

Economic Interdependence and War: A Theory of Trade Expectations

Author(s): Dale C. Copeland

Source: *International Security*, Spring, 1996, Vol. 20, No. 4 (Spring, 1996), pp. 5-41

Published by: The MIT Press

Stable URL: <http://www.jstor.com/stable/2539041>

---

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at <https://about.jstor.org/terms>



The MIT Press is collaborating with JSTOR to digitize, preserve and extend access to *International Security*

JSTOR

# Economic Interdependence and War

## A Theory of Trade Expectations

Dale C. Copeland

**D**oes economic interdependence increase or decrease the probability of war among states? With the Cold War over, this question is taking on importance as trade levels between established powers such as the United States and Russia and emerging powers such as Japan, China, and Western Europe grow to new heights. In this article, I provide a new dynamic theory to help overcome some of the theoretical and empirical problems with current liberal and realist views on the question.

The prolonged debate between realists and liberals on the causes of war has been largely a debate about the relative salience of different causal variables. Realists stress such factors as relative power, while liberals focus on the absence or presence of collective security regimes and the pervasiveness of democratic communities.<sup>1</sup> Economic interdependence is the only factor that plays an important causal role in the thinking of both camps, and their perspectives are diametrically opposed.

Liberals argue that economic interdependence lowers the likelihood of war by increasing the value of trading over the alternative of aggression: interdependent states would rather trade than invade. As long as high levels of

---

*Dale C. Copeland is Assistant Professor in the Department of Government and Foreign Affairs at the University of Virginia.*

---

For their helpful comments on previous drafts of this article, I would like to thank Robert Art, V. Natasha Copeland, Michael Desch, Angela Doll, John Duffield, Matthew Evangelista, Richard Falkenrath, James Fearon, Joseph Grieco, Atsushi Ishida, Irving Lachow, Alastair Iain Johnston, Andrew Kydd, Jack Levy, Lisa Martin, Michael Mastanduno, John Mearsheimer, Andrew Moravcsik, John Owen, Paul Papayoanou, Stephen Rhoads, Gideon Rose, Richard Rosecrance, Len Schoppa, Herman Schwartz, Randall Schweller, Jitsuo Tsuchiyama, David Waldner, and Stephen Walt. This article also benefited from presentations at the Program on International Politics, Economics, and Security at the University of Chicago; the University of Virginia Department of Government's faculty workshop; the annual meeting of the American Political Science Association, Chicago, September 1995; the Olin security workshop at the Center for International Affairs, Harvard University; and the Center for Science and International Affairs, Harvard University (under whose auspices it was written). All errors remain mine.

---

1. For a summary of the causal variables in the two schools, see John J. Mearsheimer, "Back to the Future: Instability in Europe After the Cold War," *International Security*, Vol. 15, No. 1 (Summer 1990), pp. 5-56; Robert O. Keohane, "International Liberalism Reconsidered," in John Dunn, ed., *The Economic Limits to Modern Politics* (Cambridge: Cambridge University Press, 1990), pp. 165-194.

---

*International Security*, Vol. 20, No. 4 (Spring 1996), pp. 5-41

© 1996 by the President and Fellows of Harvard College and the Massachusetts Institute of Technology.

interdependence can be maintained, liberals assert, we have reason for optimism. Realists dismiss the liberal argument, arguing that high interdependence increases rather than decreases the probability of war. In anarchy, states must constantly worry about their security. Accordingly, interdependence—meaning mutual dependence and thus vulnerability—gives states an incentive to initiate war, if only to ensure continued access to necessary materials and goods.

The unsatisfactory nature of both liberal and realist theories is shown by their difficulties in explaining the run-ups to the two World Wars. The period up to World War I exposes a glaring anomaly for liberal theory: the European powers had reached unprecedented levels of trade, yet that did not prevent them from going to war. Realists certainly have the correlation right—the war was preceded by high interdependence—but trade levels had been high for the previous thirty years; hence, even if interdependence was a necessary condition for the war, it was not sufficient.

At first glance, the period from 1920 to 1940 seems to support liberalism over realism. In the 1920s, interdependence was high, and the world was essentially peaceful; in the 1930s, as entrenched protectionism caused interdependence to fall, international tension rose to the point of world war. Yet the two most aggressive states in the system during the 1930s, Germany and Japan, were also the most highly dependent despite their efforts towards autarchy, relying on other states, including other great powers, for critical raw materials. Realism thus seems correct in arguing that high dependence may lead to conflict, as states use war to ensure access to vital goods. Realism's problem with the interwar era, however, is that Germany and Japan had been even more dependent in the 1920s, yet they sought war only in the late 1930s when their dependence, although still significant, had fallen.

The theory presented in this article—the theory of trade expectations—helps to resolve these problems. The theory starts by clarifying the notion of economic interdependence, fusing the liberal insight that the benefits of trade give states an incentive to avoid war with the realist view that the potential costs of being cut off can push states to war to secure vital goods. The total of the benefits and potential costs of trade versus autarchy reveals the true level of dependence a state faces, for if trade is completely severed, the state not only loses the gains from trade but also suffers the costs of adjusting its economy to the new situation.

Trade expectations theory introduces a new causal variable, the expectations of future trade, examining its impact on the overall expected value of the trading option if a state decides to forgo war. This supplements the static

consideration in liberalism and realism of the levels of interdependence at any point in time, with the importance of leaders' dynamic expectations into the future.

Levels of interdependence and expectations of future trade, considered simultaneously, lead to new predictions. Interdependence can foster peace, as liberals argue, but this will only be so when states expect that trade levels will be high into the foreseeable future. If highly interdependent states expect that trade will be severely restricted—that is, if their expectations for future trade are low—realists are likely to be right: the most highly dependent states will be the ones most likely to initiate war, for fear of losing the economic wealth that supports their long-term security. In short, high interdependence can be either peace-inducing or war-inducing, depending on the expectations of future trade.

This dynamic perspective helps bridge the gaps within and between current approaches. Separating levels of interdependence from expectations of future trade indicates that states may be pushed into war even if current trade levels are high, if leaders have good reason to suspect that others will cut them off in the future. In such a situation, the expected value of trade will likely be negative, and hence the value of continued peace is also negative, making war an attractive alternative. This insight helps resolve the liberal problem with World War I: despite high trade levels in 1913–14, declining expectations for future trade pushed German leaders to attack, to ensure long-term access to markets and raw materials.

Even when current trade is low or non-existent, positive expectations for future trade will produce a positive expected value for trade, and therefore an incentive for continued peace. This helps explain the two main periods of détente between the Cold War superpowers, from 1971 to 1973 and in the late 1980s: positive signs from U.S. leaders that trade would soon be significantly increased coaxed the Soviets into a more cooperative relationship, reducing the probability of war. But in situations of low trade where there is no prospect that high trade levels will be restored in the future, highly dependent states may be pushed into conflict. This was the German and Japanese dilemma before World War II.

The article is divided into three sections. The first section reviews liberal and realist theories on the relationship between economic interdependence and the probability of war, and provides a critique of both theories. The second section lays out trade expectations theory. The final section examines the diplomatic historical evidence for the new theory against two significant cases: Germany

before World War I and Germany before World War II. The evidence indicates that the new variable, expectations of future trade, helps resolve the anomalies for current theories: in both cases, negative expectations for future trade, combined with high dependence, led leaders into total war out of fear for their long-term economic position and therefore security.

### *The Liberal and Realist Debate on Economic Interdependence and War*

The core liberal position is straightforward.<sup>2</sup> Trade provides valuable benefits, or “gains from trade,” to any particular state. A dependent state should therefore seek to avoid war, since peaceful trading gives it all the benefits of close ties without any of the costs and risks of war. Trade pays more than war, so dependent states should prefer to trade not invade. This argument is often supported by the auxiliary proposition that modern technology greatly increases the costs and risks of aggression, making the trading option even more rational.

The argument was first made popular in the 1850s by Richard Cobden, who asserted that free trade “unites” states, “making each equally anxious for the prosperity and happiness of both.”<sup>3</sup> This view was restated in *The Great Illusion* by Norman Angell just prior to World War I and again in 1933. Angell saw states having to choose between new ways of thinking, namely peaceful trade, and the “old method” of power politics. Even if war was once profitable, modernization now makes it impossible to “enrich” oneself through force; indeed, by destroying trading bonds, war is “commercially suicidal.”<sup>4</sup>

Why do wars nevertheless occur? While the start of World War I just after *The Great Illusion*’s initial publication might seem to refute his thesis, Angell in

---

2. Four other subsidiary liberal arguments, employing intervening variables, are not sufficiently compelling to discuss here. The first suggests that high trade levels promote domestic prosperity, thereby lessening the internal problems that push leaders into war. The second argues that interdependence helps to foster increased understanding between peoples, which reduces the misunderstandings that lead to war. The third asserts that trade alters the domestic structure of states, heightening the influence of groups with a vested interest in peaceful trade. The final argument contends that trade has the “spill-over” effect of increasing political ties between trading partners, thus improving the prospects for long-term cooperation. For an critical analysis of these views, see Dale Copeland, “Economic Interdependence and the Outbreak of War,” paper presented to University of Virginia Department of Government’s faculty workshop, March 1995.

3. Richard Cobden, *The Political Writings of Richard Cobden* (London: T. Fischer Unwin, 1903), p. 225.

4. Norman Angell, *The Great Illusion*, 2d ed. (New York: G.P. Putnam’s Sons, 1933), pp. 33, 59–60, 87–89.

the 1933 edition argued that the debacle simply confirmed the unprofitability of modern wars. He thus upheld the common liberal view that wars, especially major wars, result from the misperceptions of leaders caught up in the outmoded belief that war still pays. Accordingly, his is “not a plea for the impossibility of war . . . but for its futility,” since “our ignorance on this matter makes war not only possible, but extremely likely.”<sup>5</sup> In short, if leaders fail to see how unprofitable war is compared to the benefits of trade, they may still erroneously choose the former.

Richard Rosecrance provides the most extensive update of the Cobden-Angell thesis to the nuclear era. States must choose between being “trading states,” concerned with promoting wealth through commerce, and “territorial states,” obsessed with military expansion. Modern conditions push states towards a predominantly trading mode: wars are not only too costly, but with the peaceful trading option, “the benefits that one nation gains from trade can also be realized by others.” When the system is highly interdependent, therefore, the “incentive to wage war is absent,” since “trading states recognize that they can do *better* through internal economic development sustained by a worldwide market for their goods and services than by trying to conquer and assimilate large tracts of land.”<sup>6</sup> Rosecrance thus neatly summarizes the liberal view that high interdependence fosters peace by making trading more profitable than invading.<sup>7</sup>

---

5. Ibid., pp. 59–62, 256.

6. Richard Rosecrance, *The Rise of the Trading State: Commerce and Conquest in the Modern World* (New York: Basic Books, 1986), pp. 13–14; 24–25 (emphasis added); see also Rosecrance, “War, Trade and Interdependence,” in James N. Rosenau and Hylke Tromp, eds., *Interdependence and Conflict in World Politics* (Aldershot, U.K.: Avebury, 1989), pp. 48–57; Rosecrance, “A New Concert of Powers,” *Foreign Affairs*, Vol. 71, No. 2 (Spring 1992), pp. 64–82.

7. A book often seen as a statement on the peace-inducing effects of interdependence—Robert O. Keohane and Joseph S. Nye, *Power and Interdependence* (Boston: Little, Brown, 1977)—actually contains no such causal argument. For Keohane and Nye, “complex interdependence” is more peaceful by definition: it is “a valuable concept for analyzing the political process” only when military force is “unthinkable” (pp. 29, 24). In the second edition: “since we *define* complex interdependence in terms of [policy] goals and instruments,” arguments “about how goals and instruments are affected by the degree to which a situation approximates complex interdependence or realism will be tautological.” Thus, “we are left essentially with two dependent variables: changes in agendas and changes in the roles of international organizations.” Keohane and Nye, *Power and Interdependence*, 2d ed. (Glenview, Ill.: Scott, Foresman, 1989), p. 255; emphasis in original. The dependent variable of this article—the likelihood of war—is nowhere to be found, which is not surprising, since it is assumed away. Other works on interdependence from the 1970s, which largely examined dependent variables other than war, are discussed in Copeland, “Economic Interdependence and the Outbreak of War.”

Realists turn the liberal argument on its head, arguing that economic interdependence not only fails to promote peace, but in fact heightens the likelihood of war.<sup>8</sup> States concerned about security will dislike dependence, since it means that crucial imported goods could be cut off during a crisis. This problem is particularly acute for imports like oil and raw materials; while they may be only a small percentage of the total import bill, without them most modern economies would collapse. Consequently, states dependent on others for vital goods have an increased incentive to go to war to assure themselves of continued access of supply.

Neorealist Kenneth Waltz puts the argument as follows: actors within a domestic polity have little reason to fear the dependence that goes with specialization. The anarchic structure of international politics, however, makes states worry about their vulnerability, thus compelling them "to control what they depend on or to lessen the extent of their dependency." For Waltz, it is this "simple thought" that explains, among other things, "their imperial thrusts to widen the scope of their control."<sup>9</sup> For John Mearsheimer, nations that "depend on others for critical economic supplies will fear cutoff or blackmail in time of crisis or war." Consequently, "they may try to extend political control to the source of supply, giving rise to conflict with the source or with its other customers." Interdependence, therefore, "will probably lead to greater security competition."<sup>10</sup>

---

8. One might contend that realists doubt the causal importance of economic interdependence, since relative gains concerns convince great powers to avoid becoming dependent in the first place. Aside from arguments showing why states may cooperate despite concerns for relative gains (see essays by Powell, Snidal, and Keohane in David A. Baldwin, ed., *Neorealism and Neoliberalism: The Contemporary Debate* [New York: Columbia University Press, 1993]; Dale Copeland, "Why Relative Gains Concerns May Promote Economic Cooperation: A Realist Explanation for Great Power Interdependence," presented at the annual meeting of the International Studies Association, San Diego, April 1996), the argument is empirically false. Periods of high interdependence have arisen even when the security competition between great powers was particularly intense, such as from 1880 to 1914, as Waltz acknowledges. Kenneth Waltz, "The Myth of Interdependence," in Ray Maghooori and Bennett Ramberg, *Globalism versus Realism* (Boulder, Colo.: Westview Press, 1982), p. 83. Since the reality of high interdependence cannot be argued or assumed away, I focus here on the core realist claim that whenever high levels of interdependence are reached, for whatever reason, war is more likely.

9. Kenneth Waltz, *Theory of International Politics* (New York: Random House, 1979), p. 106.

10. John J. Mearsheimer, "Disorder Restored," in Graham Allison and Gregory F. Treverton, eds., *Rethinking America's Security* (New York: W.W. Norton, 1992), p. 223; Mearsheimer, "Back to the Future," p. 45. See also Robert Gilpin, "Economic Interdependence and National Security in Historical Perspective," in Klaus Knorr and Frank N. Trager, eds., *Economic Issues and National Security* (Lawrence, Kan.: Allen, 1977), p. 29. Adopting the realist argument, but emphasizing how dependence leads states to adopt destabilizing offensive strategies, is Anne Uchitel, "Interdepend-



This modern realist understanding of economic interdependence and war finds its roots in mercantilist writings dating from the seventeenth century. Mercantilists saw states as locked in a competition for relative power and for the wealth that underpins that power.<sup>11</sup> For mercantilists, imperial expansion—the acquisition of colonies—is driven by the state's need to secure greater control over sources of supply and markets for its goods, and to build relative power in the process. By allowing the metropole and the colonies to specialize in production and trade of complementary products (particularly manufactured goods for raw materials), while ensuring political control over the process, colonies “opened up the possibility of providing a system of supply within a self-contained empire.”<sup>12</sup>

In this, we see the underpinning for the neorealist view that interdependence leads to war. Mercantilist imperialism represents a reaction to a state's dependence; states reduce their fears of external specialization by increasing *internal* specialization within a now larger political realm. The imperial state as it expands thus acquires more and more of the characteristics of Waltz's domestic polity, with its hierarchy of specialized functions secure from the unpredictable policies of others.

In sum, realists seek to emphasize one main point: political concerns driven by anarchy must be injected into the liberal calculus. Since states must be primarily concerned with security and therefore with control over resources and markets, one must discount the liberal optimism that great trading partners will always continue to be great trading partners simply because both states benefit absolutely. Accordingly, a state vulnerable to another's policies because of dependence will tend to use force to overcome that vulnerability.

---

ence and Instability,” in Jack Snyder and Robert Jervis, eds., *Coping with Complexity in the International System* (Boulder, Colo.: Westview Press, 1993), pp. 243–264. For Barry Buzan, since liberal free-trading systems are dependent on a hegemon which invariably declines, such systems are destined to fall into “malevolent” mercantilist practices, as states scramble to control access to goods formerly safeguarded by the hegemon. Avoiding the liberal system altogether, through a “benign” mercantilist system of self-sufficient trading blocs, will be therefore preferred. Buzan, “Economic Structure and International Security: The Limits of the Liberal Case,” *International Organization*, Vol. 38, No. 4 (Autumn 1984), esp. pp. 597, 609–623. For a similar argument, see Robert Gilpin, *U.S. Power and the Multinational Corporation* (New York: Basic Books), 1975, p. 259.

11. See Eli F. Heckscher, *Mercantilism*, vol. 2, trans. Mendel Shapiro (London: George Allen, 1931), p. 15; Jacob Viner, “Power Versus Plenty as Objectives of Foreign Policy in the Seventeenth and Eighteenth Centuries,” *World Politics*, Vol. 1, No. 1 (October 1948), p. 10; David A. Baldwin, *Economic Statecraft* (Princeton, N.J.: Princeton University Press, 1985), chap. 5.

12. Heckscher, *Mercantilism*, vol. 2, p. 40.



#### A COMPARISON OF THE LIBERAL AND REALIST PERSPECTIVES

While the liberal and the realist arguments display critical differences, they possess one important similarity: the causal logic of both perspectives is founded on an individual state's decision-making process. That is, while the two camps freely use the term "interdependence," both derive predictions from how particular decision-making units—states—deal with their own specific dependence. This allows both theories to handle situations of "asymmetric interdependence," where one state in a dyad is more dependent than the other. Their predictions are internally consistent, but opposed: liberals argue that the more dependent state is less likely to initiate conflict, since it has more to lose from breaking economic ties;<sup>13</sup> realists maintain that this state is more likely to initiate conflict, to escape its vulnerability.

The main difference between liberals and realists has to do with their emphasis on the benefits versus the costs of interdependence. The realist argument highlights an aspect that is severely downplayed in the liberal argument, namely, consideration of the potential costs from the severing of a trading relationship. Most liberals, if pressed, would probably accept David Baldwin's conceptualization of dependence as the opportunity costs a state would experience should trade end. Yet Baldwin's opportunity costs are only the loss of the benefits from trade received after a state moves from autarchy.<sup>14</sup> It is this understanding of opportunity costs that is followed in the most comprehensive liberal argument for interdependence and peace, that of Rosecrance. There is little sense in Rosecrance's work that a state's decision to specialize and thus to restructure its economy radically can entail huge "costs of adjustment" should trade be later severed, nor that such costs can actually put the state in a far worse position than if it had never moved from autarchy in the first place.<sup>15</sup> This is the concern of realists when they talk about dependence on

13. See Keohane and Nye, "World Politics and the International Economic System," in C. Fred Bergsten, ed., *The Future of the International Economic Order* (Lexington: D.C. Heath, 1973), pp. 121–122; Neil R. Richardson and Charles W. Kegley, "Trade Dependence and Foreign Policy Compliance," *International Studies Quarterly*, Vol. 24, No. 2 (June 1980), pp. 191–222.

14. David A. Baldwin, "Interdependence and Power: A Conceptual Analysis," *International Organization*, Vol. 34, No. 4 (Autumn 1980), pp. 478, 482–484, 489; Baldwin, "The Power of Positive Sanctions," *World Politics*, Vol. 24, No. 1 (October 1971), pp. 19–38; Albert O. Hirschman, *National Power and the Structure of Foreign Trade*, exp. ed. (Berkeley: University of California Press, 1980), chap. 2.

15. On the costs of adjustment, see Ruth Arad, Seev Hirsch, and Alfred Tovas, *The Economics of Peacemaking* (New York: St. Martin's Press, 1983), pp. 26–34. Keohane and Nye examine the "costs of adjusting" as an integral part of "vulnerability" interdependence (*Power and Interdependence*, p. 13). Yet they do not establish the original autarchic position as a baseline for examining these costs independently from the benefits of trade forgone; this baseline is incorporated later in

“vital goods” such as oil. A state that chooses not to buy oil from outsiders forgoes certain benefits of trade, but by operating on domestic energy sources, it avoids the heavy penalty experienced by a state that does base its industrial structure on imported oil, only to find itself cut off from supplies.

That Rosecrance minimizes this realist concern is evident. In an explicit effort to refute Waltz’s definition of interdependence as “a trading link which ‘is costly to break’,” Rosecrance contends that “to measure interdependence in this way misses the essence of the concept.” His subsequent discussion emphasizes only the benefits that states give up if they choose not to trade (his “opportunity costs”), and makes no mention of any potentially severe costs of adjustment. In fact, he argues that dependence on such things as foreign sources of energy is really no different than relying on outsiders for “fashions” or different makes of cars; if trade is cut off, a state loses only “consumer choice.” Recognition that the whole industrial structure of a state might be undermined or destroyed by an adversary’s severing of vital trade is absent.<sup>16</sup>

Rosecrance is reluctant to acknowledge realist concerns, perhaps because to do so would imply that dependent states might be more willing to go to war, as realists maintain, while Rosecrance is arguing that they are less willing to do so.<sup>17</sup> This points to a critical distinction between liberalism and realism that illuminates the liberal understanding of why wars ultimately occur. For liberals, interdependence does not have a downside that might push states into war, as realists contend. Rather, interdependence is seen to operate as a restraint on aggressive tendencies arising from the domestic or individual levels. If interdependence becomes low, this restraint is taken away, allowing the aggressive tendencies to dominate. To borrow a metaphor from Plato: for liberals, inter-

---

building the new theory. Liberals also consider “costs” in terms of losses in “autonomy” due to trade ties; see Richard N. Cooper, *The Economics of Interdependence* (New York: McGraw Hill, 1968), pp. 4–12; Rosecrance, *Rise of the Trading State*, pp. 39–41, 235. Note, however, that these are costs that go hand in hand with high trade, not costs that are experienced if trade is cut off. Hence, these losses in autonomy are more accurately considered as a form of sensitivity interdependence—costs incurred when trade is ongoing—rather than as a form of “vulnerability” interdependence so worrying to realists. On this, see Keohane and Nye, “International Interdependence and Integration,” in Fred I. Greenstein and Nelson W. Polsby, eds., *Handbook of Political Science*, vol. 8 (Reading, Mass.: Addison-Wesley, 1975), pp. 368–370.

16. Rosecrance, *Rise of the Trading State*, pp. 144–145. In the appendix, an iterated prisoner’s dilemma is used to show the “concrete benefits” from trade cooperation. If states decide not to cooperate, they simply “[do] not benefit”; pp. 233–236.

17. Rosecrance occasionally seems to accept that some goods are more vital than others, but even here he reiterates the liberal argument: “Countries dependent on the world economy for markets, assistance, and critical raw materials are doubly hesitant to embark on military adventures”; *ibid.*, p. 133, emphasis added.

dependence operates like the reins on the dark horse of inner passions; it provides a material incentive to stay at peace, even when there are internal predispositions towards aggression. Remove the reins, however, and these passions are free to roam as they will.<sup>18</sup>

This point becomes clearer as one examines Rosecrance's explanations for the two World Wars. World War II, for Rosecrance, was ultimately domestically driven. The main aggressors saw war as a means to cope with the upheavals flowing from "social discontent and chaos" and the "danger of left-wing revolutions"; given these upheavals, it is "not surprising that the territorial and military-political system [i.e., war] emerged as an acceptable alternative to more than one state." Connecting the Second World War to causes arising from the unit level in the First World War, he continues: "If Germany, Italy, and Japan did not fulfill their territorial ambitions at the end of World War I, they might develop even more nationalistic and solidaristic regimes and try again."<sup>19</sup> With trade and therefore interdependence at low levels in the 1930s, "economics offered no alternative possibility"; it failed to provide what he later refers to as a "mitigat[ing]" or "restraining" influence on unit-level motives for war.<sup>20</sup>

World War I is a problematic case for Rosecrance, as it was for Angell, since the great powers went to war even though trade levels were still high. Like Angell, Rosecrance's main defense of liberalism is that leaders simply did not see how beneficial interdependence was, and how costly war would be. Due to outmoded ideas and unit-level pathologies, they misperceived the situation; hence, interdependence could not operate as it should, as a restraint on aggression. He talks about leaders' obsession with "nationalist ambitions" and "balance of power politics." He suggests that "no pre-1914 statesman or financier was fully aware of the damage that war would do to the European body economic" because of the irrational belief that "[war] would be over very

---

18. See Plato's *Phaedrus* in *Phaedrus and Letters VII and VIII*, trans. Walter Hamilton (Harmondsworth: Penguin, 1973), sections 246–256. The historical roots of this view are explicated in Albert O. Hirschman, *The Passions and the Interests: Political Arguments for Capitalism before its Triumph* (Princeton: Princeton University Press, 1977). He quotes Montesquieu (*ibid.*, p. 73): "It is fortunate for men to be in a situation in which, though their passions may prompt them to be wicked, they have nevertheless an interest in not being so."

19. Rosecrance, *Rise of the Trading State*, pp. 102–103 (see also p. 111). Rosecrance does point out that Germany and Japan apparently went to war also to gain raw materials (*ibid.*, p. 108). He does not argue, however, that these two states were more dependent than other states for such materials; to have done so would suggest the validity of the realist logic.

20. See *ibid.*, pp. 106, 123, 150, 162.

quickly.”<sup>21</sup> At one point, he even seems to cast doubt on the efficacy of interdependence as a restraint on aggression:

One should not place too much emphasis upon the existence of interdependence per se. European nations in 1913 relied upon the trade and investment that flowed between them; that did not prevent the political crisis which led to . . . World War I. Interdependence only constrains national policy if leaders accept and agree to work within its limits.<sup>22</sup>

It thus appears that Rosecrance cannot really envision interdependence as being anything but a “constraint” or “restraint” on unit-level tendencies to aggress. This view is consistent with the general liberal perspective that all wars are ultimately driven by unit-level phenomena such as misperceptions, authoritarianism, ideology, and internal social conflict. Rosecrance’s historical understanding of the World War II, for example, would fit nicely with the “democratic peace” literature: had all the states in 1939 been democratic, war would probably not have occurred despite the disrupted global economic situation, but since some states were not democratic, their aggressive domestic forces became unfettered once interdependence had declined. The idea that economic factors by themselves can push states to aggress—an argument consistent with neorealism and the alternative theory I will present below—is outside the realm of liberal thought, since it would imply that purely systemic forces can be responsible for war, largely regardless of unit-level phenomena.<sup>23</sup>

While liberal theory certainly downplays the realist concern for the potential costs of severed trade, it is also clear that realists slight the positive role the benefits of trade can have on a state’s choice between peace and war. In the next section, I bring together the liberal emphasis on benefits with the realist emphasis on costs to create a framework for understanding the true level of dependence a state faces. This section also seeks to correct the most significant

---

21. See *ibid.*, pp. 18–19, 88, 96–97, 99, 150.

22. *Ibid.*, p. 141 (see also p. 150). The argument here borders on being non-falsifiable: disconfirming cases where war occurs despite high interdependence can be sidestepped by saying simply that states did not “accept” being peaceful traders. Note as well that if states have already decided to be peaceful, then interdependence is not needed as a restraint.

23. On liberalism’s inherently unit-level orientation to conflict, see Andrew Moravcsik, “Liberalism and International Relations Theory,” Working Paper, Center for International Affairs, Harvard University, 1992; Michael Howard, *War and the Liberal Conscience* (New Brunswick: Rutgers University Press, 1978). On the democratic peace argument, see Bruce Russett, *Grasping the Democratic Peace* (Princeton: Princeton University Press, 1993).

error in both liberal and realist theories, namely, their lack of theoretical attention to the dynamics of state expectations for the future.

### *Trade or Invade? A Theory of Trade Expectations*

This section introduces the theory of trade expectations. This theory extends liberal and realist views regarding interdependence and war, by synthesizing their strengths while formulating a dynamic perspective on state decision-making that is at best only implicit in current approaches. The strength of liberalism lies in its consideration of how the benefits or gains from trade give states a material incentive to avoid war, even when they have unit-level predispositions to favor it. The strength of realism is its recognition that states may be vulnerable to the potential costs of being cut off from trade on which they depend for wealth and ultimately security. Current theories, however, lack a way to fuse the benefits of trade and the costs of severed trade into one theoretical framework.

More significantly, these theories lack an understanding of how rational decision-makers incorporate the future trading environment into their choice between peace and war. Both liberalism and realism often refer to the future trading environment, particularly in empirical analyses. But in constructing a theoretical logic, the two camps consider the future only within their own ideological presuppositions. Liberals, assuming that states seek to maximize absolute welfare, maintain that situations of high trade should continue into the foreseeable future as long as states are rational; such actors have no reason to forsake the benefits from trade, especially if defection from the trading arrangement will only lead to retaliation.<sup>24</sup> Given this presupposition, liberals can argue that interdependence—as reflected in high trade at any particular moment in time—will foster peace, given the benefits of trade over war. Realists, assuming states seek to maximize security, argue that concerns for relative power and autonomy will eventually push some states to sever trade ties (at least in the absence of a hegemon). Hence, realists can insist that interdependence, again manifest as high trade at any moment in time, drives dependent states to initiate war now to escape potential vulnerability later.

For the purposes of forging strong theories, however, trading patterns cannot be simply assumed *a priori* to match the stipulations of either liberalism or of realism. Trade levels fluctuate significantly over time, both for the system as a

---

24. See Rosecrance, *Rise of the Trading State*, appendix.

whole and particularly between specific trading partners, as the last two centuries demonstrate. Accordingly, we need a theory that incorporates how a state's expectations of its trading environment—either optimistic or pessimistic—affect its decision-calculus for war or peace. This is where the new theory makes its most significant departure. Liberalism and realism are theories of “comparative statics,” drawing predictions from a snapshot of the level of interdependence at a single point in time. The new theory, on the other hand, is dynamic in its internal structure: it provides a new variable, the “expectations of future trade,” that incorporates in the theoretical logic an actor's sense of the future trends and possibilities.<sup>25</sup> This variable is essential to any leader's determination not just of the immediate value of peace versus war at a particular moment in time, but of the overall expected value of peace and war over the foreseeable future.

From consideration of the expectations-of-future-trade variable along with a state's level of dependence, one can derive a consistent deductive theory of state decision-making showing the conditions under which high interdependence will lead to peace or to war. High interdependence can be peace-inducing, as liberals maintain, as long as states expect future trade levels to be high in the future: positive expectations for future trade will lead dependent states to assign a high expected value to a continuation of peaceful trade, making war the less appealing option. If, however, a highly dependent state expects future trade to be low due to the policy decisions of the other side, then realists are likely to be correct: the state will attach a low or even negative expected value to continued peace without trade, making war an attractive alternative if its expected value is greater than peace. Moreover, since a negative expected value of trade implies a long-term decline in power, even if war is not profitable *per se*, it may be chosen as the lesser of two evils.<sup>26</sup>

---

25. On the differences between comparative statics and dynamic analyses that incorporate the future, see Eugene Silberberg, *The Structure of Economics*, 2d ed. (New York: McGraw-Hill, 1990), chaps. 1, 12, and 18.

26. That is, war is rational if it has either a higher net *positive* value or a lower net *negative* value. The theory thus works regardless of whether states are innately “greedy”—seeking positive gains from war—or simply security-seekers desiring to minimize long-term threats. See Charles L. Glaser, “Political Consequences of Military Strategy: Expanding and Refining the Spiral and Deterrence Models,” *World Politics*, Vol. 44, No. 4 (July 1992), pp. 497–538. By connecting the trading environment to fears about relative decline, I draw upon the notion that declining states launch preventive wars to uphold their waning security. Elsewhere, I build a solely power-driven theory showing why states faced with deep and inevitable decline initiate major wars. Dale Copeland, “Neorealism and the Myth of Bipolar Stability: Toward a New Dynamic Realist Theory of Major War,” *Security Studies*, Vol. 5, No. 3 (Spring 1996).



The deductive logic of the alternative theory, as with liberalism and realism, centers on an individual state's efforts to manage its own situation of dependence. Consider a two-actor scenario, where one state "A" may trade with another state "B." If state A moves away from the initial position of autarchy to begin trading, and trade is free and open, it will expect to receive the benefits of trade stressed by liberals, namely, the incremental increase in A's total welfare due to trade.<sup>27</sup> Note that a state can still be aware of the "benefits of trade" even if present trade is non-existent, since they represent the potential gains from trade that would accrue to the state should trade levels become high in the future.<sup>28</sup> It is a state's ability to foresee future potential benefits that allows it to attach a high expected value to the peaceful trading option even when current trade levels are low (as long as it expects current restrictions to be relaxed).

When a state trades, it specializes in and exports goods in which it enjoys a comparative advantage, while forgoing the production of other goods, which it then imports. This process of specialization, however, entails potentially large costs of adjustment if trade is subsequently cut off. This is especially so in the modern world if the state becomes dependent on foreign oil and certain raw materials. With the economy's capital infrastructure (machines, factories, transportation systems, etc.) geared to function only with such vital goods, a severing of trade would impose huge costs as the economy struggles to cope with the new no-trade situation.<sup>29</sup> In short, the severing of trade, as realists would argue, would put the state in a situation far worse than if it had never specialized in the first place.

This analysis leads to a clearer understanding of any particular state's total level of "dependence." On a bilateral basis, that level is represented by the sum of the benefits that the state would receive from free and open trade with another state (versus autarchy), and the costs to the state of being cut off from that trade after having specialized (versus autarchy). If state A started with an economy of 100 units of GNP before any trade with B (the autarchic position), and open trade with B would mean economic expansion to a level of 110 units of GNP on an ongoing basis, then the "benefits of trade" could be considered as 10 units. If the specialization that trade entails, however, would mean the

---

27. This is consistent with standard trade theory. See Richard E. Caves and Ronald W. Jones, *World Trade and Payments*, 4th ed. (Boston: Little Brown, 1985), chaps. 3–4.

28. I thank Andrew Moravcsik for discussions on the potential benefits of trade.

29. The capital investments represent "sunk costs" not easily recouped. See Arad, Hirsch, and Tovias, *The Economics of Peacemaking*, pp. 26–28.



economy would fall to 85 units should B sever trade ties, then the “costs of severed trade” would be 15 units versus autarchy. State A’s total dependence level would thus be the benefits of trade plus the costs of severed trade after specialization, or 25 units.

The dependence level will itself be a function of such parameters as the overall compatibilities of the two economies for trade, the degree of A’s need for vital goods such as oil and raw materials, and the availability of alternative suppliers and markets. Thus if A’s need for trade with B is great because the economies are highly compatible (say, in terms of mutual comparative advantages), B has valuable natural resources that A lacks, and A has few other countries to turn to, then A’s dependence can be considered high.<sup>30</sup>

In deciding between peace and war, however, a state can not refer simply to its dependence level. Rather, it must determine the overall expected value of trade and therefore the value of continued peace into the foreseeable future. The benefits of trade and the costs of severed trade on their own say nothing about this expected value. Dynamic expectations of future trade must be brought in. If the state has positive expectations that the other will maintain free and open trade over the long term, then the expected value of trade will be close to the value of the benefits of trade. On the other hand, if the state, after having specialized, comes to expect that trade will be severed by the trading partner, then the expected value of trade may be highly negative, that is, close to the value of the costs of severed trade. In essence, the expected value of trade may be anywhere between the two extremes, depending on a state’s estimate of the expected probability of securing open trade, or of being cut off.<sup>31</sup>

This leads to a crucial hypothesis. For any given expected value of war, we can predict that the lower the expectations of future trade, the lower the

---

30. On the importance of alternatives, see Baldwin, “Interdependence and Power,” p. 482; Keohane and Nye, *Power and Interdependence*, p. 13. It is worth remembering that alternative suppliers and markets are only valuable in reducing A’s dependence if A can get access to them. If B is able not only to sever bilateral trade, but also to blockade A to prevent third-party trading, then A effectively has no alternatives and is therefore dependent. This was the situation for Japan *vis-à-vis* the United States before 1941 regarding oil imports.

31. This line of reasoning is developed formally in Dale Copeland, “Modelling Economic Interdependence and War: A Theory of Trade Expectations,” paper presented at the annual meeting of the American Political Science Association, Chicago, September 1995. It is consistent with consideration of the “probability of transaction” as a determinant of expected national income in Arad, Hirsch, and Tovias, *The Economic of Peacemaking*, pp. 37–43, although they do not employ expectations of future trade as a theoretical variable affecting the likelihood of war.

expected value of trade, and therefore the more likely it is that war will be chosen.

It is important to note that the expected value of trade will not be based on the level of trade at a particular moment in time, but upon the stream of expected trade levels into the future. It really does not matter that trade is high today: if state A knows that B will cut all trade tomorrow and shows no signs of being willing to restore it later, the expected value of trade would be negative. Similarly, it does not matter if there is little or no trade at present: if state A is confident that B is committed to freer trade in the future, the expected value of trade would be positive.

The fact that the expected value of trade can be negative even if present trade is high, due to low expectations for future trade, goes a long way towards resolving such manifest anomalies for liberal theory as German aggression in World War I. Despite high levels of trade up to 1914, German leaders had good reason to believe that the other great powers would undermine this trade into the future; hence, a war to secure control over raw materials and markets was required for the long-term security of the German nation. Since the expected value of trade can be positive even though present trade is low, due to high expectations for future trade, we can also understand such phenomena as the periods of détente in U.S.-Soviet relations during the Cold War (1971–73 and after 1985). While East-West trade was still relatively low during these times, the Soviet need for Western technology, combined with a growing belief that large increases in trade with the West would be forthcoming, gave the Soviets a high enough expected value of trade to convince them to be more accommodating in superpower relations.<sup>32</sup>

In making the final decision between peace and war, however, a rational state will have to compare the expected value of trade to the expected value of going to war with the other state.

The expected value of war, as a realist would emphasize, cannot be ascertained without considering the relative power balance. As one state moves from a position of relative inferiority in economic and military power to relative superiority, the expected value of war will move from negative to positive or even highly positive. This proposition follows directly from the insights of deterrence theory: the larger the state in relative size, the higher the probability of winning a victory, while the lower the costs of fighting the war.<sup>33</sup>

---

32. The U.S.-Soviet Cold War case is covered in Copeland, "Modelling Economic Interdependence and War."

33. See Alexander L. George and Richard Smoke, *Deterrence in American Foreign Policy: Theory and Practice* (New York: Columbia University Press, 1974), chaps. 2–3.

Hence, if victory entails occupying the other state and absorbing its economy, war can take on a very positive expected value when a large power attacks a small state.<sup>34</sup> For example, if Iraq had been allowed to hold on to Kuwait after its August 1990 invasion, war for Iraq would certainly have “paid.” Similarly, Czechoslovakia was an easy and attractive target for Germany by 1938–39, as were the other smaller states of Europe, and evidence suggests that war against these nations was indeed profitable for the Nazis.<sup>35</sup> On the other hand, war between more equal great powers is likely to have a much lower or even negative expected value. The Spartan leadership took Sparta into war against Athens in 431 BC, for example, under no illusions that war would be a profitable venture.<sup>36</sup> While the Athenian economy presented a large prize should victory be attained, war with a near-equal adversary could be expected to be very costly, with a low likelihood of victory.

Where we would anticipate a low or negative expected value to the option of war, the expectations-of-future-trade variable should have a determinant effect on the likelihood of war. If state A has positive expectations for future trade with B, and A and B are roughly equal in relative power, then state A will assign a high expected value to continued peaceful trade, will compare this to the low or negative expected value for invasion, and will choose peace as the rational strategy. The higher A’s dependence and the higher the expectations for future trade, the higher the expected value for peaceful trade, and therefore the more likely A is to avoid war. But if state A is dependent and has negative expectations for future trade with B, then the expected value of trade will be very low or negative. If the expected value for trade is lower than the expected value for invasion, war becomes the rational choice, and this is so even when the expected value of invasion is itself negative: war becomes the lesser of two evils.<sup>37</sup>

34. This is developed formally in Copeland, “Modelling Economic Interdependence and War.”

35. See Peter Liberman, “Does Conquest Pay? The Exploitation of Occupied Industrial Economies” (Ph.D. diss., Massachusetts Institute of Technology, 1991).

36. Thucydides, *The Peloponnesian War*, trans. Rex Warner (Harmondsworth: Penguin, 1954), Book 1, lines 80–88.

37. When one state is very large and the other very small, it is harder to sort out the effects of interdependence from the effects of relative power, at least in actual cases of war. The expected value of war for the superior state is likely to be quite positive anyway, and thus will tend to overshadow the expected value of trade even when the state has positive expectations of future trade. Here, the superior state simply chooses war as the “greater of two goods.” This choice would not be altered by any diminution of trade expectations; indeed, war would simply be even more rational as the expected value of trade (and therefore peace) falls. War in such a situation of marked power imbalance and low expectations of future trade is thus overdetermined; it would be difficult to tell whether war occurred because of the positive expected value of war, the negative expected value of trade, or both. Thus, in my empirical analysis, I examine cases where great powers

Until now, I have talked about state A's "expectations of future trade" as though they were an essentially exogenous, that is, as though state B, in its willingness to trade with A, were not affected by A's behavior. If, however, state A, by making political, military, or economic concessions, can induce B to relax trading restrictions, then A's low expectations for future trade may be raised.

This suggests that the effects of diplomacy and bargaining need to be integrated into any extended historical analysis.<sup>38</sup> The probability of B trading with A is never completely independent of A's actions, since there is always some concession that A could make to get B to commit to higher trade levels over the long term. But the problem for A is that B's price for high trade may be unacceptable in that it undermines A's internal stability or its external power position. To take an extreme example, if B were to demand, as the price for higher trade, that A unilaterally disarm and allow B to occupy A with its army, it is hard to imagine A accepting such a deal. If B remains unwilling to budge from such an exorbitant demand, then it is fair to say that A's pessimistic expectation for future trade is exogenous; there is little A can do, short of national suicide, to improve the likelihood of trade.

Thus state A, in estimating B's probability of trading with A, will refer to many indicators suggesting how "reasonable" B will be into the future, that is, how willing B will be to trade, and at what price. One may think of these indicators simply as causal factors affecting the variable "expectations of future trade." Such systemic factors as B's economic competitiveness, B's rate of depletion of raw materials and energy reserves (affecting its future export ability), and military pressures constraining B's trade with A will be important. German leaders before World War I, for example, had good reason to believe that Britain would be forced to move to imperial preference to protect its empire from the German economic challenge and to lend support to its entente partners. Japanese leaders in the late 1930s recognized that the United States would have to cut back on oil and iron exports to Japan as U.S. reserves were

---

attacked great powers in long and costly total wars. While these cases do not cover the universe of wars, they do isolate the role of economic interdependence and changing expectations of future trade in the outbreak of war.

38. Given space constraints, my case studies in this article do not provide a full analysis of the bargaining dynamic. For an analysis of interstate economic bargaining, see Baldwin, *Economic Statecraft*, chap. 6; R. Harrison Wagner, "Economic Interdependence, Bargaining Power, and Political Influence," *International Organization*, Vol. 42, No. 3 (Summer 1988), pp. 461–483. Note also that there may be a causal feedback loop, whereby increasing fears of war lead others to reduce trade, which in turn heightens the incentive of dependent states to initiate war. These and other issues involving the endogeneity of trade expectations are addressed more fully in my book manuscript, "Economic Interdependence and War."

depleted or needed to supply a military buildup (even one directed only at Germany). Such systemic pressures on B to reduce trade with A will foster negative expectations of future trade among A's leaders.

But domestic and personal factors can also play a significant role in the exogenous rise or decline in B's likelihood of trading with A, indicating that the assumption that B is a "unitary actor" must be relaxed to some degree when examining history.<sup>39</sup> In 1972, for example, the Soviets saw Nixon and Kissinger as firmly in control of American policy, and therefore able to carry through on commitments to increase East-West trade. Two years later, however, such a positive expectation for future trade could not be sustained in the wake of Watergate and the reassertion of Congressional power, at least at a price which was reasonable to the Soviets. This had much to do with the failure of détente, as I argue elsewhere.<sup>40</sup>

A comparison of the arguments of trade expectations theory with those of liberal and realist theory is presented in Table 1. To summarize: liberals contend that high economic dependence, as manifest in high trade levels, reduces a state's likelihood of initiating war by providing a material "constraint" on unit-level forces for aggression. Low dependence will increase this likelihood, since this constraint on unit-level motives for war is removed. Realists argue that high dependence heightens the probability of war as dependent states struggle to reduce their vulnerability. In the realist world, however, low dependence should have no impact on the likelihood of war or peace; that is, other factors should become causally determinant of war. Still, since economic interdependence is at least eliminated as a possible source of conflict, realists

---

39. Note that state A, the decision-making unit in the theory, can still be treated as a rational unitary actor *responding* to the observed domestic forces on the other side.

40. See Copeland, "Modeling Economic Interdependence and War," pp. 62–66. International trade institutions such as the General Agreement on Tariffs and Trade (GATT), by lowering transaction costs and facilitating the punishment of cheaters, may be an additional means to build positive expectations for future trade. Indeed, for some liberals, peace may only be likely when both interdependence and effective global institutions co-exist and reinforce one another; Keohane, "International Liberalism Reconsidered," p. 183. While such institutions may indeed affect trade expectations, they are unlikely to be as significant in history as the systemic and domestic factors just discussed, for the simple reason that these institutions are a creation of the post-World War II era. Moreover, since concerns for war and peace revolve mostly around the great powers, and powers like Soviet Union and China have been historically excluded from trade institutions like GATT, such institutions cannot account for fluctuations in the levels of tension between the United States and these powers since 1945. Finally, the institutional approach overlooks *bilateral* diplomacy as the principal mechanism through which expectations of trade change; consider the United States and Japan up to December 1941, or the United States and Japan today. Accordingly, while my argument recognizes the contribution institutions can make to the improvement of future trade expectations, the focus both theoretically and empirically remains fundamentally non-institutional.

Table 1. The Competing Theories.

	Core Liberal Theory (e.g., Rosecrance)	Core Realist Theory (e.g., Waltz, Mearsheimer)	Trade Expectations Theory (Copeland)
Nature of the system	Anarchy	Anarchy	Anarchy
Nature of the state	Generally a rational, unitary calculator of costs/benefits, but may also have aggressive, unit-level drives	Rational, unitary actor seeking to reduce vulnerability to improve security	Rational, unitary actor calculating the expected stream of benefits and costs over the <i>foreseeable future</i> , to maximize wealth and therefore security
Analytical focus	The individual state's concern for its own dependence	The individual state's concern for its own dependence	The individual state's concern for its own dependence
State's decision for war or peace driven by	Benefits of trade (the "gains from trade" from specialization)	Costs of severed trade (the costs of adjustment after being cut off, due to specialization)	Benefits of trade <i>and</i> costs of severed trade, <i>plus</i> expectations of future trade
Ultimate reason that state goes to war	If level of dependence low (i.e., trade is low), "restraint" on unit-level aggressive tendencies removed	High dependence creates a systemic incentive to use force to overcome vulnerability	High dependence and pessimistic expectations for future trade, creating a low or <i>negative</i> expected value for trade
Reason for state choosing to stay at peace	If level of dependence high (i.e., trade is high), then high dependence "restrains" by making benefits of trade greater than value of war	Low dependence removes another systemic incentive for war	High dependence and optimistic expectations for future trade, creating a high expected value for trade

NOTE: All three theories recognize that relative power affects the value of the "invade" option; hence, Table 1 focuses on aspects of the "trade" option that affect the decision for war or peace.

would predict that the overall likelihood of war should fall when mutual dependence is low.

In other words, both liberals and realists believe that a situation of low dependence eliminates “dependence” as a causal variable. But since liberals argue that unit-level forces are always ready to be let loose (in the absence of a community of democratic nations), the termination of high dependence takes away the previous restraint on such forces, and therefore the probability of war rises dramatically. For realists, the causes of war come from systemic factors, including a state’s dependence (as well as relative power, etc.); therefore, since high dependence will tend to push a state into war, the absence of dependence gives the state one less systemic reason to aggress.

The new theory departs from the two other approaches by incorporating both the level of dependence and the dynamic expectations of future trade. It is somewhat consistent with realism in that low dependence implies little impact on the prospects for peace or war: if there are few benefits from trade and few costs if trade is cut off, then trade does not matter much in the state’s decision to go to war. As with realism, however, the elimination of a factor that might otherwise push a state into war suggests that the probability of war should be less when dependence is low.<sup>41</sup>

When dependence is high, peace will be promoted only when the state has positive expectations of future trade. Here, the liberal logic applies, whereby the positive benefits of trade give the dependent state the incentive not to disrupt a profitable peace. If, however, expectations of future trade fall, then realist concerns about the downside of interdependence—the costs of being cut off—enter in, dramatically increasing the likelihood that the dependent state will initiate war. Importantly, the decision for war does not hinge on what the present trade levels are; rather, it is leaders’ expectations for the future that drive whether the expected value of trade is positive and peace-inducing or negative and war-inducing.

---

41. Trade expectations theory, like realism, is a systemic theory; it assumes no unit-level drives towards aggression. While expectations may seem like a unit-level factor, remember that these are expectations of an external phenomenon, namely, the other’s propensity to trade into the future; the causal source of behavior comes from outside, not from within, the actor. See Waltz, *Theory of International Politics*, p. 60. One might also argue that domestic and individual level factors within a state can distort expectations, but I simply assume that such misperceptions are minimal for purposes of building a deductive theory; this assumption can be later relaxed if so desired.



## Historical Evidence

This section explores how expectations of future trade affected the decisions for war in two cases: Germany and World War I, and Germany and World War II.<sup>42</sup> These cases were chosen for two reasons. First, total wars between great powers minimize the problem of overdetermination that occurs when cases of great powers attacking small powers are included.<sup>43</sup> Second, since Germany lost these wars, internal documents are available to reveal the decision-making processes of aggressing states. If we want to go beyond correlation to causation, we must test the causal mechanism linking variables; that is, we have to see if leaders took their nations into war for the reasons hypothesized.<sup>44</sup>

42. Given space limitations, my "best case" among the major wars of this century, Japan and World War II, is covered elsewhere; Copeland, "Modelling Economic Interdependence and War." I show that Japanese leaders—military, civilian, and the emperor himself—reluctantly moved towards a consensus for war with the United States and Britain due to progressively more devastating U.S.-British trade sanctions. Japan, due to its small size, was almost completely dependent on outside sources for the raw materials and oil that supported its industrial structure. As American and British trade restrictions began to increase after 1930, and especially after a series of embargoes starting in 1939, Japan shifted from a primary concern with the Soviet threat to the need for control of raw materials in South East Asia. After the U.S., British, and Dutch severed all oil trade to Japan in July–August 1941, Japanese leaders agreed that unless oil imports were restored, economic decline would imperil long-term security. Hence, following the failure of desperate diplomatic initiatives in November 1941 to secure renewed trade, the plan for all-out war was accepted by the emperor. In short, Japan's extreme dependence, coupled with very negative expectations for future trade, pushed the country into a war that almost all recognized would have great costs and a low probability of success. See Nobutaka Ike, trans. and ed., *Japan's Decision for War: Records of the 1941 Policy Conferences* (Stanford: Stanford University Press, 1967).

43. See note 37, above. To minimize the selection bias of focusing just on the wars themselves, I also look at the periods before the wars began, to see how incentives for aggression changed as independent variables did.

44. Empirical analyses so far have been primarily correlational studies, finding that high trade tends to be associated with lower conflict. Mark J. Gasiorowski, "Economic Interdependence and International Conflict: Some Cross-national Evidence," *International Studies Quarterly*, Vol. 30, No. 1 (March 1986), pp. 22–38; Mark J. Gasiorowski and Solomon W. Polachek, "Conflict and Interdependence: East-West Trade and Linkages in the Era of Detente," *Journal of Conflict Resolution*, Vol. 26, No. 4 (December 1982), pp. 709–729; Polachek, "Conflict and Trade," *Journal of Conflict Research*, Vol. 24, No. 1 (March 1980), pp. 55–78; William J. Domke, *War and the Changing Global System* (New Haven: Yale University Press, 1988), chap. 5; Edward D. Mansfield, *Power, Trade, and War* (Princeton: Princeton University Press, 1994), chap. 4. These studies, however, provide no documentary evidence that leaders considered trade levels in deciding between war and peace. It is thus hard to know whether the correlation is spurious or illuminating. While the result seems to support liberalism over realism, it is also consistent with trade expectations theory: high trade should be associated with lower conflict in those instances where expectations for future trade are also positive. Given their suspect methodologies, one should also be cautious about quickly dismissing realism. The correlation of trade with less conflict in the first three studies is not surprising, since dyads of small states are included to build the sample. Such states tend to have very high trade/GNP ratios. See Stephen D. Krasner, "State Power and the Structure of International Trade," *World Politics*, Vol. 28, No. 3 (April 1976), p. 328. However, they are deterred from war by their

Exploring internal decision-making in some detail, I show how trade expectations theory helps solve the empirical puzzles for liberalism and realism.

#### GERMANY AND THE OUTBREAK OF WORLD WAR I

Germany had been one of the few great powers trying to buck the trend towards protectionism in the early and mid-1890s. Recognizing that German industrial products could now match the goods of any state, Chancellor Caprivi set in place policies to expand German trade in Europe and overseas. Other great powers, however, indicated their opposition to any German *penetration pacifique*. Severe tariffs from the United States (McKinley tariff, 1890) and France (Meline tariff, 1892) were certainly worrisome. Even that bastion of free trade—Britain—indicated after 1895 that its fear of rising German commercial strength would soon lead to a reversal of policy. In 1896, the British had raided the Transvaal region of South Africa, jeopardizing German commercial interests. In mid-1897, Canada slapped a discriminatory tariff on non-British goods, contrary to the 1865 Most Favored Nation treaty between Germany and the British empire. Despite Germany's protest, the British, far from making amends, upheld the Canadian decision and then renounced the 1865 treaty in July 1897. Soon after this Joseph Chamberlain opened talks with British colonies on the possible formation a general imperial preference system.<sup>45</sup>

German expectations for future trade reflected these developments. On July 31, 1897, the Prussian minister in Munich informed Chancellor von Hohenlohe that public opinion saw the British "denunciation" of the 1865 treaty as "the prelude to a close trade relationship of England with her colonies." The kaiser's marginal comments indicated his agreement that "the denunciation is the beginning of a revolution in the whole system of British commercial policy." For the kaiser, any suggestion that the target of British action was the United States was "nonsense"; clearly "it is against Germany." He continued, "now that the superiority of German industry is recognized, [the British] will soon make efforts to destroy it."<sup>46</sup>

---

very size. Note as well that all of these tests simply assume that the trade/GNP ratio alone is an adequate measure of the core concept, dependence. Given the concern of realism and trade expectations theory for the costs of severed trade, a proper test must also include such factors as dependence on others for vital goods and availability of alternative sources of supply.

45. See Paul M. Kennedy, *The Rise of Anglo-German Antagonism, 1860–1914* (London: Ashfield, 1980), chaps. 12–14.

46. Quoted from *German Diplomatic Documents, 1871–1914*, vol. II, trans. E.T.S. Dugdale (New York: Harper and Brothers, 1930), pp. 486–487.

The “main worry” of German leaders during the late 1890s, as Fritz Fischer recounts, “remained . . . the extreme protectionist tariffs of the United States and the plans for a British customs association.”<sup>47</sup> The German naval buildup after 1898 was partly designed to protect German trade, particularly imports of raw materials and food. Cecil notes that there was widespread recognition in Germany that with its fast growing population, Germany “could no longer subsist on native-grown foodstuffs” and that a strong navy was needed as “a necessary bulwark against starvation.”<sup>48</sup>

German leaders had good reason to worry about the dependability of outside suppliers. In the decade and a half before the war, dependence on trade for vital goods increased dramatically, driven by phenomenal growth in both population and industrial size. Domestic oil production, for example, had gone up 140 percent from 1900 to 1913, but still accounted for only ten percent of total German oil needs. The state went from being a net exporter of iron ore as late as 1897 to relying on outsiders for close to 30 percent of its needs by 1913, despite domestic production increases of 120 percent. By 1913, over 57 percent of Germany’s imports were in the form of raw materials, versus 44 percent in 1903 and 41 percent in 1893. All this was occurring at a time when Germany’s ratio of trade to GNP was rising to new heights: from 32 percent in 1900, to 36 percent in 1910, to almost 40 percent in 1913.<sup>49</sup>

Of great concern as well were the growing French, Russian, and British efforts to obstruct German commerce. After 1897, Britain and the United States worked in tandem to preclude German colonial gains: despite Germany’s efforts, for example, it received nothing from the dissolution of the Spanish empire. In both Moroccan crises, 1905 and 1911, Britain helped France thwart greater German economic penetration of Africa. In fact, from 1898 to 1913, the colonial territory Germany had been permitted to acquire was only one-

---

47. Fritz Fischer, *War of Illusions: German Policies from 1911 to 1914*, trans. Marian Jackson (New York: W. W. Norton, 1975), p. 7.

48. Lamar Cecil, *Albert Ballin: Business and Politics in Imperial Germany* (Princeton: Princeton University Press, 1967), p. 149. It was at this time that German leaders implemented the concepts of *Weltpolitik* and *Mitteleuropa* as responses to growing foreign protectionism. *Weltpolitik* sought “the attainment of secure external supplies of raw materials at regulated prices,” while *Mitteleuropa*, its continental counterpart, envisioned the development of “an organized and protected system of economic exchanges between an industrial Germany and an agricultural periphery in central and eastern Europe.” See Woodruff D. Smith, *The Ideological Origins of Nazi Imperialism* (New York: Oxford University Press, 1986), pp. 65, 78.

49. See B.R. Mitchell, *European Historical Statistics, 1750–1975*, 2d rev. ed. (New York: Facts on File, 1981), pp. 514, 821 on trade/GNP; pp. 393, 439 on oil; pp. 409, 445–446 on iron ore. See W.F. Bruck, *Social and Economic History of Germany from William II to Hitler, 1888–1938* (Cardiff: Oxford University Press, 1938), p. 110, on raw materials.

seventh that acquired by the United States, a state less often thought of as "imperialist."<sup>50</sup>

In the Middle East, the British worked actively to minimize German economic penetration. In 1907, they agreed with Russia to divide Persia into spheres of influence as part of a campaign to restrict any extension of German power via the proposed Berlin–Baghdad Railway. The Russian ambassador reported to Moscow in August 1910, "England is less interested in what happens in Persia than in preventing any other Power, except England and Russia, from playing any role there. This applies particularly to Germany and Turkey."<sup>51</sup> Just before the war, England worked out a tacit deal with the Americans, giving them a sphere of influence over Latin American oil, in return for British domination of the Middle Eastern oil reserves.<sup>52</sup> By these means, the Germans were effectively denied control over oil imports at a time when only 10 percent of Germany's growing oil requirements was supplied by internal production.

Two other areas concerned the Germans: raw materials and food. With Germany becoming a net importer of iron ore after 1897, French ore became increasingly important: German ore imports from France had increased almost sixty-fold from 1900 to 1913 as Sweden, Germany's main supplier, moved to establish export quotas. German industry invested heavily in the mines of Northern France, and by 1913, directly controlled about 10 to 15 percent of French ore reserves.<sup>53</sup>

The French government took steps to stop this economic penetration, delaying further concessions to German companies in early 1912 and then halting them altogether in December 1913. This came at a time when German capital in general was being shut out of both the French and Russian markets. It is not surprising, therefore, that German industrialists in 1913 would openly speak to the Italian Minister of Commerce "of the need to lay their hands on the iron ore basin of French Lorraine; war seemed to them a matter for industry."<sup>54</sup>

---

50. Holger H. Herwig, *Politics of Frustration: The United States in German Naval Planning, 1889–1941* (Boston: Little, Brown, 1976), p. 9.

51. Quoted in G. Lowes Dickinson, *The International Anarchy, 1904–1914* (New York: Century, 1926), p. 261; see also chap. 10.

52. See Fiona Venn, *Oil Diplomacy in the Twentieth Century* (New York: St. Martin's, 1986), chap. 2; Daniel Yergin, *The Prize: The Epic Quest for Oil, Money, and Power* (New York: Simon and Schuster, 1991), pp. 153–163.

53. Fischer, *War of Illusions*, pp. 321–322; see also Hans W. Gatzke, *Germany's Drive to the West* (Baltimore: Johns Hopkins Press, 1950), pp. 30–38.

54. Quoted in Fischer, *War of Illusion*, p. 326; see also pp. 322–326.

Expectations for the critical food trade were also deteriorating in the last years before the war. Imports of foodstuffs from 1890 to 1913 grew at an average of 4.8 percent a year, well above the overall economic growth rate of 3.9 percent. The Anglo-German naval arms race reflected fears on each side that the other might blockade imports to starve the adversary into submission. British plans for such a blockade were well-advanced in the last decade before the war, and “[the] threat to Germany was a real one.”<sup>55</sup>

Thus German leaders after 1897 were increasingly worried about great power economic as well as military encirclement. Their declining expectations of future trade on the eve of World War I are revealed by the extensive documentary work of Fischer.<sup>56</sup> His evidence shows a clear relation between initial German war aims and the increasing economic anxieties of a diverse group of individuals before July 1914. The shared fear was that German industry, increasingly dependent on outsiders for vital goods, would be strangled by the growing economic restrictions imposed by adversaries. Since these powers had extensive imperial possessions, they could afford to adopt closed economic policies; Germany lacked such an alternative. As neomercantilist Gustav Schmoller in 1900 put it, the Russian, British, and American world empires, “with their greed for land, their power at sea and on land, their trade,” want to put all others “into an economic straitjacket and to smother them.”<sup>57</sup>

By 1911, after the failures of the second Moroccan crisis and “in response to the protectionist trends in the United States, Britain, and Russia,” Germany “turned again to the idea of a central European economic area as a defensive measure.”<sup>58</sup> Concern for economic security was tangible, transcending ideological and party lines. Future chancellor and National Liberal Stresemann stated in early 1913 that Germany must seek to “create a self-sufficient economic area, so as to make sure of our raw material requirements and to protect our exports.” Basserman of the Centre Party in mid-1912 stated that “our trade declines more and more in certain places where we are pushed out or where it keeps its end up only with difficulties.” Even the Social Democrat Hildebrand would write in 1911, “from a socialist standpoint the acquisition of colonial domains has become an acute economic necessity for Germany.” Indeed,

---

55. Avner Offer, *The First World War: An Agrarian Interpretation* (Oxford: Oxford University Press, 1989), p. 322; chaps. 15–21; pp. 325–326, 335. By 1906, Germany was importing about 20 per cent of its annual grain consumption (p. 230).

56. While Fischer’s goal is to show that domestic causes for the war were predominant, much of his evidence actually indicates that German leaders were driven by systemic concerns, namely the safeguarding of German economic security. Fischer, *War of Illusions*, pp. viii–ix.

57. Quoted in *ibid.*, p. 35.

58. Fischer’s words, *ibid.*, p. 10.

Fischer shows that after 1906 the Social Democratic party moved from opposition to acceptance of German colonial expansion.<sup>59</sup>

These views paralleled those within the government. Walter Rathenau, who was the influential head of the department of military raw materials in the War Ministry in August 1914, was arguing by December 1913 that Germany's raw material base was too "narrow," and that it depended on "the mercy of the world market as long as [Germany] did not itself possess sufficient raw material sources." In April 1914, Albert Ballin noted that the "expansion of our foreign markets is increasingly threatened," and in the oil-rich Near East in particular, "we have been thrown out of the most important regions there."<sup>60</sup>

The declining expectations of future trade contributed to the pervasive sense of general decline felt by the German leadership in July 1914. Extensive evidence shows that German leaders brought on world war for "preventive" motives, namely to forestall the rise of powers such as Russia.<sup>61</sup> Economic factors reinforced these motives. If France and Russia could be defeated, valuable areas in Europe would be incorporated under German tutelage, guaranteeing the raw materials and markets needed for future German economic power and therefore security; without major war, the economic policies of German adversaries would push Germany further into decline over the long term.

These aims were revealed in the so-called "September Program," which was finalized by Chancellor Bethmann Hollweg on September 9. The plan stated that the "general aim of the war" was "security for the German Reich in west and east for all imaginable time." Russia "must be thrust back as far as possible," while France would become "economically dependent on Germany, secur[ing] the French market for our exports." France's "ore-field of Briey, which is necessary for the supply of ore for our industry, [would] be ceded," and a "central European economic association," including central Europe, France, Poland, and "perhaps Italy, Sweden, and Norway," would be formed. And while members would be "formally equal," "in practice [the association] will be under German leadership and must stabilize Germany's economic dominance over *Mitteleuropa*."<sup>62</sup>

---

59. Quotations in *ibid.*, pp. 234, 250–253.

60. Quoted in *ibid.*, pp. 238, 450.

61. For a summary, see Dale Copeland, "Realism and the Origins of Major War" (Ph.D. diss., University of Chicago, 1993), chaps. 3 and 4.

62. Quoted in Fritz Fischer, *Germany's Aims in the First World War* (New York: W. W. Norton, 1967), pp. 103–104.



This blunt programme for German economic hegemony in Europe was clearly consistent with the pre-war call for a *Mitteleuropa*, and it reflected the work of Bethmann and his associates through the months of July and August 1914. Rathenau, now in charge of raw materials for the Reich, was particularly influential. On August 1, 1914, he submitted to Bethmann a long memorandum arguing that “only a Germany reinforced by ‘*Mitteleuropa*’ would be in a position to maintain herself as an equal world power between the world powers of Britain and the United States on the one side and Russia on the other,” and war, if necessary, would help to achieve this “essential objective.”<sup>63</sup> The date shows that the report must have been prepared during the height of the July crisis, demonstrating that the September program reflected pre-war objectives, rather than a post-hoc scramble to justify the reality of war.

Of particular concern were German iron ore interests in France. On August 26, Bethmann sought information on the size of the ore deposits in French Lorraine, and soon after agreed to consider annexation of French mines “in a final peace treaty.” Aware of pre-war French discrimination against German companies, in the September Program he wrote that any commercial treaty with a defeated France “must secure for us financial and industrial freedom of movement in France in such a fashion that German enterprises can no longer receive different treatment from [the] French.”<sup>64</sup> Russian pre-war trade restrictions were also to be torn down. Bethmann noted in an October 22, 1914, memo to Delbrück, secretary of state in the Reich Interior Office, that after the war Russia “would have imposed on it a long-term commercial treaty which would mean a lowering of Russian industrial tariffs.”<sup>65</sup>

It is important to note the widespread agreement during the September–October period that despite likely opposition from industrial and agricultural interests, Germany needed to create a free-trade zone within Europe after victory in order to compete against the remaining world powers. In a September 13 memo to Bethmann, Delbrück argued that “only a Europe without customs barriers [controlled by Germany] can effectively face the vast producing potential of the transatlantic world.”<sup>66</sup> In October, von Falkenhausen, counsellor at the Prussian Ministry of Agriculture, wrote that economic hegemony

---

63. Ibid., pp. 101 and 11. The first part of the quote is Fischer’s paraphrase from the document; the words “essential objective” Fischer takes from the document itself. Bethmann was clearly impressed by the memo; he circulated it throughout the department. Ibid., p. 101.

64. Quoted in Fischer, *War of Illusions*, p. 533; Fischer, *Germany’s Aims*, p. 104.

65. Fischer’s words summarizing the document, *War of Illusions*, p. 538.

66. Quoted in ibid., p. 540.



in Europe was needed to “match the great, closed bodies of the United States, the British, and the Russian Empires,” in order to compete “over the conditions of the admission of each to the markets of the others.”<sup>67</sup> Also in October, an adviser to Delbrück, Schoenebeck, argued that the “final great aim” in the war was “to create a great central European economic area which allows us to maintain our place in the economic struggle of the nations and prevents us from declining into economic impotence in the face of the increasingly closed and assertive economic world empires—Great Britain with its colonies, the United States, Russia, Japan and China.”<sup>68</sup>

Thus increasingly pessimistic German trade expectations had much to do with the German willingness to bring on a major war in July 1914. With Britain shutting Germany out of the oil-rich Middle East and resource-rich Africa, with France threatening Germany’s access to iron ore, and with high French and Russian tariff levels limiting German economic growth versus “economic empires” like Britain and the United States, German leaders felt that only a major war would provide the economic dominance of Europe needed for long-term German survival.

#### GERMANY AND THE START OF WORLD WAR II

There is great continuity between German decision-making up to World War I and up to World War II in terms of the causal role of economic factors.<sup>69</sup> This derives from one overriding fact: Germany in the 1930s, as before World War I, was a state capable of great military power, but its small territory possessed few natural resources compared with the great powers surrounding it. In consequence, Germany would always remain highly dependent on outsiders for the food and raw materials vital to its economic health, unless it expanded. Moreover, since the surrounding great powers were better able to fashion self-sustaining imperial realms, should they ever move in this direction by closing their borders to trade—as they began to do in the early 1930s—long-term German economic viability and therefore security would be threatened. These two realities implied that Germany’s potential military superiority might

---

67. Quoted in *ibid.*, p. 539.

68. Quoted in Fischer, *War of Illusions*, p. 539 and *Germany's Aims*, p. 251.

69. In showing this continuity, I do not mean to minimize the atrocities committed by the Nazi regime. Rather, while Hitler’s *means* were far more evil than Wilhelmine Germany’s, many of his *ends* in terms of economic and territorial security were essentially the same. The most important contribution to the “continuity” argument in modern historiography is Fritz Fischer’s work and the work of his followers in the “Hamburg School.” See also Smith, *Ideological Origins*.

have to be used, as in World War I, to generate the territorial mass needed for survival against what in 1914 were referred to as the “economic world empires.”

The strategic obsessions of Adolf Hitler and the Nazi regime revolved around this dilemma which the first World War had failed to solve. In *Mein Kampf*, Hitler foresaw that, because Germany’s small size constrained its “living space” (*Lebensraum*), its dependence on foreign states for food would only increase as the population grew faster than the yields on arable land.<sup>70</sup> By the mid-1930s, his anxiety shifted somewhat: Germany’s problem was not simply the supply of food, but even more seriously, the supply of raw materials needed for industrial strength. This dual problem could be overcome by one strategy: war against the system, with the acquisition of Russian land west of the Urals as the prime territorial objective. By destroying Russia, in one stroke Germany could acquire the land needed for vital food and raw materials, while preventing the rise of the state most likely to overwhelm Germany in the future.<sup>71</sup>

Even if we question critical aspects of Hitler’s worldview, it is important to note not only that his strategic objectives mirrored much of pre-1914 thinking, but that without his mass appeal and the loyalty of subordinates, Hitler could not have initiated world war. Would Hitler’s arguments have made as much sense to his followers, if Germany had possessed the land mass of Russia or the British empire, or if world trade had not been disrupted by the Great Depression? Implicit in what follows is the argument that had Germany been less dependent on vital goods, and had expectations for future trade not been so pessimistic following U.S., British, and French efforts to create closed trading blocs, it would have been much more difficult for Hitler to pull Germany into war: the expected value of the trading option would have been much higher—or at least not as negative—thus dampening the necessity for war.

Immediately after Hitler’s accession to power, Nazi economic policy was guided by the so-called “Reformers,” a group of economists calling for the creation of a self-sufficient “large economic area” (*Grosswirtschaftsraum*) protected by tariff barriers.

This campaign was prompted by the collapse of the international trading system in the wake of the slump, the revival of world-wide protectionism, and

---

70. Hitler, *Mein Kampf*, trans. Ralph Manheim (Boston: Houghton Mifflin, 1925), pp. 131–140. For the pre-1914 origins of the idea of *Lebensraum*, see Smith, *Ideological Origins*, chap. 5.

71. On Hitler’s fears of the rise of Russia, see Hitler, *Mein Kampf*, chap. 24.

specifically, the creation of imperial or regional preference areas. . . . If Germany's economy was to compete with those of the United States, the British Empire, and Japan, it would need to create a rival economic bloc.<sup>72</sup>

This was akin to the pre-World War I concept of *Mitteleuropa*, an idea actively resuscitated by the Brüning and Papen governments after 1930 in response to the collapse of world trade.<sup>73</sup>

Nevertheless, from 1933 to 1936, when the economy was overseen by Hjalmar Schacht, the president of the Reichsbank, Germany did not proceed immediately towards greater self-sufficiency. Keynesian deficit spending, including mass rearmament, produced an immediate economic revival that required marked increases in the input of raw materials, which generally came from abroad. The massive wave of protectionism that followed the U.S. Smoot-Hawley tariffs of 1930, however, created a major constraint: since Germany could not sell its exports abroad, foreign currency could not be raised to pay for the imports of raw materials.

By June 1934, Hitler was being told that the "raw materials situation [was] becoming daily more acute," and that there was a "drain of foreign exchange."<sup>74</sup> The problem was particularly acute since much of Germany's raw material was coming from British colonies or dominions that had entered into the British imperial preference system. Part of the "New Plan" of September 1934 was to reorient German trade away from the British Empire and towards smaller European countries and South America, where supplies would be more secure.<sup>75</sup>

The New Plan solved the balance-of-payments problem for 1935, but by late 1935, world economic upheavals had shifted the terms of trade against Germany; import prices had risen 9 percent while export prices dropped by 9 percent. In other words, Germany had to sell 18 percent more just to import the same amount.<sup>76</sup> By 1936, Hitler decided to move towards greater autarchy in preparation for the war he saw as necessary for Germany's long-term economic viability. This decision was embodied in the "Four-Year Plan" of August 1936. Imports were to be restricted to goods that could not be acquired within Germany, while a program to synthesize oil and later rubber was initiated.

---

72. From J. Noakes and G. Pridham's summary notes, *Nazism 1919–1945: A Documentary Reader*, vols. 2 and 3 (Exeter, U.K.: University of Exeter, 1988), pp. 259–260.

73. *Ibid.*, p. 260.

74. *Ibid.*, Doc. No. 181, p. 270.

75. *Ibid.*, p. 274. See also Hirschman, *National Power*, part II.

76. Noakes and Pridham, *Nazism, 1919–1945*, p. 277.

Since the plan was opposed by Schacht and others, Hitler composed a lengthy memorandum to his key subordinates in August, explicating his rationale. Germany, he wrote, was engaged in a struggle for its very survival. Germany's situation was dire: "We are overpopulated and cannot feed ourselves from our own resources. . . . It is equally impossible for us at present to manufacture artificially certain raw materials which we lack in Germany or to find substitutes for them." Germany needed to act to relieve its dependence on "foodstuffs and raw materials," and the solution "lies in extending our living space, that is to say, extending the sources of raw materials and foodstuff of our people."<sup>77</sup>

Hitler recognized that Germany could try to satisfy its dependence by importing the necessary goods, yet this required selling exports to get imports. The world economic environment was not amenable to this strategy.

(a) Since the German people will be increasingly dependent on imports for their food and must similarly, whatever happens, import a proportion at least of certain raw materials from abroad, every effort must be made to facilitate these imports. (b) An increase in our own exports is possible in theory but in practice hardly likely. *Germany does not export to a political or economic vacuum, but to areas where competition is very intense.* . . . Since imports of food on the whole cannot be substantially reduced and are more likely to increase, an adjustment must be found in some other way.

Hitler's solution was therefore to seek "100 percent self-sufficiency . . . in every sphere where it is feasible," to save precious foreign currency for the importation of food and any raw materials that could not be found or synthesized within Germany.<sup>78</sup>

The problem of raw material dependence turned out to be more intractable than Hitler imagined. Through vast investments, Germany was able to increase production of synthetic fuel by 130 percent from 1936 to 1939. In 1938, however, still only about 10 percent of German petroleum need was met by domestic production; the other 90 percent was coming from outside, primarily the West Indies, the United States, and Rumania. In the same year, two-thirds of iron ore requirements came from outside. By the outbreak of war itself, Germany still relied on outsiders for fully one-third of all raw material needs.<sup>79</sup>

---

77. Ibid., Doc. No. 185, pp. 283–284.

78. Ibid., Doc. No. 185, pp. 284–286 (emphasis added).

79. Oil figures from Robert Goralski and Russell W. Freeburg, *Oil and War: How the Deadly Struggle for Fuel in WWII Meant Victory or Defeat* (New York: William Morrow, 1987), p. 26; iron ore from Mitchell, *European Historical Statistics*, pp. 446, 410; raw materials from Noakes and Pridham,

Expectations for future trade were not getting any better after 1935. British and French moves towards imperial preference solidified. The League of Nations' attempt to impose oil sanctions on Italy after its attack on Ethiopia, while ultimately unsuccessful, also suggested how the "have" great powers would react should the "have-nots" seek changes in the status quo. And sometimes vital imports were suddenly cut off for no apparent reason, or due to uncontrollable domestic factors in the supplying nation. In February 1936, for example, the Soviet Union stopped all oil deliveries to Germany, citing only "difficulties with foreign payments."<sup>80</sup> Such actions could only have further reduced Hitler's estimate of the value of the trading option.

By 1937, the critical decision for war had been made. On November 5, 1937, Hitler brought together his top four military leaders and the Foreign Minister for what is generally considered to be the most important "war council" meeting prior to the war.<sup>81</sup> The issue at hand was whether Germany's "space" problem could be solved by "means of autarchy" or by "increased participation in the world economy." The first was infeasible, since complete autarchy "could not be maintained." Hitler then launched into a discussion of the trading option as a means to German long-term security. To "participation in the world economy," he said, "there were limitations which we were unable to remove. The establishment of Germany's position on a secure and sound foundation was obstructed by market fluctuations, and commercial treaties afforded no guarantee for their actual observance." Countries that Germany formerly relied on for food were now industrializing, implying that they could no longer meet German food needs. Germany was also living in "an age of economic empires," and Hitler compared Germany to others with small territories, such as Japan and Italy, where "economic motives underlay the urge for expansion." Unfortunately, "for countries outside the great economic empires, opportunities for economic expansion were severely obstructed."

---

*Nazism 1919–1945*, p. 291. On German efforts to reduce dependence through increased trade ties with China and Eastern Europe, and through intervention in the Spanish Civil War, see Gerhard L. Weinberg, *The Foreign Policy of Hitler's Germany: Starting World War II* (Chicago: University of Chicago Press, 1980), chaps. 1, 5 and 7; David E. Kaiser, *Economic Diplomacy and the Origins of the Second World War* (Princeton: Princeton University Press, 1980); Robert H. Whealey, *Hitler and Spain: The Nazi Role in the Spanish Civil War, 1936–1939* (Lexington: University Press of Kentucky, 1989); Berenice A. Carroll, *Design for Total War: Arms and Economics in the Third Reich* (The Hague: Mouton, 1968).

80. Yergin, *The Prize*, p. 332.

81. See Noakes and Pridham, *Nazism 1919–1945*, p. 680.

Admitting that the economic stimulus provided by rearmament “could never form the basis of a sound economy over a long period,” Hitler elaborated the supply dilemma:

There was a pronounced military weakness in those states which depend for their existence on foreign trade. As our foreign trade was carried on over the sea routes dominated by Britain, it was a question rather of security of transport than of foreign exchange, which revealed in time of war the full weakness of our food situation. The only remedy, and one which might seem to us visionary, lay in the acquisition of greater living space.<sup>82</sup>

This living space “can be sought only in Europe”; this was “not a matter of acquiring population but of gaining space for agricultural use. Moreover, areas producing raw materials can be more usefully sought in Europe, in immediate proximity to the Reich, than overseas.”<sup>83</sup> Germany, he said, would have to acquire territory from others through force. He then laid out three possible contingency plans, all of which envisioned war by 1943–45 at the latest, before German military power would be past its peak.<sup>84</sup>

From this meeting, it is clear that the two conditions outlined by trade expectations theory as determinant of war—high dependence and low expectations for future trade—were present in the German case by the late 1930s.<sup>85</sup> In such a situation, even if the expected value of invasion is low or negative,<sup>86</sup> the value of the status quo trading option tends to be even lower; major war then becomes the lesser of two evils, especially when the negative expected value of trade only exacerbates anticipated decline. While no one would want

---

82. Ibid., Doc. No. 503, pp. 681–683.

83. Ibid., Doc. No. 503, pp. 682–683.

84. Ibid., Doc. No. 503, pp. 684–685.

85. One might discount Hitler’s language as mere talk necessary to justify his true driving force, which was his lust to dominate others; see Hans J. Morgenthau, *Scientific Man Versus Power Politics* (Chicago: University of Chicago Press, 1946). Even if this were true, however, it begs the question of why he felt his four key military leaders would need to hear an elaborate economic rationale for war. We thus return to the point that without the support of his subordinates, Hitler could not have initiated war; calculated aggression, therefore, had to have a logical end. It is also clear that the majority of Hitler’s military leaders were not simply brain-washed dupes of Nazi ideology, but accepted the necessity of major war on strategic grounds. See the essays in Correlli Barnett, ed., *Hitler’s Generals* (New York: Quill, 1989); John J. Mearsheimer, *Conventional Deterrence* (Ithaca: Cornell University Press, 1983), chap. 4; Dale Copeland, “Deterrence, Reassurance, And Machiavelian Appeasement: Was the Second World War Inevitable?” paper presented at *Security Studies* conference on “Deterrence after the Cold War: Theoretical Perspectives and Policy Implications of Enduring Rivalries,” Naval Postgraduate School, Monterey, Calif., September 1995.

86. On May 23, 1939, Hitler told his top military officials that while Germany must “aim at a short war,” it “must also be prepared for a war of 10–15 years’ duration.” Noakes and Pridham, *Nazism 1919–1945*, Doc. No. 539, p. 738.

to understate important unit-level reasons for the war (Hitler's personality, the nature of the Nazi regime, its racist ideology, etc.), Germany's systemic economic situation was a fundamental cause. Like Japan in 1930s, Germany's small territorial size, highly industrialized economy, and growing population meant that it would always be dependent on other great powers for goods vital to its long-term well-being. This would be so despite German efforts to achieve relative autarchy. With the world economy going through significant fluctuations, and with large economic empires like the United States and Britain shutting off trade with have-not nations like Germany, it was not surprising that "participation in the world economy" was not seen as the means to achieve Germany's long-term security.

Thus, Hitler's calculations contained a certain tragic rationality eerily similar to those of German decision-makers in 1914. Moreover, German military leaders, most of whom were in positions of authority before Hitler assumed power, also accepted his logic. Disagreements with the military were mostly over tactics, not grand-strategic objectives: there was almost universal acceptance of the notion that Germany, to survive as a nation, had to overcome its severe dependence on others by grabbing the raw materials and fertile territory of other states.

## *Conclusion*

This article offers a new theory to build upon liberal and realist approaches to economic interdependence and war. The other two approaches highlight important causal elements of interdependence—liberalism, the benefits of trade, and realism, the potential costs of severed trade—but neither specifies the conditions under which these elements will operate. By introducing a dynamic factor, expectations of future trade, the new theory shows when high levels of dependence lead to peace or to war. When expectations for trade are positive, leaders expect to realize the benefits of trade into the future and therefore have less reason for war now; trade will indeed "constrain." If, however, leaders are pessimistic about future trade, fearing to be cut off from vital goods or believing that current restrictions will not be relaxed, then the negative expected value of peace may make war the rational strategic choice.

A few practical implications of this new theoretical framework for the post-Cold War world can be briefly noted. In anticipating likely areas of conflict, one should look for situations in which powers have both high levels of dependence on outsiders and low expectations for trade. Both China and Japan,



as emerging great powers, may soon satisfy these conditions. China's economy is growing at a yearly rate many times that of most other powers, and its domestic sources of raw materials are struggling to keep pace; within the next couple of years, for example, China will have to begin importing oil.<sup>87</sup> As it continues to modernize its armed forces, it will gradually gain the strength necessary to press its territorial claims.<sup>88</sup>

Japan has never truly overcome the problem it faced before World War II, namely, its overwhelming dependence on others for the vital minerals and oil needed to sustain its modern industrial economy. While U.S. hegemony in the region has allowed Japan to flourish since 1945, one can imagine the fears that would arise in Tokyo should the United States ever reduce its naval and military presence in the Far East (for budgetary or other reasons). Japan would be compelled to try to defend its raw material supply routes, setting off a spiral of hostility with regional great powers like China, India, Russia, and perhaps the United States itself.<sup>89</sup>

Russia still has significant economic ties with the states of the former Soviet Union, and is, in particular, dependent on pipelines through Ukraine and Belarus to sell its natural gas to Western European customers. These states in turn depend on Russia for their energy supplies.<sup>90</sup> Should Ukraine use threats to turn off the pipelines as political leverage, low expectations for future trade might push Russia to reoccupy its former possession in order to mitigate its economic vulnerability.

American and European dependence on Middle East's oil exports, combined with plummeting expectations for future trade, were probably the key factors leading the United States and Europe to unite against Iraq in 1990–91. It is not hard to envision future scenarios in the Persian Gulf involving fundamentalist Iran or a resurgent Iraq that could dictate a repeat of the Gulf War, this time with perhaps far more devastating consequences.

The key to moderating these potential conflicts is to alter leaders' perceptions of the future trading environment in which they operate. As the Far Eastern

---

87. See Nicholas D. Kristof, "The Rise of China," *Foreign Affairs*, Vol. 72, No. 5 (November/December 1993), p. 64.

88. China has already staked a claim to the potentially oil rich and much disputed Spratly Islands in the South China Sea. See Gerald Segal, "East Asia and The 'Constraint' of China," *International Security*, Vol. 20, No. 4 (Spring 1996), pp. 107–135. William H. Overholt, *The Rise of China: How Economic Reform is Creating a New Superpower* (New York: Norton, 1993).

89. For an exaggerated but still insightful analysis of this, see George Friedman and Meredith Lebard, *The Coming War with Japan* (New York: St. Martin's Press, 1991).

90. See Erik Whitlock, "Ukrainian-Russian Trade: The Economics of Dependency," *Radio Free Europe/Radio Liberty Research Report*, Vol. 2, No. 43 (October 29, 1993), pp. 38–42.

situation of the late 1930s showed, the instrument of trade sanctions must be used with great care when dealing with states possessing manifest or latent military power. Economic sanctions by the United States against China for human rights violations, for example, if implemented, could push China toward expansion or naval power-projection in order to safeguard supplies and to ensure the penetration of Asian markets. Sanctions against Japan could produce the same effect, if they were made too strong, or if they appeared to reflect domestic hostility to Japan itself, not just a bargaining ploy to free up trade.

The value of maintaining an open trading system through the new World Trade Organization (WTO) is also clear: any significant trend to regionalization may force dependent great powers to use military force to protect their trading realms. In this regard, my analysis tends to support the liberal view that international institutions may help reinforce the chances for peace: insofar as these institutions solidify positive expectations about the future, they reduce the incentive for aggression. Yet trade expectations between great powers are usually improved without formal institutions being involved, simply as the result of smart bilateral diplomacy. Nixon and Kissinger achieved just that when they negotiated the 1972 trade treaty with the Soviets. Conversely, trade expectations can be shattered by poor bilateral diplomacy even within the context of an overarching international regime. American trade sanctions against China or Japan tomorrow, for example, might produce profound political-military tension, even under the new WTO framework. The existence of formal institutions, therefore, does not do away with the need for intelligent great power foreign policy between individual great powers.

This article began with the question of whether high economic interdependence between states after the Cold War might help preserve the peace. For liberals confident that a new day is dawning for the international system, this analysis sounds a strong note of caution. It is the very states that are the *most* dependent on others that are likely to lead the system into war, should their leaders become pessimistic about the continuation of trading relations that so determine their wealth and security. But my argument also rejects the stark view of realists who automatically equate continued high interdependence with conflict: if leaders can sustain positive expectations for the future, then trading will indeed seem more rational than invading. To a large degree, whether interdependence leads to war or to peace thus becomes a question of political foresight. Those leaders who understand that an adversary's decisions rest not on the static situation of the present, but on the dynamic expectations for the future, will be better able to avoid the tragedy of war.