Different in Asia? Developmental states, trade, and international conflict onset and escalation

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Abstract

In this article, I ask what might be the effect of international trade on interstate conflict in Asia and the Pacific. Overall, the associations of trade interdependence and trade volume in the region appear similar to those globally: interdependence is accompanied by a reduction in the chance of militarized conflict *onset*, whereas the volume of trade appears to reduce the chance of conflict *escalation* to deadly international violence. I suggest a partial exception for East Asia, implying weaker associations between trade and pacific outcomes. I argue that the regionally common 'developmental state' model allows such states to more freely, but less credibly, use trade as a foreign policy tool, reducing trade's constraint upon East Asian states in security affairs. Analyses of East Asian dyads and of developmental states in data from all regions of the globe support my contention that trade

interdependence has weaker pacific effects in these contexts, although some other expectations are not supported.

In this article, I apply a framework for thinking about the relationship between international trade and interstate conflict onset and escalation that incorporates distinct roles for trade volume and trade interdependence. I focus on the implications of such an approach for understanding trade–conflict dynamics in the broad Asia and Pacific region. The region, especially East Asia, is interesting to study from this perspective for at least two reasons. First, the amount of intraregional trade has expanded greatly since about 1980 (Wu, 2007; Asian Development Bank, 2009), roughly coinciding with the changes introduced by Deng Xiaoping to Chinese domestic and international economic relations beginning in 1979. This corresponds with a regional drop in interstate war and deadly conflict in the region (Tønnesson, 2009). Second, Asian states, especially those in Northeast and Southeast Asia, are often considered to have a distinctive trade-based recipe for development, based on export-led growth with a large role for the strategic choices of the state, usually called the 'developmental state' model (Johnson, 1982; Amsden, 1989). I do find some difference in the trade–conflict dynamics in East Asia, and one motivation for this study is to identify a variable that explains this difference and may be substituted for the proper name 'East Asia' (Przeworski and Teune, 1970, p. 8). The developmental state model appears to be such a variable.[1]

In the rest of the article, I first briefly discuss the concepts of *interdependence* and *volume* as aspects of trade that might be considered distinct in their relationship with international conflict. I pay special attention to how the developmental state model might interact with these two aspects of trade. I next discuss measures and methods, and then present results for a series of probit selection models that examine my propositions. I summarize conclusions in the final section of the article.

1 Trade interdependence and trade volume[2]

This section draws on bargaining models of war (Fearon, 1995; Reiter, 2003) to consider how trade volume and interdependence might relate to

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1   Replication files for the statistical analysis are available here: http.

2   Parts of sections discussing general hypotheses and methodological choices are based on Goldsmith (2013).

international conflict. Trade *volume* is defined as the total amount of exports and imports between any pair of countries (or 'dyad'). Trade *dependence* is the relative importance of that trade for each country, based on its share of the country's gross domestic product (GDP). *Interdependence* refers to the degree of mutual dependence on the trade relationship for each country in a dyad – when levels of dependence for both states are relatively high, interdependence is also high.

Bargaining models understand interstate conflict as a process of strategic interaction. Two crucial points in this process are (i) the initial challenge leading to a dispute, and (ii) the subsequent choice for escalating or defusing the crisis, usually considered as leading to war, or peace, between the states involved. A central insight is the idea that, given full information and certainty, war is irrational. Fearon (1995) provides a seminal example of such models, considering the implications of private information and uncertainty. If states are able to credibly signal their levels of capability and resolve to fight, then through bargaining they can reach a mutually acceptable agreement while avoiding the extra costs of war. However, because states have incentives to bluff and exaggerate, credible and effective communication is problematic. War ensues due to uncertainty over its likely outcome, and is only resolved once the side that is likely to lose clearly recognizes its position (Reiter, 2003).

Thinking about the role of international trade in this process should therefore focus on how it might affect leaders' *perceptions of the costs of war*, and how it might affect the communication process regarding *uncertainty over intentions and resolve*.

1.1 Interdependence

As both a signaling tool and a representation of state-level opportunity costs, trade interdependence has qualities that might reduce the likelihood of conflict onset. This is so because putting trade at risk implies that leaders have the resolve to suffer the domestic costs incurred if that trade is actually lost in conflict with the trading partner. The likelihood of significant domestic political costs makes the trade-based signal credible (Fearon, 1995, 1997). Regarding conflict onset, Crescenzi (2003) considers how contentious interchanges over trade before a militarized crisis might be consistent with a negative (pacific) effect of interdependence on the subsequent emergence of a militarized dispute, because they

facilitate communication about resolve.[3] As Gartzke *et al.* (2001, p. 400) put it 'interdependence makes it easier to substitute nonviolent contests for militarized disputes in signalling resolve.'

At the stage of escalation to serious violent conflict, bargaining theories may point to the further ability of interdependent states to credibly signal their resolve during a crisis through placing trade at risk (Morrow, 1999, p. 487). However, I argue that this does not fully consider the selection dynamics of the conflict onset stage (see also Goldsmith, 2013). Trade-based economic interdependence for the state and its adversary are likely to be observable at the conflict onset stage, and thus fully considered by each state. Interdependence should not play a major role in the escalation stage, because the potential costs to oneself and the adversary of risking that trade have already been 'priced in' to the calculations of each side. The signals have already been sent. These arguments lead to two hypotheses.

General hypotheses about trade interdependence[4]:

Hypothesis 1: higher dyadic trade interdependence will have a negative effect on interstate conflict onset.

Hypothesis 2: higher dyadic trade interdependence will have no effect on interstate conflict escalation to more serious violence.

1.2 Volume

Another way of measuring dyadic trade is to consider the value of trade flows in absolute terms, rather than proportional to the overall economy of each state. I suggest that more trade may *increase the chance of conflict onset*, even if resolve for escalation to war is low. For example, trade volume, even if not implying high dependence, is especially attractive for signaling at low levels of conflict because it has qualities that are appealing for leaders looking for 'bargaining chips' which are not obvious as such to opponents. It often represents interests that are valuable enough not to be dismissed as cheap talk or bluff by an opponent, but also not vital enough to defend at all costs. A trade-related issue might also arise

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3   But see also Morrow (1999, p. 485) who argues that the overall effect of interdependence on conflict onset is 'indeterminate.'

4   In the hypotheses and analysis, I use language-implying causation because of the strength of theory and evidence cumulated in the literature I cite (and in this article), although I acknowledge the caveat that 'effects' are never certain in observational data.

based on the interests of the sub-state actors involved, such as firms, even though national leaders are unwilling to actually go to war over the issues. *Controlling for the degree of state-level dependence, more traded goods or higher values of goods could provide more points of potential conflict*. Realist thinkers in international relations, such as Gilpin (1987, p. 172) and Waltz (1979, p. 138), highlight that trade among states may serve both as a conduit for signaling dissatisfaction on other issue areas, and as a set of issues which might themselves lead to conflict.

But the absolute volume of trade could also be relevant for bargaining to avert *escalation to violent conflict*. As suggested, it might often be the case that the degree of the state's overall interdependence was factored into the decision when the state selected itself into the conflict onset stage (either by initiating the conflict, or by not conceding the issue at stake before the disagreement became militarized). In such circumstances, interdependence would not play a significant role in further decisions about escalation. Trade issues leading to disputes will also have already been raised, by definition. But dramatic bargaining gestures involving large amounts of trade, or specific goods perceived to be of special importance, either as concessions or as further threats to signal a higher level of resolve than previously perceived, could help defuse the crisis. Because signals regarding interdependence levels will have already been perceived at the conflict onset stage, high-volume trade relationships might provide further signaling tools using valuable, dramatic gestures regarding high-profile aspects of the trade relationship: *the more and larger the trade issues available to each state for signaling, the more likely that states can effectively communicate their preferences to avoid war, or signal their resolve to fight*. Perceptual factors can be important in international conflict dynamics, over and above the actual economic value of a good or set of goods to the overall economy (Jervis, 1976). Such tools should be more available when the overall amount of trade is high, and scarce if the overall amount of trade is low.[5]

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5   This argument might be usefully expanded to consider specific types of goods (Dorussen 2006), or the degree to which firms are globalized (Brooks 2005), but my argument does not hinge on them. If they exist, my empirical analyses would tend to underestimate the effect of relevant firms or states, given that irrelevant firms'/states' trade is included in the general trade data.

General hypotheses regarding trade volume:

Hypothesis 3: higher dyadic trade volume will have a positive effect on the onset of interstate conflict.

Hypothesis 4: higher dyadic trade volume will have a negative effect on the chance of interstate conflict escalation to more serious violence.

1.3 East Asian states and trade signaling

My expectations regarding East Asia are based on the centrality of trade, especially exports, to the developmental state model, and on the close connections between political and economic elites in states adopting the model. The model's core tenets originate with Johnson (1982) and are summarized well by Leftwich (1995), Önis (1991), and Woo-Cummings (1999). Leftwich (1995, p. 405) lists the 'six major components' of the concept: '(i) a determined developmental elite; (ii) relative [state] auto-nomy; (iii) a powerful, competent, and insulated economic bureaucracy; (iv) a weak and subordinated civil society; (v) the effective management of non-state economic interests; [and] (vi) repression, legitimacy, and performance.'

I argue that such a political-economic system would lead to the expectation that, other things equal, trade will be less potent as a signaling device for East Asian developmental states. Signaling logic depends on the existence of domestic constituencies able to impose costs on foreign policy decision makers. However, East Asian developmental states have constituencies with weaker abilities to impose costs. Civil society is especially weak, and business elites are not truly autonomous from the political and bureaucratic decision makers; rather there are 'extraordinary degrees of elite unity' (Önis, 1991, p. 115), whereas the state is relatively autonomous from sub-national pressure.

In such circumstances, signaling based on risking the loss of trade for the state would be seen by adversary states as incurring relatively fewer domestic costs, and more likely to be a bargaining tactic. Business elites will probably go along with, and may be complicit in, the overall conflict strategy if trade has come into the bargaining process. This will tend to reduce the pacific effect on conflict onset of overall economic inter-dependence, because the lower-cost signals sent will seem less credible. Thailand and Cambodia, for example, have experienced a series of

militarized disputes since 2008, over the contested status of a temple on their border, in spite of their relatively high trade interdependence.

However, the *amount* of trade between two countries might *further increase* the chance of a dispute arising. While less able to use trade to credibly signal resolve, relatively autonomous East Asian developmental states will be freer to raise high-profile or high-value trade issues in the conflict bargaining process, regardless of whether firms or other societal actors (e.g., labor unions) find such behavior in their interests. They will therefore be free to link them to other contentious issues in relations with other states. Thus, relative to other states, specific amounts of trade, or traded goods, will be somewhat more likely to be sources of dispute onsets for East Asian states. In the context of ongoing territorial disagreements in 2002, for example, Singapore refused to pay a higher price for Malaysian water than their contract required. Malaysia's Prime Minister Mahathir then stated publicly 'according to the agreement, we must supply them with water – unless we go to war with them' (BBC 6 August 2002).

But high trade volume may also be somewhat less likely to provide useful tools for avoiding conflict escalation to violence because of the lower domestic political costs. Developmental states will have easier access to trade issues during conflict, but these trade issues will be relatively less credible as signals which might help avert conflict escalation. Returning to the example of the Thai–Cambodian border dispute, in spite of relatively high trade volumes ($1 billion in 2008, and a reported further $900 million in unofficial trade along border areas) and attempts from the Thai side especially to use cross-border flows and trade-related loans to defuse tensions, it has escalated to a shooting conflict involving soldiers' deaths (although never approaching the 250-death threshold used in the analyses in this article) several times (The Bangkok Post, 16 October 2008, 31 January 2009, 11 June 2009).

In the empirical analysis that follows, I test the hypotheses that stem from these arguments on two types of dyads: those including two East Asian states, and those including at least one developmental state in any region. This is appropriate because, while my logic hinges on the characteristics of developmental states, there may be states in East Asia that adopt many of its important aspects, but are not categorized as fully fitting the model. For example, neither Vietnam, Cambodia, nor the Philippines is categorized as developmental for any period (see below).

Cross-regional analysis is potentially useful when different models of political economy have been adopted by diffusion or other processes (e.g., 'flying geese' or more nuanced processes, e.g., Bernard and Ravenhill, 1995) in different regions. On the other hand, some countries outside of East Asia, such as Botswana and Finland, have been categorized as developmental states for parts of their history. My expectations should therefore be tested against their patterns of conflict behavior, so I also present analysis for intraregional dyads including at least one developmental state in any region of the world.[6] Hypotheses finding support in analysis with both types of dyad will deserve greater confidence.

East Asia/developmental state hypotheses:

Hypothesis 5: for East Asian dyads (developmental states), higher dyadic trade interdependence will have a pacific effect on interstate conflict onset, but of less magnitude than for other types of dyads.

Hypothesis 6: for East Asian dyads (developmental states), higher dyadic trade interdependence will have no effect on interstate conflict escalation to more serious violence (the same as hypothesis 2).

Hypothesis 7: for East Asian dyads (developmental states), higher dyadic trade volume will have a positive effect on the onset of interstate conflict, but of greater magnitude than for other types of dyads.

Hypothesis 8: for East Asian dyads (developmental states), higher dyadic trade volume will have a Pacific effect on the chance of interstate conflict escalation to more serious violence, but of less magnitude than for other types of dyads.

2 Measures and methods

In this section, I discuss measures and statistical methods used to test the hypotheses. Pooled dyadic annual time-series data are used (notation omits time indicators for clarity). Some variables are further described in the appendix.

6　Models similar to 4 and 7 using an indicator of dyads of *two* developmental states fail to produce valid results due to the small number of such dyads. However, my hypotheses do not require that both states in a dyad be developmental.

2.1 Measures of trade and conflict

GDP share is the proportion of country i's GDP that is represented by trade with a particular country j.

$$\text{GDPshare}_{i,j} = \frac{\text{imports}_{ij} + \text{exports}_{ij}}{\text{GDP}_i}.$$

Once this is calculated, for each dyad ij, the lower of the two values of $\text{GDP}_{\text{share}}$ is chosen, using the weak-link logic (Dixon, 1994) that the least dependent state (largest GDP) represents the effective level of interdependence ($\text{GDPshare}_{\text{lower}ij}$).

The volume of trade is simply the sum of imports and exports within a dyad for a given year, in constant inflation-adjusted dollars.

$$\text{Trade volume}_{ij} = \text{imports}_{ij} + \text{exports}_{ij}.$$

It is important to note that there is not a high degree of empirical correlation between trade volume and interdependence ($r = 0.293$ for Trade volume$_{(\ln)}$ and GDPshare$_{\text{lower}}$).[7] This is so because weak-link interdependence is proportional and hinges on the size of the larger state in the dyad, whereas trade volume is a function of both economies in the dyad, and not proportional.

My operationalization of international conflict involves measuring both the onset of a militarized dispute, and the escalation of some disputes to levels of serious interstate violence. I use all militarized interstate disputes (MIDs) in the correlates of war (COW) dataset, for the years 1951–2001 (1961–2001 for some analyses), coding all years in which a MID was initiated within a dyad as 1 (MID data end in 2001). A MID involves a threat, show, or use of force by one state, directed at the other. Dyad-years of MID continuation are dropped, and all other non-MID dyad-years are coded 0. I create an indicator for MIDs which escalate, eventually incurring over 250 battle-related deaths, coding an escalation variable 1 for dyad-years involving the onset of such a MID, all subsequent years for those MIDs are dropped, and all years with no such serious MID are coded 0.

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7   All intraregional dyads, 1950–2000. Without the logarithmic transformation for Tradevolume, this is 0.344.

Descriptive statistics for all such MIDs in the Asia–Pacific, as well as GDP share and trade volume are presented in Table A1, for dyad-years experiencing 'fatal' MID onsets which incur at least one battle death, along with counts for fatal MIDs with over 250 battle deaths, and MIDs incurring 1000 or more deaths. The analyses rely only on the escalation threshold of over 250 deaths, because available MID incident data, 1992–2001, indicate that no MIDs begin with an incident involving that many deaths. This reinforces the assumed escalation process reflected in the statistical models, while providing the greatest possible variation in the dependent variable.[8] The conflict indicators are measured 1951–2001, one year after the independent variables (1950–2000) to support causal inference. Given my focus on the bargaining process of MID onset and escalation, I drop 'joiners' – states that were not involved on day one of the MID onset – from the analysis.[9]

I also include a number of control variables likely to be associated with both trade and conflict. Alliances are one such factor. I use Signorino and Ritter's (1999) alliance portfolio similarity statistic, S (alliance ties 'S'), weighted by global share of military capabilities. This is also an important control because it helps account for the role of extra-regional great powers, such as the United States or the Soviet Union for Asia, in conflict dynamics among intraregional dyads.

Xiang et al. (2007) show that omission of a variable accounting for power (states' military capabilities) has the potential to bias trade and conflict models. The military capabilities of each state (as measured by COW's composite index of national capabilities) is an important control for this study because it is related to economic size, and thus to the potential trade volume of states. I create a dyadic indicator by adding them, then taking the natural log.[10]

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8 See Goldsmith (2013) for detailed discussion based on data from Ghosn et al. (2004), and robustness checks.

9 South Vietnam is coded as a joiner for the MID with North Vietnam beginning in 1964, and thus this conflict is not included in the results presented here. This dyad did have a fatal MID in 1960 (see Table A1). In the MID data, the primary parties to the Vietnam War are the United States and North Vietnam. However, if the north–south dyad is re-coded as a primary party with a MID onset in 1964 that escalates to war, then the results presented here are not substantively affected. The only change in statistical significance for the trade variables is that the negative association with MID escalation of the interaction term for Tradevolume and East Asia becomes significant at the 90% level in model 3.

10 I add a very small number, 0.000001, to the sum of dyadic CINC scores to avoid zero values before taking the natural log.

Regime type and geographic distance are also important controls. In the conflict onset stage, I use two indicators of dyadic regime type, measuring the degree of joint democracy in the dyad and the existence of a jointly authoritarian dyad as separate factors (Goldsmith *et al.*, 2008). I include distance (natural log of miles between capitals) and contiguity.[11] I also include a cubic polynomial for peaceyears (number of years since the dyad's last MID) to account for temporal dependence (Carter and Signorino, 2010).

To identify the escalation stage, variables included are trade volume and trade interdependence – the focus of this study – and also total dyadic power capabilities and joint autocracy. Dyadic power is included again to guard against the overestimation of the effect of trade volume at this stage. Joint autocracy is included because, whereas there is little theory to guide expectations, it is possible that autocratic leaders are less constrained by audience costs or other factors than leaders in less centralized regimes. Given that conflict among autocracies is less likely, those that do experience it might be especially resolved to pursue the issues at stake, and thus especially likely to escalate. Such high resolve and low constraint might not be observed by adversaries at the conflict onset stage, even though they are aware of the regime type of the state, due to the closed nature of fully autocratic states' decision making.

Dyads in East Asia, Asia and the Pacific, and other regions are coded using dichotomous (dummy) indicators. I limit the regional analyses to the period 1961–2001, because prior to this, there were relatively few states categorized as developmental in East Asia. I also use several indicators to assess the robustness of my findings to alternative hypotheses. These include territorial conflicts, dyads with free-trade practices, dyads sharing membership in regional integration arrangements (RIAs), and dyads sharing memberships in all types of international governmental organizations (IGOs).

As noted, I also create an indicator for dyads including at least one developmental state based on the literature on this topic. This is appropriate because not all East Asian states, even after 1960, can be considered 'developmental,' and there are a number of states outside of East

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11 Including distance and contiguity is important because capital cities might be quite far, although two states share a border. For example, China and Vietnam border each other, although their capitals are over 2,000 miles apart.

Asia categorized in the existing literature as developmental. In fact, according to my coding detailed below, while 67% of 5,497 East Asian dyad years, 1950–2000,[12] include at least one developmental state, these represent only 33% of all 11,262 dyad years containing at least one developmental state in intraregional data for that period. The remaining 7,574 developmental state dyad years include 4,632 (41%) comprising one East Asian and one other Asia–Pacific state, and 2,942 (26%) comprising states outside of the Asia and Pacific region altogether.

I define Asia and the Pacific as the wide region, including Oceania/Australasia, South, Central, Southeast, and Northeast Asia. I define East Asia as Southeast and Northeast Asia. Specifically, Cambodia, China, Indonesia, Japan, Laos, Malaysia, Myanmar, North Korea, Philippines, Republic of Vietnam, Singapore, South Korea, Taiwan, Thailand, and Vietnam (Socialist Republic of Vietnam). Thus, East Asia is a sub-region of Asia and the Pacific. In the analyses, I compare East Asian dyads (for which both states are in East Asia) with dyads in other parts of Asia and the Pacific (not including East Asia). I also compare both groups with all other intraregional dyads globally. The other regions for which dyads are pooled in these analyses are Latin America, the West (Europe and North America), Sub-Saharan Africa, and the Middle East and Northern Africa. *Inter*regional dyads (e.g., Bolivia and Laos, or the United States and Vietnam) are excluded from the analysis because they are less appropriate for comparison with East Asian dyads or other sets of intraregional dyads: they take considerably lower values for trade and all other variables in the models (except, of course, distance), and they have a much lower likelihood of conflict.

Based on the developmental state literature, I coded the following states as 'developmental' for the periods indicated: Japan (1925–), Taiwan (1949–), France (1945–85), Austria (1950–79), Finland (1950–79), Malaysia (1957–), Thailand (1958–), South Korea (1960–), Singapore (1965–), Botswana (1966–), Indonesia (1966–), People's Republic of China (1979–). Sources are noted in the appendix.[13] I now turn to a discussion of the choice of econometric method for assessing support for my hypotheses.

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12 This rises to 72% of 4,725 for the period 1960–2000.

13 I also acknowledge the useful study of Kivimäki and Kivimäki (2011), but do not fully concur with its coding of developmental states.

2.2 Econometric models

The analysis relies on a Heckman (1976) selection estimator for probit models, because the conflict escalation process might be vulnerable to selection bias. This occurs when there is a relationship between the factors causing a case to enter a sample, and the factors associated with the outcome to be studied.

A key insight of bargaining models of war is that international conflict analysis can suffer from selection bias. For example, both resolve and military capabilities are important for conflict onset as well as escalation. As Fearon (2002, pp. 6–7) writes 'Rational challengers select themselves into crises according to their prior beliefs about the defender's willingness to resist with force. To the extent that this occurs, the crises in which defenders' immediate deterrent threats are most credible will tend to be crises in which the challenging states are relatively strongly motivated to change the status quo, and thus willing to accept an appreciable risk of conflict. Hence despite their credibility compared to immediate deterrent threats in other cases, defender threats in this subset are less likely to succeed.' Other studies using selection models to examine escalation using MID data include Bennett and Stam (2004, pp. 30, 117, 219) and Braithwaite and Lemke (2011).

Huth and Allee (2002, pp. 35–36) raise another relevant issue. In dyadic time-series studies of international conflict, the possibility for theoretically irrelevant but statistically significant findings exists due to the rarity of conflict, and lack of much basis for conflict within many dyads. However, to assess the effects of international trade, it is preferable to include all dyads, because even smaller non-contiguous states often trade with each other. Including relevant control variables is one approach suggested by Huth and Allee, and these are included in the models. The regional approach of this article further helps focus analysis on proximate, relevant dyads. A selection model also provides a check: in the second stage of the process, states that have selected themselves into militarized conflict represent a small and relevant subset, and the possibility of escalation is logically strong.

In the analyses that follow, I first present models including all intraregional data, and using interaction terms for Asia and Pacific (excluding East Asia) dyads, East Asian dyads, and dyads containing at least one developmental state, to assess whether there is a difference in the

trade–conflict relationship between these groups and all other intraregional dyads in the world. I then proceed to models including only dyads for each group. I also discuss a number of robustness checks. Finally, I present estimates of the substantive impact of trade volume and interdependence on the chance of conflict onset and escalation in East Asia and among dyads with a developmental state, compared with all other intraregional dyads.

3 Results

I include all intraregional dyads in the models in Table 1. Interaction terms are used to assess whether there is a statistically significant difference in the trade–conflict associations of dyads comprising the groups of interest in the hypotheses, and all other intraregional dyads. Model 1 presents baseline results for all intraregional dyads in the period when the developmental state model began to be widespread in East Asia (from 1960). Model 2 contrasts the effects of the trade variables intra-regionally with their effects in Asia and the Pacific, excluding East Asian dyads. Model 3 considers the difference in the effects of trade for East Asian dyads. Model 4 has a longer temporal domain, and considers the difference between intraregional dyads without a developmental state and those including at least one developmental state, with independent variables measured 1950–2000 (and the corresponding dependent variables measured 1951–2001).

The results suggest that trade interdependence (GDPshare) has a pacific effect on the onset of MIDs intra-regionally, and no significant association with MID escalation to over 250 battle deaths. This supports general hypotheses 1 and 2. Trade volume appears to have no significant association with MID onset, although the coefficients are positive as expected, and a negative and significant association with MID escalation. Thus, general hypothesis 3 finds little support, but hypothesis 4 is supported.

These patterns are clear in model 1, but also consistent in models 2–4, for the GDP share and trade volume terms (when Asia–Pacific/East Asia/Developmental state dummy = 0). The interaction terms in these models also show that there are statistical differences in the association of interdependence and MID onset for each of the groups indicated (when dummy = 1). Thus, in model 2, the interaction term for Asia–Pacific dyads excluding East Asian states and lower dyadic GDP

Table 1 Intraregional models with interactions

	Model 1			Model 2			Model 3			Model 4		
	All Intraregional Dyads, 1961–2001			Interaction Model for Asia–Pacific Dyads (excluding East Asia), 1961–2001			Interaction Model for East Asia Dyads, 1961–2001			Interaction Model for Developmental State Dyads, 1951–2001		
	coeff.	SE	sig.	coeff.	SE	sig.	coeff.	SE	sig.	coeff.	SE	sig.
Escalation to over 250 Deaths												
Tradevolume$_{(ln)}$	**−0.04**	0.01	0.00	**−0.04**	0.01	0.00	**−0.03**	0.01	0.01	**−0.03**	0.01	0.00
Tradevolume$_{(ln)}$ × [AP, EA, *or* Dev State dyads]				0.09	0.07	0.20	−0.03	0.02	0.25	−0.01	0.03	0.65
GDPshare$_{lower}$	7.19	14.13	0.61	9.11	12.76	0.48	10.87	22.66	0.63	13.19	22.83	0.56
GDPSHARE$_{lower}$ × [AP, EA, or Dev State dyads]				−1003.43	1337.52	0.45	−6.78	33.47	0.84	−11.27	31.78	0.72
[AP, EA, or Dev State dyads]				0.31	0.40	0.43	−0.18	0.23	0.43	−0.30	0.23	0.20
Power$_{AB(ln)}$	0.01	0.05	0.82	−0.01	0.05	0.91	0.01	0.05	0.88	0.03	0.05	0.58
Joint autocracy	0.18	0.17	0.31	0.22	0.18	0.23	0.13	0.18	0.48	**0.28**	0.17	0.10
Constant	**−1.10**	0.33	0.00	**−1.28**	0.36	0.00	**−1.03**	0.36	0.00	**−1.07**	0.33	0.00
Selection into MID												
Tradevolume$_{(ln)}$	0.00	0.00	0.87	0.00	0.00	0.73	0.00	0.00	0.90	0.00	0.00	0.65
Tradevolume$_{(ln)}$ × [AP, EA, or Dev State dyads]				0.02	0.01	0.11	0.01	0.01	0.15	−0.01	0.01	0.34
GDPshare$_{lower}$	**−15.78**	3.27	0.00	**−15.08**	3.26	0.00	**−25.47**	4.63	0.00	**−28.67**	4.67	0.00
GDPshare$_{lower}$ × [AP, EA, or Dev State dyads]				−172.39	103.53	0.10	**16.15**	5.63	0.00	**24.49**	5.30	0.00
[AP, EA, or Dev State dyads]				0.12	0.09	0.19	**0.39**	0.05	0.00	**0.17**	0.05	0.00

Continued

Table 1 *Continued*

	Model 1			Model 2			Model 3			Model 4		
	All Intraregional Dyads, 1961–2001			Interaction Model for Asia–Pacific Dyads (excluding East Asia), 1961–2001			Interaction Model for East Asia Dyads, 1961–2001			Interaction Model for Developmental State Dyads, 1951–2001		
	coeff.	SE	sig.	coeff.	SE	sig.	coeff.	SE	sig.	coeff.	SE	sig.
Parity	**0.48**	0.06	0.00	**0.48**	0.06	0.00	**0.48**	0.07	0.00	**0.43**	0.06	0.00
Power$_{AB(ln)}$	**0.23**	0.01	0.00	**0.23**	0.01	0.00	**0.20**	0.02	0.00	**0.22**	0.01	0.00
Alliance ties 'S'	0.04	0.07	0.57	0.03	0.07	0.69	0.01	0.07	0.89	0.09	0.06	0.11
Joint democracy	**−0.03**	0.01	0.00	**−0.03**	0.01	0.00	**−0.02**	0.01	0.01	**−0.03**	0.01	0.00
Joint autocracy	**−0.34**	0.05	0.00	**−0.34**	0.05	0.00	**−0.30**	0.05	0.00	**−0.37**	0.05	0.00
Contiguity	**0.86**	0.04	0.00	**0.86**	0.04	0.00	**0.90**	0.04	0.00	**0.91**	0.04	0.00
Distance$_{(ln)}$	**−0.25**	0.02	0.00	**−0.26**	0.02	0.00	**−0.26**	0.02	0.00	**−0.27**	0.02	0.00
Peaceyears	**−0.05**	0.00	0.00	**−0.05**	0.00	0.00	**−0.05**	0.00	0.00	**−0.05**	0.00	0.00
Peaceyears^2	**0.00**	0.00	0.00	**0.00**	0.00	0.00	**0.00**	0.00	0.00	**0.00**	0.00	0.00
Peaceyears^3	**0.00**	0.00	0.00	**0.00**	0.00	0.00	**0.00**	0.00	0.00	**0.00**	0.00	0.00
Constant	**0.90**	0.19	0.00	**0.90**	0.19	0.00	**0.69**	0.20	0.00	**0.88**	0.18	0.00
rho	−0.31	0.13	0.03	−0.28	0.14	0.05	−0.33	0.13	0.02	−0.30	0.13	0.03
Number of observations	78,211			78,211			78,211			85,179		
Uncensored observations	810			810			810			942		
Wald chi-squared (4, 7 df)	15.37		0.00	17.93		0.01	16.92		0.02	17.23		0.02

Probit selection models. Dependent variable measured at year $t + 1$ (1951–2001), independent variables at year t (1950–2000); statistically significant coefficients at 0.10 level or better indicated with bold; Significance of *rho* based on the likelihood ratio test for independence of equations. All significance tests are two-tailed.

share is negative and significant (at the 90% level), suggesting a stronger pacific effect for interdependence in this part of Asia than among other intraregional dyads. But the opposite is the case for East Asian dyads and dyads including a developmental state. In models 3 and 4, the corresponding interaction terms are positive and significant, although the magnitude (absolute values of the coefficients) is not quite as large as the negative coefficient for GDP share. This suggests a weaker, although still pacific, effect for interdependence for East Asia and for developmental states in general. This is consistent with hypothesis 5. There is also no significant effect indicated for interdependence in the MID escalation stage in models 3 and 4, which is consistent with hypothesis 6.

However, hypotheses 7 and 8 regarding trade volume do not find support: there is no indication in models 3 or 4 of any significant difference for East Asia or developmental states in the association of trade volume with MID onset or escalation, when compared with other intraregional dyads.

These patterns and conclusions are further supported by models 5 through 8 in Table 2. While interaction terms in probit models are useful for assessing whether there is a statistical difference between one set of observations and another, their interpretation is not straightforward (Kam and Franzese, 2007). I therefore present models using only the sets of dyads of interest in Table 2, as well as two sets of marginal effect plots in Figures 1 and 2.

Regarding the choice of selection models, the rho-statistics in models 1 through 5 are highly significant, indicating a strong likelihood of selection bias. However, the results are substantively unchanged if separate probit models are used.

When all intraregional dyads excluding East Asia[14] are examined in model 5, there are significant pacific relationships between trade interdependence and MID onset and trade volume and MID escalation, but no significant association between interdependence and escalation, again supporting general hypotheses 1, 2, and 4. When only East Asian dyads are considered in model 6, the same relationships hold, but the magnitude of the coefficient for interdependence in stage 1 of the model appears to be much smaller, suggesting support for hypothesis 5 (probit coefficients

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14 A model using only Asia and Pacific dyads excluding East Asian states fails to converge.

Table 2 Intraregional models

	Model 5			Model 6			Model 7		
	All Intraregional Dyads excluding East Asia, 1961–2001			East Asia Dyads, 1961–2001			Intraregional Developmental State Dyads, 1951–2001		
	coeff.	SE	sig.	coeff.	SE	sig.	Coeff.	SE	sig.
Escalation to more serious conflict									
Tradevolume$_{(ln)}$	**−0.03**	0.01	0.01	**−0.06**	0.02	0.02	**−0.05**	0.03	0.03
GDPshare$_{Lower}$	17.05	21.73	0.43	−3.31	39.53	0.93	−0.19	27.54	0.99
Power$_{AB(ln)}$	−0.03	0.06	0.64	0.01	0.13	0.95	0.12	0.15	0.44
Joint autocracy	0.16	0.21	0.43	0.13	0.41	0.75	−0.11	0.52	0.84
Constant	**−0.93**	0.42	0.03	**−1.91**	0.70	0.01	−1.14	0.88	0.20
Selection into MID									
Tradevolume$_{(ln)}$	−0.00	0.00	0.93	0.00	0.01	0.61	−0.00	0.01	0.95
GDPshare$_{Lower}$	**−25.55**	4.75	0.00	**−10.04**	3.63	0.01	−3.32	2.70	0.22
Parity	**0.43**	0.07	0.00	**0.48**	0.21	0.02	0.19	0.18	0.29
Power$_{AB(ln)}$	**0.22**	0.02	0.00	**0.23**	0.05	0.00	**0.24**	0.04	0.00
Alliance ties 'S'	0.08	0.07	0.25	−0.39	0.24	0.11	0.15	0.19	0.42
Joint democracy	**−0.03**	0.01	0.00	**0.05**	0.02	0.05	−0.01	0.02	0.47
Joint autocracy	**−0.37**	0.06	0.00	0.06	0.14	0.70	0.08	0.14	0.54
Contiguity	**0.97**	0.05	0.00	**0.46**	0.13	0.00	**0.53**	0.10	0.00
Distance$_{(ln)}$	**−0.21**	0.02	0.00	**−0.54**	0.09	0.00	**−0.45**	0.06	0.00
Peaceyears	**−0.05**	0.00	0.00	**−0.16**	0.02	0.00	**−0.18**	0.02	0.00
Peaceyears^2	**0.00**	0.00	0.00	**0.01**	0.00	0.00	**0.01**	0.00	0.00
Peaceyears^3	**0.00**	0.00	0.00	**0.00**	0.00	0.00	**0.00**	0.00	0.00
Constant	**0.40**	0.21	0.06	**3.41**	0.69	0.00	**2.68**	0.52	0.00
rho	−0.47	0.15	0.01	0.11	0.27	0.69	−0.20	0.31	0.53
Number of observations	66,962			4178			9808		
Uncensored observations	626			164			186		
Wald chi-squared (4 df)	8.44		0.08	8.95		0.06	5.59		0.23

Probit selection models. Dependent variable measured at year $t + 1$ (1951–2001), independent variables at year t (1950–2000); statistically significant coefficients at 0.10 level or better indicated with bold font; significance of *rho* based on the likelihood ratio test for independence of equations. All significance tests are two-tailed.
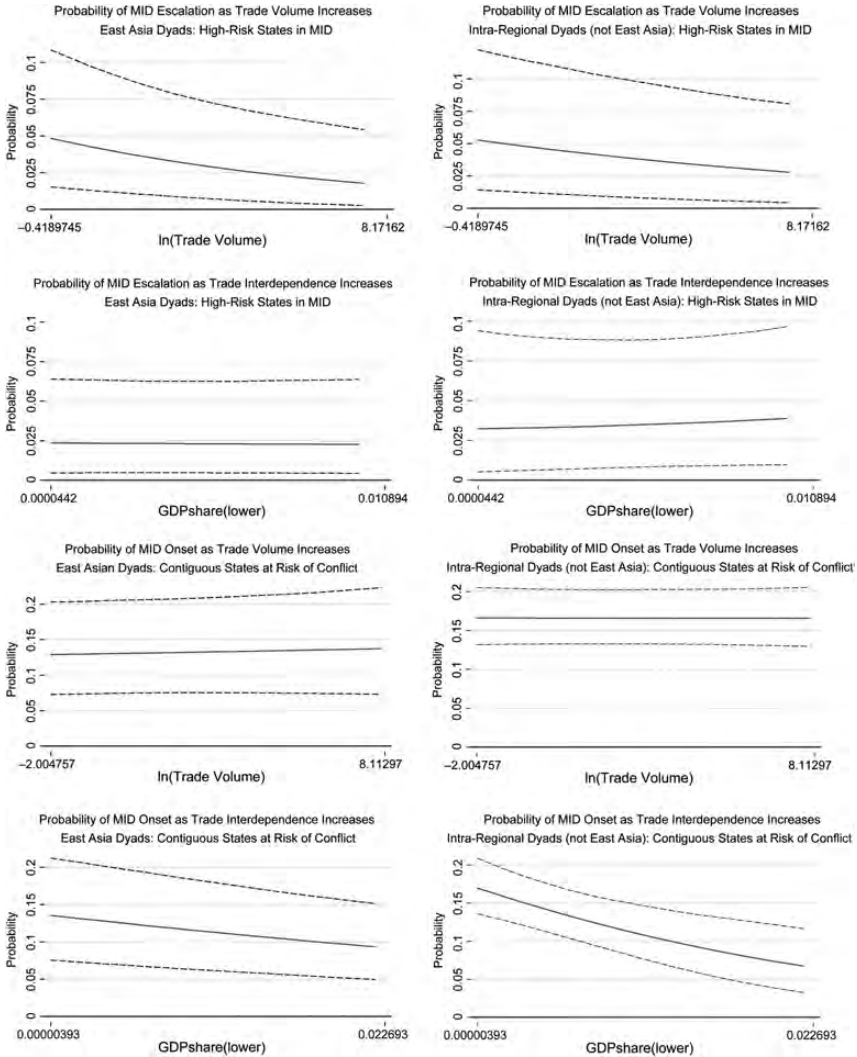
Figure 1. East Asian and other dyads (1961–2001): marginal effects of trade variables

cannot be clearly interpreted without considering the values taken by other variables in the model, therefore estimates in Figs 1 and 2 are better indicators). The negative interdependence–MID onset relationship in model 7, when dyads containing at least one developmental state are considered, becomes insignificant. This is also consistent with hypothesis 5.
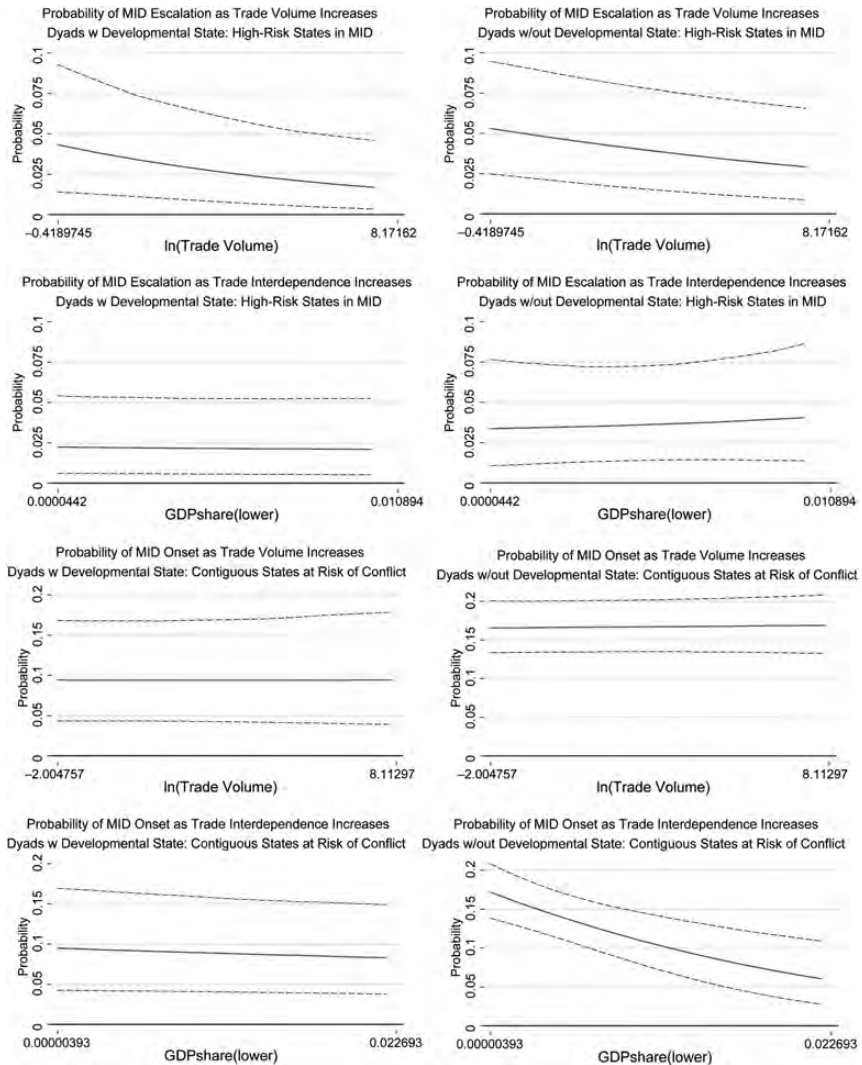
Figure 2. Dyads with and without developmental states (1951–2001): marginal effects of trade variables

Before further assessing the hypotheses by considering marginal effects, presented in Figs 1 and 2, I first discuss the robustness of the findings so far.

3.1 Robustness checks

The dyads involved in deadly MIDs (Table A1 in the appendix) give an indication that Asia–Pacific MIDs often involve states with competing

territorial claims. If trade and territorial issues are correlated, then the apparent effects of interdependence and volume on conflict might be spurious. To assess whether territorial disputes might account for the distinctions found for East Asian or developmental states, I include a control for them in each stage of models otherwise specified as in Table 1. The Territorial claim indicator is coded 1 for all dyad-years with an active territorial claim, 0 otherwise, based on data for 1950–95 from Huth and Allee (2003). The results indicate that territorial claims are strongly associated with MID onset, but are not more likely to escalate than MIDs with no territorial issue. But inclusion of these variables does not change the sign or significance of the trade–conflict relationships of interest.

Recent literature on trade and conflict has suggested that trade conducted with fewer tariff or non-tariff barriers is most conducive to peace, whereas non-free trade is less so (McDonald, 2004). Because developmental states tend to manage trade strategically, this argument might explain the findings. Another argument focuses on the role of RIAs in facilitating conflict avoidance or resolution (Haftel, 2007).[15] Because East Asia has relatively few of these (only two of the 25 Haftel identifies), this may also provide an explanation for my results. Similarly, I also test whether lower joint IGO memberships of any sort explain my findings.

In order to assess each of these hypotheses, I ran models similar to models 3 and 4 in Table 1, also including in each stage indicators of joint GATT or WTO membership (for free trade), joint RIA membership, or joint IGO membership, and interacting these terms with the trade variables at each stage. If these variables provide alternative explanations, they should cause the trade interaction terms with East Asian and developmental state dyads to become insignificant. If the trade interaction terms' coefficients retain the same patterns of sign and statistical significance as in models 3 and 4, the results for East Asia and developmental states can be considered robust to these factors.

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15 My RIA coding is admittedly less nuanced than Haftel's, because it does not code the scope of economic activity covered by RIAs, nor the frequency of leader meetings. However, interacting RIAs with trade volume is a reasonable substitute for economic scope. This has considerably greater substantive effect on conflict than leader meetings (Haftel 2007, p. 230).

The findings in Table 2 prove highly robust in these sensitivity tests. In all cases, the trade variables and their interactions with East Asian and developmental state dyads retained comparable sign and significance, whereas in some instances, the new dummy and interaction terms also produced significant results (not discussed, to save space).

3.2 Estimating substantive effects

The results discussed so far indicate that the effects of trade interdependence on the onset of interstate conflict in East Asia and among dyads with a developmental state appear to be smaller than in other intraregional dyads, as anticipated by hypothesis 5. Hypothesis 6 has also been supported because there is no indication of a difference between the null effects of interdependence on escalation in general and among East Asian or developmental state dyads. However, hypotheses 7 and 8 have not found support.

In order to further assess hypotheses 5–8, a clearer indication of the relative substantive effects on the likelihood of interstate conflict onset and escalation is given in Figs 1 and 2. They present the marginal effects (and 95% confidence intervals) on predicted probabilities of MID onset and escalation, based on models 6 (Fig. 1) and 7 (Fig. 2). The figures are based on estimated effects[16] for the trade variables while all other variables in the model are held at values that represent dyads at plausible risk of conflict. Given that interstate conflict is quite rare (MID onset occurs in just 0.9% of intraregional dyad years, 1951–2001, whereas MID escalation to over 250 battle deaths occurs in just 5% of those onsets), it is important to simulate scenarios in which the role of trade in preventing conflict can be meaningful. I therefore set the values of all other variables in the model at their 80th percentile 'dangerous' values (i.e., the 80th percentile low value for distance and the 80th percentile high value for parity). I then allow the relevant trade variable (GDPshare or Trade volume) being estimated to vary from the minimum

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16 Specifically, they are based on simulations using 10,000 sample draws from the multivariate normal distribution, similar to simulations produced by Clarify software (King *et al.*, 2000) or suggested by Brambor *et al.* (2010). For the simulations, separate probit models are used for each stage for the sake of computational simplicity, with the second stage run on data only for dyads with MID onsets (a conditional model). The probit results are very similar to those for models 5 and 6.

to maximum value it actually takes in intraregional data when the other trade variable is set at its 80th percentile dangerous value.[17] This provides realistic scenarios based on the actual cross-national variation in the key variables. These values are calculated for all intraregional dyads, 1960–2000, such that the same values are used for all scenarios in Figs 1 and 2. They allow comparability across scenarios for typical dyads at some plausible risk of conflict, rather than the average intraregional dyad, which has a very low *a priori* risk of conflict.

Comparison of these marginal effects strongly supports the conclusions already suggested. The pacific effects of trade interdependence on the chances of conflict onset are smaller and weaker in East Asia and among dyads including a developmental state, as is evident when the lower left panels of each figure are compared with the lower right panels. This is consistent with the logic laid out regarding the use of trade interdependence to signal intentions and resolve in the initiation stage of conflict for developmental states. If they can more freely, but less credibly, use trade as a signaling tool, I have argued that this weaker effect is indeed what would be observed. Also consistent with my expectations, interdependence has little apparent effect on escalation for any type of dyad – which I argue would be the case if it had been sufficiently factored in to actors' calculations at the conflict onset stage. The middle upper panels in both figures indicate this; the slopes are almost perfectly flat for East Asian and developmental dyads, and although there are slightly inclining slopes for other intraregional dyads, they are small and the confidence intervals are quite wide across the entire range of values.

While the slope of the marginal effect of trade volume on the chance of MID onset in East Asia is slightly positive (Fig. 1, middle lower left panel), this is too small to count as substantial support for hypothesis 7. There is no corresponding conflict-exacerbating effect evident for the dyads including a developmental state (Fig. 2, same panel location). The corresponding positive coefficients in models 3 and 6 are also not statistically significant. Neither is there evidence that trade volume has less of a pacific effect in East Asia or among dyads with a developmental state

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17 I use the range of the 95% confidence interval of the 80th percentile value as calculated by Stata 11 software.

than in other intraregional dyads. The left and right upper graphs in each figure are very similar. Thus, while trade volume, rather than interdependence, is associated with pacific outcomes at the escalation stage, as anticipated by my general hypothesis 4, this effect is not of any less magnitude in East Asia or among developmental states, and hypothesis 8 is not supported. This would, for example, support an interpretation of the already-mentioned Thai–Cambodian dispute that points to trade as a possible factor inhibiting the conflict from escalating to higher levels. The weaker pacific effect of trade on MID onset, but not on MID escalation, among East Asian and developmental dyads is an area for further consideration and analysis. Perhaps it points to different perceptual dynamics due to different levels of decision maker attention at each conflict stage, for example.

4 Conclusions

This article has presented statistical tests regarding the trade–conflict relationship, with special attention to East Asia and to developmental states. The findings support the expectation that different aspects of trade can have different effects at different stages of the conflict bargaining process. While the expansion of intraregional trade flows in East Asia may have coincided with a drop in the escalation of militarized disputes, I find that the link between trade interdependence and peace is actually somewhat weaker in East Asia than in other regions. I provide evidence that this effect is attributable to the developmental state model. However, a broader conclusion of this article is that differences in the trade–conflict relationship across regions, and across different political-economic systems, appear to be differences of degree, rather than of kind. Contrary to my expectations, the impact of the developmental state model is not so strong that trade volume is associated with a greater frequency of MID onset, or with a weaker pacific impact on MID escalation. In East Asia, as in other regions, high volumes of trade appear to provide useful signaling tools that states involved in militarized disputes can deploy to help avoid escalation to large-scale interstate violence and war. The region's increased trade flows may thus help explain the relative lack of conflict escalation in recent decades.

Acknowledgements

Appendix

Further notes on the data and sources

Trade and GDP. Gleditsch (2002) *Expanded Trade and GDP Data* version 4.1. Trade volume indicators are adjusted for inflation using the deflator provided by the U.S. Department of Labor, Bureau of Labor Statistics (1983–84 as the base years) at ftp://ftp.bls.gov/pub/special. requests/cpi/cpiai.txt, accessed 30 March 2010.

Conflict. COW Project dyadic MID data (Ghosn and Bennett, 2007).

Developmental states. The coding relies on some often cited and/or empirically focused studies of developmental states, including chapters by Woo-Cummings, Johnson, Pempel, Vartiainen, and Loriaux in Woo-Cummings (1999), Leftwich (1995), and Wong (2004). Regarding some borderline cases, Masina (2010) argues that Vietnam does not fit the model due to its lack of industrial strategy, Pempel (1999, pp. 155, 164) argues that the Philippines has political and socio-economic differences due to its colonial legacy. A number of studies also point out that Chile has been too focused on free-markets internally and in its trade policies to fit the model.

Regime type. Polity IV dataset (Marshall and Jaggers, 2007). The commonly used polity index ranging from −10 (fully authoritarian) to +10

(fully democratic) is used to create two indicators, joint democracy and fully authoritarian dyads, as described in Goldsmith *et al.* (2008).

Power, contiguity, distance, and peace years. As provided by EUGene software version 3.1 (Bennett and Stam, 2000). Contiguity coded '1' if a land border is shared or if there is 24 miles or less of water between borders, otherwise '0.'

IGOs. Data for this variable, and also RIAs and Free Trade, are from the COW IGO database (Pevehouse *et al.* 2004). The variable measures the number of IGOs in which both states in a dyad are members in a given year. It ranges from 0 to 107.

RIAs. Based on Haftel's (2007, pp. 234–235) list of 25 such organizations. The only one not found in the COW IGO data was the Bangkok Agreement (now named the Asia–Pacific Trade Agreement), so a new variable was created and included in the final tally, based on the organization's website: http://www.unescap.org/tid/apta.asp. The variable counts annual dyadic joint memberships and ranges from 0 to 3.

Free trade. I do not use McDonald's (2004) measure based on residuals from regressions on trade levels. Not only is this complicated to implement, but it relies heavily on the assumption that one can correctly specify such a model. Because trade volume itself is a key independent variable in my study, and determinants of trade may vary over time and by region, I prefer to use an institutional indicator of free trade. Thus, I code free-trade dyads as '1' for those in which each state is a member of the GATT (1950–1994) or its successor the WTO, '0' otherwise.

Table A1 Asia and Pacific dyads with fatal MIDs, 1951–2001

State A	State B	MIDs w 1000+ deaths	MIDs w over 250 deaths	All Fatal MIDs	GDPShareA	GDPShareB	Tradevolume ($ millions)
India	Pakistan	5	5	20	0.0005	0.0044	95.35
China	Vietnam	3	4	5	0.0001	0.0015	204.28
China	India	2	2	4	0.0001	0.0001	11.28
Cambodia	Vietnam	2	2	2	0.0013	0.0003	29.52
North Korea	South Korea	1	2	14	0.0005	0.0001	5.11
Thailand	Cambodia	0	1	7	0.0002	0.0025	50.65
Taiwan	Myanmar	0	1	2	0.0040	0.0061	6.64
Malaysia	Indonesia	0	1	1	0.0063	0.0017	30.00
India	Bangladesh	0	0	5	0.0002	0.0025	332.77
Myanmar	Thailand	0	0	4	0.0030	0.0003	77.25
Afghanistan	Pakistan	0	0	3	0.0057	0.0009	22.89
China	Taiwan	0	0	3	0.0015	0.0262	4613.64
Thailand	Laos	0	0	2	0.0007	0.0088	22.80
Afghanistan	Turkmenistan	0	0	1	0.0000	0.0000	0.00
Afghanistan	Tajikistan	0	0	1	0.0001	0.0004	2.33
Afghanistan	Kyrgyzstan	0	0	1	0.0002	0.0003	3.60
Afghanistan	Uzbekistan	0	0	1	0.0000	0.0000	0.00
Afghanistan	Kazakhstan	0	0	1	0.0010	0.0002	16.22
Bangladesh	Myanmar	0	0	1	0.0000	0.0001	1.36
Cambodia	Republic of Vietnam	0	0	1	0.0014	0.0011	2.71
China	North Korea	0	0	1	0.0002	0.0379	676.63
China	Nepal	0	0	1	0.0000	0.0000	0.00
Indonesia	New Zealand	0	0	1	0.0004	0.0047	360.00
North Korea	Japan	0	0	1	0.0198	0.0002	475.30
Thailand	Vietnam	0	0	1	0.0003	0.0010	92.96
Vietnam	Republic of Vietnam	0	0	1	0.0000	0.0000	0.00

Values for GDPshare and trade volume are averages for all years t with fatal MIDs in year $t + 1$; only states involved on day one of the dispute are included ('joiners' coming later to the MID are dropped from the analysis).

References

Amsden, A.H. (1989) Asia's Next Giant: South Korea and late industrialization. New York: Oxford University Press.

Asian Development Bank. (2009) *Asian Development Outlook 2009 Update: Broadening Openness for a Resilient Asia*. Manila: ADB.

The Bangkok Post. 2008–2009. Reports as noted in text. http://www.factiva.com (30 October 2009, date last accessed).

BBC (British Broadcasting Company). (2002) 'Malaysia raises the water pressure' (6 August) accessed at http://news.bbc.co.uk/2/hi/asia-pacific/2175971.stm, 30 October 2009.

Bennett, D.S. and Stam, A. (2000) 'EUGene: a conceptual manual', *International Interactions*, 26, 179–204.

Bennett, D.S. and Stam, A. (2004) *The Behavioral Origins of War*. Ann Arbor: University of Michigan Press.

Bernard, M. and Ravenhill, J. (1995) 'Beyond product cycles and flying geese: regionalization, hierarchy, and the industrialization of East Asia', *World Politics*, 47, 171–209.

Braithwaite, A. and Lemke, D. (2011) 'Unpacking escalation', *Conflict Management and Peace Science*, 28(2), 111–123.

Brambor, T., Clark, W.R. and Golder, M. (2010) 'Understanding interaction models: improving empirical analyses', *Political Analysis*, 14, 63–82.

Brooks, S.G. (2005) *Producing Security: Multinational Corporations, Globalization, and the Changing Calculus of Conflict*. Princeton, NJ: Princeton University Press.

Carter, D. and Signorino, C.S. (2010) 'Back to the future: modeling time dependence in binary data', *Political Analysis*, 18, 271–292.

Crescenzi, M.J.C. (2003) 'Economic exit, interdependence, and conflict', *Journal of Politics*, 65(3), 809–832.

Dixon, W. (1994) 'Democracy and the peaceful settlement of international conflict', *American Political Science Review*, 88(1), 14–32.

Dorussen, H. (2006) 'Heterogeneous trade interests and conflict', *Journal of Conflict Resolution*, 50(1), 87–107.

Fearon, J.D. (1995) 'Rationalist explanations for war', *International Organization*, 49, 379–414.

Fearon, J.D. (1997) 'Signaling foreign policy interests: tying hands versus sinking costs', *Journal of Conflict Resolution*, 41(1), 68–90.

Fearon, J. (2002) 'Selection effects and deterrence', *International Interactions*, 28(1), 5–29.

Gartzke, E., Li, Q. and Boehmer, C. (2001) 'Investing in the peace: economic interdependence and international conflict', *International Organization*, 55(2), 391–438.

Ghosn, F. and Bennett, S. (2007) *Codebook for the Dyadic Militarized Interstate Dispute Data, Version 3.10*, Correlates of War2 Project, The Pennsylvania State University. http://correlatesofwar.org (2 October 2008, date last accessed).

Ghosn, F., Palmer, G. and Bremer, S.A. (2004) 'The MID3 Data Set, 1993–2001: procedures, coding rules, and description', *Conflict Management and Peace Science*, 21, 133–154.

Gilpin, R. (1987) *The Political Economy of International Relations*. Princeton, NJ: Princeton University Press.

Gleditsch, K.S. (2002) 'Expanded trade and GDP data', *Journal of Conflict Resolution*, 46, 712–24.

Goldsmith and Benjamin, E. (2013) 'International Trade and the Onset and Escalation of Interstate Conflict: More to Fight about, or More Reasons Not to Fight?' *Defence and Peace Economics*, Published online 20 February 2013, DOI 10.1080/10242694.2013.763637.

Goldsmith, B.E., Chalup, S.K. and Quinlan, M.J. (2008) 'Regime type and international conflict: towards a general model', *Journal of Peace Research*, 45(6), 743–763.

Haftel, Y.Z. (2007) 'Designing for peace: regional integration arrangements, institutional variation, and militarized interstate disputes', *International Organization*, 61, 217–237.

Heckman, J.J. (1976) 'The common structure of statistical models of truncation, sample selection, and limited dependent variables and a simple estimator for such models', *Annals of Economic and Social Measurement*, 5, 475–492.

Huth, P. and Allee, T. (2002) 'Questions of research design in developing new tests of the democratic peace', *International Interactions*, 28(1), 31–57.

Huth, P.K. and Allee, T.L. (2003) *The Democratic Peace and Territorial Conflict in the Twentieth Century*. New York: Cambridge University Press.

Jervis, R. (1976) *Perception and Misperception in International Politics*. Princeton, NJ: Princeton University Press.

Johnson, C.A. (1982) *MITI and the Japanese Miracle*. Stanford: Stanford University Press.

Kam, C.D. and Franzese, R.J. Jr. (2007) *Modeling and Interpreting Interactive Hypotheses in Regression Analysis*. Ann Arbor: University of Michigan Press.

King, G., Tomz, M. and Wittenberg, J. (2000) 'Making the most of statistical analyses: improving interpretation and presentation', *American Journal of Political Science*, 44, 347–361.

Kivimäki, T. and Kivimäki, M. (2011) 'Level of development or developmentalism in the explanation of the ASEAN capitalist peace', presented at the joint conference of the Association for Asian Studies and the International Convention of Asia Scholars. Honolulu, Hawai'i, March 31–April 3.

Leftwich, A. (1995) 'Bringing politics back in: towards a model of the developmental state', *Journal of Development Studies*, 31(3), 400–427.

Marshall, M.G. and Jaggers, K. (2007) *Polity IV Project: Political Regime Characteristics and Transitions, 1800–2006*, Dataset Users' Manual, v.2007, Colorado State University, http://www.systemicpeace.org/polity/polity4.htm (3 October 2008, date last accessed).

Masina, P. (2010) *Vietnam between developmental state and neoliberalism: the case of the industrial sector.* c.MET Working Paper 7/2010 (December): http://193.205.129.80/repec/cme/wpaper/cmetwp_07_2010.pdf (29 March 2013, date last accessed).

McDonald, P.J. (2004) 'Peace through trade or free trade?', *Journal of Conflict Resolution*, 48(4), 547–572.

Morrow, J.D. (1999) 'How could trade affect conflict?', *Journal of Peace Research*, 36(4), 481–489.

Önis, Z. (1991) 'The logic of the developmental state', *Comparative Politics*, 24(1), 109–126.

Pempel, T.J. (1999) 'The Developmental Regime in a Changing World Economy.' in M. Woo-Cummings, (ed.), *The Developmental State.* Ithaca, NY: Cornell University Press. pp. 137–181.

Pevehouse, J.C., Nordstrom, T. and Warnke, K. (2004) 'The COW-2 international organizations dataset version 2.0', *Conflict Management and Peace Science*, 21(2), 101–119.

Przeworski, A. and Teune, H. (1970) *The Logic of Comparative Social Inquiry.* New York: Wiley-Interscience.

Reiter, D. (2003) 'Exploring the bargaining model of war', *Perspectives on Politics*, 1(1), 27–43.

Signorino, C.S. and Ritter, J.M. (1999) 'Tau-b or not Tau-b: measuring the similarity of foreign policy positions', *International Studies Quarterly*, 43(1), 115–144.

Tønnesson, S. (2009) 'What is it that best explains the east asian peace since 1979? A call for a research agenda', *Asian Perspective*, 33(1), 111–136.

Waltz, K.N. (1979) *Theory of International Politics.* New York: Mcgraw-Hill.

Wong, J. (2004) 'The adaptive developmental state in East Asia', *Journal of East Asian Studies*, 4, 345–362.

Woo-Cummings, M. (ed.) (1999) *The Developmental State.* Ithaca, NY: Cornell University Press.

Wu, Y. (2007) 'Major trade trends in APEC economies: implications for regional free trade agreements', in M.A.B. Siddique, (ed.), *Regionalism, Trade and Economic Development in the Asia–Pacific Region*. Cheltenham, UK: Edward Elgar. pp. 55–67.

Xiang, J., Xu, X. and Keteku, G. (2007) 'Power: the missing link in the trade conflict relationship', *Journal of Conflict Resolution*, 51(4), 646–663.