significant. As such, estimation cannot be split into two models capturing coercion and the selection of coercive tools independently. Understanding the choice of economic sanctions and military force requires accounting for selection into a coercive situation.

The combination of the bivariate probits and selection models provides strong support for the argument and hypotheses I posit. Hypothesis 1 states that economic agreements increase the likelihood of conflict between members and non-members. Agreements reduce the salience of external ties for members, thereby limiting the extent of interdependence between states. Furthermore, agreements give rise to relative gains concerns that encourage aggressive security policies to counterbalance strategic economic vulnerabilities. This hypothesis is first supported by the bivariate probit analysis. Dyads with either one agreement or opposing agreements are more likely to experience military force and economic sanctions in general. The results of the selection model provide stronger support for hypothesis 1. Economic agreements increase coercion between members and non-members, which in turn is exacerbated to the extent trade is asymmetric and/or diverted once the agreement is in place.

Hypotheses 2 states that economic agreements increase the use of military force between members and non-members. The marginalization of trade ties reduces interdependence between agreement members and the external world, thereby limiting the effectiveness of economic sanctions as either a costly signal or tool to compel. Once again, the bivariate probit lends strong support indicating that agreements increase the occurrence military force, particularly if trade is asymmetric and/or diverted. The selection model provides additional support by showing that once conflict is determined agreement members systematically prefer military force over economic sanctions if trade relations are asymmetric. Consequently, my statistical analysis lends strong support to hypothesis 2. My final hypothesis argues economic agreements decrease the use of economic sanctions. Support for this hypothesis is less robust than the first two, but does find some credence in my statistical analysis. Asymmetric trade relations reduce the likelihood

of states selecting sanctions to coerce per the selection model. Interdependence, however, encourages the use of economic sanctions between members and non-members.

## **Discussion and Conclusion**

What effect does economic integration have on relations between members and non-members? The unfortunate answer appears to be one of increased tension and conflict. As states form economic agreements, the salience of commercial ties between members and non-members declines. Furthermore, the potential loss of gains through trade diversion encourages excluded states to view interactions with members in terms of security vulnerabilities. The ultimate result of these dynamics is the reduced utility of economic sanctions as a viable alternative to military force in conflict scenarios. The empirical evidence I present generally supports these claims by showing economic agreements increase the use of coercion and encourage military force instead of economic sanctions. This is particularly true if trade relationships are asymmetric or trade diversion occurs, thereby giving rise to relative gains concerns.

Overall, the results from the bivariate probit and selection models suggest a number of interesting conclusions and important implications. First, the structure of trade relationships does indeed influence the menu of coercive policies states possess. States may only employ economic sanctions when they are viable coercive tools, which in turn requires the sender to visit a degree of punishment on the receiver. Economic agreements minimize this effect by limiting or reducing the salience of commercial ties between members and non-members. Furthermore, the degree of symmetry between members and non-members appears to further influence their selection of coercive instruments. Members or non-members that are more dependent on others are more likely to use military force than sanctions in part owing to their inability to successfully employ sanctions. Consequently, the structure of trade relationships is an important component

of how conflict unfolds in the international system. In turn, interdependence in the traditional sense is limited in its ability to constrain states from engaging in coercion when economic agreements are introduced. That is not to say, of course, that interdependence is not relevant to conflict between members and non-members. Rather, interdependence is only one aspect of economic relationships that influence conflict behavior. In other words, it is not sufficient to only identify the extent of commercial exchange between states to accurately understand their propensity to coerce. One must also understand how they value their commercial relationship and in what context it exists.

Second, the trade states do *not* conduct may be as important a component of conflict behavior as the trade that exists. Trade diversion is found in nearly all my statistical models to increase conflict, and particularly military force, between members and non-members of agreements. While this measure is admittedly only an approximation based on a hypothetical level of trade, it does suggest that states are influenced by such forces. Relative losses stemming from barriers to commerce, in turn, may create animosity and concern over economic vulnerabilities that spill over into the conflict arena.

Finally, states do appear to substitute coercive policies in some fashion. My analysis indicates broadly that economic interdependence influences whether states select military force or economic sanctions as a tool to compel policy change in others. While this is far from conclusive support for the notion that coercive alternatives to war exist, it does bring some evidence to bear. Furthermore, understanding this problem is critical to addressing the relationship between economic interdependence and interstate conflict.

My results also have interesting implications for the liberal peace. In many ways my theory and analysis supports the important pacifying forces behind arguments of interdependence

and conflict. Exclusion from economic agreements, I argue, reduces the salience of trade ties. Consequently, integration severs the mechanisms by which the liberal peace operates. The core of liberalism is clearly intact and, indeed, is augmented by my analysis. What I do, however, is refine the conditions under which economic liberalism may succeed in preventing conflict between states. Economic integration may create security externalities for states if they significantly reduce the importance of external ties or allow relative gains concerns to develop. Consequently, if my work criticizes the liberal peace, it is only by stating that the structure of trade relationships matters for conflict in certain situations. Hence, not all trade openness can be expected to purchase a state security. Indeed, those states that seek economic integration as part of a security plan aimed at excluded states are likely to exacerbate conflict and strategic rivalry.

Overall, my analysis has three major contributions for scholarship and policy. First, it contributes to the growing body of literature exploring the effects of economic integration on interstate conflict. While integration may pacify internal relations, it involves a tradeoff with external security. Second, I consider the empirical validity of policy substitution in coercive situations. While economic sanctions have long been posited as alternatives to war, few studies bring empirical results to bear. Third, my analysis addresses a generally neglected area of international relations. Specifically, how might the existence and operation of finite international institutions influence states excluded from membership? State decisions to seek integration are strategic choices that necessarily exclude certain parties. It follows, therefore, that institutions may have as profound consequences for non-members as they do members. I provide one piece of what might be a dynamic and interesting research program.

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**Table 1: Economic Agreements and External Conflict – Bivariate Probit**

One Agreement

Opposing Agreement

Militarized Interstate Disputes						
	Coefficient	Standard Error	Average Marginal Effect (Base: 0.041%)	Coefficient	Standard Error	Average Marginal Effect (Base: 0.039%)
Agreement	0.197***	0.044	0.119	0.292***	0.044	0.192
Agreement*Dependence <sub>High</sub>	3.905***	0.874	2.212	4.260***	0.953	2.533
Agreement*Dependence <sub>Low</sub>	4.696	10.559	-----	-28.967**	11.238	-17.238
Trade Diversion	0.040***	0.006	0.022	0.024***	0.006	0.014
Dependence <sub>High</sub>	-2.002*	0.815	-1.153	-2.433**	0.851	-5.572
Dependence <sub>Low</sub>	-10.347	8.401	-----	-9.641	8.517	-----
Alliance	-0.022	0.048	-----	0.024	0.046	-----
Contiguity	1.306***	0.043	2.683	1.291***	0.043	2.612
Capabilities	0.108***	0.015	0.060	0.101***	0.015	0.059
Democracy <sub>Low</sub>	-0.024***	0.004	-0.013	-0.028***	0.003	-0.016
IGOs	0.011***	0.002	0.006	0.012***	0.002	0.007
Major Power	0.600***	0.060	0.555	0.679***	0.054	0.663
Constant	-2.771***	0.064	-----	-2.803***	0.065	-----
Economic Sanctions						
	Coefficient	Standard Error	Average Marginal Effect (Base: 0.020%)	Coefficient	Standard Error	Average Marginal Effect (Base: 0.041%)
Agreement	0.322***	0.066	0.065	0.329***	0.066	0.069
Agreement*Dependence <sub>High</sub>	-0.556	0.448	-----	0.134	0.488	-----
Agreement*Dependence <sub>Low</sub>	23.764***	7.163	4.250	-0.289	7.230	-----
Trade Diversion	0.013	0.008	-----	0.031***	0.008	0.006
Dependence <sub>High</sub>	1.551***	0.258	0.297	1.813***	0.249	0.408
Dependence <sub>Low</sub>	-14.861*	6.524	-2.592	-8.299	5.860	-----
Alliance	0.188*	0.076	0.041	0.117	0.080	-----
Contiguity	0.003	0.110	-----	-0.135	0.117	-----
Capabilities	0.045*	0.019	0.007	0.063***	0.017	0.012
Democracy <sub>Low</sub>	-0.001	0.004	-----	-0.017***	0.004	-0.003
IGOs	0.011***	0.003	0.002	0.011***	0.003	0.002
Major Power	0.832***	0.085	0.335	0.929***	0.073	0.413
Constant	-3.470***	0.098	-----	-3.435***	0.096	-----
N		245,769			253,339	
$\chi^2$		3460.2***			3561.80***	
p		0.418***			0.453***	
Pseudo-Log Likelihood		-3984.4252			-4411.838	

The dependent variables are Militarized Interstate Disputes (MIDs) and the threat or imposition of economic sanctions as labeled. The "agreement" variable indicates dyads with either one state possessing membership in an economic agreement (left columns) or where both states are members of different agreements (right columns). Average marginal effects calculated while holding all other variables at mean values. The cubic polynomial term controlling for temporal dependence (peace years<sup>3</sup>) is omitted for space. Robust standard errors included. \* $p < .05$  \*\* $p < .01$  \*\*\* $p < .001$

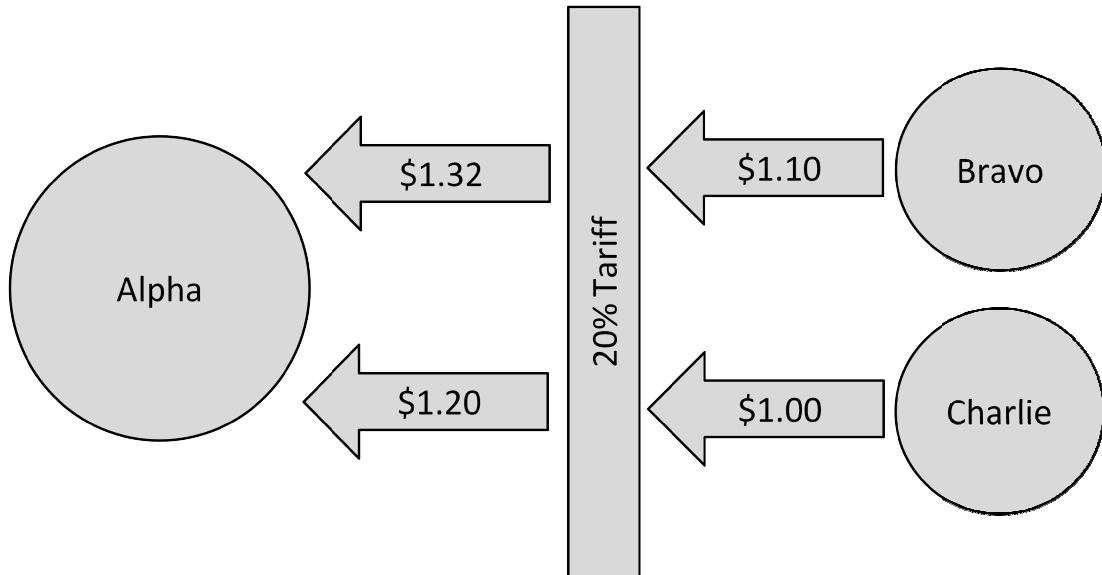
**Table 2: Economic Agreements and External Conflict – Selection**

	One Agreement		Opposing Agreement	
<b>Military Force Over Economic Sanctions</b>				
	Coefficient	Standard Error	Coefficient	Standard Error
Agreement	-0.292	0.172	-0.320	0.179
Agreement*Dependence <sub>High</sub>	12.881***	4.053	11.846**	55.670
Agreement*Dependence <sub>Low</sub>	-99.712*	47.478	-125.412*	4.234
Trade Diversion	0.056*	0.024	-0.013	0.023
Dependence <sub>High</sub>	-11.230**	3.983	-12.129**	3.944
Dependence <sub>Low</sub>	65.990	45.095	59.539	44.227
Alliance	-0.041	0.174	0.104	0.168
Capabilities	0.116*	0.049	0.106*	0.046
Contiguity	1.926***	0.256	1.959***	0.236
Democracy <sub>Low</sub>	-0.052***	0.011	-0.041***	0.010
Constant	0.462	0.411	0.897*	0.411
<b>Coercion Takes Place</b>				
	Coefficient	Standard Error	Coefficient	Standard Error
Agreement	0.223***	0.040	0.240***	0.042
Agreement*Dependence <sub>High</sub>	1.952**	0.634	1.765*	0.730
Agreement*Dependence <sub>Low</sub>	6.229	10.739	-21.008	10.794
Trade Diversion	0.024***	0.005	0.014*	0.006
Dependence <sub>High</sub>	-0.338	0.551	-0.283	0.568
Dependence <sub>Low</sub>	-16.767	9.513	-15.738	9.412
Affinity	-0.539***	0.039	-0.380***	0.043
Alliance	0.132**	0.047	0.117**	0.044
Capabilities	0.035*	0.014	0.051***	0.014
Contiguity	1.268***	0.043	1.208***	0.042
Democracy <sub>Low</sub>	-0.015***	0.003	-0.026***	0.003
GDP <sub>Low</sub>	0.107***	0.013	0.075***	0.013
IGOs	0.008***	0.002	0.011***	0.002
Major Power	0.318***	0.059	0.538***	0.052
Constant	-4.804***	0.310	-4.238***	0.300
N	243,275		249,915	
Censored	242,496		249,054	
Uncensored	779		861	
$\chi^2$	112.72***		133.87***	
$\rho$	-0.608***		-0.669***	
Pseudo-Log Likelihood	-3796.089		-4186.021	

*The selection variable (bottom panel) is the use of a coercive tool (militarized interstate dispute (MID) + sanction). The outcome variable is the use of a MID rather than economic sanctions. The "agreement" variable indicates dyads with either one state possessing membership in an economic agreement (left columns) or where both states are members of different agreements (right columns). The cubic polynomial term controlling for temporal dependence that appears in the selection equation (peace years<sup>3</sup>) is omitted for space. Robust standard errors included. \*p < .05 \*\* p < .01 \*\*\* p < .001*

Figure 1: An Illustration of Trade Diversion

Wheat Prices Without Economic Agreements



Wheat Prices With Alpha-Bravo Economic Agreement

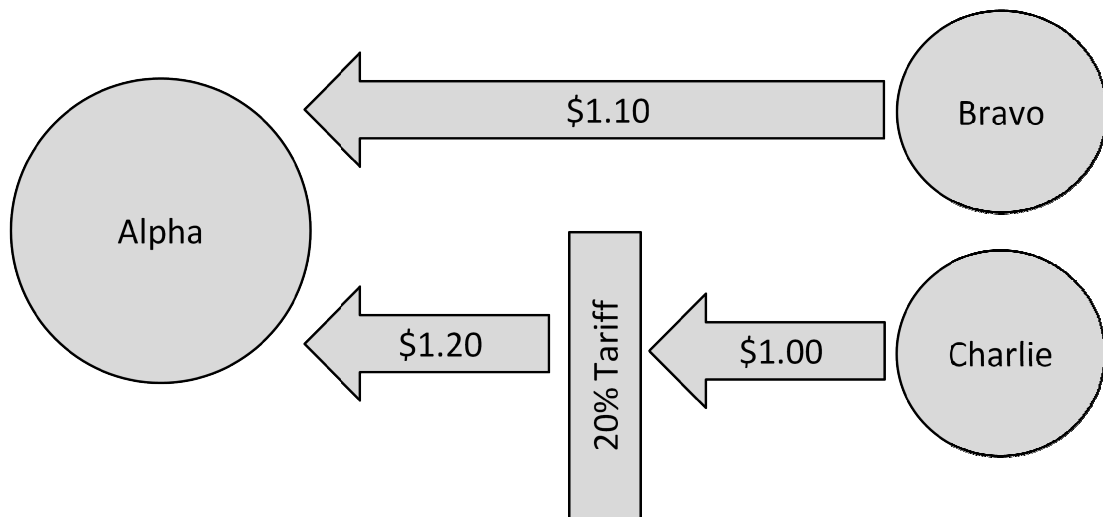
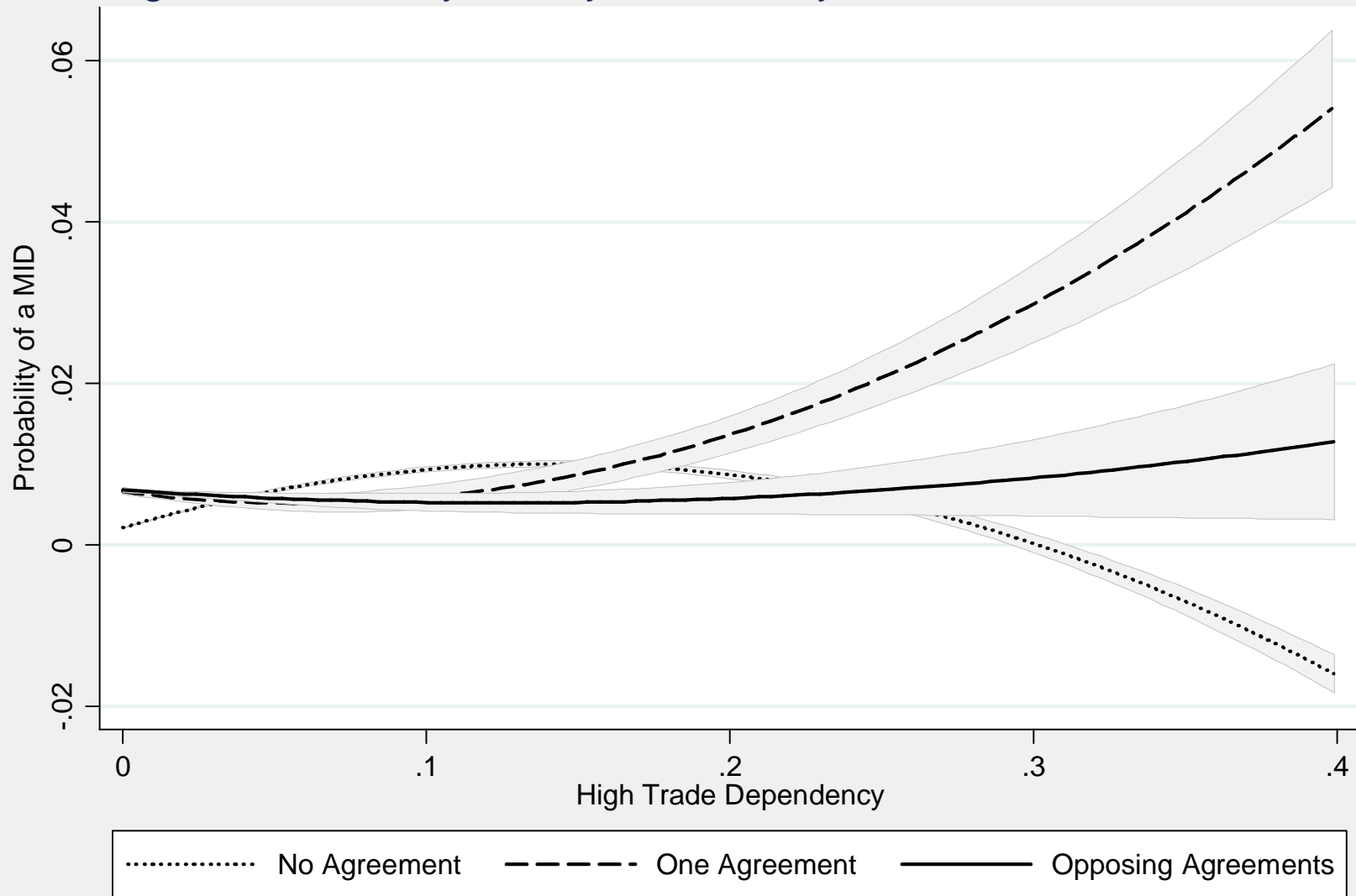


Figure 2: Trade Symmetry and Military Conflict



### Figure 3: Trade Diversion and Coercion

