

War, Peace, and the Invisible Hand: Positive Political Externalities of Economic Globalization

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Studies of signaling in international relations reveal how punishing bluffing ex post through domestic audience costs or opposition groups facilitates credible ex ante communication among states and reduces the impetus toward war. Global integration of economic markets may also reduce uncertainty by making talk costly ex ante. Autonomous global capital can respond dramatically to political crises. To the degree that globalization forces leaders to choose between pursuing competitive political goals and maintaining economic stability, it reveals the intensity of leaders' preferences, reducing the need for military contests as a method of identifying mutually acceptable bargains. Asymmetric integration can dampen the pacific effects of globalization, but asymmetry does not in itself exacerbate dispute behavior. We present the theory and offer preliminary corroborative tests of implications of the argument on postwar militarized disputes.

He intends only his own gain, and he is in this, as in many other cases, led by an invisible hand to promote an end which was not part of his intention.

— Adam Smith (1976, p. 477)

Certain bourgeois writers ... give the hope of peace among nations under capitalism. Theoretically, this opinion is absurd, while in practice it is sophistry and a dishonest defense of the worst opportunism.

— V. I. Lenin (1970[1916], p. 74)

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1. Introduction

Recent years have witnessed growing interest among scholars and policymakers in the political consequences of economic integration. *How do increasingly autonomous global capital markets influence the conduct of world affairs?*¹ We use signaling theory to argue that integration can reduce reliance on military force as a method for states to pursue national interests. Put simply, globalization promotes peace.² At the same time, concerns about unequal development appear overstated. Asymmetric integration may precipitate civil tensions, but asymmetry should not by itself make integrated states more disputatious than states with limited exposure to global markets.

The idea that the global economy impacts the disputatiousness of states is certainly not new. Early students of capital like Montesquieu (1989 [1748]) and Smith (1976) anticipated that markets that span borders would have pacific effects. Critics of free markets from V. I. Lenin (1970[1916]) to Patrick Buchanan (1998) argue that globalization generates not amity, but added international antagonism. Contemporary partisans continue the dialectic in various forms and through various methods. Demonstrators from Seattle to Switzerland and from Gothenberg to Jakarta have taken to the streets, mobilized by apocalyptic visions of the menace of globalization. Proponents of integration appear to see the rigorously derived implications of efficient markets as sufficient justification while critics of disparate partisan persuasion predict increased inequality, conflict, and the plundering of state sovereignty on issues as diverse as labor rights, the environment, and military power. All factions seem to overlook the possibility that integration introduces even greater leverage and flexibility for states, at least in the realm of nonviolent competition.

We differ from existing debates about globalization and economic interdependence in how we characterize the causes of war and in the way we link political conflict to markets. Developments in the bargaining theory of war suggest that informational asymmetry (uncertainty) is an important cause of interstate violence. Since military contests are costly, and since some settlement (tacit or overt) eventuates, there exists a mutual benefit for states in obtaining eventual settlements in lieu of fighting. States can prefer war if they differ in their expectations about the terms of eventual settlements; at least one party must be overly optimistic about its prospects in a contest. Optimism does not necessitate irrationality, however. States need only be confronted with private information and incentives to compete (Fearon, 1995). War then acts as a mechanism of revelation, informing competitors about relative power or resolve and thereby dissipating the impetus to fight.

If at least some disputes result from uncertainty, then processes that inform states without requiring military violence promote peace. Previous research based on this insight emphasizes the role of domestic audience costs (Fearon, 1994) or opposition groups (Schultz, 1998, 1999) in corralling “cheap talk.” Leaders facing uncertainty and international competition have incentives to bluff, occasionally necessitating costly contests to unravel relative capabilities or resolve. Domestic audiences or opposition groups can make a leader’s statements more credible ex ante by punishing bluffing ex post. Yet, there exists another mechanism to enhance credibility. Making talk costly ex ante also discourages bluffing, potentially allowing states to bargain short of war.³

¹ Waltz (1999, 2000) argues that international affairs are not much changed by globalization.

² We use “globalization” and “economic integration” interchangeably. We define globalization as the integration of financial markets and the growing dispersion of production capital (Veseth, 1998).

³ Fearon (1997) discusses “tying hands” versus “sinking costs.” The former imposes a contingent cost (leaders’ talk is only costly if the leader bluffs and is caught) while the latter exacts a price regardless. Fearon refers to both as costly signaling. See Morrow (2000) for a review of the rationale for formalizing security alignments.

Adam Smith identified in markets autonomous forces with serendipitous effects. Here, we discuss how globalization facilitates costly signaling among states. Global markets have the ability to punish leaders' statements by reallocating capital abroad. If in turn leaders have incentives to soothe economic markets, then globalization presents politicians with a dilemma. Leaders are forced to choose between stable markets and the pursuit of political objectives. Under traditional international conditions, states possess only crude instruments such as cheap talk and force with which to compete. Leaders must sometimes go to war to prove their willingness to do so. Globalization provides an additional mechanism for competition beyond cheap talk, but short of military violence. Leaders of integrated states who threaten a neighbor encourage investors to flee. Unresolved leaders may prefer to abandon political objectives rather than antagonize investors. Resolved leaders pursue demands in spite of the economic consequences, differentiating themselves from less resolved types and allowing opponents to more effectively fashion mutually acceptable *ex ante* bargains.⁴

In the sections that follow, we first review the relevant literature. We then develop our argument and assess some of our claims using large-sample quantitative tests. We conclude with a discussion of some of the implications of our theory and the prospects for globalization and peace.

2. A Synthesis of Three Literatures

New insights are often formed by combining established arguments and observations in novel ways. We seek a synthesis of components of three distinct literatures. Studies of economic globalization narrate the substance to be analyzed, debate definitional issues, and examine state–market linkages, but lack a sophisticated conception of the causes of war and have yet to make extensive use of statistical methods to analyze the impact of globalization on conflict. Analysis of interdependence and conflict provides insights about the role of economic liberalism in generating peace and develops the basic research design used in this study, but has yet to explore the state–market nexus in detail and typically focuses narrowly on trade. Finally, research on signaling delineates a logic of war and peace that constitutes the theoretical foundations of the current study but has yet to be applied in the context of economic integration. Each of the three literatures contributes analytic components to our study of the effect of globalization on peace. However, the three literatures currently run on largely separate courses. We thus begin the task of integrating these three literatures by offering an innovative logic for why economic globalization facilitates peace. We review each of these literatures below and then offer a theory of globalization and peace in the subsequent section.

2.1. *Economic Globalization*

Economic globalization can be defined as the integration of financial markets and the increasing dispersion of production capital (Veseth, 1998).⁵ Two major controversies in the existing academic literature involve the extent of globalization and the proper characterization of state–market relations. Below, we summarize these controversies and relate each to the study of inter-state disputes.

Some observers claim that the world has become “globalized,” that the ongoing integration of economic markets is unprecedented (Ohmae, 1996; Greider, 1997; Friedman, 1999). Critics of this view (Waltz, 1999; Gilpin, 2001) cite the limited nature and geographical distribution of integration in recent years compared with that of the late 19th century. This controversy really hinges on one’s definition of

⁴ Reputation can make “cheap talk” credible (Sartori, 2002), though it also has perverse effects (Nalebuff, 1991).

⁵ Our argument has clear systemic implications. Here, we focus on the dyadic implications of globalization.

globalization. If researchers can agree on what globalization means, then whether it has occurred (or not) is largely an empirical question. Wade (1996) shows that existing economic integration is uneven, with financial capital and direct investment appearing predominantly in a few clusters around the globe. Thus, globalization seems to be ongoing and incomplete. For our purposes, the nascent character of globalization actually enhances analysis. The salient observation here is that markets and production networks are increasingly global, whether they are currently “globalized” by any consensus criteria or not. Further, the nascent status of globalization means that quantitative research can both assess and anticipate the effects of economic integration.

The consequences of globalization for the state–market relationship is central to our argument. Our conception of costly signaling through economic markets depends not only on the rise of global markets, but also on the continued viability of states. On the one hand, our argument presupposes growing market autonomy. Markets must be able to respond to political news independent of government constraints in order to be informative to observers. On the other hand, if state power is destined to disappear, then the effect of costly signaling on inter-state conflict is really mute.

The extent to which states are threatened by globalization is a subject of considerable conjecture and debate. Some scholars herald the death of the state as a sovereign entity (Kindleberger, 1969; Strange, 1996, 1998). Accompanying such “death notices” are predictions of a rise in extra-territoriality and the coming of a borderless world (Ruggie, 1993; Ohmae, 1996; Cohen, 1998).

A second group asserts as folly the claims of the first group. As Kapstein puts it, “states remain the single most important players” in the international system (Kapstein, 1994). Global markets serve in a submissive though expanding inter-state role. The global economy still operates within regulatory structures originating from home state control so that political boundaries continue to define complex systems of cross-border capital accumulation (Wade, 1996; Krasner, 1999).

Wedge between opposing positions is an argument that states are not dead, just ailing. The nation-state is not about to be replaced, but national foreign policies are increasingly constrained by global markets (Andrews, 1994; Drucker, 1997; Evans, 1997; Rodrik, 1997; Reinicke, 1998). States retain limited monetary and fiscal autonomy and a weakened ability to address domestic tasks. Eclipse of the state is unlikely, but policy options are limited to repressive methods for avoiding collapse or to regimes sponsored by supranational organizations (Drucker, 1997; Evans, 1997; Reinicke, 1998).

While debate continues, there appears to be substantial agreement on three points. First, goods and financial markets are increasingly integrated while production is becoming decentralized. Second, the economic policy autonomy of states is shrinking with the expanding power of markets. Third, globalization is asymmetric and incomplete; states differ in their integration into the world economy. It follows that the consequences of markets for states should also vary with integration, a possibility that we explore with special focus on the prevalence of militarized disputes.⁶

2.2. Economic Interdependence and Conflict Behavior

Beginning in the 1970s, students of political economy began to re-evaluate the effect of economic interdependence on inter-state conflict. Several authors made conceptual contributions or refined definitions of interdependence (Deutsch, 1978; Rosenau, 1984; Keohane and Nye, 1989; Kroll, 1993; Caporaso, 1998). One insight

⁶ Rosecrance (1985) is an early and notable exception. Gissinger and Gleditsch study the effects of globalization and domestic (civil) conflict (1999). We differ from both studies in how we characterize the causes of warfare.

from this literature is that a diversity of linkages may itself be a palliative for violence. Yet these studies fail to explain how multiple channels alter states' incentives to compete. The fundamental claim of this literature is that economic linkages deter conflict by increasing opportunity costs, the forgone benefits states face in using force. "International commerce, being a transaction between nations, could conceivably also have a direct impact on the likelihood of peace and war: once again the [economic] interests might overcome the passions, specifically the passion for conquest" (Hirschman, 1997). Most quantitative studies report that bilateral trade correlates with a reduction in inter-state militarized disputes (Polachek, 1980; Gasiorowski, 1986; Oneal et al., 1996; Oneal and Russett, 1997, 1999a, 1999b; Bliss and Russett, 1998; Polachek, Robst, and Chang, 1999).⁷

Using a bargaining logic of war, Morrow offers two reasons why trade and conflict do not interact in the manner typically described (1999). First, trade should be reduced *ex ante* where the risk of conflict is greatest if firms anticipate contests between states (Morrow, Siverson, and Tabaras, 1999).⁸ Trade and war are endogenous; states are not deterred from conflict if the threat of conflict deters trade. Second, trade should at most weakly deter conflict since factors inhibiting aggression by one party encourage aggression in others. Gartzke Li, and Boehmer (2001) offer a game-theoretic model and quantitative test of Morrow's second point. States may subsume opportunity costs associated with trade as different bargains, so that interdependence does not necessarily reduce the likelihood of disputes. However, interdependence also facilitates costly signaling, allowing states to inform competitors about relative resolve and removing informational motives for war. The study uses capital and monetary policy variables to show that interdependent states are less likely to fight.

Research on interdependence and conflict is methodologically sophisticated and offers important statistical support for the intuition that inter-state economic linkages promote peace. However, studies of interdependence typically emphasize states to the exclusion of actors in the private sector, thereby ignoring interactions between states and markets. While this may not be a fatal weakness for research narrowly focused on political processes, it is also plausible that the rise of markets relative to states makes unbiased descriptions of political conflict in isolation from non-state actors impossible. The literature has also been imprecise in its treatment of the causes of war. We take from the interdependence literature our research design and the general expectation that integration encourages peace. To this we add the state-market relationships emphasized by globalization research and adopt a specific, explicit, conception of war onset from signaling theory.

2.3. Signaling Theories and Interstate Conflict

A ubiquitous characteristic of competition is the difficulty actors face in credibly communicating private information about factors salient to their performance in a contest.⁹ Given that agreements often depend on perceptions of relative power, threat, or interest, competitors face incentives to conceal weakness and claim strength. This "pooling" of attributes, or "types" means that opponents sometimes underestimate one another. The inability to communicate credibly, and its relationship to costly contests, forms the basis of an evolving literature on signaling in international relations.

⁷ There remain critics of the liberal peace (Barbieri, 1996; Barbieri and Schneider, 1999). Mansfield and Pollins (2002) and McMillan (1997) review the literature on interdependence and conflict.

⁸ Li and Sacko (2002) show that, not only does conflict have an *ex ante* effect on trade (as Morrow suggests), but trade also has an *ex post* effect on conflict.

⁹ Unfortunately, this ubiquity has led many to underestimate the importance of uncertainty and information as determinants of war and peace. Anarchy, though even more ubiquitous, receives considerably more attention.

The talk of nations is too often cheap. Competition and the private nature of information about factors relevant to a state's performance in a contest mean that states have difficulty conveying relevant facts in a credible manner. The signaling literature explores two mechanisms likely to enhance the credibility of political statements. First, so-called cheap talk signaling enhances credibility by differentially rewarding honesty or punishing bluffing. Domestic audiences or opposition groups can punish leaders who are found to be dissembling (Fearon, 1994; Schultz, 1998, 1999; Smith, 1998). In societies where office-holding is subject to popular review, disapproval of bluffing by an audience or "selectorate" encourages leaders to be more truthful (Fearon, 1994). Competitors who are aware that some leaders face harsher consequences for deception are more likely to believe statements from these leaders.¹⁰ States with sanctioning selectorates are then able to communicate credibly using words and less often need to resort to costly deeds. Alternately, oppositional elites may sanction bluffing (Schultz, 1998, 1999). In a related conception, Sartori (2002) shows how states can internalize the consequences of bluffing through reputation. Like the boy who cries wolf, states or leaders caught in a lie are less likely to be believed in future negotiations.

Costly signaling offers a second process by which leaders can increase their credibility. Audience cost models involve sanctions for observed bluffing (as when a leader backs down from a threat), but credibility can also be increased if some price is imposed regardless of subsequent actions.¹¹ Making a leader's words costly encourages leaders with relatively low valuations for issues at stake, or high costs for fighting, to remain silent, or to choose more pliant language. Observers may then infer from differences in statements and from associated (observable) costs which leaders are resolved and which are not. By making talk costly, leaders address the credibility problems associated with cheap talk. Contests are then less often necessary as states arrive at nonviolent *ex ante* bargains.

Applications of costly signaling theory appear in several subjects in international relations. Deterrence theory argues that states can manipulate the probability of contests by altering the perceptions of potential attackers. Leaders engage in threats that imply a cost to potential attackers. Credibility is again a problem, since leaders have incentives to make deterrent threats regardless of whether they expect to act to fulfill their commitments (Powell, 1990). States enhance the credibility of deterrent threats by associating costly behavior with the threat. A state that claims it is willing to intervene in the event of a war between states and redeploys two aircraft carriers, say, is more credible than a state that issues only a verbal warning.¹² Alliances offer another possible example of costly signaling. Alliances also seek to alter inter-state behavior by manipulating beliefs (Fearon, 1997; Morrow, 2000). They often impose *ex ante* costs that differentiate a resolved defender willing to protect a partner from states possessing only weak, informal alignments.¹³ Finally, war itself involves costly signaling (Wagner, 2000). States learn about an opponent through the conduct of a war, eventually learning enough to bargain effectively. The problem with war, of course, is that it involves violence and bloodshed. In our analysis, we seek mechanisms that, while they must be costly to be informative, do not require human casualties to unravel the problem of cheap talk.

Costly signaling theory can be applied to other contexts in international relations besides war, deterrence, and alliances. Any process that makes a leader's statements expensive *ex ante* reduces incentives to bluff. Indeed, unlike deterrence and

¹⁰ Smith (1998) provides an endogenous rationale for Fearon's assumption that selectorates punish bluffing.

¹¹ The need for detection means that cheap talk signaling can produce perverse incentives (Nalebuff, 1991).

¹² The credibility of deterrent threats can also be enhanced through cheap talk signaling (associating a state's reputation with a commitment, creating domestic audience costs for failing to respond to aggression, etc.).

¹³ Alliances can also constitute cheap talk signals. An explicit promise to protect a partner, for example, involves no *ex ante* costs but links a state's reputation to punishment should a defender fail to honor its commitment.

alliance formation, the most effective signaling is likely to follow from mechanisms that are not under the control of the participants. In this sense, states and leaders do not signal so much as signaling occurs to them. Third parties, with their own incentives to respond strategically to situations, are bound to carry the most credence with observers. How third parties are said to influence credibility, however, is relevant to what must be known, and how observers must act. In cheap talk signaling, audiences must be informed and attentive to leader behavior in order to sanction bluffing and generate credibility. The sanctioning entity must distinguish between bluffers and non-bluffers in order to encourage honesty. Costly signaling requires only that third parties respond egoistically to changes in conditions brought about by political shocks, since sanctions are imposed regardless of subsequent behavior.

In summary, previous studies on globalization, interdependence, and inter-state conflict offer insights that help us understand how globalization influences political competition, while also leaving key issues in doubt. System-level or case study research on globalization assesses the scope of integration or debates the relative merits of efficiency versus equity. Little attention has been paid to either dyadic inter-state conflict or the theoretical logic of war. Studies of globalization also appear to cherish a negative conception of the political consequences of integration. In contrast, research on interdependence embraces dyadic analysis and offers a more optimistic conception of the political externalities of trade. Yet the interdependence literature is narrowly attached to goods markets, ignoring other aspects of integration. Interdependence research also focuses on states as the predominant international actors. Finally, signaling theories offer a coherent rationale for war and peace, but emphasize audience costs over other forms of costly signaling. Signaling theories have yet to be applied to account for how a third party such as the global capital markets affects inter-state competition. We next synthesize and extend elements of these three literatures to show how state exposure to global capital markets can produce more peaceful political interactions.

3. An Informational Theory of Globalization and Peace

Too often, talk is cheap in international politics. "Cheap talk" involves statements that impart little cost to the speaker. States in competition make claims about their willingness or ability to incur hardship or loss in the pursuit of preferred objectives. A state might threaten war, for example, unless its interests are accommodated in some manner. Unfortunately, such claims are not readily verifiable. States often possess information about their willingness or ability to pursue contests that is not publicly known. Attempts to convey this information through talk are thwarted to the degree that competition invites bluffing. If there is no cost for bluffing, and if bluffing allows for the possibility that an opponent will make a more generous concession, then states should bluff. Obviously, if bluffing is ubiquitous, statements should not be believed. That leaders do make statements and often appear to be believed suggests that bluffing is contained in international politics. That bluffing is perennial and often advantageous to the perpetrator also appears manifest.

Here, we examine one solution to the problem of credible communication that appears to us both novel and significant. Leaders can enhance the credibility of statements if statements are costly, and thus no longer cheap. Only when the issues at stake are relatively important will a leader then choose to make a demand. The importance of credible communication is bound up with the origins of international conflict. We use the informational approach to war to show how globalization can make talk costly and how costly talk reduces the need for militarized disputes.

3.1. An Informational Theory of War

As Blainey (1988) points out, the task in explaining war has less to do with identifying the means and motives for conflict than with accounting for the occasional inability of states to forge the bargains that eventuate from contests prior to the onset of fighting. If contests entail positive costs (fighting consumes gold, goods, and human life), then states benefit by agreeing to settle for the terms they are destined to obtain in lieu of fighting. It follows that a broad cause of warfare can be obtained from the fact that states often have different beliefs about the terms of eventual bargains. One party must be overly optimistic about its prospects in fighting. Yet “exuberance” need not imply irrationality (Fearon, 1995).¹⁴ States that possess private information about factors affecting the likely terms of an eventual settlement have incentives to dissemble. Given uncertainty, bluffing can yield bargains a state prefers to those obtainable through naïve revelation.¹⁵ States must occasionally fight to distinguish actual strategic conditions from the claims of competitors.¹⁶

Yet war is only one potential solution to the problem of asymmetric information. War forces the revelation of private information by being costly. If alternative methods exist that are also costly (perhaps less costly) but nonviolent, then it is possible for states to resolve their differences without requiring military force. Historically, there have been few alternatives to warfare as a method of information revelation and competition in international politics, not so much because states have lacked the ability to impose costs on themselves (a state could always “burn money”), but because few alternatives existed that also harmed opponents. The imperative of competition encourages actors to attend to the balance of power. States in competition seek to weaken opponents, not themselves. War is informative precisely because the process of harming an opponent reveals the information necessary to obtain mutually acceptable bargains. In a system with limited economic integration, warfare is not only the “final arbiter” but often the only arbiter available to states.

3.2. How Globalization Promotes Peace

Informational theories of war argue that at least some contests result from uncertainty and states’ incentives to compete. Costly signaling can reduce the need for conflict by allowing for credible communication. Globalization facilitates costly signaling by making leaders’ talk costly and thus reducing the incentives to bluff. For a state with a closed economy seeking to compete in the international system, alternatives are largely limited to cheap talk and war. Traditionally, leaders have been forced to fight to prove that they are not bluffing. However, for a state that is integrated into the global economy, there exists a “middle path” between fighting and just talk. The ability of capital to flow freely into and out of a national economy provides leaders vying for prosperity with incentives to appeal to the market. Conditions that frighten investors lead to capital flight, raise the costs of borrowing, and deter future investments. The leader of a globalized state thus faces a trade-off between economic and political incentives. Efforts to promote prosperity and economic stability imply a lack of political resolve while efforts to compete abroad frighten markets. The fervor with which leaders make political threats now imparts an economic cost. Leaders that value economic conditions more than a given

¹⁴ Blainey (1988) and Jervis (1976) offer psychological studies of uncertainty and war.

¹⁵ Fearon (1995) refines the argument by Blainey (1988). See also Gartzke (1999), Morrow (1999), and Wagner (2000).

¹⁶ Fearon (1995) actually identifies three causes of rational war: asymmetric information, commitment problems, and indivisibility of goods. He dismisses the indivisibility as trivial. Slantchev (2003) and Garfinkel and Skaperdas (2000) provide explanations involving full information and status/time inconsistency problems.

political issue will prefer to accept less generous bargains while leaders that value the issues at stake highly and pursue more advantageous political bargains can demonstrate preference intensity through a willingness to incur economic hardship. When capital is free to move globally, the conflictual political talk of leaders is no longer cheap.

Globalization has three attributes that facilitate costly signaling short of war. First, global markets consist of assets that are easily quantified. These assets impose additional opportunity costs on states for conflictual political activity. While opportunity costs seldom deter contests directly, the ability of other actors to observe both these costs and a leader's reactions is informative. While economic costs are readily quantifiable, the (subjective) valuation of political goals is not. Leaders' private information about their valuation of the stakes in international political competition leads to uncertainty and the possibility of violent contests. Because globalization forces leaders to choose between economics and politics, and because economic benefits are readily observable, opponents can better infer the concealed (subjective) valuation for political objectives.

Second, globalization significantly increases the ability of market agents to respond decisively to political risk, making it difficult for integrated states to avoid the economic consequences of political competition. The fact that global integration allows investors to shift capital abroad with greater rapidity and ease means that economic consequences can be both massive and swift. Further, investors possess unambiguous incentives. As crises heat up and leaders continue to advance political objectives, the proximity of danger should lead markets to assess the extent and credibility of looming political shocks. Increasing globalization means that market actors can react relatively autonomously to changes in risk and return. Different priorities between states are then revealed by the interaction of states and integrated markets, an outcome not recognized in previous literatures. To the extent that globalization limits the ability of states to interfere with market processes, it also forces states to confront the trade-off between satisfying markets by promoting political stability and satisfying political interests by pursuing competitive international goals. Thus, we see the autonomy of capital as a critical component of our argument.¹⁷

Third, signaling through markets is costly but nonviolent. The size of global capital markets makes their operation relevant to states. Large outflows of capital, as has occurred in the recent crisis between India and Pakistan, can alter the prosperity of nations. This ability to significantly harm states, as well as the incentives investors have to pursue their own economic interests, means that frightening markets pose both costs and opportunities for political leaders. Costly market responses offer a mechanism for signaling while imposing a cost on an opponent. Few states will prefer costly methods of identifying resolve that also weaken their bargaining power. War is appealing because it serves the dual role of signaling while potentially increasing a state's bargaining power. Integrated states face the prospect of mutual economic harm as the result of threats or demands. The leader making a threat reveals resolve because of the harm she imposes on her economy. The target of a threat in turn has an incentive to accommodate the demand in order to stem capital outflows. Finally, scaring markets involves no direct loss of life, does not alter state borders, and cannot immediately weaken a state's military strength. In contrast, costly signaling through deterrence, alliance formation, and arms racing all involve changes in the military balance that can be seen as threats, and possibly touch off a conflict spiral (Kydd, 1997).

¹⁷ Our emphasis on liquid capital and autonomous markets differentiates our argument from that of Rosecrance (1985). Rosecrance sees fixed investment as tying states together and discouraging conflict. We argue that it is the mobility of capital that is the critical factor in informing competitors and avoiding the necessity of military contests.

Integrated markets are characterized by the ability of capital to more freely cross borders, allowing investors to hedge against or flee the hazards that shadow political contests. Market integration therefore creates a tension for leaders between economic incentives to cooperate and political incentives to compete. States participating in the global economy face added opportunity costs in pursuing conflict abroad. Yet the costs associated with political shocks do not in themselves do much to deter contests. Symmetry implies that factors that inhibit one state in a conflict encourage additional aggression from others. Instead, global markets are more likely to influence conflict through the revelation of information. A leader seeking to obtain concessions from a neighboring state, for example, could threaten war, but this is likely to encourage investors to flee abroad or charge a higher risk premium. Alternately, the leader might reassure investors that he or she has no intention of resorting to force. Moderation, however, only stabilizes markets by betraying the leader's efforts to bargain aggressively with competing states. Frightening a political opponent necessitates spooking investors as well. The difference in state goals in economic and political spheres means that one cannot typically comfort investors and frighten political opponents at the same time. This tension between political and economic objectives, as well as the difficulty in bluffing simultaneously in opposite directions, forces the leader to choose between stable markets and political competition. Because an economic cost is associated with frightened investors, at least some leaders who are bluffing prefer to reveal their bluff rather than continue to compete.

Globalization can facilitate costly signaling in crises and reduce the need for violence in four ways. While each alternative is logically possible, only one need actually occur. Conversely, two or more can combine in a given crisis. First, markets might anticipate looming contests, distinguish between genuine threats and bluffing, and act in a manner informing political competition. If markets anticipate that a leader is bluffing, then they have no incentive to alter behavior or forgo profitable market opportunities. The fact that markets fail to respond to a leader's threats, however, stands as an indication to other states that the leader is probably bluffing.¹⁸

Second, leaders may anticipate the market response to political shocks. Leaders who know that markets fear political conflict must expect economic damage. If investors in turn are aware that political shocks carry added economic risk (markets can be totally ignorant about the leader's intentions), then markets have incentives to re-allocate capital or charge a higher risk premium. Thus, leaders who anticipate negative economic consequences of hostile political words are aware that their talk is no longer cheap. Bluffing is less frequent as the cost involved in scaring markets deters leaders from idle threats. This second conception may be a reasonable way to characterize how globalization affects inter-state communication, but one can relax assumptions even further.

The third possibility is minimally restrictive, requiring only that states and markets learn about each other by observation without demanding any prior knowledge or forward-looking strategy. Leaders who are not cognizant initially that hostile political statements upset markets need only be able to assimilate the consequences of their actions in order to develop this understanding. If a leader remains committed to pursuing a given political objective, then he can persist in his demand, thereby informing markets and other states of the leader's resolve. If instead the leader regrets the economic damage caused by hostile words, and prefers to re-stabilize domestic markets, the leader can retract his statement, again

¹⁸ Bueno de Mesquita shows that bond prices anticipate relative state performance in the Seven Weeks' War (1990).

revealing information (in this case a lack of resolve).¹⁹ This interaction of state and market is sufficient to allow observers and participants to infer meaning from a leader's talk, by distinguishing leaders who are resolved from those who are not.

Finally, even if neither states nor markets learn, political and economic selection will tend to evolve actors that are mutually responsive. Over time, automaton investors will be differentially affected if some automatons attend to political shocks while others do not. Automatons that re-allocate capital to adjust for shifting political conditions will tend to see their holdings grow, while automatons that ignore politics will tend to see their holdings dwindle. The market share of responsive economic automatons will increase with successive political crises. These same incentives ensure that integrated markets will evolve to punish political adventurism. The economic consequences of conflict rise as automatons that flee risk grow as a portion of market capitalization. Political selection also encourages leaders to weigh market incentives against foreign policy goals.²⁰

We can map the consequences of state-market interaction in the following conceptual illustration. Assume State i and State j have a conflict of interest over some issue. Assume also that each state's economy is integrated into the global capital market, c . Let State i threaten State j over some issue (x). State j does not know *ex ante* whether State i 's threat is genuine or a bluff. As the threat is announced, the integrated capital market, c , re-equilibrates, choosing either to respond to, or to ignore the evolving political crisis. Market c can respond in one (or more) of the following ways: (1) capital already invested in State i and/or State j can leave in response to increased risk, (2) the market can charge a higher risk premium when lending to, or investing in, State i or State j , (3) potential future investors in the market can refrain from lending to, or investing in, State i or State j . The three market responses represent State i 's opportunity cost for challenging State j . Given these conditions, how does market behavior influence the political competition between State i and State j ? How does it help to reveal State i 's private information?

Table 1 presents four possible scenarios of state-state-market (i - j - c) interaction. In scenario (1), State i is resolved, investors correctly interpret State i 's demand as credible, and respond in a costly manner. State i 's willingness to suffer economic losses indicates resolve in a manner observable to State j . The reduction in uncertainty makes a settlement between the two countries more likely, reducing the need to escalate to militarized conflict. In scenario (2), State i is resolved, but investors do not respond. Such a scenario may occur episodically but should be an exception rather than the rule. Investors who ignore a possible contest between State i and State j stand the risk of incurring higher economic losses. Over time, higher losses tend to drive investors with inaccurate beliefs about political behavior out of the market, while attentive investors tend to proliferate. This means that scenario (2) is not evolutionarily stable. Even if scenario (2) occasionally occurs, selection ensures that future interactions will drift toward one of the other three scenarios.

In scenario (3), State i bluffs, investors believe i 's bluff and respond by reallocating capital abroad, by charging higher rents, or by not investing. If investors over-react to State i 's threat, then i and j suffer economic losses. It is the informational asymmetry between State i and the market that makes scenario (3)

¹⁹ President George W. Bush initially responded to the Chinese seizure of a U.S. spy plane in April 2001 with forceful talk, but then moderated his tone when it became clear that U.S. threats were unsettling the markets. More recently, the Bush administration has shown a willingness to let U.S. markets flag partly as a result of talk of war with Iraq.

²⁰ Audience cost models depend on constituents to punish leaders for bluffing. In our model, investors punish threats (investors need have no idea whether a threat is genuine). Constituents could in turn punish leaders for costly and unsuccessful foreign policy initiatives. We do not explore political selection here.

TABLE 1. Four Scenarios for State–State–Market Interaction

		The Capital Market (c) Believes State <i>i</i> is:	
		Resolved	Bluffing
State <i>i</i> is:	Resolved	(1) Likely to occur Investors respond appropriately State <i>i</i> remains aggressive - reveals type State <i>j</i> identifies <i>i</i> 's type, bargains	(2) Not evolutionarily stable Investors under-react, suffer losses State <i>j</i> is misinformed by market States likely to fight
	Bluffing	(3) Likely to occur Investors over-react, suffer losses States incur unnecessary economic losses State <i>i</i> reveals bluff, backs down	(4) Likely to occur Investors respond appropriately State <i>i</i> 's bluff is called State <i>j</i> does not acquiesce

possible. Note, however, State *i* now possesses a disincentive to maintain the asymmetry. By revealing its lack of resolve (backing down from its initial demand), *i* can stem the outflow of capital. If State *i* is unresolved, then *i* values economic stability relatively higher than resolved states value political victory, and *i* can prefer to reveal its willingness to accept a more accommodating settlement to State *j*. In scenario (4), State *i* bluffs, and the market *c* correctly identifies *i*'s lack of resolve, so that little or no economic harm is incurred. State *j* can observe the lack of market response to State *i*'s demand. Further, State *i* can infer what State *j* will infer from the lack of market reaction. State *i* never intends to fight with State *j*, so peace prevails. In summary, in scenarios (1) and (4), the market responds appropriately to the political shock. This response informs State *j* as to the veracity of State *i*'s stated intentions. In scenarios (2) and (3), the market responds inappropriately to the political shock. Yet incentives are such that, even in ignorance, market reaction informs political competitors. In scenario (3), market punishment of an unresolved State *i* forces *i* to reveal a willingness to compromise with State *j* rather than endure further economic harm. In scenario (2), resolved and unresolved types of State *i* pool, but even here, economic incentives suggest that the equilibrium is not evolutionarily stable. Our application of signaling theory to globalization and interstate conflict thus implies the following hypothesis:

H1: *Pairs of states that are integrated into global capital markets are less likely to experience militarized disputes than pairs of states that are isolated from global capital markets.*

3.3. Asymmetric Integration

Critics of globalization charge that asymmetric integration—in which states are unevenly linked to the global economy—has the potential to increase conflict among states by leading to economic inequality and dependence.²¹ Dependent states face coercion through markets, which increases tensions and manifests itself in greater global violence. Other critics of globalization claim that integration threatens the political autonomy of sovereign states. The growing power of markets is said to bind governments in a manner that hampers the ability of states to pursue their political interests abroad. While these arguments are widely discussed and perhaps almost as widely accepted, they depend on a logic of contests in which the distribution of power is the critical determinative factor. The informational approach suggests instead that power relations, if common knowledge to

²¹ A large literature examines asymmetric dependence. See Caporaso (1998) and Hirschman (1945) for reviews.

competitors, largely determine the contents of settlements, rather than the methods by which settlements are obtained. Asymmetry clearly harms the bargaining power of the dependent state, but to the degree that relative bargaining power is subject to common conjecture, asymmetry should have relatively little influence on whether states fight. Asymmetric dependence shifts the kinds of settlements states can expect in bargaining, but this should not necessarily change the frequency of bargaining failure. Instead, to the extent that asymmetry reduces the ability of one party to signal, asymmetric dependence weakens the ability of states to credibly communicate. Note, however, that this does *not* equate to the claim that asymmetry *increases* dispute propensity. Asymmetrically dependent dyads can be more conflict prone than symmetrically dependent dyads, while asymmetric dyads are less disputatious (or at least no more disputatious) than autarkic dyads.

States are also limited in their ability to use asymmetric integration to coerce political concessions. As Wagner (1988) points out, coercion is constrained by basic accounting rules. A state cannot obtain preferred terms and reduce the probability of a contest with the same resources. Assuming optimizing behavior and a budget constraint, states can demand political concessions, or they can enjoy the economic benefits of asymmetry, but they must concede benefits along one dimension to increase benefits in the other. Further, the ability to coerce extends only to the point where the value of political concessions equals a state's value for economic ties. If the cost of concessions exceeds the value of market linkages, then states prefer terminating linkages rather than being coerced. Asymmetric dyads can be less peaceful than symmetrically dependent dyads, but asymmetric dyads should be at least as peaceful as dyads with few economic ties.

We can again use the framework provided by Table 1 to illustrate the effect of asymmetric integration on inter-state conflict. Assume that only State j 's economy is economically integrated. State i restricts capital flows into and out of its national economy. Hence, the dyad $i-j$ is asymmetrically integrated into the global capital market c . Modifying the framework in Table 1 in this way suggests several implications. First, nothing is changed about the functioning of the global capital market. Expectations derived from the four different scenarios in Table 1 still apply to international investors, though differences appear in the interaction of the market with states. Second, the global market is now unable to be informative about State i . State i 's domestic capital market is delinked from the global market, so that the behaviors of investors inside State i are unrelated to world markets. Domestic markets could still conceivably punish aggressive foreign policy actions by leaders in State i , but in practice, most states that are closed to international capital also impose significant restrictions on domestic investors. Domestic re-allocation of capital also fails to address the underlying problem that all domestic investments will be affected by market fears of an international political crisis. Third, although capital flight from State i is restricted, investment in State j can continue to be informative to State i . Hence, compared with symmetric integration, asymmetric integration merely limits revelation from the delinked capital market. Investors' actions in the global capital market remain informative so long as one of the two states is integrated. The dispute propensity of asymmetrically integrated dyads thus falls somewhere between that of integrated dyads and non-integrated dyads. These deductions lead to the following hypothesis:

H2: *Pairs of states that are asymmetrically integrated into global capital markets are only slightly more disputatious than pairs of states that are symmetrically integrated.*

4. Research Design

This section begins the task of operationalizing and testing the hypotheses from the theory. We use the dyad as the unit-of-analysis. While a monadic research design is

sufficient to allow a test of the claim that a state that is more integrated into the global economy is generally less likely to experience disputes, we have several reasons for using dyads. First, inter-state military conflict is a minimally dyadic process. Disputes involve the (strategic) interaction of states. Since we can never be sure that we are controlling for biases that result from using a unit-of-analysis different from the unit in which behavior originates, we think it most appropriate to remain at the dyadic level. Second, other variables used in the statistical models are explicitly dyadic and relational. A monadic unit-of-analysis would impede the use of standard control variables (contiguity, alliance ties, capability ratio, etc.). Third, informational theories of war imply that asymmetric information on the part of either party in a conflict is sufficient to cause a dispute. While the presence of one state with an integrated economy in a dyad is necessary for globalization to lead to peace, integrated states will still experience a significant number of disputes if neighbors or adversaries are not economically integrated (this is why we also use the weak link assumption discussed below). Finally, assessment of asymmetric integration requires a dyadic unit-of-analysis. Together, we believe that these reasons provide a powerful rationale for the dyadic approach.

Recall that our first hypothesis claims that two states whose capital markets are more integrated into the global economy are less likely to experience militarized disputes between them. If capital market integration allows for costly signaling, then globalization at the dyadic level should correlate negatively with threats or acts of military violence. Hypothesis 1 is consistent with the “weak link” assumption advocated by Dixon (1994) and Oneal and Russett (1997). Contests in dyads should decline monotonically with the level of integration of the least integrated state in the dyad (the state for which signaling remains least effective and thus for which asymmetric information remains greatest). The second hypothesis suggests that asymmetry can lead to a lessening of the pacific effects of globalization, but that asymmetrically integrated dyads should continue to be less dispute prone than non-globalized dyads. Controlling for the “threshold” level of integration, we expect that dyadic inter-state differences in the level of economic integration have little or no impact on the likelihood of militarized violence. We test hypothesis 2 by examining the asymmetry between levels of integration in a dyad. Analysis is conducted using two samples, all dyad-years and politically relevant dyad-years (1950–1992), to ensure the robustness of results. Unless otherwise noted, we code variables in the same manner as Oneal and Russett (1999b).

4.1. Dependent Variable

The dependent variable, ONSET, is a dichotomous variable coded “1” for the first year of a militarized inter-state dispute (MID) in a dyad and “0” otherwise. MIDs are coded for the highest level of hostility of a dispute, ranging from threat of force (2), display of force (3), use of military force (4), or war (5) (Gochman and Maoz, 1984; Jones, Bremer, and Singer, 1996).²² We use DYMID (1.0), a dyadic version of the MID data released by Zeev Maoz. Maoz also corrects some coding errors in the MID dataset.²³ Some studies look at MID involvement (the presence or absence of a MID in a given dyad-year) rather than MID onset (Oneal and Russett, 1997). Since statistical models assume cases are independent, we prefer assessing MID onset rather than involvement.

²² MIDs select on dispute intensity (Smith, 1999), though we use a dichotomous dependent variable.

²³ The DYMID 1.0 dataset is available at: <http://spirit.tau.ac.il/zeevmaoz/>.

4.2. Globalization Variables

The most salient features of economic globalization are the growing integration of financial markets, the dispersion of production capital, and the associated loss of state economic autonomy. We look at the degree to which state economies in a dyad are integrated into, and open to, the world economy in terms of production and financial capital. We also measure state policy autonomy in terms of ability to regulate capital flows. While we focus on the effect of capital markets, we also control for the effect of dyadic trade levels employed by previous studies of interdependence.

- *Joint Governmental Openness to Capital*: GOVCAPOPENL indicates the difficulty states face in seeking to impose restrictions on capital flows (the degree of lost policy autonomy due to globalization). Following Gartzke, Li and Boehmer (2001), we construct GOVCAPOPENL to measure joint openness to capital flows in a dyad. We sum eight different types of state restrictions on foreign exchange, current account, and capital account. We then invert values by taking the difference between eight and the score. The dyadic variable adopts the lower of the two state scores, again using the “weak link” assumption.²⁴ GOVCAPOPENL should negatively correlate with dispute propensity.
- *Joint Exposure to Production Capital*: FDIGDPL codes minimum dyadic exposure to investment capital. We measure monadic capital exposure as the sum of the absolute values of inflows and outflows of direct investments weighted by GDP, in Purchasing Power Parity (PPP).²⁵ FDIGDPL uses the lower of the two monadic values, capturing the common level of integration of both states into the world production capital market. The variable should correlate with a lower likelihood of MID onset.
- *Joint Exposure to Financial Capital*: PORTFGDPL indicates the minimum exposure of dyad members to the financial capital market. We measure monadic exposure as the sum of absolute values of inflows and outflows of portfolio and other investments, weighted by PPP-based GDP.²⁶ We exclude flows associated with monetary authorities and the government. PORTFGDPL equals the lower of monadic values and should decrease the chances of a MID.
- *Dyadic Trade Interdependence*: TRADELOW measures dyadic trade interdependence. A bilateral trade-to-GDP ratio is constructed for each state in a dyad, representing the portion of the state’s economy devoted to trade with a dyadic partner. Following the “weak link” assumption practiced by Oneal and Russett (1997), we use the lower of the two trade dependence statistics to denote the common minimum level of interdependence for each dyad. We expect TRADELOW to be negatively related to MID onset.

4.3. Asymmetry Variables

Disparate levels of integration in a dyad are argued to inflame relations. We argue that asymmetry at most weakens, but fails to remove, the pacifying effects of globalization. The variables below measure dyadic asymmetry in market integration

²⁴ Data are from the International Monetary Fund (2000). Restrictions include capital or current transaction limits, currency prescription, import surcharges, advance import deposits, export proceeds surrender requirements, bilateral payment arrangements with IMF members and nonmembers. See also Garrett (1995) and Simmons (1999).

²⁵ Data are from the World Bank (1999). Direct investments include equity capital, reinvestment of earnings, and other long-term and short-term capital.

²⁶ Portfolio investments include equity and debt securities (bonds, money market instruments, financial derivatives) and trade credits, loans, currency and deposits (World Bank, 1999).

and bilateral trade. We expect coefficients to be insignificant, or positive but weaker than the effect of corresponding globalization variables.

- *Asymmetric Governmental Openness to Capital*: GOVCAPOPEND measures asymmetry in the loss of state policy autonomy over capital flows and equals the absolute value of the difference between financial openness scores of the two states in a dyad.
- *Asymmetric Exposure to Production Capital*: FDIGDPD equals the absolute value difference between the dyad states' exposure to production capital, measured as gross FDI (sum of the absolute values of inflows and outflows) divided by PPP-based GDP.
- *Asymmetric Exposure to Financial Capital*: PORTFGDPD equals the absolute value difference between dyad members' exposure to financial capital, measured as gross portfolio and other investments divided by GDP (using PPP).
- *Asymmetric Trade Interdependence*: TRADEDIF indicates dyadic trade dependence asymmetry, measured as the absolute value of the difference between bilateral-trade-to-GDP ratios.

4.4. Control Variables

- *Dyadic Democracy*: We use two variables to control for regime type. Each state's score equals the difference between democracy (DEMOC) and autocracy (AUTOC) from the Polity III data (Gurr, Jagers, and Moore, 1989; Jagers and Gurr, 1995). DEML and DEMH are, respectively, the lower and higher of the monadic values in a dyad-year. DEML measures pacifying effects of joint democracy while DEMH measures the effect of regime difference (Oneal and Russett, 1997).
- *Geographic Contiguity and Distance*: CONTIG is a dummy variable for states with common land borders or separation by less than 150 miles of water. In the all-dyads sample we also include DISTANCE, the natural log of the great circle distance between capital cities of states in a dyad. Distance should decrease the probability of a MID.
- *Military Alliances*: ALLIES is a dummy indicating the presence of a defense or neutrality pact, or an entente, coded from the Correlates of War (COW) Alliance data (Singer and Small, 1990).
- *Relative Capability Ratio*: CAPRATIO measures the dyadic power balance and equals the natural log of the ratio of the stronger state's COW military capabilities index (CINC) to that of the weaker dyadic state. COW CINC scores are composed of a state's share of the total system population, urban population, consumption of energy (coal-ton equivalents), iron and steel production, military manpower, and military expenditures.
- *Major Power Status*: MAJPOWER is a dummy variable, coded "1" if the dyad contains a major power (China, France, United Kingdom, USSR, United States) and "0" otherwise.²⁷

²⁷ *Capability Ratio* measures relative power while *Major Power Status* indicates absolute power. These are conceptually distinct contributors to international behavior. In 1987, for example, both the United States and Vietnam and the United Arab Emirates and Trinidad and Tobago have the same CINC ratio (1.626). Obviously, the two dyads differ. Relative power by itself does not distinguish between dyads composed of weak states and dyads composed of powerful states. Major power status by itself fails to identify asymmetries below the major power threshold.

4.5. The Statistical Model

The statistical model estimated using all dyads is specified as follows:

$$\begin{aligned} ONSET_{ij,t} = & \beta_0 + \beta_1 DEML_{ij,t-1} + \beta_2 DEMH_{ij,t-1} + \beta_3 CONTIG_{ij,t-1} \\ & + \beta_4 DISTANCE_{ij,t-1} + \beta_5 MAJPOWER_{ij,t-1} + \beta_6 ALLIES_{ij,t-1} \\ & + \beta_7 CAPRATIO_{ij,t-1} + \beta_k GLOBALIZATION_{ij,t-1} \\ & + \beta_l ASYMMETRY_{ij,t-1} + \beta_m SPLINES_{ij} \end{aligned}$$

GLOBALIZATION and ASYMMETRY are vectors of variables meant to test hypothesis 1 and hypothesis 2, respectively. Hypothesis 1 suggests that GLOBALIZATION should be negative and significant while hypothesis 2 implies that ASYMMETRY should be insignificant or positive but of modest magnitude. Several different model specifications representing the hypotheses are used to assess the robustness of our argument.²⁸ The SPLINES represent a vector of three spline variables plus a linear term, constructed following Beck, Katz, and Tucker (1998), to control for duration dependence in the dependent variable. Since they lack a substantive interpretation, we omit splines that are insignificant (results remain consistent). All independent variables are lagged one year behind the dependent variable to control for simultaneity bias.²⁹ We estimate coefficients using PROBIT in Stata with Huber/White robust standard errors and adjusting for clustering in dyads. Standard errors are robust not only to the possibility of heteroscedasticity caused by the units (dyads) but also to serial correlation in general within each dyad (Wiggins, 1999). We omit DISTANCE and MAJPOWER in the politically relevant dyads sample (Oneal and Russett, 1999b).

To assess model robustness and the effects of data availability, we estimate six specifications for both all dyads and for politically relevant dyads. The baseline model includes each of the control variables plus the trade variables (TRADELOW and TRADEDIF). The second model adds the variables for lost policy autonomy over capital flows (GOVCAOPENL and GOVCAOPENL). The third model includes the production capital variables (FDIGDPL and FDIGDPD). The fourth model introduces the financial capital variables (PORTFGDPL and PORTFGDPD). The fifth model includes all key variables. The globalization variables exhibit collinearity. To assess the overall effect of financial globalization, Model 6 uses an aggregate index of integration from the World Bank (2000). The aggregate measure equals gross private capital flows (the sum of the absolute values of direct, portfolio, and other investment flows, excluding government or central bank assets or liabilities) over GDP (using PPP). The lower of monadic values in a dyad (CAPITALL) measures joint financial integration in the dyad, while the absolute value difference between high and low values (CAPITALD) represents dyadic asymmetry.

5. Results

Tables 2 and 3 present results for models estimated for all dyads and for politically relevant dyads (1950–1992).³⁰ Hypothesis 1 and 2 are tested in both samples to

²⁸ Economic development may lead to both globalization and peace. While we do not reject the possibility of endogeneity, we think it ambitious at this stage to attempt to model the origins of globalization, especially as the literature on the subject has yet to arrive at a consensus (Hegre, 2000; Mousseau, 2000). As a robustness check, we ran regressions including GDP per capita (logged). Controlling for development has no substantive effect on our results.

²⁹ While not an ideal solution, lagging independent variables is conventional practice to control for simultaneity bias in international relations. Ideally, endogeneity could be modeled directly, but the IR community has yet to find a satisfactory means of modeling simultaneous equations with dichotomous and continuous variables.

³⁰ We also examined models including preference similarity to evaluate concerns by Morrow (1999) about endogeneity (Gartzke, 1998, 2000). We do not report these results here due to space limitations.

TABLE 2. Effects of Economic Integration and Asymmetry on MID Onset (All Dyads, 1950–1992)

	<i>Model 1</i>	<i>Model 2</i>	<i>Model 3</i>	<i>Model 4</i>	<i>Model 5</i>	<i>Model 6</i>
<i>Economic Integration</i>						
TRADELOW	– 14.247** [2.11]	– 3.475 [0.98]	6.343 [0.84]	– 2.677 [0.47]	11.286* [1.66]	– 0.456 [0.08]
GOVCAPOPENL		– 0.093*** [4.99]			– 0.107*** [3.82]	
FDIGDPL			– 0.472*** [3.35]		– 0.346*** [2.80]	
PORTFGDPL				– 0.045*** [2.59]	0.0005 [0.03]	
CAPITALL						– 0.056*** [3.31]
<i>Asymmetry</i>						
TRADEDIF	0.068 [0.10]	1.005 [1.26]	0.256 [0.34]	– 0.094 [0.14]	1.096 [1.29]	0.035 [0.05]
GOVCAPOPEND		0.021 [1.46]			0.052** [2.24]	
FDIGDPD			– 0.007 [0.48]		– 0.026 [1.21]	
PORTFGDPD				0.001 [0.54]	0.002 [1.47]	
CAPITALD						0.001 [0.71]
<i>Control Variables</i>						
DEML	– 0.033*** [6.44]	– 0.020*** [3.99]	– 0.018** [2.44]	– 0.022*** [3.04]	– 0.013* [1.88]	– 0.021*** [2.90]
DEMH	0.009*** [2.75]	0.004 [1.11]	0.010* [1.73]	0.009 [1.51]	0.009 [1.45]	0.010 [1.56]
CONTIG	1.009*** [14.45]	1.006*** [12.53]	0.881*** [8.51]	0.894*** [8.63]	0.907*** [8.46]	0.890*** [8.60]
DISTANCE	– 0.247*** [9.67]	– 0.220*** [6.88]	– 0.207*** [5.43]	– 0.216*** [5.62]	– 0.208*** [4.81]	– 0.218*** [5.70]
MAJPOWER	0.807*** [10.80]	0.572*** [6.21]	0.630*** [5.32]	0.599*** [4.94]	0.619*** [5.80]	0.606*** [5.03]
ALLIES	– 0.131** [2.01]	– 0.127* [1.89]	– 0.045 [0.54]	– 0.085 [0.98]	– 0.016 [0.17]	– 0.080 [0.93]
CAPRATIO	– 0.082*** [4.61]	– 0.040** [2.11]	– 0.016 [0.61]	– 0.028 [1.07]	– 0.014 [0.52]	– 0.027 [1.02]
CONSTANT	– 0.444** [2.10]	– 0.235 [0.83]	– 0.213 [0.66]	– 0.153 [0.47]	– 0.239 [0.62]	– 0.116 [0.36]
N	282105	174548	80125	80125	75601	80665
Wald Test (χ^2)	1790***	1431***	1264***	1368***	1164***	1370***

Temporal splines not reported. Values in parentheses are robust z-statistics. Significance tests are two-tailed. * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

ensure robustness. Our discussion focuses on the impact of globalization and asymmetric integration on the onset of MIDs.

5.1. Parameter Estimates of Globalization Variables

Joint Governmental Openness to Capital (GOVCAPOPENL) is negative and statistically significant at the 1% level for all dyads in Model 2 of Table 2 and for politically relevant dyads in Model 3 of Table 2. When states in a dyad liberalize restrictions on capital flows, they lose economic policy autonomy; but the loss of state policy autonomy in turn empowers the private capital market, which enables

TABLE 3. Effects of Economic Integration and Asymmetry on MID Onset (Politically Relevant Dyads, 1950–1992)

	<i>Model 1</i>	<i>Model 2</i>	<i>Model 3</i>	<i>Model 4</i>	<i>Model 5</i>	<i>Model 6</i>
<i>Economic Integration</i>						
TRADELOW	− 8.556* [1.74]	− 0.911 [0.34]	5.470 [0.75]	− 2.385 [0.39]	8.924 [1.41]	− 0.841 [0.14]
GOVCAOPENL		− 0.078*** [3.63]			− 0.078** [2.45]	
FDIGDPL			− 0.364*** [3.12]		− 0.294*** [2.60]	
PORTFGDPL				− 0.027* [1.75]	0.013 [0.73]	
CAPITALL						− 0.037** [2.57]
<i>Asymmetry</i>						
TRADEDIF	0.905 [1.45]	1.057 [1.27]	0.793 [1.01]	0.373 [0.51]	1.264 [1.46]	0.504 [0.70]
GOVCAOPEND		0.004 [0.23]			0.030 [1.01]	
FDIGDPD			− 0.007 [0.35]		− 0.019 [0.69]	
PORTFGDPD				0.001 [0.69]	0.003 [1.42]	
CAPITALD						0.001 [0.86]
<i>Control Variables</i>						
DEML	− 0.029*** [5.73]	− 0.012** [2.37]	− 0.016** [2.12]	− 0.018*** [2.64]	− 0.013* [1.82]	− 0.018** [2.52]
DEMH	0.012*** [2.74]	0.006 [1.24]	0.010 [1.31]	0.008 [1.03]	0.009 [1.16]	0.008 [1.06]
CONTIG	0.504*** [6.64]	0.551*** [5.90]	0.504*** [3.38]	0.526*** [3.47]	0.540** [4.18]	0.521*** [3.48]
ALLIES	− 0.143** [2.03]	− 0.069 [0.91]	0.026 [0.27]	− 0.009 [0.09]	0.058 [0.60]	− 0.005 [0.05]
CAPRATIO	− 0.118*** [6.90]	− 0.071** [3.31]	− 0.036 [1.14]	− 0.053 [1.62]	− 0.025 [0.78]	− 0.052 [1.61]
CONSTANT	− 1.134*** [10.92]	− 1.009*** [6.56]	− 1.196*** [5.70]	− 1.205*** [5.90]	− 1.206*** [6.10]	− 1.177*** [5.75]
N	29022	15300	8023	8023	7782	8054
Wald Test (χ^2)	682***	603***	414***	416***	409***	413***

Temporal splines not reported. Values in parentheses are robust z-statistics. Significance tests are two-tailed.
* $p < 0.1$; ** $p < 0.005$; *** $p < 0.01$.

the states to reduce the likelihood of engaging in military violence. The variable remains statistically significant in the expected direction in the full models for both samples, as shown by Model 5 in Tables 2 and 3. Even though the variable correlates highly with other globalization variables, its effect remains strong and robust in the presence of competing variables.

Joint Exposure to Foreign Direct Investments (FDIGDPL) is negative and statistically significant at the 1% level for all dyads and for politically relevant dyads, as shown in Model 3 of both Tables 2 and 3. As both states in a dyad become more integrated into the global production capital network, the dyad becomes increasingly peaceful. Joint exposure to FDI flows remains strong and robust even in the presence of competing variables, as Model 5 shows in Tables 2 and 3.

Joint Exposure to Financial Capital (PORTFGDPL) is negative for both samples as in Model 4 of both tables, and significant at the 1% level for all dyads in Table 2

but only at 10% among politically relevant dyads in Table 3. The variable is not significant in the full model for either sample, as Model 5 of both tables shows. The effect of Joint Exposure to Financial Capital does not appear to be as robust as the other globalization variables. However, if financial capital is defined more narrowly as equity securities, we find that the lower equity-over-GDP variable is perfectly associated with the absence of MIDs, suggesting a much stronger pacifying effect than when we use the broader definition. It is also worth noting that the distribution of financial capital is highly skewed and concentrated, resulting in many zeroes for the lower portfolio-over-GDP ratio within dyads in both samples. Hence, as financial globalization diffuses and intensifies, we should expect to find the pacifying effect of financial capital also grows. The topic remains one for future research.

The aggregate Measure of Capital Market Integration (CAPITALL) is a composite variable reflecting the effects of governmental financial openness (GOVCAPOPENL), joint exposure to production capital (FDIGDPL), and joint exposure to financial capital (PORTFGDPL). It is statistically significant for both all dyads and politically relevant dyads, as in Model 6 of both Tables 2 and 3. The finding is consistent with our conception that as both states in a dyad become more integrated into the global capital market, they should experience a lower risk of fighting with each other.

As Model 1 in Table 2 shows, for all dyads (1950–1992), Dyadic Trade Interdependence (TRADELOW) is statistically significant and in the expected negative direction. Joint trade interdependence reduces the odds of a MID. However, in Models 2, 3, 4, 5, and 6, once we control for more salient aspects of globalization, Dyadic Trade Interdependence is no longer statistically significant. For politically relevant dyads (1950–1992), Dyadic Trade Interdependence is insignificant in Model 1 of Table 3, which is consistent with the findings of Beck, Katz, and Tucker (1998), where they control for duration dependence. Dyadic Trade Interdependence is also insignificant in the other models in Table 3. The integration of the goods markets between two countries in a dyad appears to have a much less significant effect on peace than other aspects of economic globalization.

5.2. Parameter Estimates of Asymmetry Variables

Theory and evidence combine to counter pessimism about the effects of globalization on inter-state conflict. We find that asymmetry at worst mitigates the positive political externalities of globalization. Asymmetric integration into the global economy does not increase militarized disputes.

Almost none of the asymmetry variables—asymmetric trade interdependence (TRADEDIF), asymmetric production capital (FDIGDPD), asymmetric financial capital exposure (PORTFGDPD), and the composite measure of asymmetric economic integration (CAPITALD)—are statistically different from zero in any model, either for all dyads (Table 2) or for politically relevant dyads (Table 3). The only exception is asymmetric governmental openness to capital (GOVCAPOPEND), which is positive and significant at the 5% level in the full model for all dyads, as in Model 5 of Table 1. Even in this case, the coefficient (0.052) is only half the size of the negative effect of joint government capital openness (GOVCAPOPENL), (-0.107). Hence, the empirical effect of asymmetry is either insignificant or at most moderates the overall pacific effect of integration.

5.3. Parameter Estimates of Control Variables

Results for control variables are consistent with those of previous studies. Geographical contiguity is positive and significant in both samples (distance “causes” peace). The correlation with MID onset in the sample of all dyads is

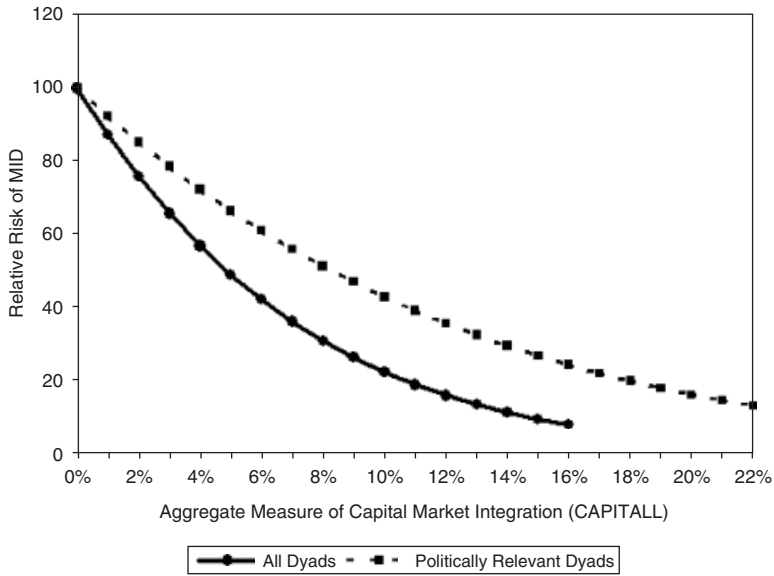


FIG. 1. Effects of Capital Market Integration on MID Onset

statistically significant and positive for geographic distance and major power dyads. Joint democracy (DEML) has the expected negative sign and is significant in almost all models for both samples. Results for political distance (DEMH), alliance ties (ALLIES) and relative power difference (CAPRATIO) are not robust across models.

5.4. Substantive Effects of Economic Globalization

Parameter estimates are useful for hypothesis testing, but what about the substantive impact of globalization on peace? Figure 1 illustrates the relative risk of MID onset for different values of the aggregate measure of capital market integration (CAPITALL). Relative risk measures the percent change in the predicted probability of MID onset for a value of the aggregate measure of capital market integration against the baseline probability (baseline for the aggregate measure of capital market integration equals 0, i.e., complete financial autarky). Using Model 6 to predict MIDs, we hold the other variables constant by setting geographical contiguity (CONTIG) to 1, military alliance ties (ALLIANCE) to 0, and interval-level variables to their means. We then compute MID relative risk scores for values of the aggregate measure of capital market integration from 0 to its 99th percentile value (16% for all dyads, 22% for politically relevant dyads) in unit increments and plot the values in Figure 1. The relative risk of MID onset drops from a nominal 100% at autarky to about 8% for all dyads and about 14% in politically relevant dyads at the 99th percentile value of the aggregate measure of capital market integration, a substantial pacifying effect for integration.

6. Conclusion and Implications

Students of world politics are centrally concerned with the interaction of states in a system lacking central enforcement. In contrast, a central objective of political economy is to decipher the nature and consequence of interactions between states and markets. Economic globalization enables a dialogue between students of world politics and political economy that is intellectually rewarding and of significant policy relevance. The globalizing world economy appears increasingly to tie

together states and markets in a manner liable to alter the calculus of both processes. Traditional schools of thought suggest reason for apprehension about the consequences of this interaction, either implying that states should be restrained from interfering in markets or advocating barriers to markets to protect the realm of states. We argue, and to a significant degree show, that the interaction of states and markets is capable of providing positive political externalities. Increasingly, economic agents in global markets affect bargaining among states by making threats of disruptive conflict costly for political competitors. Because markets respond to risk, political demands coincide with an economic price tag and hence political talk is no longer cheap. States that are integrated into the global economy are more often able to reveal resolve through their statements and through the associated market responses, rather than through military acts. Counter to the outcry of skeptics, globalization does not appear to herald a substantial loss of state autonomy. While states exert less control over capital than before, greater flexibility and lower risk of violence for states competing under globalization affords additional opportunities to pursue competitive political objectives. Asymmetric integration at worst softens the pacific effects of integration.

That global markets can hobble national economies overnight is no longer conjecture. Market agents are driven by economic fundamentals that encourage anticipation of state behaviors. Even when poorly informed, however, the size and autonomy of global markets affects international relations. It is not the benefits of globalization that deter interstate violence. States can too easily use the vulnerability of their counterparts to leverage new political concessions. Rather, the presence and magnitude of global assets force state leaders to demonstrate resolve in ways that were previously unavailable. Globalization allows states to reveal private information by political talk that is economically costly, facilitating *ex ante* bargains and reducing the need for war.

Greater market autonomy also opens up new avenues for interstate competition. As capital market integration renders conflictual talk between states more credible, it is more often possible to resolve conflicts short of military violence. Because such talk (even with its economic consequences) is often cheaper than fighting, and because the prospect of warfare is reduced, states should more often pursue secondary political objectives. Integration provides for cheaper and less risky contests of words and market indicators that allow states more political flexibility, not less.

It remains the case that states are asymmetrically integrated into the world economy. As our findings demonstrate, asymmetry does not add to the danger of disputes. Instead, asymmetrically integrated dyads are asymmetrically able to signal. While the conventional wisdom implies that there is an inherent trade-off between efficient economic policies and efforts to promote peace, our results suggest no such trade-offs. Measures that are designed to increase the symmetry in integration are normatively desirable on several grounds. However, the benign impact of globalization on peace appears to result from enhancements to economic integration, even if occasionally these efforts result in additional asymmetry. The United States and other major powers can best discourage conflict by promoting greater global economic ties and by fostering equity of development.

Another benefit of the globalization debate has been increased attention to linkages between international politics and global political economy. Still, much remains to do in linking the two subjects. Political economists are concerned mainly with the relationship between state and market. Students of world politics are typically more concerned with state-to-state relations. Both communities have a tendency to treat the other subject as static or linear. If our conception of globalization and peace is valid, then the interaction of states in the presence of markets is genuinely a dynamic and interactive process. The emergence of greater economic autonomy means that market actors can shift wealth with greater ease, ironically increasing the sensitivity of markets to political behavior. States become more dependent on markets but are also better

able to further their international interests through market forces. If states and markets genuinely interact, then the nature of these interactions should be informative to participants, observers, and researchers.

Much remains, too, in solidifying the empirical relationship between economic integration and peace. We have only made incremental progress in assessing the theory. While our study shows that states that share valuable, autonomous capital linkages are less likely to fight, we fail to demonstrate that integration causes the reduction in dispute behavior. More fine-grained analysis using events data and market indicators will be necessary to ascertain whether an alternative precipitant can be found for the relationship we identify, or whether signaling remains the most likely candidate. The theoretical basis for believing in informational explanations is strong, however, and we remain confident that additional research will substantiate our theoretical claims about signaling.

The rise of autonomous markets implies a different game of politics with a more complex set of actors. As Strange (1996) argues, structural changes in the world economy affect the nature of diplomacy from solely among states to that between states, between firms, and between states and firms. States can continue to play power politics, ignoring market actors. However, they now do so at a price. Traditional perspectives concerned with relationships between politics and economics seek to protect states from markets or markets from states. We see the externalities of state-market interactions as mixed, but often benign. If asymmetric integration does not significantly increase the probability of conflict, then at least one rationale for protecting states from markets is removed. Nor should societies seek to isolate markets from the effects of political posturing. If some economic inefficiency is induced by inter-state conflict, then this informs political competitors, reducing uncertainty, allowing for ex ante bargains and some increase in international peace.

References

- ANDREWS, D. M. (1994) Capital Mobility and State Autonomy: Toward a Structural Theory of International Monetary Relations. *International Studies Quarterly* **38**(2):193–218.
- BARBIERI, K. (1996) Economic Interdependence: A Path to Peace or a Source of International Conflict? *Journal of Peace Research* **33**(1):29–49.
- BARBIERI, K., AND G. SCHNEIDER (1999) Globalization and Peace: Assessing New Directions in the Study of Trade and Conflict. *Journal of Peace Research* **36**(4):387–404.
- BECK, N., J. N. KATZ, AND R. TUCKER (1998) Taking Time Seriously: Time-series–Cross-section Analysis with a Binary Dependent Variable. *American Journal of Political Science* **42**(4):1260–1288.
- BLAINEY, G. (1988) *The Causes of War*, 3rd ed. New York: Free Press.
- BLISS, H., AND B. RUSSETT (1998) Democratic Trading Partners: The Liberal Connection. *Journal of Politics* **60**(4):1126–1147.
- BUCHANAN, P. (1998) *The Great Betrayal: How American Sovereignty and Social Justice are Being Sacrificed to the Gods of the Global Economy*. Boston: Little, Brown.
- BUENO DE MESQUITA, B. (1990) Pride of Place: The Origins of German Hegemony. *World Politics* **43**(1):28–52.
- CAPORASO, J. A. (1998) Dependence, Dependency, and Power in the Global System: A Structural and Behavioral Analysis. *International Organization* **32**(4):14–43.
- COHEN, A. (1998) *Israel and the Bomb*. New York: Columbia University Press.
- DEUTSCH, K. W. (1978) *The Analysis of International Relations*, 2nd ed. Englewood Cliffs, NJ: Prentice-Hall.
- DIXON, W. J. (1994) Democracy and the Peaceful Settlement of International Conflict. *American Political Science Review* **88**(2):14–32.
- DRUCKER, P. F. (1997) The Global Economy and the Nation-State. *Foreign Affairs* **76**:159–171.
- EVANS, P. (1997) The Eclipse of the State? Reflections on Stateness in an Era of Globalization. *World Politics* **50**:62–87.
- FEARON, J. D. (1994) Domestic Political Audiences and the Escalation of International Disputes. *American Political Science Review* **88**(3):577–592.

- FEARON, J. D. (1995) Rationalist Explanations for War. *International Organization* 49(3):379–414.
- FEARON, J. D. (1997) Signaling Foreign Policy Interests: Tying Hands Versus Sinking Costs. *Journal of Conflict Resolution* 41(1):68–90.
- FRIEDMAN, T. (1999) *The Lexus and the Olive Tree*. New York: Farrar, Straus and Giroux.
- GARFINKEL, M. R., AND S. SKAPERDAS (2000) Conflict Without Misperceptions or Incomplete Information: How the Future Matters. *Journal of Conflict Resolution* 44(6):793–807.
- GARRETT, G. (1995) Capital Mobility, Trade, and the Domestic Politics of Economic Policy. *International Organization* 49(3):657–687.
- GARTZKE, E. (1998) Kant We All Just Get Along? Motive, Opportunity, and the Origins of the Democratic Peace. *American Journal of Political Science* 42(1):1–27.
- GARTZKE, E. (1999) War Is in the Error Term. *International Organization* 53(3):567–587.
- GARTZKE, E. (2000) Preferences and the Democratic Peace. *International Studies Quarterly* 44(2):191–210.
- GARTZKE, E., Q. LI, AND C. BOEHMER (2001) Investing in the Peace: Economic Interdependence and International Conflict. *International Organization* 55(2):391–438.
- GASIOROWSKI, M. J. (1986) Economic Interdependence and International Conflict: Some Cross-national Evidence. *International Studies Quarterly* 30(1):23–38.
- GILPIN, R. (2001) *Global Political Economy*. Princeton, NJ: Princeton University Press.
- GISSINGER, R., AND N. P. GLEDITSCH (1999) Globalization and Conflict: Welfare, Distribution, and Political Unrest. *Journal of World Systems Research* 5(2):327–365.
- GOCHMAN, C. S., AND Z. MAOZ (1984) Militarized Interstate Disputes, 1816–1976: Procedure, Patterns, and Insights. *Journal of Conflict Resolution* 28(4):585–615.
- GREIDER, W. (1997) *One World, Ready or Not: The Manic Logic of Global Capitalism*. Cambridge, MA: Harvard University Press.
- GURR, T. R., K. JAGGERS, AND W. H. MOORE (1989) “Polity II: Political Structures and Regime Change.” University of Maryland.
- HEGRE, H. (2000) Development and the Liberal Peace: What Does It Take to Be a Trading Syndrome. *Journal of Peace Research* 37(1):3–30.
- HIRSCHMAN, A. O. (1945) *National Power and the Structure of Foreign Trade*. Berkeley: University of California Press.
- HIRSCHMAN, A. O. (1977) *The Passions and the Interests: Political Arguments for Capitalism Before Its Triumph*. Princeton, NJ: Princeton University Press.
- INTERNATIONAL MONETARY FUND (2000) *International Financial Statistics. CD-ROM and codebook*. Washington, DC: International Monetary Fund.
- JAGGERS, K., AND T. R. GURR (1995) Transitions to Democracy: Tracking Democracy’s “Third Wave” with the Polity III Data. *Journal of Peace Research* 32:469–482.
- JERVIS, R. (1976) *Perception and Misperception in International Politics*. Princeton, NJ: Princeton University Press.
- JONES, D. M., S. A. BREMER, AND J. D. SINGER (1996) Militarized Interstate Disputes, 1816–1992: Rationale, Coding Rules, and Empirical Patterns. *Conflict Management and Peace Science* 15(2):163–213.
- KAPSTEIN, E. B. (1994) *Governing the Global Economy: International Finance and the State*. Cambridge, MA: Harvard University Press.
- KEOHANE, R. O., AND J. S. NYE (1989) *Power and Interdependence*. New York: Scott, Foresman.
- KINDLEBERGER, C. P. (1969) *American Business Abroad: Six Lectures on Direct Investment*. New Haven, CT: Yale University Press.
- KRASNER, S. D. (1999) *Sovereignty: Organized Hypocrisy*. Princeton, NJ: Princeton University Press.
- KROLL, J. A. (1993) The Complexity of Interdependence. *International Studies Quarterly* 37(3):321–348.
- KYDD, A. (1997) Game Theory and the Spiral Model. *World Politics* 49(3):371–383.
- LENIN, V. I. (1970[1916]) *Imperialism: The Highest Stage of Capitalism*. New York: International.
- LI, Q., AND D. SACKO (2002) The (IR)Relevance of Interstate Militarized Disputes to International Trade. *International Studies Quarterly* 46(1):11–44.
- MANSFIELD, E., AND B. POLLINS (2002) Interdependence and International Conflict: An Assessment of the Recent Literature and Directions for Future Research. Typescript, Ohio State University.
- McMILLAN, S. M. (1997) Interdependence and Conflict. *Mershon International Studies Review* 41(1):33–58.
- MONTESQUIEU, BARON DE (1989[1748]) *Spirit of the Laws*. Cambridge: Cambridge University Press.
- MORROW, J. D. (1999) How Could Trade Affect Conflict? *Journal of Peace Research* 36(4):481–489.
- MORROW, J. D. (2000) What Do We Know About War? *American Review of Political Science* 3:63–83.

- MORROW, J. D., R. M. SIVERSON, AND T. E. TABARAS (1999) The Political Determinants of International Trade: The Major Powers, 1907–90. *American Political Science Review* **92**(3):649–661.
- MOUSSEAU, M. (2000) Market Prosperity, Democratic Consolidation, and Democratic Peace. *Journal of Conflict Resolution* **44**(4):472–507.
- NALEBUFF, B. (1991) Rational Deterrence in an Imperfect World. *World Politics* **43**(3):313–335.
- OHMAE, K. (1996) *The End of the Nation State*. New York: Free Press.
- ONEAL, J. R., AND B. RUSSETT (1997) The Classical Liberals Were Right: Democracy, Interdependence, and Conflict, 1950–1985. *International Studies Quarterly* **41**(2):267–293.
- ONEAL, J. R., AND B. RUSSETT (1999a) Assessing the Liberal Peace with Alternative Specifications: Trade Still Reduces Conflict. *Journal of Peace Research* **36**(4):423–442.
- ONEAL, J. R., AND B. RUSSETT (1999b) The Kantian Peace: The Pacific Benefits of Democracy, Interdependence, and International Organizations. *World Politics* **52**(1):1–37.
- ONEAL, J. R., F. H. ONEAL, Z. MAOZ, AND B. RUSSETT (1996) The Liberal Peace: Interdependence, Democracy, and International Conflict, 1950–1985. *Journal of Peace Research* **33**(1): 11–28.
- POLACHEK, S. W. (1980) Conflict and Trade. *Journal of Conflict Resolution* **24**(1):55–78.
- POLACHEK, S. W. (1997) Why Democracies Cooperate More and Fight Less: The Relationship Between International Trade and Cooperation. *Review of International Economics* **5**(3):295–309.
- POLACHEK, S. W., J. ROBST, AND Y.-C. CHANG (1999) Liberalism and Interdependence: Extending the Trade-Conflict Model. *Journal of Peace Research* **36**(4):405–422.
- POWELL, R. (1990) *Nuclear Deterrence Theory: The Search for Credibility*. Cambridge: Cambridge University Press.
- REINICKE, W. H. (1998) *Global Public Policy*. Washington, DC: Brookings Institution.
- RODRIG, D. (1997) *Has Globalization Gone Too Far?* Washington, DC: Institute for International Economics.
- ROSEGRANCE, R. (1985) *The Rise of the Trading State: Commerce and Conquest in the Modern World*. New York: Basic Books.
- ROSENAU, J. M. (1984) A Pre-Theory Revisited: World Politics in an Era of Cascading Interdependence. *International Studies Quarterly* **28**(3):245–305.
- RUGGIE, J. (1993) Territoriality and Beyond: Problematizing Modernity in International Relations. *International Organization* **47**:139–174.
- SARTORI, A. (2002) The Might of the Pen: A Reputational Theory of Communication in International Disputes. *International Organization* **56**(1):121–149.
- SCHULTZ, K. A. (1998) Domestic Opposition and Signaling in International Crises. *American Political Science Review* **94**(4):829–844.
- SCHULTZ, K. A. (1999) Do Domestic Institutions Constrain or Inform? Contrasting Two Institutional Perspectives on Democracy and War. *International Organization* **53**(2):233–266.
- SIMMONS, B. (1999) *Continuity and Change in Contemporary Capitalism*. New York: Cambridge University Press. (The Internationalization of Capital, pp. 36–69).
- SINGER, J. D., AND M. SMALL (1990) *Measuring the Correlates of War*. Ann Arbor: University of Michigan Press. (Formal Alliances, 1816–1965: An Extension of the Basic Data, pp. 159–190).
- SLANTCHEV, B. (2003) The Power to Hurt: Costly Conflict with Completely Informed States. *American Political Science Review* **97**(1):123–133.
- SMITH, A. (1976) *An Inquiry into the Nature and Causes of the Wealth of Nations*. Chicago: University of Chicago Press.
- SMITH, A. (1998) International Crises and Domestic Politics. *American Political Science Review* **92**(3): 623–638.
- SMITH, A. (1999) Testing Theories of Strategic Choice: The Example of Crisis Escalation. *American Journal of Political Science* **43**(4):1254–1283.
- STRANGE, S. (1996) *The Retreat of the State: The Diffusion of Power in the World Economy*. Cambridge: Cambridge University Press.
- STRANGE, S. (1998) *Mad Money: When Markets Outgrow Governments*. Ann Arbor: University of Michigan Press.
- VESETH, M. (1998) *Selling Globalization: The Myth of the Global Economy*. Boulder, CO: Lynne Rienner.
- WADE, R. (1996) *National Diversity and Global Capitalism*. Ithaca, NY: Cornell University Press. (Globalization and Its Limits: Reports of the Death of the National Economy Are Greatly Exaggerated, pp. 60–88).
- WAGNER, R. H. (1988) Economic Interdependence, Bargaining Power, and Political Influence. *International Organization* **41**(3):461–483.

- WAGNER, R. H. (2000) Bargaining and War. *American Journal of Political Science* **44**(3):469–484.
- WALTZ, K. N. (1999) Globalization and Governance. *PS: Political Science and Politics* **32**:693–700.
- WALTZ, K. N. (2000) Globalization and American Power. *National Interest* **59**:46–56.
- WIGGINS, V. (1999) Comparing XTGLS with Regress, Cluster().www.stata.com/support/faqs/stat/xtgls_rob.html.
- WORLD BANK (1999) *World Development Indicators*. CD-ROM. Washington, DC: World Bank.
- WORLD BANK (2000) *World Development Report*. Washington, DC: World Bank.