

# The Nexus of Market Society, Liberal Preferences, and Democratic Peace: Interdisciplinary Theory and Evidence

MICHAEL MOUSSEAU

*Koç University*

Drawing on literature from Anthropology, Economics, Political Science and Sociology, an interdisciplinary theory is presented that links the rise of contractual forms of exchange *within* a society with the proliferation of liberal values, democratic legitimacy, and peace among democratic nations. The theory accommodates old facts and yields a large number of new and testable ones, including the fact that the peace among democracies is limited to market-oriented states, and that market democracies—but not the other democracies—perceive common interests. Previous research confirms the first hypothesis; examination herein of UN roll call votes confirms the latter: the market democracies agree on global issues. The theory and evidence demonstrate that (a) the peace among democratic states may be a function of common interests derived from common economic structure; (b) all of the empirical research into the democratic peace is underspecified, as no study has considered an interaction of democracy with economic structure; (c) interests can be treated endogenously in social research; and (d) several of the premier puzzles in global politics are causally related—including the peace among democracies and the association of democratic stability and liberal political culture with market-oriented economic development.

---

Europe is uniting around the values we share — peace and stability, democracy and human rights.

— U.S. president Clinton, remarks at  
the NATO 50th Anniversary  
Summit, April 22, 1999<sup>1</sup>

Among policymakers and the media we frequently encounter references to the “like-minded, market-oriented democracies” (Cohen, 1998). “A community of market democracies,” goes the fashionable platitude, “upholds common standards of human rights ... where nations cooperate to make war unthinkable.”<sup>2</sup> The

---

*Author's note:* An earlier version of this paper was presented at the 1998 Annual Meeting of the Peace Science Society (International), New Brunswick, NJ. For helpful comments I thank Erik Gartzke, Douglas Lemke, Patrick James, and the anonymous reviewers. Of course, all errors are my own. For research assistance I thank Melis Söğüttekin.

<sup>1</sup> The White House, 1999. Remarks by the president on foreign policy, 5 June. [www.pub.whitehouse.gov/urires/I2R?urn:pdi://oma.eop.gov.us/1999/4/, 22/13.text](http://www.pub.whitehouse.gov/urires/I2R?urn:pdi://oma.eop.gov.us/1999/4/, 22/13.text).

<sup>2</sup> Quotes are of U.S. president William Clinton. See *Ibid.* and “Address by the President to the 48th session of the United Nations General Assembly, 27 September 1993” ([www.pub.whitehouse.gov/urires/I2R?urn:pdi://oma.eop.gov.us/1993/9/, 27/4.text](http://www.pub.whitehouse.gov/urires/I2R?urn:pdi://oma.eop.gov.us/1993/9/, 27/4.text)).

North Atlantic Alliance claims to be based on “common values of democracy, human rights and the rule of law,” and it was in the seeming pursuit of these values that the Alliance fought a war over the human rights of ethnic Kosovars.<sup>3</sup>

Despite the prevalence of value-based explanations for global affairs among policymakers and the popular media, in academia models of international relations characteristically treat the formation of preferences exogenously. The standard theses of Morgenthau (1985[1948]) and Waltz (1979), for instance, presume actors to value, respectively, power or security—and predict war (and peace) as a consequence of these assumed preferences and varying balances of power. In general, Liberals make these same assumptions—or assume a first preference ordering for material wealth—and predict peace or cooperation to occur when uncertainty is reduced (Axelrod, 1984), or when the proper institutions are in place (Doyle, 1986; Russett and Oneal, 2001). More recent models in International Relations predict strategic choices or make varying assumptions about preference orderings (e.g., Lake, 1992; Fearon, 1994; Bueno de Mesquita, Morrow, Siverson, and Smith, 1999), but very few seek to *predict* varying preferences. As a result, leading theories of global politics inform us that the seeming pursuit of “democracy, human rights and the rule of law” by the market democracies is *not* because these states prefer democracy, human rights, and the rule of law—but because these pursuits are tactics aimed at achieving some other interest that remains assumed, constant, and unexamined.<sup>4</sup>

In this article, I present an interdisciplinary theory of global politics that explicates interests by predicting the emergence of liberal values and goals from the socioeconomic norms of market-oriented economic development. There is an extensive literature concerned with the linkage of liberal political culture with economic development, but most of the theory in this literature assumes the reverse path of a particular culture fostering development (e.g., Weber, 1958[1904–5]; Inglehart, 1988; Fukuyama, 1995), or some form of evolutionary path-dependency (e.g., Parsons, 1964). Against these views, I demonstrate how liberal political culture may rise—and fall—with the rise of a market economy, and how such preferences and their predicted effects can be modeled across time and space with the observation of such economic conditions. In this way, the theory explicates interests and identifies the exogenous factors that cause them, and in so doing offers a novel, simple, tenable, interdisciplinary, and—most importantly—testable explanation for a wide range of global phenomena. These include a deductively derived identification of the origin and character of liberal political values, as well as an integration of two leading puzzles in global politics: the association of democratic stability with development, and democracy with interstate peace.

Previous research has confirmed the theory’s predictions that the zones of democratic peace (Mousseau, 2000; Mousseau, Hegre, and Oneal, 2003) and cooperation (Mousseau, 2002a) are substantially limited to the market democracies. Critical to the model’s veracity, however, is that market democracies—but not necessarily other democracies—share common preferences and interests in global affairs. In this article, I test this expectation with analysis of roll call votes at the United Nations General Assembly (UNGA). The UNGA regularly serves as the forum for a host of world issues ranging from such salient matters as national security and human rights to relatively mundane procedural issues. As such, patterns of preference commonality in the UNGA offer a standard gauge of common values, preferences, interests, and thus friendship among nations (Gartzke, 1998, 1999; Oneal and Russett, 1999; Russett and Oneal, 2001).

---

<sup>3</sup> Quoted from the North Atlantic Treaty Organization’s home page at [www.nato.int/docu/comm/c911107a.htm](http://www.nato.int/docu/comm/c911107a.htm).

<sup>4</sup> For further discussion of the limits of treating preferences exogenously in international relations theory see Moravcsik (1997), Wendt (1999), and Keohane (2001).

While previous research has found that democratic states tend to vote together in the UN General Assembly (Kim and Russett, 1996; Russett and Oneal, 2001), no one has examined whether this pattern is driven by the market (or developed) democracies. Nor do any of the current explanations for the democratic peace make such a prediction (Lake, 1992; Russett, 1993; Dixon, 1994; Fearon, 1994; Bueno de Mesquita et al., 1999)—and all of them would be hard pressed to explain it. Moreover, if the market democracies share common global preferences and interests, then the peace among them would appear to rest less on institutional constraints on fighting than on the likelihood that, sharing common interests, the market democracies simply have little to fight about in the first place. In this way, the theory significantly departs from previous explanations for the democratic peace, with implications for the literature on the origins of liberal political culture and democratic consolidation.

This article is structured as follows. After reviewing the theory and evidence on democratic peace and interests, I briefly catalog the literature on political culture. I then present the potential causal linkage of market-oriented development with liberal political culture and democratic institutions. After introducing several nontrivial and novel facts, I present the empirical examination of the contingent claim that the market democracies share common values, interests, and preferences. I conclude by highlighting the significance of this research for studies of democratic consolidation and democratic peace. As the war against terrorism and the success of the North Atlantic alliance demonstrate, market development may offer the missing linkage of democratic governance with democratic consolidation, like-mindedness, and friendship among nations.

### **The Democratic Peace Literature and Interests**

While democracies fight other states, the condition of relative peace among democratic nations is the premier nontrivial fact of international relations (Levy, 1988; Russett, 1993). This pattern appears to hold after consideration of multiple factors associated with democracy and war that may account for the relationship (Bremer, 1992; Maoz and Russett, 1993). Additional studies have made it increasingly unlikely that the democratic peace can be explained by the presence (or absence) of militarized conflict in previous years (Raknerud and Hegre, 1997; Beck, Katz, and Tucker, 1998), or any reverse impact of militarized conflict causing states to be less democratic before their wars (cf. James, Solberg, and Wolfson, 1999; Mousseau and Shi, 1999; Oneal and Russett, 2000; Reiter, 2001).

The consequence of these and earlier findings has been a resurgence of theories on how democracy may promote peace among nations, most of which focus on institutions as the master variable. The institutional “normative” view argues that democratic institutions promote peaceful norms of conflict resolution (Russett, 1993:30–38; Dixon, 1994). The institutional “structural” view emphasizes how domestic pressures from the electorate may constrain democratic leaders from resorting to war (Lake, 1992; Fearon, 1994; Bueno de Mesquita, et al., 1999).

Though both institutional models of democratic peace are post hoc, each has accrued some empirical support. The “classical” variant of the structural view assumes that voters resist paying the costs of war in taxes and battle deaths, and this resistance directly translates into a democratic pacifism in foreign policy (Kant, 1982[1795]; Bueno de Mesquita and Lalman, 1992). Supportive of this view, studies have found that democracies suffer fewer battle deaths than other states in their wars (Rummel, 1995; Siverson, 1995; Bennett and Stam, 1996). Against this view, it is not clear that democratic states are particularly peaceful in their relations with nondemocracies. While there is some favorable evidence (e.g., Gleditsch and Hegre, 1997), there are a number of opposing studies (e.g., Lemke and Reed, 1996; see Ray, 2000, for a review of the evidence on this issue).

A newer version of the structural hypothesis, in contrast, assumes not that voters are averse to fighting in war, but that they resist *backing down* in interstate crises. Formal analyses appear to demonstrate that if this assumption is true, then democracies would be in peace with each other, but not with other states (Fearon, 1994; Bueno de Mesquita et al., 1999). Constrained by the electorate, democratic leaders initiate militarized conflict only against easy targets; and all states—democracies and autocracies—perceive that democracies are unlikely to back down and thus avoid targeting them. Supportive of this view, it seems that democracies are more likely to win their wars (Lake, 1992; Stam, 1996), and prevail in militarized interstate disputes (Partell and Palmer, 1999).

A number of studies also support the view that democratic institutions give rise to peaceful norms of conflict resolution (Russett, 1993:30–38; Dixon, 1994). It seems that when democracies do engage each other in militarized conflict, they tend to resolve their disputes with negotiation (Dixon, 1994), compromise (Mousseau, 1998), and law (Raymond, 1994). Also consistent with the normative view, the pacifying impact of democracy appears to strengthen over time after a transition to democracy (Hensel, Goertz, and Diehl, 2000).

Of course, correlation does not mean causation. As always with correlational studies, there is no way of knowing if some unaccounted variable may render the relationship spurious. Indeed, Wolfson, James, and Solberg (1998) have criticized the tone of the democratic peace literature for treating democracy exogenously; other critics claim that these studies do not account for interests (Farber and Gowa, 1997). Gartzke argues that interests may be formed for a host of reasons other than institutional structures (1998, 1999). To test this expectation, he assesses common interests among nations with the observation of agreement on UN General Assembly roll call votes. He finds a strong role for shared interest in reducing militarized conflict, but only a weak or nonexistent role for democracy. From this, Gartzke concludes that states' interests are more important than democratic structures for explaining the peace among democratic nations.

Gartzke (1998, 1999) is correct to point out the potential role for common interests in explaining peace among nations, but, as he makes clear, he does not explicate the emergence of common interests. Responding to Gartzke (1998), Oneal and Russett (1999) also examined UNGA roll call votes—this time as the dependent variable—and found that it is democracy (along with trade interdependence and common alliance) that might foster common interests between nations. Therefore, the authors concluded, it is also these factors that explain the peace (with interests an intervening “variable”). Oneal and Russett did not, however, explicate how democratic institutions are supposed to foster common interests. Instead, the authors claimed that “logic and empirical evidence suggest this extension of the democratic peace perspective” (1999:20). In contrast, Gartzke concluded that national interests, democracy, and democratic peace may all be explained by some exogenous third factor (see also Wolfson et al., 1998:167).

What might be this exogenous third factor that explains the emergence of common interests, democratic stability, and democratic peace? As discussed, conventional views in International Relations treat the formation of interests exogenously. Studies in Sociology and Comparative Politics have firmly established, however, that whether or not democracy has a positive impact on economic growth, economic development either “causes” democracy (Burkhart and Lewis-Beck, 1994), or makes transitions from democratic to autocratic rule highly unlikely (Przeworski, Alvarez, Cheibub, and Limongi, 1997). Concurrently, numerous scholars have argued that liberal political culture is essential for democratic stability and longevity (e.g., Lipset, 1959; Almond and Verba, 1963; Dahl, 1971; Huntington, 1984; Inglehart, 1997). Keohane makes the point succinctly: “liberal democratic legitimacy and the meaning of self-interest depend on people’s values and beliefs” (2001:1). Might economic development serve as the “third factor” that

influences a people's institutions, values, beliefs, and perceived interests in global affairs?

### The Political Culture Literature

Across a myriad of sub-fields there are several misunderstandings about the potential for political culture as an explanatory force in global politics. In some quarters there is a widespread misperception that culture as an explanatory variable is non-falsifiable. An influential voice for this view is offered by Waltz in his infamous harangue against the "first image" (1959). Building on a logic expressed earlier by Mead (1940), Waltz pointed out that human nature is a constant and therefore cannot explain war. However, Waltz failed to make a clear distinction between human nature and culture and, by definition, the latter is a variable. In fact, there is no *a priori* reason why culture cannot explain global phenomena—a point implicitly acknowledged by Waltz himself (1959:56).

Another unfortunate but widespread misunderstanding about political culture is that it must be treated indigenously, and thus cultural explanations must pit Muslims against Christians, Chinese against Russians, the West against the rest, and so on. Huntington's "Clash of Civilizations" is the most well known example of this view in recent years (1996), a thesis that appears to have little historical support (Russett, Oneal, and Cox, 2000; cf. Huntington, 2000; Henderson and Tucker, 2001). Indigenous identifications of culture typically identify political culture inductively and thus cannot explain change very well (Rogowski, 1974).

While political culture does not have to be treated exogenously or indigenously, it seems that most attempts at explicating liberal preferences have not been successful against rigorous treatment. Until the 1960s, a prevailing "modernization" school turned to varying mechanisms of evolutionary path-dependency to explain the emergence of inductively derived "modernity" (e.g., Parsons, 1964; for more recent discussions of evolutionary theory see James and Goetze, 2001). However, the failure of democratic regimes across much of the developing world put a damper on monotonic notions of "political development." Today numerous less developed and autocratic regimes coexist with advanced systems of communications— with telephones, televisions, even cell phones and computers—showing that the use of high technology and other forms of "modern" living are not a significant force for the emergence of liberal political culture.

More recent attempts at endogenizing liberal culture have turned to diffusionist or educational ontologies. For example, Chu, Hu, and Moon (1997) seek to explain the rise of the Korean economy by way of cultural diffusion from the U.S. Diffusionism faces a logical problem, however, in that such theories must ultimately draw on some alternative ontology, as the predicted cultural diffusion must derive from someplace. Education has long been treated as a key source of liberal values (Lerner, 1958; Inkeles and Smith, 1974), but the evidence for education is not clear. Underdevelopment and totalitarianism coexisted with high levels of education for many years in Eastern Europe, the Soviet Union, and Nazi Germany, and even the leaders of the attack on the World Trade Center on September 11, 2001 were highly educated. In a systematic cross-national study of democratic stability, Inglehart found no support for the role of education when levels of development *or* measures of liberal political culture were considered (1997:183).

In sum, most theories of economic development and cultural change have been generally set aside for several reasons, including logical inconsistencies or for lack of historical support. Yet the evidence linking economic development with liberal political culture and democracy is well established and overwhelming, and contains no serious detractors. A small sample that includes classical and systematic evidence across disparate literatures includes: Polanyi (1957 [1944]); Weber (1958[1904–5]); Lipset (1959); MacPherson (1977[1962]); Braudel (1979); Durkheim (1984[1893]);

Hofstede (1984); Burkhart and Lewis-Beck (1994); Chu et al. (1997); Inglehart (1997); and Przeworski et al. (1997). In the following section I depart fundamentally from previous theories of economic development and cultural change, identify those liberal values that may arise from the presence of a market economy, as well as identify the ways and means that this process may occur.

### **An Interdisciplinary Theory of Global Politics**

All interesting theory begins with at least one untestable, or ontological, assumption. For example, Realists assume that actors seek wealth or security, and thus power (Waltz, 1979; Morgenthau, 1985[1948]); institutionalists assume institutions constrain, and typically hold preferences constant (e.g., Bueno de Mesquita et al., 1999; Russett and Oneal, 2001).<sup>5</sup> In Anthropology exists a scientific research program based on cultural materialist ontology, which assumes a probabilistic inter-relationship among a society's economy (infrastructure), institutions (structure), and culture (superstructure) (Murphy and Margolis, 1995:2; Harris, 2001[1979]). The ontology is illustrated in Figure 1, where a society's economy, institutions, and culture are seen to mutually influence and reinforce each other. As can be seen with the stronger arrows leading from the economy, however, the ontology assumes that, in the long run, the economy has the greater influence over culture and institutions (Murphy and Margolis, 1995:3). The rationale for this assumption is simple: for most individuals and societies economic well-being is more important than cultural values and institutions and thus, in the long run, institutions and culture are expected to bend to economic expediency. In this way, it is the economy that is considered the primary source of change, with economic variables treated exogenously, and social and political institutions and cultural preferences explained (with allowance for feedback loops).

One compelling aspect of cultural materialism for global politics is its capacity to link a myriad of theories and bodies of literature into a common framework. For instance, the extensive literature on institutions fits nicely in the arrows leading from the institutional oval in Figure 1. That is, from the cultural materialist perspective, institutions may constrain behavior and affect our political culture (Diamond, 1997), economic structures (North, 1981), and public policy (Lake, 1992; Bueno de Mesquita et al., 1999; Russett and Oneal, 2001). Indeed, the overwhelming majority of institutionalist research in Political Science, both formal and informal, is in accord with cultural materialist ontology.

It is becoming more recognized, however, that institutions are not enough to grasp political phenomena: that "beliefs are crucial to understanding any game-theoretic situation" (Keohane, 2001:7; see also Ostrom, 1990; Tyler, 1990; Morrow, 1994; Levi, 1997; Wendt, 1999). This does not mean, however, that we must turn to pronouns—that we must treat differences between, say, Mexicans and Canadians as explanatory variables (e.g., Huntington, 1996). Rather, it means that we should look for structural regularities that influence the formation of beliefs and preferences across nations. As seen with the arrows leading from the cultural oval in Figure 1, this view is coincident with the cultural materialist emphasis that culture matters. But the ontology not only highlights the importance of beliefs and preferences, it seeks to explicate them from economic structure, as can be seen with the larger arrow leading from the economy to culture in Figure 1.

The ontology's stronger emphasis on the economy is in agreement with the vast Marxian literature that identifies global political change in economic structure. The

<sup>5</sup> Since most studies of global politics draw on Realist or institutionalist assumptions, these ontologies are well known and are not usually discussed in empirical research. That I draw on alternative ontology (and thus have to discuss it) should not be interpreted as rendering this study any less scientific than others: it is simply a necessary task when using a less well known ontology.

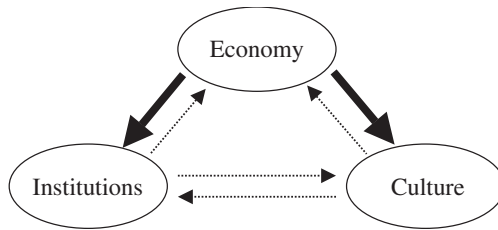


FIG. 1. The Ontology of Cultural Materialism

ontology must depart, however, from the Marxian assumptions of economic determinism, dialectics, class-centrism, and the monotonic view of history. Even structural versions of Realism are compatible with the ontology, as structural Realism is at its core an institutional theory: it is the condition of *institutional* anarchy—not human nature—that is assumed to drive states to be primarily concerned with security and thus power (Waltz, 1979:88–101). In contrast to Realism, however, the ontology applies to individuals: in the condition of domestic institutional anarchy, individuals should also be primarily concerned with security, causing a more zero-sum oriented political culture. Indeed, the ontology yields theory that operates across levels of analysis, generating expectations in the sub-national, national, and international arenas.

What theory of global politics derives from the ontology? In brief, if economic norms translate, in the long run, to social and political norms, then there are several liberal political values deeply embedded within the norms of market-oriented economic development (Mousseau, 2000:476–78, 2002a, 2002b). A society with “market-oriented development” has, by definition, a complex division of labor primarily linked not with the state but with the market.<sup>6</sup> Under these conditions, most adults in a society obtain their incomes and consumer goods by interacting with the norms of market competition: with free choice, bargaining, and regularized interactions with strangers—behaviors that are less normalized elsewhere (Mousseau, 2003). Market norms will fail to prevail, however, unless a state intervenes to enforce contracts equally. In this way—if the exogenous conditions for market-oriented development are present—a growth of a market economy gives rise to the legitimacy of governing institutions that enforce contracts equally, and a political culture that respects democratic-made common law, individual freedom, legal equality, and universal extensions of trust.

I emphasize that the theory identifies the source of liberal values as present in societies in which the majority of people regularly engage in, and primarily benefit from, the market place.<sup>7</sup> The theory in no way asserts that any of the following gives rise to liberal culture and democratic legitimacy: wealth (as in oil wealth); industrialization (which can be fascist or socialist); capitalism (which can be crony, monopolistic, or oligopolistic); or a “free market” (a policy description). Nor is the theory about interstate trade (which may or may not favor the emergence of an inclusive market within a nation). The key exogenous variable is very simple and unambiguous: *the extent to which the majority in a society regularly engage in, and thus primarily benefit from, contractual exchange on the market.* Economic historians have long

<sup>6</sup> This definition includes the “social democracies,” which have had predominantly market economies (Mousseau, 2000:476), and excludes the communist and fascist regimes, which were and are integrated by the state, not a market.

<sup>7</sup> Thus, a “market economy” should not be confused with a “free market”: the latter is government policy; the former is the condition when the majority of people in a society regularly engage in, and thus primarily benefit from, contractual exchange on the market. There is no implied assumption that the latter leads to the former.

documented cultural change toward liberal values associated not only with economic development in general, but with the rise of a market in particular (Polanyi, 1957 [1944]; MacPherson, 1977 [1962]; Tandy and Neale, 1994:19–20). Braudel specifically distinguished capitalism from the market economy of “ordinary people,” and observed that “everything” rests “on the broad back of material life” (1979:63).

Because a market needs a state that enforces contracts equitably, it follows that for a majority in a society to share market norms and thus liberal culture a state must intervene to reinforce and encourage the foundations of the market economy (Polanyi, 1957 [1944]). In this way, the theory identifies a positive feedback loop, or interaction, of democratic institutions, liberal culture, and the market economy, as the initial emergence of market norms and the increasing trust in contracting with strangers facilitates increased specialization and lower transaction costs, propelling a mutually reinforcing cycle of market-integrated growth, liberalism, and rising legitimacy of democratic institutions. This view may explain the recent experiences of South Korea and Taiwan, as well as the success of liberal institutions in North America well before industrialization. The Northern states enjoyed both a market economy and liberal culture at the founding of the Republic (Wood, 1993); as did Classical Greece (Tandy, 1997) and, to a lesser extent, Renaissance Italy (Martines, 1979). Nor is the theory at odds with dependency and world systems perspectives on global politics, for the presence or absence of a market economy is primarily treated exogenously.

#### *Old Facts, New Facts, and the Critical Test*

The implications for contemporary international politics are straightforward and profound if it is assumed that elected leaders value tenure in office and pay close attention to the preferences of the median voter. This is a common assumption made by all institutional theories of global politics, from Kant (1982[1795]) to today (e.g., Bueno de Mesquita et al., 1999), all backed by a wide array of evidence (e.g., Hinckley, 1992; Page and Shapiro, 1992; Knopf, 1998; McKeown, 2000; Van Belle and Hook, 2000). As discussed, a market economy cannot exist without market institutions (democracy) that enforce common law (see also Polanyi, 1957[1944]). Democracy, however, can form for a host of reasons outside the model, including foreign occupation or pressure, or simple diffusion of the democratic idea.<sup>8</sup> Accordingly, democracy can exist without a market economy, but an intense market economy is highly unlikely to exist without democratic institutions (or at least some form of common law to enforce contracts equally). It follows that, if the theory is correct, the majority of voters in all market-oriented democracies share liberal political values—and the voters in democracies with weak market economies are less likely to share such values. With weak market norms, voters will be comparatively more parochial (in-group oriented) and less tolerant or concerned with individual freedom and rights.<sup>9</sup> Elected leaders, in turn, will not be constrained to agree with other democracies of any kind. Herein lies the opportunity for a direct and simple test of the theory: if the voters in market democracies think alike as predicted, then their leaders should reflect this

<sup>8</sup> A market economy can also be imposed: the Western democracies imposed market economy as well as democracy on Western Germany and Japan after WWII. Consistent with theoretical expectations, after about one generation Western Germany’s political culture was well on its way to becoming liberal (Inglehart, 1997:175). However, the imposition of a market economy—where the invader imposes the rule of law, refrains from exploiting the vanquished, and subsidizes market-led economic growth—takes much more commitment by the occupier than the imposition of democratic institutions alone and is not a common occurrence in history.

<sup>9</sup> I emphasize that, by definition, “democratic institutions” are just that: democratic *institutions*; not democratic *culture*, democratic *stability*, and so on. See Mousseau (2003) for further discussion of the norms and values that prevail in nonmarket cultures.



commonality in their public positions on global issues. Notwithstanding the constraints of international politics, over a period of time with everything else being equal, market democracies—but not necessarily the other democracies—should tend to agree on global issues.

Two standard measures of agreement among nations are similarity in alliances portfolios and roll call agreement at the United Nations General Assembly. While both measures seem to fit the epistemic condition of “agreement among nations,” I observe roll call agreement at the UNGA, for several reasons. First, scholars have long raised the possibility that alliances may be more likely among states that tend to *disagree* on global issues, as alliances are a means of extending influence, and may not be worth the cost of commitment with friends with whom you tend to agree (Bueno de Mesquita, 1981; Simon and Gartzke, 1996). Second, Signorino and Ritter make a convincing case of substantial error in measures of association using alliance portfolios (1999:126). Third, while many resolutions raised at the UNGA may be procedural and benign, issues of human rights frequently come before the Assembly. If the voters in less developed democracies are comparatively less tolerant of individual freedom as the theory predicts, then on issues of human rights the market democracies should clearly tend to think alike—and do so in opposition to the other democracies. This pattern should be observable in the aggregate, along with a general commonality in preferences on other issues due to shared respect for legal equality, common law among nations (e.g., rules of diplomacy), and so on. Fourth, analyses of agreement at the UN will render the results herein more comparable with recent studies of democracy and agreement, which have found that democratic states tend to vote alike in the UNGA, as do economically similar states (Kim and Russett, 1996; Oneal and Russett, 1999; Russett and Oneal, 2001). Regardless of the theoretical implications, if the democratic voting agreement is conditioned on market development as predicted, then these studies are underspecified—and the analyses will extend our knowledge of voting agreement.

The hypothesis test—that established patterns of agreement among democracies are conditional to both states having robust market economies—offers a significant departure from all previous research on democratic peace, in three ways. First, neither structural (Lake, 1992; Fearon, 1994; Bueno de Mesquita et al., 1999), normative (Dixon, 1994), nor classical-liberal (Russett and Oneal, 2001) explanations for democratic peace make such an empirical claim—and all would be hard pressed to explain it. Second, virtually all of these theories, generated post hoc, seek to explain the democratic peace through varying mechanisms other than a general agreement on international issues. Institutions and their norms are thought to constrain the leaders of democratic states, but I am not aware of anyone who has asserted how such leaders should have little to fight about in the first place. By showing an economic condition to the general agreement among democracies, this study will demonstrate both the economic limitation to the democratic peace, and that the peace is a function not only of constraints from war, but of common interests in the first place. Third, by showing how common interests may derive from the market economy, and how these interests may explain democratic stability, this study offers a new perspective on the role of alternative exogenous variables and the formation of state interests in the democratic peace, as argued in various forms by Farber and Gowa (1997), Gartzke (1998, 1999), and Wolfson et al. (1998).

Nevertheless, confirmation of the hypothesis will not overrule other possible explanations for the result. As with all correlational studies, causation can only be assessed, among other things, on the comparative strength of a theory's explanatory and predictive power. In this light, the theory offers a simple explanation for two of the foremost puzzles in Political Science: the linkage between development and democratic stability (Burkhart and Lewis-Beck, 1994; Przeworski

et al., 1997), and the democratic peace (Bremer, 1992; Gleditsch and Hegre, 1997). As I have discussed above and elsewhere, the theory also offers alternative explanations for, among other things, the rise of liberal political culture (Mousseau, 2000), the emergence of civil society (Mousseau, 2002b), and the clash of market civilization with the rest of the world in the war on terror (Mousseau, 2003). Predictions from the theory—novel facts—include that market democracies are more likely than other states (including other democracies) to cooperate, ally, and join international organizations (Mousseau, 2000:482).

Moreover, a good theory's critical predictions must bear out rigorous empirical examination (Vasquez, 1993:304–8). In this regard, the *a priori* predictions that the zones of democratic peace, cooperation, and alliance formation are limited to the market democracies (asserted in Mousseau, 2000:482) have already been borne out by the evidence (respectively, in Mousseau, 2000, 2002a, and 2002c). Is the zone of agreement also present among—and possibly exclusive to—the market democracies? The following sections test this hypothesis.

### Research Design

To ascertain whether the market-oriented democracies tend to vote alike at the UN General Assembly, I first obtained a measure of UNGA roll call vote similarity from the *Similarity of UN Policy Positions, 1946–96* dataset (Gartzke, Jo, and Tucker, 1999).<sup>10</sup> These data are constructed in annual aggregations, setting the unit of analysis of annualized pairings, or dyads, of UN member states. While preference similarity at the UN has been operationalized by computing Kendall's Tau  $\beta$  (Gartzke, 1998, 1999; Oneal and Russett, 1999), Signorino and Ritter (1999) emphasize that Kendall's Tau  $\beta$  is designed for ranked categorical data—and not for measuring agreement. Thus, Kendall's Tau  $\beta$  does not distinguish disagreement from randomness (125–56), and pairs of states with identical preferences may not be given the highest rankings (121–22). Accordingly, Signorino and Ritter propose an alternative measure, **S**, and present a compelling case for its use to gauge preference similarity among nations. The traditional Kendall's Tau  $\beta$ , however, allows for a more direct comparison of the results herein with previous studies (Oneal and Russett, 1999). Accordingly, I report results using both measures of agreement: Signorino and Ritter's **S** and Kendall's Tau  $\beta$  (the variables SUN and TAUBUN in the *Similarity of UN Policy Positions, 1946–96* dataset).

I report descriptive statistics for the SUN and TAUBUN variables in Appendix I. As can be seen, both measures of roll call agreement theoretically range from  $-1$  to  $1$ , yet both have means above zero. This reflects the fact that many issues raised before the UN General Assembly are procedural or substantively benign, and thus pass with large majorities, several abstentions, and a few opposing votes. This means that only a minority of roll call votes is likely to reflect preference similarity on global issues, and that the impact of market democracy is best observed in the aggregate. Accordingly, I centered both variables: I subtracted each from its median, and then divided by the standard deviation of the uncentered term. Because of some skewness in each term (as seen in Appendix I), the median is preferred to the mean (Blalock, 1979:67). Descriptive statistics for the dependent variables after these transformations are reported in Appendix II. Below I address the data sources and measurements of democracy, development, and market democracy, followed by a discussion of the theory, measures, and data sources of suitable control variables.

<sup>10</sup> Version 1.17. I am grateful to Erik Gartzke, Jo Dong-Joon, and Richard Tucker for organizing and constructing these data and measures, and making them available at <http://www.vanderbilt.edu/~rtucker/data/affinity/un/similar>.

*Independent Variables**a. Democracy*

Because of the critical importance of the measure for democracy, I report the results with two separate indicators: the Polity III (version 98) summated index and Vanhanen's (2000) continuous index. The 21-point Polity III index is based on coders' assessments of five regime characteristics: degree of constraints on executive authority; competitiveness of political participation; competitiveness of executive recruitment; openness of executive recruitment; and degree of regulation of political competition (Jagers and Gurr, 1995). Vanhanen's index is the product of two dimensions, electoral competition and participation. The former is based on the share of votes won by the largest party; the latter is based on the percentage of voters from the whole population (Vanhanen, 2000:253). In the research sample the Polity and Vanhanen democracy measures correlate at 0.86 (Pearson's  $r$ ).<sup>11</sup>

Necessarily omitted from the analyses are cases where democracy data are missing or where the state was undergoing a regime transition, interruption, or interregnum. In addition, because the democracy data are aggregated annually, if a state's democracy level changed from one year to the next we do not know the polity status of the state during its participation at the UN. To help ensure the accuracy of this critical measure, I omitted all cases where the state in the previous year underwent a regime transition, interruption, or interregnum (or the data in the previous year were missing). Similarly, if a state changed more than 5 points from the previous year (on the 21-point Polity III measure) we cannot be confident in the status of the state through the current year, so these cases were also omitted.<sup>12</sup>

As discussed, the clearest evidence for democratic peace is *among* democracies. Since a pair of states can only be as jointly democratic as the less democratic state in the pairing, I follow Dixon's "weakest link" principle (Dixon, 1993:51) and assess dyadic democracy with the level of democracy of the less democratic state for each dyad-year. Still, previous studies also report institutional and economic (dis)similarity as an influence on the behavior of nations (Kim and Russett, 1996; see also Werner and Lemke, 1997). This means that we must account for institutional similarity in any test of joint democracy. Since a pair of states can only be as institutionally dissimilar as the distance between the less democratic and the more democratic one, I follow Oneal and Ray (1997) and assess institutional dissimilarity with the level of democracy of the more democratic state in a dyad. For conceptual ease, I call the level of democracy of the less democratic state in a dyad *Shared Democracy*, since it indicates the minimum level of democracy shared by both states. Likewise, I call the level of democracy of the more democratic state in a dyad *Mixed Democracy*, since when Shared Democracy is low Mixed Democracy can take on high values only when the two states are highly institutionally dissimilar.

*b. Development*

While the market norms model predicts the market democracies to be more likely than other states to vote similarly at the UN, economic development may also have a separate independent impact on voting agreement. In the 1950s and 1960s the rapid expansion of UN membership to include less developed countries led to their dominance in setting the agenda in the General Assembly. These countries share a common interest on issues of international economic assistance, regulation of

<sup>11</sup> The Polity III data (version 98) can be obtained at the web site of the Polity Project at the Center for International Development and Conflict Management at the University of Maryland, College Park, <http://www.bsos.umd.edu/cidcm/polity>. Vanhanen's democracy data can be obtained at <http://www.svt.ntnu.no/iss/data/vanhanen>.

<sup>12</sup> A common alternative solution is to lag the democracy variable. However, with lagging we still do not know the regime status of a state while the General Assembly is in session in years with regime changes. Thus, the safest solution is to avoid drawing inferences from such cases.

foreign direct investment, the protection of mineral and agricultural exports, and general global economic redistribution.

Given the critical importance of this variable, like democracy (above), I report results with two separate indicators for development: gross domestic product per capita (GDPpc) and energy consumption per capita (ENCONpc). I obtained GDPpc data from the Penn World Table's variable RGDPCH, calculated in constant dollars with the Chain index (Summers and Heston, 1991). Data from the Penn World Table are available for most countries from 1950 to 1991—setting the temporal limits of the analyses. For the second measure of development, I obtained ENCONpc data from the Correlates of War project (see Bremer, 1992), data often used to assess development (Burkhart and Lewis-Beck, 1994; Dixon, 1994; Mousseau, 2001). In standard form, I took the natural logarithm of both measures, which correlate at 0.75 (Pearson's  $r$ ).

For both indicators I followed the “weakest link” principle: I converted to a dyadic measure by considering the level of development (logged GDPpc/ENCONpc) of the less developed state for each dyad-year, a variable I call *Shared Development*. To account for economic similarity (Kim and Russett, 1996), the variable *Mixed Development* indicates the level of development of the more developed state in the dyad.

### *c. Market Democracy*

To assess the test hypothesis that the democratic voting agreement may be limited to—or more robust among—the market democracies, I calculated the interactive term *Shared Democracy\*Shared Development*. This measure reaches high values only when both states in a dyad are highly democratic and both have developed economies. Of course, an important caveat of the market norms model is that “development” means market-based development. As discussed above, a society with “market-oriented development” has, by definition, a complex division of labor linked primarily not with the state but with the market. The more complex the divisions of labor in a society integrated with the market, the more likely the majority in the society will interact with market norms. However, there are nations in the dataset that have had relatively high levels of GDPpc or ENCONpc without complex divisions of labor (the oil-rich kingdoms), or relatively complex divisions of labor integrated not with the market but by the state (the communist regimes).

Nevertheless, those states with high levels on the indicators for development but with weak or nonexistent domestic markets will not violate the epistemic assumptions of the interactive term. This is because historically virtually all democracies that have had high levels of development have had their complex divisions of labor primarily integrated with the market.<sup>13</sup> As a corollary, all nations with high levels of development that were not based on complex divisions of labor integrated with the market have been highly autocratic (such as those in Eastern Europe or the Persian Gulf). Given that low values of Shared Democracy will yield low values of Shared Democracy\*Shared Development, the interactive term serves its epistemic function: it assesses the degree to which both countries in a dyad are democratic and both have socio-economies in which most adults obtain their incomes and consumer goods by interacting with the norms of market competition (with free choice, bargaining, and regularized interactions among strangers).

### *Control Variables*

To examine the separate and combined impacts of democracy and development on preference similarity at the United Nations, it is useful to account for the effects of other variables that might correlate with these dimensions. However, control

<sup>13</sup> See footnote 6.

variables need to be considered very carefully: to the extent that one is posited as partially or wholly explained by the explanatory variable it is an *intervening* variable. Control for intervening variables is not appropriate in tests of theoretically driven hypotheses, for if a theory predicts the impact of the explanatory variable to be reduced with the inclusion of the intervening variable, such inclusion cannot logically refute the theory being tested (King, Keohane, and Verba, 1994:173). Intervening variables do, however, offer alternative explanations for the results. In this way, inclusion of an intervening variable can establish the first-run plausibility of an alternative explanation for a confirmed hypothesis; but it cannot resolve the competing viability of the two explanations. For the latter, further tests of Granger causality or simultaneity among the variables may be in order, and the viability of the competing theories must be assessed according to their relative explanatory and predictive powers, numbers of anomalies, and so on.

In the analyses herein all the control variables are to some degree predicted by the independent variable of shared market democracy, and are thus intervening variables: trade dependency, democratic maturity, strategic interests, and shared satisfaction with the global status quo. Accordingly, I test the first-run plausibility of these alternative explanations, but I do so in separate analyses. Below I discuss the theory and measures of each.

#### *a. Trade Interdependence*

The universalist and contracting nature of liberal-market culture means that individuals in market cultures should be expected to roam the world searching out opportunities for profit. This renders foreign trade per capita a predicted and intervening variable in any test of the predicted impact of democracy and development on voting agreement. However, trade *per capita* is not the same as trade *interdependence* (trade/gross domestic product), and it is reasonable to expect trade interdependence to foster a common interest and thus voting agreement among nations (Oneal and Russett, 1999). Thus, to the extent that trade per capita predicts trade interdependence, the latter is an intervening variable and its impact on the test hypothesis needs to be interpreted carefully. With this qualification, I obtained interstate trade data from Oneal and Russett (1999). Drawing on IMF statistics, Oneal and Russett assess country *i*'s dependence on trade with *j* as the sum of trade *ij* divided by the GDP of *i*, and then assess dyadic interdependence by considering the level of dependence of the less dependent state for each dyad-year. I follow these steps here, and call the variable *Trade Interdependence*.

#### *b. Democratic Maturity*

Recall that the theory predicts market development to stabilize and consolidate democratic institutions. This means that democratic institutional maturity is an intervening rather than confounding factor in any examination of market democracy on international behavior. However, if market democracy is found to have a positive impact on voting agreement, it is plausible that this pattern may be explained by the fact that democracies with developed economies tend to be more stable (Przeworski et al., 1997). Normative approaches to political development and democratic peace predict that, over time, democratic institutions affect norms (Dixon, 1994; Diamond, 1997:xix).

Therefore, to assess the first-run viability of this competing explanation for the results, I report separate analyses with statistical control added for democratic maturity. To gauge this factor, I obtained the DURATION variable from the Polity III (version 98) dataset, which gives a count for the number of years since a nation's last abrupt change of institutions, or the year, 1900.<sup>14</sup> Because the maturing impact

<sup>14</sup> For the years 1950 to 1954 the durability data are missing in the dataset. I filled in these four years by extrapolating backwards in time and noting abrupt changes of regime.

of time naturally diminishes with time, I took the natural logarithm of this term (+ 1). In accordance with the “weakest link” principle, the variable *Democratic Maturity* is the product of Democracy Low and DURATION of the less democratic state. If both states share the same value of democracy, I used the DURATION value of the less mature state.

### *c. Alliance*

As discussed above, the model predicts alliances to form among democracies with developed market economies, a hypothesis subsequently confirmed (Mousseau, 2002c). This means that the presence of an alliance is, like democratic maturity, an intervening rather than confounding factor in any examination of market democracy on international behavior, and thus statistical control for it is not appropriate. If developed democracy is found to have a positive impact on voting agreement, however, it is plausible that this pattern may be explained by common interests and preferences caused not by their common infrastructures, but by a common enemy during the Cold War (Farber and Gowa, 1997). Therefore, to assess the viability of this competing explanation for the results, I report separate analyses with control added for alliances. With data originating with the Correlates of War (Small and Singer, 1969), revised by Bennett (1997), and obtained from the EUGene data generation and management program (Bennett and Stam, 2000), *Alliance* equals 1 if the two states are linked by a mutual defense treaty, neutrality pact, or entente, and 0 otherwise.

### *d. Joint Satisfaction*

If market democracy is found to have a positive impact on voting agreement, an alternative explanation for the results is joint satisfaction with the status quo (Kugler and Lemke, 1996; Lemke, 2002). Lemke and Reed (1996) argue that if democratic states impose fewer domestic rents (Lake, 1992; Brawley, 1993), then a democratic hegemon—the U.S. through the period to be analyzed—would create and enforce a “liberal” international system. Other democracies, in turn, would tend to agree with the U.S.-enforced liberal order, and thus democracies would tend to agree on global issues.

As with democratic maturity and alliance formation, however, the model herein predicts market development to stabilize democratic institutions, and cause market democracies to both ally and agree on global issues. This means that, with the hegemon being a market democracy, satisfaction with the status quo is a predicted outcome. However, joint satisfaction with the status quo is also a plausible alternative explanation for any positive impact of market democracy on voting agreement. To assess this plausibility, I follow Lemke and Reed (1996) and measure “satisfaction with the status quo” with a state’s alliance portfolio similarity with the hegemon (the U.S. during the UN period); only I use *S* (rather than *Tau β*, as recommended by Signorino and Ritter, 1999). I obtained this variable from the EUGene data generation program (Bennett and Stam, 2000). Since two states can only be as jointly satisfied as the less satisfied one, I assess dyadic joint satisfaction by gauging the level of the less satisfied state, a variable I call *Joint Satisfaction*.

## **Analyses and Results**

The merging of the UN roll call similarity, democracy, development, and trade data yields 94,305 nonmissing observations, containing 4,839 dyadic cross-sections of UN member states over the 1950 to 1991 period.<sup>15</sup> While pooling the data allows us to test the impacts of the independent variables across both time and space

<sup>15</sup> These statistics were obtained after dropping the year 1964 from the analysis, as roll call data for this year were interpolated from the years 1963 and 1965.

simultaneously, pooling does raise the specters of autocorrelation and heteroscedasticity.<sup>16</sup> One common solution to this problem is to estimate using feasible generalized least squares (FGLS). However, Beck and Katz (1995) have shown that FGLS can lead to underestimations of the true variability of standard errors and thus “extreme over-confidence” (635). This problem is particularly acute when data are cross-sectionally dominant (644–45). With 4,839 cross-sections over 41 years, the UN data are especially cross-sectionally dominant, suggesting that autocorrelation within units is less of a threat than contemporaneous correlation across panels (Stimson, 1985:926). Consider, for instance, that some years may have fewer controversial issues raised in the General Assembly than others, and thus have higher rates of agreement (see also Lemke, 2002:103).

To account for such autocorrelation, Beck and Katz (1995) recommend combining ordinary least squares parameter estimates with panel-corrected standard errors (PCSEs). I follow this recommendation here, and report estimates of standard errors assuming that the disturbances are heteroscedastic and contemporaneously correlated across panels. However, a perusal of the data shows that many panels have multiple years of missing data, with the result that many panel covariance estimates are drawn from just one common year. Moreover, these missing data appear to be systematic, with fewer dyads containing countries from Eastern Europe and the post-colonial states. To obtain some balance in the panels whilst enhancing the representative integrity of the data, I dropped those panels with 1 or more years of missing data if the dyad contained a state from the over-represented regions of Western Europe, Scandinavia, Latin America, or the European settler states of the U.S., Canada, Australia, or New Zealand. However, if a panel contained at least one state from Eastern Europe I allowed up to 20 years of missing data (and this way included two Eastern European states, the USSR and Rumania). For the rest of the world I allowed up to 13 years of missing data, and in this way included a large number of post-colonial regimes. These operations yielded 25,672 observations containing 789 cross-sections over the 1950 to 1991 period.<sup>17</sup> Finally, to ease interpretation of the parameter estimates and standard errors, I centered the democracy and development variables on their medians. Statistics for all the variables are reported in Appendix II, and a correlation matrix of the independent variables is reported in Appendix V.

The first model in Table 1 reports the separate estimates of democracy (Polity data) and development (GDP data) on voting agreement in the UN General Assembly (using **S**). As can be seen, all the democracy and development coefficients are quite significant, indicating that these dimensions have an important impact on voting agreement among UN member states. The negative direction of the Mixed Democracy coefficient (−0.22) indicates that institutional dissimilarity is associated with a tendency toward disagreement in the Assembly. The same appears for the Mixed Development (−0.34) coefficient: increasing economic dissimilarity appears

<sup>16</sup> The traditional test for first-order autocorrelation, the Durbin-Watson statistic, is not appropriate for pooled data (Stimson, 1985:921). However, it is reasonable to assume the presence of autocorrelation and heteroscedasticity in analyses of pooled data (Beck and Katz, 1995:634).

<sup>17</sup> The result left 69% of the countries in the data outside of Western Europe and the settler countries. See Appendix III for a list of the countries analyzed. An additional benefit of reducing the number of cross-sections is that it reduces the immense computational cost of combining OLS with PCSEs. In fact, few standard statistical packages offer the capability of combining OLS with PCSEs, and even with the software an analysis of the full dataset is beyond the capacities of most late-model desk tops. To perform the analyses herein I used *Stata7 Special Edition*, which has the capability of analyzing larger matrices. With the “xtpcse” command, I used the “pairwise” option to compute the covariances using all available observations (time periods) that are common to any two panels. Because autocorrelation and heteroscedasticity affect estimates of standard errors but not parameters, I tested for any systematic effect caused by missing data in the panels by analyzing the entire dataset of 94,305 observations using ordinary least squares with robust (Huber-White) standard errors assuming independence across, but not within, cross-sections. I report these results in Appendix IV, where we can see that all the parameters are in the same direction and with similar values as reported in key model 2 in Table 1.

TABLE 1. Regressions of Dyadic Democracy, Development, and Their Interaction on Roll Call Agreement at the United Nations General Assembly<sup>a</sup>

Variable	Model 1: Additive			Model 2: Interactive			Model 3: Using Tau $\beta^b$			Model 4: Alternative Xs <sup>c</sup>		
	B	SE	t	B	SE	t	B	SE	t	B	SE	t
Shared democracy <sup>d</sup>	0.18	0.03	5.9	0.10	0.03	3.4	0.24	0.03	8.7	0.09	0.03	2.8
Mixed democracy <sup>e</sup>	-0.22	0.02	-9.7	-0.19	0.02	-8.4	-0.07	0.02	-3.9	-0.23	0.02	-11.0
Shared development <sup>f</sup>	0.28	0.02	14.0	0.15	0.02	6.4	0.10	0.02	5.5	-0.08	0.04	-2.0
Mixed development <sup>g</sup>	-0.34	0.04	-9.5	-0.36	0.04	-9.6	-0.35	0.02	-16.9	-0.29	0.03	-8.9
Shared democracy * Shared development	—	—	—	0.18	0.02	9.2	0.29	0.02	15.3	0.19	0.02	10.2
Intercept	-0.37	0.06	-5.9	-0.40	0.07	-6.0	-0.31	0.04	-7.7	-0.28	0.06	-4.3
R-Square	0.255			0.284			0.407			0.264		

<sup>a</sup>Linear regression using panel-corrected standard errors to correct for contemporaneous correlation across panels. Sigma computed by pairwise selection. 311,655 estimated covariances; 789 dyadic cross-sections; N = 25,672.

<sup>b</sup>N = 25,339.

<sup>c</sup>Democracy gauged with Vanhanen's index (2000); development gauged with energy consumption per capita. N = 25,276.

<sup>d</sup>Level of democracy of the less democratic state.

<sup>e</sup>Level of democracy of the more democratic state.

<sup>f</sup>Level of development of the less developed state.

<sup>g</sup>Level of development of the more developed state.

to be associated with a tendency toward less agreement in the Assembly. Since the variables are standardized, their coefficients are directly comparable, and the large size of the Mixed Development coefficient indicates that dissimilarity in level of development is the strongest predictor of disagreement in the General Assembly. Nevertheless, the positive directions of the Shared Democracy (0.18) and Shared Development (0.28) coefficients indicate that both joint democracy and joint development are associated with roll call agreement.

The second model in Table 1 breaks new ground by adding the interactive term for market democracy, Shared Democracy\*Shared Development (using *S* and the Polity and GDP data). As can be seen, the interactive coefficient is very significant and positive (0.18). This is a major finding, for it indicates that there is an interaction of democracy and development on voting agreement, and thus all estimates without the multiplicative term are underspecified (Friedrich, 1982). Notably, both constituent coefficients, Shared Democracy (0.10) and Shared Development (0.15), are less robust in model 2 compared to model 1, suggesting that voting agreement among democracies and developed states may be a function not of democracy and development, but of the interaction of these factors. Still, the conditional relationship between Shared Democracy and Shared Development and the interactive term means that the coefficients and standard errors for each of these constituent terms applies only when the other has a value of zero (the median). Direct interpretation is also impeded by the complex mathematical relationship among these terms. Therefore, to interpret the direction and strength of each constituent term across the full range of values of the other, I computed the conditional effects for a pair of UN members in 1991 and report the results in Figure 2.

The vertical dimension in Figure 2 presents the Gartzke et al. (1999) *S* measure of voting agreement measured in Z-scores around the median. Since states that are both democratic are also institutionally similar, to see the impact of joint democracy above and beyond the impact of institutional similarity, the horizontal dimension in Figure 2 assumes the condition of perfect institutional similarity: that both states



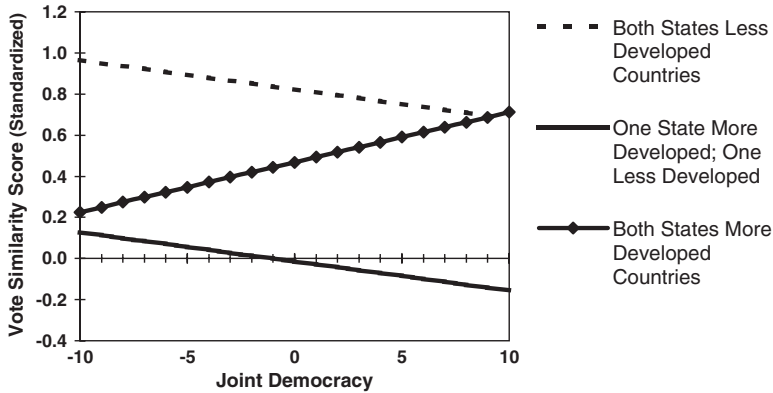


FIG. 2. How the Economy Conditions the Impact of Democracy on Voting Agreement in the United Nations General Assembly

have the same level of democracy (this is why all three intercepts are above the median). Variation along this axis will thus reflect any impact of joint democracy beyond institutional similarity. The democracy scale presented, which ranges from  $-10$  to  $10$ , is also empirically meaningful: among the cases analyzed, 48% have values of Shared Democracy less than or equal to  $-7$ , and 29% have Shared Democracy scores greater than or equal to  $7$ . To reflect the real world on the economic dimension, I define a “more developed country” (MDC) as having a GDPpc equal to the market democracy average in 1991<sup>18</sup> (a GDPpc of \$12,960, about the level of Austria that year), and a “less developed country” (LDC) as having a GDPpc equal to the average for all the other states in 1991 (GDPpc of \$2,651, about the level of Algeria that year).

As can be seen in Figure 2, the impact of joint democracy on roll call agreement at the UN General Assembly is very much conditioned by a dyad’s economic circumstances. Among mixed-developed dyads (with one state having a GDPpc of \$2,651 and the other \$12,960), increasing joint democracy appears to have a negative impact on voting agreement. A movement across the scale from joint democracy of  $-10$  to  $10$  is associated with a decrease from a Z-score of  $0.13$  to  $-0.16$ , or about  $0.3$  standard deviations. As can be seen, this negative impact of joint democracy on voting agreement is estimated as the same when both states are LDCs, only the intercept is higher (at  $Z = 0.96$ ). As discussed above, since the 1960s the LDCs have held the majority in the General Assembly, and these countries regularly propose resolutions on issues of development (many benign)—and thus LDCs regularly agree on many resolutions before the Assembly. Nevertheless, whether just one or both countries in a dyad are LDCs, increasing joint democracy appears to have a negative impact on roll call agreement. This negative impact of institutional democracy is probably a consequence of domestic pressures on elected leaders of LDCs to pursue in-group, parochial agendas at the UN. Since it takes two domestic audiences to agree, joint democracy is associated with increasing agreement in neither joint LDC nor mixed-developed dyads.

In contrast, among the MDCs increasing joint democracy appears to have a robust positive impact on agreement in the General Assembly. A movement across the democracy scale is associated with an increase in roll call agreement by about one-half of a standard deviation. Closer examination shows that the negative impact of joint democracy on voting agreement becomes positive when the less developed

<sup>18</sup> That is, Australia, New Zealand, Japan, the United States, Canada, and all the nations in Western Europe and Scandinavia.

state has a GDPpc of about \$4,750—about the level of Argentina in 1991. It is notable that this level of GDPpc is not far from the cut-off point (\$8,050) I found democratic states to be more rather than less likely to engage each other in intense forms of interstate cooperation (Mousseau, 2002a:157).<sup>19</sup> Using the standard cut-off point of “7” for identifying democracies (Jagers and Gurr, 1995:474), the income point of \$4,750 yields the prediction that the jointly poorest 18% of joint democratic (and institutionally similar) dyads are *less* likely than other states to agree in the General Assembly. While joint democratic LDCs ( $Z = 0.68$ ) tend to agree about as much as joint democratic MDCs ( $Z = 0.71$ ), this is clearly a consequence of the overall tendency for LDCs to agree on resolutions at the UN—not a consequence of their joint democracy. The coefficients in model 2 illustrated in Figure 2 thus clearly confirm the test hypothesis that the impact of joint democracy on voting agreement in the UN General Assembly is conditioned on levels of development.

It is notable that, among the three illustrated economic conditions in Figure 2, the joint MDC autocracies ( $Z = 0.23$ ) are about as likely to agree as the mixed-developed autocracies ( $Z = 0.13$ ). This suggests the notable result that previous reports of economic similarity in voting agreement may be the consequence of agreement among the LDCs alone. The autocratic MDCs tend to have state and feudalistic integrated economies (otherwise they would democratize)—such as the Soviet bloc communist states and the oil-rich monarchies. The leaders of these states are thus likely to be more parochial and more in-group oriented than elected leaders of states with market-oriented economies—and thus more zero-sum oriented, and generally disagreeable, in their foreign policies.<sup>20</sup>

Models 3 and 4 in Table 1 check for measurement error. To render the results herein directly comparable with previous studies of democracy and voting agreement (Oneal and Russett, 1999; Russett and Oneal, 2001:232), model 3 uses the Tau  $\beta$  measure of association in assessing roll-call similarity. As can be seen, the interactive coefficient Shared Democracy \* Shared Development is very significant and positive (0.29), indicating that the results herein are not unique to the **S** indicator of voting agreement.

Model 4 re-estimates model 2 using alternative indicators for the crucial factors of democracy and development: Vanhanen’s (2000) measure of democracy, and energy consumption per capita to assess development (using **S**). In this way, the analyses are checked with the highest possible level of measurement validity (Bailey, 1994:69–71). As can be seen, the interactive term appears positive (0.19) and significant. Models 3 and 4 thus show that the results are not the likely result of epistemic error in the key concepts of democracy, economic development, or voting agreement.

As seen in Figure 2, the absence of separate joint democratic and joint development effects appears after controlling for institutional and economic similarity effects, which are indicated with the significant and negative Mixed Democracy and Mixed Development coefficients in models 1–4 in Table 1. In this way, the analyses support the conclusion that, *beyond* institutional and economic similarity, neither democracy nor development causes states to vote alike. The interaction of both democracy and development, however, is clearly associated with an increasing tendency to agree on matters before the UN General Assembly. This outcome is contrary to previous reports of a tendency for all democracies to vote alike (Oneal and Russett, 1999; Russett and Oneal, 2001:232), and confirms

<sup>19</sup> Moreover, both of these minimum conditions (\$8,050 for cooperation and \$4,750 for voting alike) surround the level (\$6,000) identified by Przeworski et al. (1997:305) at which democratic institutions are “certain to survive”—thus empirically linking two major research programs in global politics.

<sup>20</sup> Of course, the behavior of autocratic leaders is less predictable than the behavior of democratic leaders, as the latter are more constrained by observable domestic norms and values.

theoretical expectations that the voters in the market democracies tend to think alike. What about alternative explanations?

#### *Further Tests*

As discussed, the theory yields a large number of novel and critical empirical predictions; together these predictions identify a number of factors as not independent but (at least partially) explained. These factors include trade interdependence, democratic institutional maturity, alliance formation, and satisfaction with the status-quo among nations with developed market economies. In this way, these factors are intervening ones in the analyses herein, and thus inclusion on the right-hand side is not appropriate (King et al., 1994:173). Nevertheless, these intervening factors rest on plausible competing theories that also offer alternative explanations for the results.

To assess the efficacy of these alternative explanations, model 1 in Table 2 reports a re-estimate of model 2 in Table 1 with control added for Trade Interdependence. As can be seen, the coefficient is positive and significant (8.14), indicating that higher levels of interdependence are associated with voting agreement, as reported by Russett and Oneal (2001:ch. 6). The interactive term for Market Democracy, however, remains stable and significant (0.17). Thus, even if the impact of trade on voting agreement is entirely independent of the impact of market democracy on trade, trade is highly unlikely to explain the impact of market democracy on voting agreement.

The second model in Table 2 adds control for Democratic Maturity. As can be seen, the Democratic Maturity coefficient is positive and significant (0.0). This is consistent with institutional normative as well as cultural materialist expectations that, over time, institutions affect norms (Dixon, 1994; Diamond, 1997:xix). The interactive term for Market Democracy, however, remains stable and significant (0.17). The results thus support both explanations. As discussed, this outcome is not contradictory, as the models are not mutually exclusive. Given that a large number of roll call votes involve setting the agenda on procedural matters—such as the election of the Assembly president and 21 vice presidents—representatives from stable institutional democracies, regardless of their domestic economic conditions, may share common notions on how to proceed in the democratically run Assembly. Nevertheless, *beyond* democratic institutional maturity, the interactive term indicates that the developed democracies have a pattern of agreement on global issues.

The third model in Table 2 adds control for alliances among UN members. As can be seen, the Alliance coefficient is positive and significant (0.19). This concurs with the view that strategic interests influence preference orderings in the General Assembly. Nevertheless, the interactive term for Market Democracy remains stable and significant (0.17). We cannot tell here whether strategic interests affect preferences or preferences affect interests—rendering interpretation of the Alliance coefficient problematic. What is not problematic, however, is the result that *even if strategic interests determine voting preferences*, model 3 shows that the market democracies share common positions at the UN, above and beyond strategic interests.

The fourth model in Table 2 adds control for joint satisfaction of the status quo. As can be seen, the coefficient for Joint Satisfaction is positive and significant (1.15). This supports the view that shared alliance similarity with the (democratic) hegemon—a common strategic interest in the status quo—influences voting agreement. Nevertheless, the interactive term for Market Democracy remains robust and significant (0.16). As with alliances, we cannot tell here whether common strategic interests affect preferences or preferences affect interests—rendering interpretation of the Joint Satisfaction coefficient problematic. What is not problematic, however, is the result that *even if common strategic interests in the status quo*

TABLE 2. Estimates of Dyadic Democracy, Development, and Their Interaction on Roll Call Agreement at the United Nations General Assembly, with Consideration of Control Variables<sup>a</sup>

Variable	Model 1			Model 2			Model 3			Model 4		
	B	SE	t	B	SE	t	B	SE	t	B	SE	t
Shared democracy <sup>b</sup>	0.10	0.03	3.4	0.05	0.05	1.0	0.09	0.03	3.2	0.05	0.03	1.9
Mixed democracy <sup>c</sup>	-0.19	0.02	-8.4	-0.19	0.02	-8.4	-0.17	0.02	-7.4	-0.18	0.02	-8.4
Shared development <sup>d</sup>	0.15	0.02	6.0	0.15	0.02	6.4	0.15	0.02	6.3	0.13	0.02	6.0
Mixed development <sup>e</sup>	-0.36	0.04	-9.6	-0.36	0.04	-9.6	-0.35	0.04	-9.2	-0.42	0.03	-14.6
Shared democracy*	0.17	0.02	8.7	0.17	0.02	7.3	0.17	0.02	8.2	0.16	0.02	7.8
Shared development	8.14	0.64	12.8	—	—	—	—	—	—	—	—	—
Trade interdependence	—	—	—	0.00	0.00	2.2	—	—	—	—	—	—
Democratic maturity	—	—	—	—	—	—	0.19	0.05	3.9	—	—	—
Alliance	—	—	—	—	—	—	—	—	—	1.15	0.16	7.3
Joint satisfaction	—	—	—	—	—	—	—	—	—	—	—	—
Intercept	-0.41	0.07	-6.1	-0.43	0.06	-7.1	-0.40	0.07	-6.0	-0.81	0.09	-9.1
R-Square	0.288			0.285			0.288			0.309		

<sup>a</sup>Linear regression using panel-corrected standard errors to correct for contemporaneous correlation across panels. Sigma computed by pairwise selection. 311,655 estimated covariances; 789 dyadic cross-sections; N = 25,672.

<sup>b</sup>Level of democracy of the less democratic state.

<sup>c</sup>Level of democracy of the more democratic state.

<sup>d</sup>Level of development of the less developed state.

<sup>e</sup>Level of development of the more developed state.

determine voting preferences, model 4 shows that the market democracies share common positions at the UN, above and beyond joint satisfaction.

The evidence thus indicates that, separately, neither democracy nor development has a positive impact on roll call agreement among members of the UN General Assembly. Only when combined do these factors promote agreement among nations. It also seems that this positive interaction of democracy and development is an unlikely result of measurement error, trade interdependence, democratic institutional maturity, strategic interests, or joint satisfaction with the status quo. Rather, it seems that this result is the consequence of something related to the presence of both economic development and democracy. The analyses thus support the view that shared preferences for individual freedom, equity, the rule of law, and universal trust cause market-oriented democracies to think alike and share similar preferences in global affairs.

### Implications and Conclusion

I began this article with the recognition that while media pundits and political leaders regularly emphasize the “like-minded” nature of the “market-oriented democracies” (Cohen, 1998), scholarly models of global politics characteristically treat the formation of interests exogenously. Against these views, I demonstrated how the direct effects of values and interests can be empirically modeled. Drawing on interdisciplinary cultural materialist ontology, I showed how market-based economic development can give rise to the legitimacy of governing institutions that enforce contracts equally, and a political culture that respects democratic-made common law, individual freedom, legal equality, and universal extensions of trust. I then showed how if the market democracies share common interests and preferences as predicted, then the peace among them may rest with more than simply a lack of coercion, but with the presence of common interests.

I then advanced the novel contingent claim that, if the democratic peace is a function of common interests among the market democracies, then such

democracies—but not necessarily the other democracies—should tend to vote alike at the UN General Assembly. Beyond the dearth of international relations theory that explicates interests, neither cultural nor structural explanations for political development make this empirical claim (O'Donnell, 1973; Linz and Stepan, 1997). Similarly, neither institutional (structural or normative) nor classical-liberal explanations for the democratic peace make such a claim (Lake, 1992; Dixon, 1994; Fearon, 1994; Bueno de Mesquita et al., 1999; Russett and Oneal, 2001)—and all would be hard-pressed to explain it. Previous empirical studies have identified separate economic and institutional dimensions in voting agreement at the UN (Kim and Russett, 1996; Oneal and Russett, 1999; Russett and Oneal, 2001), but no one has examined whether the phenomenon of democratic agreement may be conditioned on economic development.

With analysis of roll call votes of UN members from 1950 to 1991, I found robust support for this hypothesis. It appears that democracies with advanced economies have a very significant history of agreement in the UNGA. It must be emphasized that this pattern appears while controlling for trade interdependence, democratic maturity, alliances, satisfaction with the status quo, and institutional and economic similarity among nations. Thus, *beyond* many leading alternative explanations and *beyond* economic and institutional similarity (Kim and Russett, 1996), it seems that neither shared democracy nor shared development promotes agreement among nations. Only when both occur together do these factors promote common preferences. Given that virtually all developed democracies in history have had predominantly market economies, the results support the hypothesis that the leaders of market democracies (but not other democracies) share common preferences on the global policy spectrum. This is consistent with the theory's expectations that liberal political culture arises with market development, and from this political culture emerges common interests, cooperation, and friendship among nations. The only primary and observable missing link in the predicted chain of causation—that market development promotes liberal values—has already been confirmed in several studies and contains no serious detractors (Polanyi, 1957 [1944]; Braudel, 1979; Hofstede, 1984; Inglehart, 1997:175).

Still, correlation does not mean causation, and thus the results are susceptible to alternative explanations. As discussed above, some have suggested education as a source of cultural change (Lerner, 1958; Inkeles and Smith, 1974); others draw on diffusionist (Chu et al., 1997) or evolutionary (Parsons, 1964) ontologies. One reviewer even suggested the possibility of simultaneity—that voting agreement may cause joint democracy and joint development. For now, it is by convention that we assess a theory according to its relative explanatory power, degree of anomalies, generation of novel hypotheses, and evidence. In this light, this article demonstrates the promise of the market norms model. This is because the theory yields a comparatively wide range of explanatory power, deducing not only the character and origin of liberal values, but in the process linking two leading puzzles in global politics: the association of democratic stability with development, and democracy with peace. Just in the field of International Relations, novel and nontrivial facts include the predictions that the market democracies (but not necessarily the other democracies) tend to initiate, join, and submit to international organizations, form equitable alliance ties, engage in the highest levels of interstate cooperation, and rarely, if ever, engage each other in violence. The latter three predictions have already been borne out by the evidence (Mousseau, 2000, 2002a, 2002c; Mousseau et al., 2003). With this article, another nontrivial and novel empirical claim is confirmed: the market democracies—but not the other democracies—share common preferences on global issues. Beyond scientific standing, cultural materialist ontology also offers a simple and coherent framework for linking a great deal of the theory and research in the social sciences, and the theory of market economy and society drawn from the ontology is expressly

interdisciplinary and crosses levels of analyses in International Relations. Clearly, this perspective has promise and warrants more attention by earnest scholars.

According to conventional wisdom in International Relations, the apparent pursuit of “democracy, human rights, and the rule of law” by the developed market democracies is not because these states prefer democracy, human rights, and the rule of law—but because these pursuits are part of a larger strategy aimed at accruing more power, wealth, or some other unvarying goal. Against convention, I have shown how the pursuit of democracy, human rights, and the rule of law by the market democracies may be because these states actually value democracy, human rights, and the rule of law. In this way, the evidence supports the conclusion, seemingly obvious to leaders of market democracies addressing the UN General Assembly, that “the consolidation of market democracy ... is clearly the strongest form of preventive diplomacy.”<sup>21</sup>

### Appendix I. Descriptive Statistics of Dependent Variables Before Centering

<i>Variable</i>	<i>N</i>	<i>Mean</i>	<i>Median</i>	<i>Std. Dev.</i>	<i>Skewness</i>	<i>Minimum</i>	<i>Maximum</i>
SUN	25,672	0.42	0.44	0.31	-0.46	-0.66	1.00
TAUBUN	25,339	0.19	0.15	0.34	0.20	-0.83	1.00

### Appendix II. Descriptive Statistics of the Variables

<i>Variable</i>	<i>Mean</i>	<i>Median</i>	<i>Std. Dev.</i>	<i>Minimum</i>	<i>Maximum</i>
Shared democracy	0.57	0.00	1.00	-0.52	2.10
Mixed democracy	-0.41	0.00	1.00	-4.07	0.00
Shared development	0.12	0.00	1.00	-2.09	2.42
Mixed development	-0.28	0.00	1.00	-3.98	1.11
Shared democracy * Shared development	0.54	0.09	1.39	-4.20	5.08
Trade interdependence	0.00	0.00	0.01	0.00	0.17
Democratic maturity	26.08	12.88	27.10	0.00	94.96
Alliance	0.15	0.00	0.36	0.00	1.00
Satisfaction SQ	0.38	0.38	0.17	-0.07	0.82
<i>Shared democracy<sup>a</sup></i>	0.65	0.00	1.00	-0.07	4.14
<i>Mixed democracy<sup>a</sup></i>	-0.27	0.00	1.00	-2.60	1.32
<i>Shared development</i>	0.49	0.00	1.00	-0.19	6.86
<i>Mixed development</i>	0.09	0.00	1.00	-1.37	4.26
<i>Shared democracy * Shared development<sup>a</sup></i>	0.94	0.01	2.31	-0.31	18.16
SUN	-0.05	0.00	1.00	-3.54	1.82
TAUBUN <sup>b</sup>	0.13	0.00	1.00	-2.91	2.53

Variables in italics are from the alternative indicators of Vanhanen's (2000) measure of democracy and energy consumption data for development. N = 25,672; <sup>a</sup>N = 25,276; <sup>b</sup>N = 25,339.

<sup>21</sup> U.S. President William Clinton, “Address by the President to the 48th session of the United Nations General Assembly, 27 September 1993.” See footnote 2.

**Appendix III. List of Countries in the Primary Dataset Analyzed, Containing 798 Cross-sectional Clusters**

Australia	Iran	Rumania
Belgium	Iraq	Russia
Burma	Israel	Rwanda
Cameroon	Ivory Coast	Saudi Arabia
Canada	Japan	Senegal
Central African Republic	Luxemburg	Sri Lanka
Colombia	Malagasy Republic	Sweden
Costa Rica	Malaysia	Syria
Denmark	Mauritania	Thailand
Ecuador	Mexico	Togo
Egypt	Morocco	Tunisia
Ethiopia	Netherlands	Turkey
France	New Zealand	United Kingdom
Guinea	Norway	United States
Iceland	Pakistan	Venezuela
India	Paraguay	
Indonesia	Philippines	

**Appendix IV. Ordinary Least Squares Regression of Model 2 in Table 1 Using all Non-missing Data, Robust Standard Errors Clustered by Dyad**

<i>Variable</i>	<i>B</i>	<i>SE</i>	<i>t</i>
Shared democracy	0.01	0.01	1.0
Mixed democracy	-0.27	0.01	-23.8
Shared development	0.09	0.01	6.6
Mixed development	-0.35	0.01	-29.7
Shared democracy * Shared development	0.12	0.01	12.6
Intercept	-0.45	0.02	-29.6

N = 94,305; Number of clusters = 4,839; R-square = 0.26

Appendix V. Pearson Correlation Coefficients of the Independent Variables

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Shared democracy	1.00													
Mixed democracy	0.32	1.00												
Shared development	0.47	0.20	1.00											
Mixed development	0.23	0.56	0.40	1.00										
Shared democracy *	0.56	0.14	0.68	0.28	1.00									
Shared development						1.00								
Trade	0.20	0.06	0.28	0.11	0.31	1.00								
interdependence							1.00							
Democratic maturity	0.87	0.27	0.56	0.27	0.69	0.27	1.00							
Alliance	0.25	-0.19	0.25	-0.08	0.37	0.23	0.29	1.00						
Satisfaction SQ	0.45	0.24	0.46	0.44	0.45	0.18	0.46	0.30	1.00					
Shared democracy	0.86	0.27	0.60	0.26	0.73	0.31	0.85	0.30	0.47	1.00				
Mixed democracy	0.31	0.78	0.29	0.67	0.25	0.13	0.31	-0.13	0.32	0.34	1.00			
Shared development	0.48	0.19	0.75	0.32	0.76	0.35	0.63	0.36	0.41	0.61	0.27	1.00		
Mixed development	0.22	0.39	0.32	0.68	0.31	0.15	0.29	0.11	0.35	0.23	0.38	0.37	1.00	
Shared democracy *	0.59	0.16	0.64	0.25	0.86	0.43	0.73	0.41	0.42	0.78	0.27	0.84	0.31	1.00
Shared development														

Variables in italics are from the alternative indicators of Vanhanen's (2000) measure of democracy and energy consumption data for development.



## References

- ALMOND, G. A., AND S. VERBA (1963) *The Civic Culture: Political Attitudes and Democracy in Five Nations*. Princeton, NJ: Princeton University Press.
- AXELROD, R. (1984) *The Evolution of Cooperation*. New York: Basic Books.
- BAILEY, K. D. (1994) *Methods of Social Research*, 4th ed. New York: The Free Press.
- BECK, N., AND J. KATZ (1995) What to Do (and Not to Do) with Time-Series Cross-sectional Data. *American Political Science Review* **89**:634–647.
- BECK, N., J. KATZ, AND R. TUCKER (1998) Taking Time Seriously in Binary Time-Series–Cross-Section Analysis. *American Journal of Political Science* **42**:1260–1288.
- BENNETT, D. S., AND A. STAM (2000) EUGene: A Conceptual Manual. *International Interactions* **26**: 179–204.
- BENNETT, S. D. (1997) Testing Alternative Models of Alliance Duration, 1816–1984. *American Journal of Political Science* **41**:846–879.
- BENNETT, S. D., AND A. C. STAM III (1996) The Duration of Interstate Wars: 1812–1985. *American Political Science Review* **90**:239–257.
- BLALOCK, H. M. JR. (1979) *Social Statistics*, 2nd ed. New York: McGraw-Hill.
- BRAUDEL, F. (1979) *Afterthoughts on Material Civilization and Capitalism*, translated by P. Ranum. Baltimore, MD: Johns Hopkins University Press.
- BRAWLEY, M. R. (1993) Regime Types, Markets and War: The Importance of Pervasive Rents in Foreign Policy. *Comparative Political Studies* **26**:178–197.
- BREMER, S. A. (1992) Dangerous Dyads: Conditions Affecting the Likelihood of Interstate War, 1816–1965. *Journal of Conflict Resolution* **36**:309–341.
- BUENO DE MESQUITA, B. (1981) *The War Trap*. New Haven, CT: Yale University Press.
- BUENO DE MESQUITA, B., AND D. LALMAN (1992) *War and Reason: Domestic and International Imperatives*. New Haven, CT: Yale University Press.
- BUENO DE MESQUITA, B., J. D. MORROW, R. M. SIVERSON, AND A. SMITH (1999) An Institutional Explanation of the Democratic Peace. *American Political Science Review* **93**:791–807.
- BURKHART, R. E., AND M. S. LEWIS-BECK (1994) Comparative Democracy: The Economic Development Thesis. *American Political Science Review* **88**:111–131.
- CHU, Y., F. HU, AND C. MOON (1997) “South Korea and Taiwan: The International Context.” In *Consolidating the Third Wave of Democracies, Regional Challenges*, edited by L. Diamond, M. F. Plattner, Y. Chu and H. Tien, pp. 267–294. Baltimore, MD: Johns Hopkins University Press.
- COHEN, R. (1998) A Policy Struggle Stirs Within NATO. *The New York Times*, Nov. 28.
- DAHL, R. A. (1971) *Polyarchy: Participation and Opposition*. New Haven, CT: Yale University Press.
- DIAMOND, L. (1997) “Introduction: In Search of Consolidation.” In *Consolidating the Third Wave of Democracies*, edited by L. Diamond, M. F. Plattner, Y. Chu and H. Tien, pp. xiii–xlvii. Baltimore, MD: Johns Hopkins University Press.
- DIXON, W. J. (1993) Democracy and the Management of International Conflict. *Journal of Conflict Resolution* **37**:42–68.
- DIXON, W. J. (1994) Democracy and the Peaceful Settlement of International Conflict. *American Political Science Review* **88**:14–32.
- DOYLE, M. W. (1986) Liberalism and World Politics. *American Political Science Review* **80**:1151–1169.
- DURKHEIM, E. (1984[1893]) *The Division of Labour in Society*. Basingstoke, England: Macmillan.
- FARBER, H., AND J. GOWA (1997) Common Interests or Common Politics? Reinterpreting the Democratic Peace. *Journal of Politics* **59**:393–417.
- FEARON, J. D. (1994) Domestic Political Audiences and the Escalation of International Disputes. *American Political Science Review* **88**:577–592.
- FRIEDRICH, R. J. (1982) In Defense of Multiplicative Terms in Multiple Regression Equations. *American Journal of Political Science* **26**:797–833.
- FUKUYAMA, F. (1995) The Primacy of Culture. *Journal of Democracy* **6**:7–14.
- GARTZKE, E. (1998) Kant We All Just Get Along? Opportunity, Willingness and the Origins of the Democratic Peace. *American Journal of Political Science* **42**:1–27.
- GARTZKE, E. (1999) Preferences and the Democratic Peace. *International Studies Quarterly* **43**:83–114.
- GARTZKE, E., D. JO, AND R. TUCKER (1999) *The Similarity of UN Policy Positions 1946–96*. Version 1.17. Computer file.
- GLEDITSCH, N. P., AND H. HEGRE (1997) Peace and Democracy: Three Levels of Analysis. *Journal of Conflict Resolution* **41**:283–310.
- HARRIS, M. (2001[1979]) *Cultural Materialism: The Struggle for a Science of Culture*. Walnut Creek, USA: AltaMira Press.

- HENDERSON, E. A., AND R. TUCKER (2001) Clear and Present Strangers: The Clash of Civilizations and International Conflict. *International Studies Quarterly* 45:317–338.
- HENSEL, P. R., G. GOERTZ, AND P. F. DIEHL (2000) The Democratic Peace and Rivalries. *Journal of Politics* 62:1173–1188.
- HINCKLEY, R. H. (1992) *Peoples, Polls, and Policymakers: American Public Opinion and National Security*. New York: Lexington.
- HOFSTEDE, G. (1984) *Culture's Consequences: International Differences in Work Related Values*, abridged ed. London: Sage.
- HUNTINGTON, S. P. (1984) Will More Countries Become Democratic? *Political Science Quarterly* 99:193–218.
- HUNTINGTON, S. P. (1996) *The Clash of Civilizations and the Remaking of World Order*. New York: Simon and Schuster.
- HUNTINGTON, S. P. (2000) Try Again: A Reply to Russett, Oneal & Cox. *Journal of Peace Research* 37(5):609–611.
- INGLEHART, R. (1988) The Renaissance of Political Culture. *American Political Science Review* 82:1203–1230.
- INGLEHART, R. (1997) *Modernization and Postmodernization: Cultural, Economic, and Political Change in 43 Societies*. Princeton, NJ: Princeton University Press.
- INKELES, A., AND D. SMITH (1974) *Becoming Modern: Individual Change in Six Developing Countries*. Cambridge, MA: Harvard University Press.
- JAGGERS, K., AND T. R. GURR (1995) Tracking Democracy's Third Wave with the Polity III Data. *Journal of Peace Research* 32:469–482.
- JAMES, P., AND D. GOETZE, eds. (2001) *Evolutionary Theory and Ethnic Conflict*. Westport, CT: Praeger.
- JAMES, P., E. SOLBERG, AND M. WOLFSON (1999) An Identified Systemic Model of the Democracy–Peace Nexus. *Defense and Peace Economics* 10:1–37.
- KANT, I. (1982 [1795]) *Perpetual Peace*, translated and edited by L. W. Beck. New York: Bobbs-Merrill: Indianapolis.
- KEOHANE, R. O. (2001) Governance in a Partially Globalized World. *American Political Science Review* 95:1–13.
- KIM, S., AND B. RUSSETT (1996) The New Politics of Voting Alignments in the United Nations General Assembly. *International Organization* 50:629–652.
- KING, G., R. O. KEOHANE, AND S. VERBA (1994) *Designing Social Inquiry: Scientific Inference in Qualitative Research*. Princeton, NJ: Princeton University Press.
- KNOPE, J. W. (1998) How Rational Is the “Rational Public”? Evidence from U.S. Public Opinion on Military Spending. *Journal of Conflict Resolution* 42:544–571.
- KUGLER, J., AND D. LEMKE (1996) *Parity and War: Evaluations and Extensions of The War Ledger*. Ann Arbor: University of Michigan Press.
- LAKE, D. A. (1992) Powerful Pacifists: Democratic States and War. *American Political Science Review* 86:24–37.
- LEMKE, D. (2002) *Regions of War and Peace*. New York: Cambridge University Press.
- LEMKE, D., AND W. REED (1996) Regime Type and Status Quo Evaluations: Power Transition Theory and the Democratic Peace. *International Interactions* 22:143–164.
- LERNER, D. (1958) *The Passing of Traditional Society: Modernizing in the Middle East*. New York: Free Press.
- LEVI, M. (1997) *Consent, Dissent, and Patriotism*. Cambridge: Cambridge University Press.
- LEVY, J. S. (1988) Domestic Politics and War. *Journal of Interdisciplinary History* 18:345–369.
- LINZ, J. J., AND A. STEPAN (1997) “Toward Consolidated Democracies.” In *Consolidating the Third Wave of Democracies, Regional Challenges*, edited by L. Diamond, M. F. Plattner, Y. Chu and H. Tien, pp. 14–33. Baltimore, MD: Johns Hopkins University Press.
- LIPSET, S. M. (1959) Some Social Requisites of Democracy: Economic Development and Political Legitimacy. *American Political Science Review* 53:69–105.
- MACPHERSON, C. B. (1977[1962]) *The Political Economy of Possessive Individualism: Hobbes to Locke*. London: Oxford University Press.
- MAOZ, Z., AND B. RUSSETT (1993) Normative and Structural Causes of Democratic Peace, 1946–1986. *American Political Science Review* 87:624–638.
- MARTINES, L. (1979) *Power and Imagination: City-states in Renaissance Italy*. New York: Vintage Books.
- MCKEOWN, T. J. (2000) The Cuban Missile Crisis and Politics as Usual. *Journal of Politics* 62:70–87.
- MEAD, M. (1940) Warfare Is Only an Invention—Not a Biological Necessity. *Asia* 40:402–405.
- MORAVCSIK, A. (1997) Taking Preferences Seriously: A Liberal Theory of International Politics. *International Organization* 51:514–555.

- MORGENTHAU, H. (1985[1948]) *Politics Among Nations: The Struggle for Power and Peace*, 6th ed. New York: Knopf.
- MORROW, J. D. (1994) *Game Theory for Political Scientists*. Princeton, NJ: Princeton University Press.
- MOUSSEAU, D. Y. (2001) Democratizing with Ethnic Divisions: A Source of Conflict? *Journal of Peace Research* **38**:547–568.
- MOUSSEAU, M. (1998) Democracy and Compromise in Militarized Interstate Conflicts, 1816–1992. *Journal of Conflict Resolution* **42**:210–230.
- MOUSSEAU, M. (2000) Market Prosperity, Democratic Consolidation, and Democratic Peace. *Journal of Conflict Resolution* **44**:472–507.
- MOUSSEAU, M. (2002a) An Economic Limitation to the Zone of Democratic Peace and Cooperation. *International Interactions* **28**:137–164.
- MOUSSEAU, M. (2002b) “Globalization, Markets, and Democracy.” In *Globalization and Civilizations*, edited by M. Mozaffari, pp. 97–124. London: Routledge.
- MOUSSEAU, M. (2002c) Market Culture and Peace Among Nations: It’s the Market Democracies That Ally. Paper presented at the Annual Meeting of the American Political Science Association, Boston, Aug. 29 – Sept. 1.
- MOUSSEAU, M. (2003) Market Civilization and Its Clash with Terror. *International Security* **27**:5–30.
- MOUSSEAU, M., AND Y. SHI (1999) A Test for Reverse Causality in the Democratic Peace Relationship. *Journal of Peace Research* **36**:639–663.
- MOUSSEAU, M., H. HEGRE, AND J. R. ONEAL (2003) How the Wealth of Nations Conditions the Liberal Peace. *European Journal of International Relations* **9**:277–314.
- MURPHY, M. AND F. AND M. L. MARGOLIS (1995) *Science, Materialism, and the Study of Culture*. Gainesville: University Press of Florida.
- NORTH, D. (1981) *Structure and Change in Economic History*. New York: W. W. Norton.
- O’DONNELL, G. (1973) *Modernization and Bureaucratic–Authoritarianism: Studies in South American Politics*. Berkeley: University of California Press.
- ONEAL, J. R., AND J. L. RAY (1997) New Tests of the Democratic Peace Controlling for Economic Interdependence, 1950–1985. *Political Research Quarterly* **50**:751–775.
- ONEAL, J. R., AND B. RUSSETT (1999) Is the Liberal Peace Just an Artifact of Cold War Interests? Assessing Recent Critiques. *International Interactions* **25**:1–29.
- ONEAL, J. R., AND B. RUSSETT (2000) Why “An Identified Systemic Model of the Democracy–Peace Nexus” Does Not Persuade. *Defence and Peace Economics* **11**:197–214.
- OSTROM, E. (1990) *Governing the Commons: The Evolution of Institutions for Collective Action*. New York: Cambridge University Press.
- PAGE, B. I., AND R. Y. SHAPIRO (1992) *The Rational Public: Fifty Years of Trends in Americans’ Policy Preferences*. Chicago: University of Chicago Press.
- PARSONS, T. (1964) Evolutionary Universals in Society. *American Sociological Review* **29**:339–357.
- PARTELL, P. J., AND G. PALMER (1999) Audience Costs and Interstate Crises: An Empirical Assessment of Fearon’s Model of Dispute Outcomes. *International Studies Quarterly* **43**:389–405.
- POLANYI, K. (1957[1944]) *The Great Transformation: The Political and Economic Origins of Our Time*. Boston: Beacon Press.
- PRZEWORSKI, A., M. ALVAREZ, J. A. CHEIBUB, AND F. LIMONGI (1997) “What Makes Democracies Endure?” In *Consolidating the Third Wave of Democracies, Regional Challenges*, edited by L. Diamond, M. F. Plattner, Y. Chu, and H. Tien, pp. 295–311. Baltimore, MD: Johns Hopkins University Press.
- RAKNERUD, A., AND H. HEGRE (1997) The Hazard of War: Reassessing the Evidence for the Democratic Peace. *Journal of Peace Research* **34**:385–404.
- RAY, J. L. (2000) “Democracy: On the Level(s), Does Democracy Correlate with Peace?” In *What Do We Know About War*, edited by J. A. Vasquez, pp. 299–316. Lanham, MD: Rowman & Littlefield.
- RAYMOND, G. A. (1994) Democracies, Disputes, and Third-Party Intermediaries. *Journal of Conflict Resolution* **38**:24–42.
- REITER, D. (2001) Does Peace Nurture Democracy? *Journal of Politics* **63**:935–949.
- ROGOWSKI, R. (1974) *Rational Legitimacy: A Theory of Political Support*. Princeton, NJ: Princeton University Press.
- RUMMEL, R. J. (1995) Democracies ARE Less Warlike Than Other Regimes. *European Journal of International Relations* **1**:457–479.
- RUSSETT, B. (1993) *Grasping the Democratic Peace: Principles for a Post–Cold War World*. Princeton, NJ: Princeton University Press.
- RUSSETT, B., AND J. ONEAL (2001) *Triangulating Peace: Democracy, Interdependence, and International Organizations*. New York: W. W. Norton.

- RUSSETT, B., J. R. ONEAL, AND M. COX (2000) Clash of Civilizations, or Realism and Liberalism Deja Vu? Some Evidence. *Journal of Peace Research* **37**:583–609.
- SIGNORINO, C. S., AND J. M. RITTER (1999) Tau-b or Not Tau-b: Measuring the Similarity of Foreign Policy Positions. *International Studies Quarterly* **43**:115–144.
- SIMON, M. W., AND E. GARTZKE (1996) Political System Similarity and the Choice of Allies: Do Democracies Flock Together or Do Opposites Attract? *Journal of Conflict Resolution* **40**:617–635.
- SIVERTON, R. M. (1995) Democracies and War Participation. *European Journal of International Relations* **1**:481–489.
- SMALL, M., AND J. D. SINGER (1969) Formal Alliances, 1816–1965: An Extension of the Basic Data. *Journal of Peace Research* **6**:257–282.
- STAM, A. C. (1996) *Win, Lose or Draw: Domestic Politics and War*. Ann Arbor: University of Michigan Press.
- STIMSON, J. A. (1985) Regression in Space and Time: A Statistical Survey. *American Journal of Political Science* **29**:914–947.
- SUMMERS, R., AND A. HESTON (1991) The Penn World Table. Mark 5: An Expanded Set of International Comparisons, 1950–1988. *Quarterly Journal of Economics* **106**:327–368.
- TANDY, D. W. (1997) *Warriors into Traders: The Power of the Market in Early Greece*. Berkeley: University of California Press.
- TANDY, D. W., AND W. C. NEALE (1994) “Karl Polanyi’s Distinctive Approach to Social Analysis and the Case of Ancient Greece: Ideas, Criticisms, Consequences.” In *From Political Economy to Anthropology: Situating Economic Life in Past Societies*, edited by C. A. M. Duncan and D. W. Tandy, pp. 9–33. London: Black Rose Books Ltd.
- TYLER, T. R. (1990) *Why People Obey the Law*. New Haven, CT: Yale University Press.
- VAN BELLE, D. A., AND S. W. HOOK (2000) Greasing the Squeaky Wheel: News Media Coverage and U.S. Development Aid, 1977–1992. *International Interactions* **26**:321–346.
- VANHANEN, T. (2000) A New Dataset for Measuring Democracy, 1810–1998. *Journal of Peace Research* **37**:251–265.
- VASQUEZ, J. A. (1993) *The War Puzzle*. Cambridge: Cambridge University Press.
- WALTZ, K. N. (1959) *Man, the State, and War: A Theoretical Analysis*. New York: Columbia University Press.
- WALTZ, K. N. (1979) *Theory of International Politics*. New York: McGraw–Hill.
- WEBER, M. (1958[1904–5]) *The Protestant Ethic and the Spirit of Capitalism*, translated by T. Parsons. New York: Charles Scribner’s Sons.
- WENDT, A. (1999) *Social Theory of International Politics*. Cambridge: Cambridge University Press.
- WERNER, S., AND D. LEMKE (1997) Opposites Do Not Attract: The Impact of Domestic Institutions, Power, and Prior Commitments on Alignment Choices. *International Studies Quarterly* **41**:529–546.
- WOLFSON, M., J. PATRICK, AND E. J. SOLBERG (1998) “In a World of Cannibals Everyone Votes for War: Democracy and Peace Reconsidered.” In *The Political Economy of War and Peace*, edited by M. Wolfson, pp. 155–176. Boston: Kluwer Academic.
- WOOD, G. S. (1993) *The Creation of the American Republic: 1776–1787*. New York: W. W. Norton.