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THE TROUBLE WITH CARROTS:
TRANSACTION COSTS, CONFLICT EXPECTATIONS,
AND ECONOMIC INDUCEMENTS

DANIEL W. DREZNER

CARROTS ARE commonly used in domestic politics, as any study of legislative log-rolling, campaign finance, or political patronage would attest. At the international level, the use of inducements to influence individual officials in states or international organization is also rather common, as the International Olympic Committee has recently discovered.¹ The theoretical literature suggests that inducements should be successful in altering the foreign policies of nation-states as well.² There have been several prominent cases of financial inducements in world politics in the past two decades. The United States greased the wheels of the Camp David accords by promising billions in aid to Egypt and Israel. In 1990 the Soviet Union agreed to a DM50 billion payment from Germany in return for the Soviet withdrawal of troops from East Germany. From 1992 to 1994, the United States used Nunn-Lugar funds to persuade Belarus, Ukraine, and Kazakstan to relinquish their nuclear stockpiles.

Frequently, however, carrots are spurned. North Vietnam rejected Lyndon Johnson's covert offer of massive aid in return for halting the war in Vietnam. The Reagan administration's attempt to trade arms for hostages

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1. Jere Longman, "Investigators Cite Cash Payments in Salt Lake City Bid for Olympics," *New York Times*, 8 January 1998, A1. See also Kimberly A. Elliott, ed., *Corruption and the Global Economy* (Washington, D.C.: Institute for International Economics, 1999).

2. Robert Tollison and Thomas Willett, "An Economic Theory of Mutually Advantageous Issue Linkages in International Negotiations," *International Organization* 33, no. 4 (autumn 1979): 425–49; James Sebenius, "Negotiation Arithmetic: Adding and Subtracting Issues and Parties," *International Organization* 37, no. 2 (spring 1983): 281–316; James Fearon, "Rationalist Explanations for War," *International Organization* 49, no. 3 (summer 1995): 379–414.

with Iran did not produce substantial concessions. Russia chose not to accept Japan's offer of aid in exchange for returning the Kurile Islands. Pakistan refused U.S. offers of aid in return for not conducting nuclear tests. Despite famine conditions, North Korea rebuffed a South Korean carrot of food aid in return for permitting the reunion of family members split by the Korean War. The Clinton administration's attempt to use trade as a carrot for China to alter its human rights practices has proven futile.³ Even more frequently, carrots are not proffered in situations where they are a clear option; instead, coercive tactics are used. To paraphrase Arthur Conan Doyle, this is a dog that rarely barks.

The existing literature on inducements is too small to be much of a guide for explanation. The work on carrots is paltry when compared to the literature devoted to economic or military coercion. Indeed, it is small enough to leave the definition of an intuitive notion somewhat unclear. It is telling that articles focusing on financial inducements talk about 'carrots' or 'bribes' while articles on other kinds of inducements talk about 'linkage.'⁴ This paper will use a three-part definition of carrots or inducements. First, relative to the status quo, a carrot is a transfer of benefits offered by one actor, called the *sender*, to another actor, called the *receiver*. Second, the carrot comes with a clear quid pro quo; in return for the benefit, the receiver is expected to grant some concession to the sender.⁵ Third, the sender's demanded concession is well-defined; the carrot is not proffered in the hopes of influencing the receiver country's policies over the long run.⁶

3. Randall Newnham, "How to Win Friends and Influence People" (paper presented at the International Studies Association annual meeting, Toronto, Canada, March 1997; Erik Eckholm, "Talks Between 2 Koreas Collapse in Mutual Blame," *New York Times*, 19 April 1998, 8; Robert Kagan, "The Price of 'Engaging' China," *New York Times*, 15 January 1999, A23.

4. David Baldwin, "The Power of Positive Sanctions," *World Politics* 24, no. 1 (October 1971): 19–38; T. Clifton Morgan, "Issue Linkages in International Crisis Bargaining," *American Journal of Political Science* 34, no. 2 (May 1990): 311–33; James D. Morrow, "Signaling Difficulties with Linkage in Crisis Bargaining," *International Studies Quarterly* 36, no. 1 (March 1992): 153–72; Eileen Crumm, "The Value of Economic Incentives in International Relations," *Journal of Peace Research* 32, no. 3 (summer 1995): 313–30; William J. Long, "Trade and Technological Incentives and Bilateral Cooperation," *International Studies Quarterly* 40, no. 1 (March 1996): 77–106; David Cortright, ed., *The Price of Peace: Incentives and International Conflict Prevention* (New York: Rowman and Littlefield, 1997).

5. Thus, the Marshall Plan does not qualify as a carrot, because there were no associated demands placed on it when it was first implemented. Demands made *after* 1949, using the Marshall Plan aid as leverage, would qualify as coercion relative to the status quo. See Helen Leigh-Phippard, "U.S. Export Controls and Aid to Britain, 1949–1958," *Diplomacy and Statecraft* 6, no. 3 (November 1995): 719–52.

6. For discussions of the use of inducements as a long-term strategy of increasing influence over the receiver, see Rawi Abdelal and Jonathan Kirshner, "Strategy, Economic Relations, and the Definition of National Interests," *Security Studies* 9, nos. 1/2 (autumn 1999–winter 2000): 119–56; and Paul A. Papayoanou and Scott L. Kastner, "Sleeping with the

The lack of any significant literature means that basic questions remain unaddressed. The literature suffers from Benjamin Most and Harvey Starr's criticism that the scholarly focus on foreign policy options has been too narrow.⁷ In a disputed issue area, states are not limited to the choice of inducement or no inducement. They can also select other policy options, such as economic sanctions, threats of military force, attempts at diplomatic isolation, or doing nothing. Focusing only on carrots overlooks the fact that states can choose from a host of policy options and responses. Although more attention needs to be paid to the use of carrots, it also needs to be tied into the larger question of how states choose among their set of feasible influence policies.

This paper puts forward a rational choice explanation for the conditions when inducements are a feasible and preferable option. It does so by asking two questions. First, what prevents nation-states from using carrots more frequently? In other words, why are carrots not a ubiquitous feature of the international system? Second, how useful are carrots relative to other policy options? In other words, when will carrots be preferred over economic or military coercion?

This paper will argue that only under very special circumstances will states opt for the carrot as their preferred policy option, although it will emerge as a second-best option. Carrots are not feasible because of the high transaction costs involved in making political exchanges in an anarchic world. If actions are not observable or enforceable in international interactions, the costs of securing an agreement can outweigh the benefits of any inducement. Thus, carrots will be more likely and more successful in situations where transaction costs are reduced, such as between democratic dyads or within international regimes. Even in cases where the use of inducements is a feasible option, however, it may not be the sender's preferred choice. If the sender anticipates frequent conflicts with the receiver, it will be reluctant to proffer a carrot, for fear of weakening its bargaining position in the future. If a sender wants a concession from an adversarial receiver and coercion fails to generate compliance, the sender may then proffer a carrot as a second-best option. Even in cases where the two states

(Potential) Enemy: Assessing the U.S. Policy of Engagement with China," *Security Studies* 9, nos. 1/2 (autumn 1999–winter 2000): 157–87. Note that this distinction between short-term carrots and long-term engagement strategies corresponds to the distinction in the sanctions literature between economic warfare and economic coercion. See Robert Pape, "Why Economic Sanctions Do Not Work," *International Security* 22, no. 2 (fall 1997): 90–136.

7. Benjamin Most and Harvey Starr, "International Relations, Foreign Policy Substitutability, and 'Nice' Laws," *World Politics* 36, no. 3 (April 1984): 383–406. David Baldwin also makes this point in *Economic Statecraft* (Princeton: Princeton University Press, 1985).

have harmonious relations, senders may prefer using economic or military coercion instead of inducements as a method of extracting concessions, because it is more cost-effective. Ironically, a sender may choose to coerce an ally because previous inducements give it sufficient leverage to sanction.

There are several implications of this paper for both the theory and practice of foreign policy. Theoretically, it offers an additional explanation for the existence of the democratic peace. One of the reasons that democracies may choose not to fight each other is that the use of inducements is a more feasible option between these dyads. Relative to other dyads, democracies have a wider range of policy options, making the use of force less of a necessity. This article also suggests why states continue to use coercive tactics even though scholars remain pessimistic about their utility. Compared to inducements, even sanctions that fail to yield significant concessions might be preferable. The results also throw cold water on recent claims that inducements should be used more often in crisis situations.⁸ Senders should consider other options before reaching for the bag of carrots.

This paper is divided into five sections. The next section examines why carrots are not a more common feature of world politics. It argues that high transaction costs prevent a genuine market for political concessions from developing. The third section of the paper considers how states choose among their policy options, and how states' expectations of future conflict affect those choices. Ironically, senders will prefer to sanction in cases where inducements have a better chance of success. The fourth section of the paper is a plausibility probe of the arguments developed here. It includes a statistical analysis of U.S. decisions to use carrots and sticks from 1950 to 1992, as well as a comparison of U.S. sanctions against South Korea in 1975 and inducements for North Korea in 1994 when both countries attempted to acquire nuclear weapons. The final section concludes.

WHEN ARE CARROTS FEASIBLE?

CARROTS HAVE been observed in international relations since the formation of the Delian League, and the anecdotal literature indicates that they have been used as a tool of statecraft ever since. Casual empiricism suggests, however, that at present the market for inducements in world

8. Leon V. Sigal, *Disarming Strangers: Nuclear Diplomacy with North Korea* (Princeton: Princeton University Press, 1998).

politics is remarkably thin. Klaus Knorr, writing in 1975, noted about inducements: “Surprisingly, the public record does not show this means... to have been practiced much in recent decades.”⁹ Unlike the frequent attempts to influence politicians at the domestic level, the market for purchasing influence in world politics remains underdeveloped. The question is, why? What prevents states from placing a well-defined price on all political assets? Why isn’t there a more established international market for political concessions?

Transaction-cost economics provide several reasons for why markets fail to form, several of which apply to international relations.¹⁰ For a market to exist, the costs of contracting between agents must be relatively small. If the costs of bargaining, monitoring, and implementing contracts between buyers and seller are too high, they can outweigh the utility derived from any exchange. Transactions costs are low when actions are both observable and enforceable. If contractual obligations are not directly observed, but rather outcomes related to those obligations are observed, the possibility of moral hazard arises. Agents can claim they have taken the agreed-upon action even if they have not, and attribute the absence of a desired outcome to other factors. A test-ban treaty, for example, is a contract signed by states pledging abstain from a specified action, the testing of nuclear weapons. The treaty is not perfectly monitored; nuclear tests are detected by observing seismic activity. This outcome (seismic activity) could be caused by an agent’s actions (nuclear tests) or from some other form of activity (earthquake). Because actions are not perfectly observable, there is incentive for states to cheat. States could explode a nuclear device, and then claim that the outcome was caused by other factors, such as an earthquake.¹¹ When actions are not perfectly observable and verifiable, a receiver has the incentive to go back on a deal, and the sender will be tempted to cry foul even if the receiver honors a deal.

9. Klaus Knorr, *The Power of Nations: The Political Economy of International Relations* (New York: Basic Books, 1975), 163.

10. See Ronald Coase, *The Firm, the Market, and the Law* (Chicago: Chicago University Press, 1988); Oliver Williamson, *The Economic Institutions of Capitalism* (New York: Free Press, 1985), for introductions to transaction cost economics.

11. This is not a hypothetical example. In August 1997 the United States accused Russia of violating the comprehensive nuclear test-ban treaty after unusual seismic activity was detected in the Kara Sea. Despite angry Russian denials, the United States persisted in its claim for several months. The crisis was resolved only when outside experts, after examining the U.S. data, determined that a nuclear blast could not have caused the type of readings collected by the CIA. See R. Jeffrey Smith, “U.S. Formally Drops Claim of Possible Nuclear Blast,” *Washington Post*, 4 November 1997, A2.

In some situations where carrots are considered, what the sender wants might not be under the full control of the receiving state. This could be due to domestic politics within the receiving country; some elements of a regime might be implacably opposed to the terms of any inducement and attempt to scuttle it. In other situations, the link between the agreed-upon action and the desired outcome might be more tenuous than the sender country perceives. In the Iran-Contra affair, the United States was offering carrots to Iranian moderates who claimed to have influence over Lebanese militias that held U.S. citizens. Since the link between the agreed-upon obligation (Iranian pressure on the militias to release the hostages) and the outcome (the actual release of the hostages) was not observable, the Iranians could always claim that they had honored the terms of the deal without too many hostages being released.¹² Without observable and verifiable actions, senders will be reluctant to proffer carrots, out of the fear that the receiver will exploit moral hazards.

Even if actions are perfectly observable, contracts must be enforceable. Unless exchanges are simultaneous, there is some juncture at which one side has what it wants and must decide whether to honor its part of the deal or act opportunistically and defect from the agreement. If one side in a transaction receives their desired ends before having to honor their part of the exchange, there is no incentive to honor an agreement in the immediate future. Consider the Framework Agreement between the United States and North Korea to eliminate the latter's nuclear weapons program. The key part of North Korea's concession, permitting inspections of all nuclear facilities to see if Pyongyang had attempted to manufacture nuclear weapons in the early 1990s, was delayed until the turn of the century. In the meantime, the country received fuel oil and Western investment for two civilian reactors. Having received significant benefits, there were indications in late 1998 that North Korea would renege on the agreement.¹³

Without some means of credible commitment, states always have the option of not honoring their agreements after payment has been delivered. It is often impossible to simultaneously exchange political assets such as territory, institutions, or weapons programs. Thus, senders proffering carrots must be wary of not receiving the demanded concession after making payment, and receivers must be wary of making concessions before they have received the carrot. Since states can never fully trust each other in a world of anarchy, the problem of nonsimultaneous benefits, and the diffi-

¹² See Theodore Draper, *A Very Thin Line: The Iran-Contra Affairs* (New York: Hill and Wang, 1991).

¹³ Robert Manning, "Time Bomb" *The New Republic*, 30 November 1998, 27–31.

culty of establishing credible commitments, prevents carrots from being more common.

In markets with a well-defined legal framework, contracts can be written to overcome problems of moral hazard and nonsimultaneous exchange. In an anarchic system, there is no legal recourse to force any country to honor the terms of such an agreement. The transaction costs posed by partially observable actions and unenforceable agreements prevent a full-fledged international market for political concessions from developing. This does not mean that the use of inducements never occurs. The prospect of mutually beneficial exchange still leads to some use of inducements in international affairs. Carrots are simply rarer than would be predicted in a world of perfectly observable and enforceable actions.

There are countervailing factors that can reduce the transaction costs of inducements and make their use more likely. Mechanisms for demonstrating credible commitments can reduce problems of moral hazard and opportunistic behavior. In a world of imperfect information, the best way to establish a credible commitment is to take positions that would lead to significant costs if the actor were to reverse its position. Game theory has demonstrated that in situations of imperfect information, the ability of actors to take potentially costly actions helps to separate actors capable of making credible commitments from those who cannot.¹⁴ This point has also been made in the statecraft literature; David Baldwin notes in *Economic Statecraft*, "Other things being equal, it is always desirable to minimize costs; but other things are not equal. The selection of a costly method of conveying a signal may add credibility to the signal."¹⁵ If a mechanism exists for actors to credibly commit, the transaction costs from nonsimultaneous exchange are significantly reduced.

The ability to provide verifiable information about actions and preferences also reduces the problem of moral hazard. If actions can be observed separate from outcomes then receivers have less of an incentive act opportunistically, and senders are thus more willing to offer an inducement in the first place. More information about actor preferences help reduce the transaction costs of bargaining in the first place. When there is more information about preferences and costs, bluffing, lowballing and other bar-

14. See Thomas Schelling, *The Strategy of Conflict* (Cambridge: Harvard University Press, 1960); A. Michael Spence, "Job Market Signaling," *Quarterly Journal of Economics* 87, no. 3 (August 1973).

15. Baldwin, *Economic Statecraft*, 372.

gaining tactics are less useful. Game-theoretic models show that in a world of perfect information, bargains can be struck almost immediately.¹⁶

Transferring the lessons from the transaction cost literature to international relations, it becomes clear that carrots should be more likely and more successful between liberal democracies. Liberal democracies reduce the transaction costs of carrots in several ways. Democracies are more capable of making credible commitments than nondemocracies. This capability comes from two sources. First, democratic regimes face greater domestic audience costs from backing down from a commitment.¹⁷ These costs could take the form of a drop in public or legislative support for a government, or more directly a leader's removal from office at the next election. This ability to generate political costs from breaking commitment makes it easier for democracies to make credible promises.

Another way that democratic regimes boost the ability to credibly commit is through the separation of powers. Democratic constitutions help to constrain foreign policy leaders from acting arbitrarily by granting powers to other branches of government. Ironically, constraints on a foreign policy leader's autonomy enhances that leader's ability to negotiate in good faith. Such constraints reduce the ability of states to act opportunistically after receiving the benefits from a political exchange. Governance structures that divide foreign policy powers provide a means of linking internal commitments that create the rule of law to the anarchic realm of the international system.¹⁸ Historical studies of international finance reveal that national constitutions with well-defined separation of powers enabled states to acquire debt financing from international capital markets, because constraints on the head of state reduced the likelihood of government default.¹⁹

Overall, domestic audience costs and separation of powers enhance the ability of liberal democratic regimes to make credible commitments, reducing the transaction costs of exchange. This link between liberal democracies and credible commitments has found significant empirical support.

16. Ariel Rubinstein, "Perfect Equilibrium in a Bargaining Model," *Econometrica* 50, no. 1 (January 1982): 97–109.

17. James A. Fearon, "Domestic Political Audiences and the Escalation of International Disputes," *American Political Science Review* 88, no. 3 (September 1994): 577–92.

18. Peter Cowhey, "Domestic Institutions and the Credibility of International Commitments: Japan and the United States." *International Organization* 47 no. 2 (Spring 1993): 299–326.

19. Douglass North and Barry Weingast, "Constitutions and Commitment: The Evolution of Institutions Governing Public Choice in Seventeenth-Century England," *Journal of Economic History* 49, no. 4 (December 1989); François Velde and Thomas Sargent, "The Macroeconomic Causes and Consequences of the French Revolution," *Journal of Political Economy* 103 (1995).

Kurt Gaubatz has shown that between 1816 and 1965, democratic dyads were significantly more likely to honor their international obligations than nondemocratic or mixed dyads. Follow-up studies have confirmed Gaubatz's findings on the link between credible commitments and liberal democratic regimes.²⁰

Finally, liberal democracies increase the amount of information about actors' preferences and actions. Most definitions of liberal democracy include the freedom of individuals to report on the government and to disseminate that information to all who wish to acquire it. This kind of information increases the transparency of state actions to the international system as well. Such transparency reduces the transaction costs of bargaining between democratic senders and receivers. It also enhances the effect of audience costs on credible commitment by permitting outsiders to gauge the magnitude of these costs.²¹ Another way that democracies generate information is through the behavior of opposition parties. Opposition support of regime policies (or lack thereof) has been shown to convey crucial information about preferences and costs to other international actors.²² Both means of providing information reduces the moral hazard problem that arises from unobservable actions.

These factors do not eliminate the transaction costs of carrots between democracies. In an anarchic world, even democratic governments can choose not to honor their commitments or conceal information from other countries. In general, however, the ability to make credible commitments and generate information about preferences allows democracies to reduce the transaction costs of international political exchange.

Thus, one would make two predictions about the relationship between regime type and the use of inducements. First, carrots are more likely to be proffered between democratic dyads than nondemocratic or mixed dyads. Reduced transaction costs between democracies makes senders more willing to consider inducements as an efficient way of obtaining political concessions. Democratic senders are also able to make their inducement offers more credible to receivers. Second, when carrots are proffered, they are more likely to succeed between democratic dyads than other types of dyads.

20. Kurt Taylor Gaubatz, "Democratic States and Commitment in International Relations," *International Organization* 50, no. 1 (winter 1996):109-39; William Reed, "Alliance Duration and Democracy: An Extension and Cross-Validation of 'Democratic States and Commitment in International Relations,'" *American Journal of Political Science* 41, no. 3 (July 1997),

21. Gaubatz, "Democratic States," 122.

22. Kenneth Schultz, "Domestic Opposition and Signaling in International Crises," *American Political Science Review* 92, no. 4 (December 1998):829-44.

The ability of democracies to make credible commitments reduces the likelihood of receivers acting opportunistically after receiving an inducement. Receiver suspicions of the sender backing down from its commitments are allayed if the sender is a democracy. Note that both these hypotheses apply to the dyadic level and not the monadic level. The problems of credible commitment and moral hazard are created if either side has less than perfect information about the other. Even if an authoritarian sender believes a democratic receiver will act in good faith, the reverse is not true. Between democratic dyads, carrots are more likely to be proffered, and they are more likely to succeed.

Another mechanism for reducing transaction costs between potential senders and receivers is the presence of international regimes. Neoliberal institutionalists have continually stressed that such regimes reduce transaction costs.²³ Regimes reduce transaction costs in three ways. First, they provide a routinized forum for negotiations. This reduces the costs of devising an agreement in the first place. Second, regimes lengthen the shadow of the future, which reduces the incentives to defect from agreed-upon contracts. The prospect of future exchanges can make actions enforceable, because of the ability of states to punish opportunistic actors with noncooperation in future rounds. Since reputation matters when there is repeated interaction, receivers that cheat will soon be unable to find a willing sender.²⁴ Third, international regimes increase the information available to all countries, either through active monitoring or acting as a clearing house for information collected by others. Historically, it has been shown that regimes that only provide information on compliance can encourage the rule of law, even if that entity lacks enforcement powers.²⁵

International organizations can also generate information by converting a requested concession from an unobservable action to an observable commodity. Through the act of voting, international organizations provide a means for states to make transparent their preferences on an issue. Say, for example, that a sender is willing to use a carrot to ensure a receiver improves its relations with a third country. Without an international regime,

23. Robert Keohane, *After Hegemony* (Princeton: Princeton University Press, 1984), Robert Axelrod and Robert Keohane, "Achieving Cooperation under Anarchy: Strategies and Institutions," in *Cooperation Under Anarchy*, ed. Kenneth Oye (Princeton: Princeton University Press, 1986), 226–54.

24. David Kreps, "Corporate Culture and Economic Theory," in *Perspectives on Positive Political Economy*, ed. James Alt and Kenneth Shepsle (New York: Cambridge University Press, 1990), 90–143.

25. Paul Milgrom, Douglass North, and Barry Weingast, "The Role of Institutions in the Revival of Trade: The Law Merchant, Private Judges, and the Champagne Fairs," *Economics and Politics* 2, no. 1 (March 1990): 1–23.

the receiver might attempt to obfuscate the meaning of “improve”. In an regime that requires states to vote their preferences, it becomes impossible for the receiving state to fudge the arrangement. Voting rights in international organizations can fuse actions and outcomes into a single commodity, eliminating the moral hazard problem.

The anecdotal literature on carrots shows that carrot are frequently associated with international regimes. As early as the mid-1700s, Great Britain bribed Saxony in order to buy the Saxon vote for a British electoral scheme in the Holy Roman Empire.²⁶ In this century, there are several examples of great powers using offers of aid to secure votes in international organizations. In 1961, the United States agreed to pay Haiti \$5 million in airport facilities to secure its vote in the Organization of American States to expel Cuba from the organization. In the early 1980s, the United States made similar aid-for-vote deals with Argentina and Chile in the Inter-American Development Bank to deny Nicaragua access to credit. Great Britain agreed to contribute more to the European Community budget to acquire EC support for the Falklands War. The Soviets were very successful in the 1960s and '70s at using military aid and trade concessions to purchase UN General Assembly votes. In the lead-up to the Gulf War, the United States used inducements to persuade United Nations Security Council members to vote for the use of force; more recently, China has used offers of trade deals to persuade European countries not to vote against it in the UN Human Rights Commission.²⁷

Carrots have also been observed in more arcane international regimes. The Montreal Protocol on the elimination of chloroflourocarbons explicitly includes funds for less-developed countries as a way of purchasing compliance with environmental regulations. Japan has increased its aid to Caribbean members of the International Whaling Commission in order to get enough votes to overturn the regime's ban on the hunting and killing of whales. One Caribbean diplomat defended the arrangement, stating, “Naturally we will discuss our needs with (the Japanese), and they will ask

26. George Liska, *The New Statecraft* (Chicago: University of Chicago Press, 1960), 53.

27. On Haiti, see Arthur Schlesinger, *A Thousand Days* (Cambridge: Houghton Mifflin, 1965), 782–83. On the early 1980s, see William Leogrande, “Making the Economy Scream: U.S. Economic Sanctions Against Sandanista Nicaragua,” *Third World Quarterly* 17, no. 2 (March 1996): 329–48. On weapons proliferation from Eastern Europe, see Long, “Trade and Technology Incentives and Bilateral Cooperation.” On the Falklands case, see Lisa Martin, *Coercive Cooperation* (Princeton: Princeton University Press, 1992), chap. 6. On the Soviet use of military aid, see Philip Roeder, “The Ties that Bind: Aid, Trade, and Political Compliance in Soviet-Third World Relations,” *International Studies Quarterly* 29, no. 2 (June 1985): 191–216. On China's lobbying, see David Manasian, “The World is Watching: A Survey of Human Rights Law,” *Economist*, 5 December 1998, 6.

us to support them in international organizations, as any other country would do.”²⁸ While direct bribery of officials is illegal, it is an accepted practice to influence International Olympic Committee member votes about where to host the Olympics by pledging humanitarian aid to developing countries’ athletic programs.²⁹ Cases of carrots being used to purchase concessions outside of an international organization framework are harder to find, however, and they have a more mixed record of success.³⁰

The transaction costs of international political exchange prevent the use of economic inducements from being a more common occurrence. If states are unable to perfectly observe each others’ actions, the prospect of moral hazard makes the use of carrots less likely and less successful when offered. The ability of states to act opportunistically, due to the absence of enforceable contracts, has the same effect. While transaction costs cannot be eliminated in an anarchic world, they can be reduced. Liberal democratic regimes can enable leaders to credibly commit and generate reliable information, reducing these transaction costs. International regimes can have the same effect, by routinizing bargaining procedures, extending the shadow of the future, and creating more reliable commodities in the form of votes.

WHEN ARE CARROTS PREFERABLE?

THE PREVIOUS section examined when carrots would be possible. In addition to carrots, however, states have other means of influence at their disposal, such as economic or military coercion. It is not enough to examine which variables make the use of carrots a feasible option; the context of alternative foreign policy options must be included to see whether the use of the carrot is the preferred option. The biggest criticism of the economic statecraft literature is that it fails to take into account how states choose among the range of policy alternatives.³¹ This section analyzes how sender countries choose among their set of influence strategies: economic inducements, economic coercion, and military coercion.³²

28. Mark Fineman, “Japan ‘Buys’ Pro-Whaling Votes with Caribbean Aid,” *Denver Post*, 11 December 1997, 43A, 48A.

29. More recently, explicit bribes have also been observed. On the relationship between inducements and IOC votes, see Jere Longman, “Investigators Cite Cash Payments in Salt Lake City Bid for Olympics,” *New York Times*, 8 January 1998, A1.

30. See Liska, *The New Statecraft*; and Cortright, *The Price of Peace*.

31. Baldwin, *Economic Statecraft*.

32. Two policy options will not be discussed: “doing nothing” and purely diplomatic efforts. Doing nothing is a viable policy option, but this has already been dealt with in the previous section, which asked whether proffering the carrot was preferable to the status quo.

A key difference between the carrot and the stick (be it economic or military) is that the stick is expensive when it fails, whereas the carrot is expensive when it succeeds. A successful threat of coercion is costless, because the receiver has acquiesced before the threat needs to be executed. A failed coercion attempt means that the receiver stands firm, and the sender incurs costs from implementing the threatened economic sanctions or military intervention. The reverse is true in the case of carrots. A successful inducement is costly but ensures that the sender will get the desired concession. A failed carrot is costless, although it forces the sender to contemplate its other alternatives. Thus, if both carrots and sticks are likely to succeed, senders will prefer sanctions over inducements, because the former are more cost-effective.

When is coercion likely to succeed? The existing literature on economic statecraft does provide a guide as to when this condition will be met.³³ First, the demand must be specific and well defined. Second, the receiver must suffer greater opportunity costs of coercion than the sender, otherwise the threat of sanctions cannot be credible. Third, senders must anticipate enough conflicts in the future with the receiver to prefer incurring the costs of deadlock. When conflict expectations are high, senders are increasingly eager to sanction the receiver. The act of sanctioning can enhance a sender's reputation for tough bargaining, which can be useful in later conflicts. Any material concessions extracted from sanctions can also enhance the sender's bargaining position in the future. Heightened conflict expectations will increase the sender's concern about the material and reputational consequences of outcomes in the present. With adversaries, senders are willing to incur significant costs if sanctions hurt the receiver country even more.

The effect of conflict expectations, however, cuts both ways. The more conflicts that are anticipated, the less willing the receiver will be to concede to threats. Concessions can weaken a nation-state's material bargaining strength and its reputation. States will be concerned about the intrinsic value of the concession because of the possibility of today's concessions becoming tomorrow's leverage. A variety of demands could be used in this fashion. A sender may use economic coercion to secure military basing rights, and those bases are used in a later coercion episode to threaten the

The literature on purely diplomatic incentives and punishments is scant at best, but it does seem that this option is useful only for extremely minor affairs of state. See Joseph McKenna, *Diplomatic Protest in Foreign Policy* (Chicago: Loyola University Press, 1962).

33. The following is drawn from Daniel W. Drezner, *The Sanctions Paradox: Economic Statecraft and International Relations* (Cambridge: Cambridge University Press, 1999), chap. 2.

targeted country's territory. A demand for greater liberalization within the target regime might permit the sender country to exploit domestic divisions in a later dispute. Similarly, developing the reputation of conceding in the face of coercive pressure also will weaken one's bargaining position in future disputes. These concerns become more salient when more conflicts are expected in the future.

The effect of conflict expectations is paradoxical. With allies, senders have a higher threshold to meet before coercion is an option, but once sanctions are threatened, they will lead to significant concessions. Receivers allied with the sender will care less about the long-run implications of acquiescing and more about the short-run costs and benefits of coercion. With adversaries, the reverse is true. Senders are more willing to threaten coercion, but are unlikely to extract any meaningful concessions. Indeed, conflict expectations lead to a paradox for the use of either incentives or sanctions. In the case of incentives, receivers will be the most eager to accept a carrot when they anticipate frequent conflicts with the sender, which is precisely the situation where senders are the most reluctant to proffer the carrot. When the sender and receiver anticipate frequent conflicts, they will be wary that any carrot proffered will strengthen the adversary in a future dispute. Before the First World War, for example, France refused to loan money to Germany for fear of strengthening its capabilities; Great Britain did not loan money to Russia because it did not want to strengthen Moscow's capabilities in imperial disputes.³⁴ In the late 1980s, U.S. policymakers did not extend large amounts of aid to Mikhail Gorbachev's regime in the Soviet Union in return for continued Soviet cooperation. The United States feared that this would allow the USSR to continue to subsidize regimes unfriendly to the United States, such as those in Cuba or Nicaragua. Another concern was that the money would lead to a Soviet economic turnaround, sparking a renewed cold war.³⁵ Thus, senders will prefer to use sanctions over inducements against adversaries because they anticipate frequent conflicts, but those expectations also make sanctions less effective and inducements more so.

Analyzing the choice between carrots and sticks at the decision-theoretic level further refines the conditions under which a carrot will be observed in international interactions. The sender's policy decision is dependent upon the expectations of future conflict. With adversaries, a sender will not proffer the carrot as its first policy option. It will resort to the carrot only after a

34. Liska, *The New Statecraft*, 49–50.

35. Michael Beschloss and Strobe Talbott, *At The Highest Levels* (New York: Little, Brown, 1993), 210–11, 377.

coercion attempt. This is true for two reasons. With adversaries, senders will be willing to absorb significant costs in order to coerce the receiver into conceding. Even if these expectations also reduce the likelihood that the receiver will make any substantial concessions, the sender will often prefer a stalemate.³⁶ In addition, threats or sanctions can blunt reputational implications of later offering a carrot. The threat of economic or military coercion can bolster a state's reputation as a tough bargainer. This reputation is further enhanced if economic sanctions are actually implemented. Sanctions also have the added benefit of reducing the receiver state's resources, making the postsanctions carrot a more palatable transfer.

With allies, the sender must look at the opportunity costs of coercion to see if coercion is a viable strategy. Because few conflicts are anticipated for the future, the sender will focus more on the immediate payoffs from its actions. With a coercive strategy, the sender must determine if the potential costs from coercion are small enough for it to be a credible threat to the receiver. If that criterion is met, the sender will prefer a coercive strategy; the successful coercion of allies is both costless and generates many concessions. If, for example, the sender had previously agreed to send foreign aid to the receiver, then the threat of an aid cutoff would not cost the sender anything, and generate significant concessions. If, however, that criterion is not met, then the sender will attempt to use the carrot. With reduced conflict expectations, the material or reputation effects are minor, paving the way for a carrot that enhances the utility of both the sender and receiver.

Once other policy options are included in the decision to proffer a carrot, there is a certain symmetry to great power decision making. With allies, if the great power has already extended aid or trade concessions to the receiver, it will first use economic coercion to extract the necessary concessions. Only if coercion is not a feasible option would a carrot be considered. With adversaries, the great power's first instinct is to use coercion, but due to heightened conflict expectations, sanctions are not likely to succeed. At that juncture, the sender must then choose between a carrot or stalemate. One could argue that the only difference between dealing with allies and adversaries is the sequencing of actions. With allies, the rewards are put in place first, and then used as leverage when a conflict arises. With adversaries, the conflict first arises, and if coercion fails, the sender then proffers the carrot. If force is not used, then regardless of the prior relationship, the

36. Drezner, *The Sanctions Paradox*, chap. 2.

outcome is the same; the receiver gets a reward, and the sender gets a concession. The only difference is the timing of the carrot and the stick.

States do not choose the carrot in a policy vacuum. Even if the carrot is a feasible option, they will opt for other forms of statecraft if they derive more utility from those options. Thus even if the transaction costs for carrots are minimal, sanctions could be preferred for several reasons. When conflict expectations are high, senders will prefer to sanction in order to improve its bargaining position in future conflicts, even though sanctions will not yield significant concessions. When conflict expectations are low, sanctions will still be preferred if the sender incurs minimal costs while imposing significant costs on the receiver. This is because sanctions against allies can yield significant concessions and are cheaper than carrots. Over time, senders will consider using inducements with adversaries only after sanctioning them; with allies, sanctions will often be imposed because of the use of a previous inducement.

From the previous two sections, one can derive the following testable hypotheses:

Hypothesis 1: Carrots are more likely to be observed between democratic dyads.

Hypothesis 2: Carrots are more likely to succeed between democratic dyads.

Hypothesis 3: Carrots are more likely to be observed within the framework of an international regime.

Hypothesis 4: Carrots are more likely to succeed within the framework of an international regime.

Hypothesis 5: Senders will proffer a carrot to an adversary only after they have threatened economic or military coercion first.

Hypothesis 6: Senders will coerce allies that have already received carrots related to the disputed issue.

PLAUSIBILITY PROBE

THE VARIOUS anecdotes in the previous sections suggest the existence of cases that support the theory developed here. Space constraints and limitations on data availability prevent a thorough statistical testing of all these hypotheses. Instead, this section offers a plausibility probe of some of these hypotheses. The results of the tests in this section can, at the very least, suggest that the theory developed here is worthy of further testing. The first part of this section uses chi-square tests to examine the effect of

democratic regimes on the initiation and success of economic inducements. The second part of this section compares U.S. nonproliferation policy toward North Korea and South Korea to examine the sequencing of carrots and sticks.

To test for the effect of democracy on the use and success of inducements, I will use John Sislin's data set on American influence attempts from 1950 to 1992.³⁷ Sislin codes 191 attempts by the United States to use economic and military aid as a way to obtain concessions from other countries. These cases include episodes where the United States offered aid in exchange for a concession (a carrot) or cases where transfers were cut off unless the receiver acquiesced (a stick). The data set codes whether the United States used a threat of coercion or a promise of aid, and whether the influence attempt was successful. To my knowledge, this is the only data set that includes a substantial number of well-defined attempts to use inducements to extract concessions. Data on democratic regimes comes from Michael Doyle's well-known coding of regime types.³⁸

Because transaction costs are expected to be lower between democratic regimes, the inducement option is predicted to be more attractive for the United States if the receiver is a democracy. Statistically, the United States should be more likely to offer carrots to other democracies than other regime types. The reduction in transaction costs also means that inducements offered to democracies should succeed more often than offers made to nondemocracies. If the transaction costs hypothesis is erroneous, there should be no correlation between the receiver's regime type and the decisions to use or accept the carrot.

The statistical results support the hypotheses about democratic regimes and the utility of inducements. Table 1 shows a tabular comparison of the receiver's regime type and the decision by the sender to proffer a carrot. The table shows that the United States was more than twice as likely to offer a carrot to a democratic receiver (58.8 percent) than a nondemocratic receiver (27.1 percent). The carrot was a more common option with democratic regimes than other types of regimes. Chi-square tests show this result to be statistically significant at the one percent level. To test for robustness, a multivariate logit regression was run to include control variables such as

37. John Sislin, "Arms as Influence: The Elusive Link Between Military Assistance and Political Compliance" (Ph.D. diss., Indiana University, September 1993); Sislin, "Arms as Influence: The Determinants of Successful Influence," *Journal of Conflict Resolution* 38, no. 4 (December 1994): 665-89.

38. Michael Doyle, "Liberalism and World Politics," *American Political Science Review* 80, no. 4 (December 1986): 1151-69; for cases between 1986 and 1992, I used Francis Fukuyama, *The End of History and the Last Man* (New York: Free Press, 1992), 49-50.

relative power, the receiver's perception of its security, declining U.S. hegemony, and the magnitude of the demand. The receiver's regime type remained positively correlated with the decision to proffer a carrot and statistically significant at the one percent level. The effect of the receiver's regime type on the likelihood of a carrot being proffered is consistent with the explanation developed here, statistically significant, and robust to the presence of control variables.

Table 1
REGIME TYPE AND THE DECISION TO USE A CARROT

	Coercion attempt	Inducement attempt	Total
Receiver is not a democracy	102	38	140
Receiver is a democracy	21	30	51
Total	123	68	191
Pearson chi-square	16.34	P < 0.000	
Likelihood-ratio	15.90	P < 0.000	
Gamma	0.586		

The statistical test for the second hypothesis, that carrots are more likely to succeed between democratic dyads, is shown in Table 2. This table looks only at the subset of cases where the United States offered an inducement in exchange for a political concession. Table 2 shows a tabular comparison of the receiver's regime type and whether the inducement offer was deemed successful or not. The results support the transaction cost approach. The failure rate for inducements with nondemocratic receivers (34.2 percent) is almost three times as high as the failure rate for democratic receivers (13.3 percent). The carrot was more successful between democratic dyads than mixed dyads. Chi-square tests show this result to be statistically significant at the five percent level. As with the first hypothesis, this result was checked for robustness by running a multivariate logit regression using the same set of control variables. The receiver's regime type remained positively correlated with the success of an inducement offer, and statistically significant at the five percent level. Thus, between democratic dyads,

carrots are more likely to be proffered and, once proffered, more likely to be accepted.

Table 2
REGIME TYPE AND THE SUCCESS OF USING A CARROT

	Unsuccessful Inducement Attempt	Successful Inducement Attempt	Total
Receiver is not a democracy	13	25	38
Receiver is a democracy	4	26	30
Total	17	51	68
Pearson chi-square	3.897	P < 0.048	
Likelihood-ratio	4.093	P < 0.043	
Gamma	0.543		

To examine the relationship between conflict expectations, economic coercion, and the decision to use carrots, I now compare U.S. nonproliferation policies toward South Korea in the 1970s with U.S. policy toward North Korea in the 1990s. The previous section argued that due to conflict expectations one should observe senders using carrots with adversaries only after attempts at coercion. With allies, senders will choose to sanction if they have sufficient leverage, and that leverage emanates from preexisting flows of inducements. South Korea was a close ally and North Korea a bitter adversary of the United States. Therefore, one would expect to see the use of coercion against of South Korea, made possible by previous carrots; with North Korea, one would expect to see the immediate threat of sanctions, followed by an inducement offer due to the failure of sanctions to work.³⁹

In early 1975 the U.S. intelligence community detected active efforts by the Republic of Korea (ROK) to acquire the necessary components to manufacture nuclear weapons. These components include a cadre of

39. For a much more comprehensive comparison of these cases, see Drezner, *The Sanctions Paradox*, chap. 8.

trained personnel, a delivery mechanism for the weapons, and a means to manufacture fissile material. South Korea wanted to purchase a plant to reprocess spent nuclear fuel into fissile uranium. One arms control analyst noted: "The reprocessing plant potentially would have given them fissionable material for weapons, but it was practically the last thing on the list of things they needed, from special machine tools to the nonnuclear component of weapons."⁴⁰

The ROK had decided to start a nuclear weapons program following the articulation of the Nixon Doctrine, which required U.S. allies to shoulder more of their security burdens. To apply the doctrine to Korea, President Nixon had proposed in 1970 to withdraw a third of the troops—one division—from South Korean soil. The ROK reaction had been far from sanguine. The prime minister had threatened to resign, explaining, "We are not against the Nixon Doctrine in principle, but if North Korean Kim Il Sung miscalculates, the South Korean people will wonder if America will abandon its security treaty or come to our defense."⁴¹ Over the next five years, the United States had refused to react to various acts of aggression by the North Korean regime. By 1975, Saigon had fallen and the United States was withdrawing from its bases in Thailand. The ROK desire for a credible deterrent had increased.

Starting in the summer of 1975, the United States entered into negotiations with South Korea to convince them to drop their nuclear weapons program. Six months later, in January 1976, the United States announced that Seoul had cancelled the purchase of the key components for a nuclear fuel cycle.⁴² The available evidence strongly suggests that the South Koreans acquiesced due to economic coercion from the United States. In December 1975, the U.S. ambassador to South Korea cabled his superiors that he asked a senior ROK official, "whether Korea (is) prepared (to) jeopardize availability of best technology and largest financing capability which only the United States could offer, as well as vital partnership with the United States, not only in nuclear and scientific areas but in broad political and security areas."⁴³ Multiple press reports about the January 1976 reversal quoted anonymous officials as saying that if the South Koreans had not

40. Quoted in Robert Gillette, "U.S. Squelched Apparent South Korea A-Bomb Drive," *Los Angeles Times*, 4 November 1978, 1.

41. Quoted in Kwang-Il Back, *Korea and the United States* (Seoul: Research Center for Peace and Unification of Korea, 1988), 123.

42. Don Oberdorfer, "South Korea Cancels A-Plant." *Washington Post*, 30 January 1976, A1.

43. Quoted in Don Oberdorfer, *The Two Koreas: A Contemporary History* (Reading, Mass.: Addison-Wesley, 1997), 72.

acquiesced, the United States would have halted loans worth \$275 million and loan guarantees worth \$227 million from the U.S. Export-Import Bank. Washington also made it clear that it would withhold export licenses and block the South Korean purchase of a nuclear reactor from Westinghouse. In addition, the United States persuaded the Canadians to suspend their own reactor deal with Seoul unless the reprocessing plant was canceled.⁴⁴ Other U.S. officials stated that negotiators also threatened the South Koreans with stopping \$275 million annually in U.S. military aid if the reprocessing plant went ahead as scheduled.⁴⁵

The choice of coercion was not the only one available to the United States in this dispute. Indeed, South Korea strongly hinted that they were prepared to accept a carrot in exchange for abandoning their nuclear weapons effort. In December 1975, while the two countries were in negotiations, the South Koreans requested \$1.5 billion in loans from the U.S. government for a new Force Improvement Program that would bolster their conventional military forces.⁴⁶ A key element of the ROK aid request was to have the ability to coproduce the M-60 tank as well as fighter and interceptor aircraft. The United States could have decided to use the aid request as a carrot to encourage ROK concessions. The conventional wisdom would expect this, since South Korea was such a close ally.⁴⁷

The record shows the United States opted for the stick rather than the requested carrot. The Ford administration refused the December aid request, fearing it would destabilize the balance of power in the region. It also refused to sell F-16 aircraft and advanced rocket technology.⁴⁸ After 1975, U.S. military aid to South Korea never reached the levels of the early seventies.⁴⁹ Indeed, less than a week before South Korea's decision to acquiesce, President Ford announced an end to all free military assistance to South

44. On the reports of economic coercion, see David Burnham, "South Korea Drops Plan to Buy A Nuclear Plant From France," *New York Times*, 29 January 1976, A1; Oberdorfer, "South Korea Cancels A-Plant"; "Seoul Officials Say Strong Pressure Forced Cancellation of Plans to Purchase a French Nuclear Plant," *New York Times*, 1 February 1976, 11; Gillette, "U.S. Squelched Apparent South Korea A-Bomb Drive." On the amounts of U.S. aid to South Korea, see Clarence Long, "Nuclear Proliferation: Can Congress Act in Time?" *International Security* 1, no. 4 (January 1977): 56–57.

45. Leslie H. Gelb, "Nuclear Proliferation and the Sale of Arms," *New York Times*, 11 August 1976, 3; Gelb, "Conflict Continues over U.S. Effort to Halt Spread of Nuclear Weapons," *New York Times*, 24 August 1976, 4.

46. Don Oberdorfer, "Korea Asks \$1.5 Billion in U.S. Loans for Arms," *Washington Post*, 29 December 1975, A2.

47. Virginia Foran and Leonard Spector, "The Application of Incentives to Nuclear Proliferation," in Cortright, *The Price of Peace*, 21–54.

48. See Back, *Korea and the United States*, 176–80; and Oberdorfer, "Korea Asks \$1.5 Billion in Loans for Arms."

49. Drezner, *The Sanctions Paradox*, 275.

Korea, replacing it with loans.⁵⁰ The grant aid was never reestablished. Furthermore, American and Korean recollections of the negotiations do not jibe with the offer of any inducements. The South Koreans talked of “pressures bordering on threats” when discussing the incident. A State Department official described the U.S. bargaining strategy as follows: “We simply made the negative clear to them, that if they went forward with the re-processing plant, Congress would insist on the termination of further military credit sales. And they understood this.”⁵¹

There are three reasons why the United States rejected the carrot and opted for sanctions, all consistent with the theory of inducements developed here. First, one could argue that previous carrots to the South Korean regime had failed to prevent Seoul from trying to acquire nuclear weapons. When the original U.S. troop withdrawals were announced in 1970, the Nixon administration was concerned with assuaging Korean fears of abandonment. One of the ways the United States sought to allay these fears was through increased inducements. In 1971 both countries agreed that the re-deployment of U.S. forces would be tied to an increased American appropriation of \$1.5 billion in military aid to South Korea over the next five years. Despite this significant increase in U.S. aid, the South Korean regime, led by Park Chung Hee, still went forward with its nuclear weapons program. An additional carrot would have rewarded Park’s decision to pursue a covert weapons program in spite of increased U.S. aid.

Second, the existing inducement flows to South Korea made the threat of coercion a credible and potent one for the United States. In addition to military aid, the United States had assisted South Korea in its attempt to diversify its energy needs away from oil. As early as 1967, the ROK government had expressed concern about its reliance upon energy imports. The 1973 energy shock, for example, had lowered ROK reserves to just two weeks of oil.⁵² In that year South Korea relied on imports for more than half of its energy demands. By the mid-1970s, Seoul had an ambitious plan to switch their primary source of energy away from Middle East oil to nuclear power; by 2000, Seoul had hoped to rely on nuclear power for more than sixty percent of its electricity needs.⁵³ In support of the ROK project,

50. “Ford Plans to Cut Military Aid Grants,” *New York Times*, 21 January 1976, 29.

51. Gelb, “Nuclear Proliferation and the Sale of Arms.” On the South Korean reaction, see “Seoul Officials Say Strong Pressure Forced Cancellation of Plans to Purchase a French Nuclear Plant.”

52. Mitchell Reiss, *Without the Bomb: the Politics of Nuclear Proliferation* (New York: Columbia University Press, 1988), 89.

53. Young-Sun Ha, “Republic of (South) Korea,” in *Nuclear Power in Developing Countries*, ed. James Katz and Onkar Marwah (Toronto: Lexington Books, 1982), 235.

and as a form of export promotion, the United States had provided more than half a billion dollars in loans and loan guarantees for nuclear power projects.

Combined, the preexisting military and nuclear carrots made coercion a credible option. South Korea's immediate costs of sanctions would have been the disruption of the loans and loan guarantees. This was the equivalent of 3.4 percent of its gross national product in 1975, a considerable sum compared with other sanctions attempts. This understates the true cost of the sanctions, however. Because the United States had such a monopoly position in nuclear power in the 1970s, South Korea would have faced much higher costs to implement its energy diversification program without U.S. cooperation. The threat to suspend all trade in nuclear materials would have completely devastated ROK plans for energy autonomy. Because of previous carrots, the United States held significant economic leverage over South Korea.

Finally, because conflict expectations between the two countries were so minimal, the threat of sanctions could produce significant concessions. The Park regime perceived no threat from the United States. In 1975 the Korean foreign minister described the 1954 Mutual Security Treaty as the "mainstay of the Republic of Korea's security," and stated, "The most important and effective deterrent against any possible recurrence of major conflict on the Korean Peninsula is the firm commitment of the United States to the security of South Korea."⁵⁴ After the coercion event, Seoul was unwilling to comment publicly about U.S. pressure for fear of disrupting the alliance. The Koreans were concerned about the extent of the U.S. commitment, but at no time were they concerned that the United States would repeatedly coerce them in the future. Of the five states with interests in the region (the United States, the Soviet Union, China, Japan, North Korea) the United States represented the lowest perceived threat to ROK security in 1975. With such minimal conflict expectations, South Korea was more concerned with the immediate costs of sanctions than with the long-term material or reputational implications of acquiescing. Minimal conflict expectations, combined with the significant cost of sanctions created from previous inducements, made coercion the most attractive option to the United States. Consistent with the theory developed here, the sender chose to coerce its ally because that option was both feasible and preferable.

54. Quoted in Se-Jin Kim, ed., *Documents on Korean-American Relations, 1943-1976* (Seoul: Research Center for Peace and Unification, 1976), 19.

U.S. policy toward the Democratic People's Republic of North Korea (DPRK) in the 1990s contrasts sharply with its approach toward South Korea in the 1970s. The DPRK effort to develop nuclear weapons went into high gear following a series of diplomatic and economic reversals in the early 1990s. In 1990, the Soviet Union recognized South Korea over Pyongyang's vociferous objections. At the same time, China and the Soviet Union decided to stop trading with the DPRK on concessionary terms and insist on hard-currency payments. Most outside observers anticipated that North Korea would go the way of East Germany and be absorbed into the more populous and dynamic South Korea.

As its security grew ever more precarious, North Korea accelerated its nuclear program. In 1993, International Atomic Energy Agency (IAEA) officials, acting on information provided by U.S. intelligence, requested to inspect facilities suspected of producing plutonium. The North Koreans refused, and shocked everyone by announcing in March 1993 that it would withdraw from the Nuclear Non-Proliferation Treaty (NPT) in three months. Over the next eighteen months, Pyongyang repeatedly signaled to the United States that it would be willing to accept a "package deal" of inducements. In return for staying in the NPT and dismantling its nuclear weapons program, North Korea would require significant carrots, including Western investment into light-water nuclear reactors and increased trade with the United States.⁵⁵

Given the extremely high expectations of future conflict shared by North Korea and the United States, the theory of inducements developed here would predict the United States would attempt to sanction first, and only offer inducements if the coercion attempt failed. This essentially describes the negotiations that occurred between March 1993 and October 1994. The immediate U.S. response to North Korea's threat to withdraw from the NPT was to threaten economic coercion. Just after the DPRK announcement, U.S. secretary of state Warren Christopher was quoted in the press as stating that sanctions would be the result if North Korea continued on its present path.⁵⁶ This was a bold statement, since the United States had no trade or aid to suspend with the DPRK. North Korea had been the target of comprehensive U.S. sanctions since the Korean War. If economic coercion was to be effective, the United States needed international cooperation. While

55. See Michael Mazarr, *North Korea and the Bomb: A Case Study in Nonproliferation* (New York: St. Martin's, 1995); Oberdorfer, *The Two Koreas*; Scott Snyder, "North Korea's Nuclear Program: The Role of Incentives in Preventing Deadly Conflict," in Cortright, *The Price of Peace*, 55–82; and Sigal, *Disarming Strangers*.

56. See Mazarr, *North Korea and the Bomb*, 111.

China, Russia, Japan, and South Korea all preferred the North Koreans not to have nuclear weapons, they also preferred an attempt at negotiations rather than an immediate rush to sanctions. After consultations with Seoul and Tokyo, the Clinton administration agreed to direct talks with the North Koreans to resolve the impasse. One U.S. official noted, "To some extent the diplomatic effort was forced on us by tactical considerations. The only way we could build a consensus at the U.N. Security Council to impose sanctions was to demonstrate that the North Koreans were unwilling to make a deal."⁵⁷

The next year of negotiations played out in a manner consistent with an American preference for sanctions. Washington's strategy during the first round of negotiations, according to a State Department official, was one of, "showing the sticks first, and holding the carrots in reserve...the carrots were in a basket, and the basket was kept squarely on the floor behind him."⁵⁸ Most of these carrots, furthermore, were nothing new. They consisted mostly of promises not to attack North Korea, which had been made previously by the Bush administration. Throughout the negotiations, the United States retained a belligerent tone. On a visit to Seoul in July 1993, President Clinton warned Pyongyang that if North Korea developed nuclear weapons, "it would be the end of their country." Other U.S. officials made similar noises throughout the summer. In October, Defense Secretary Les Aspin told Japanese officials that negotiations would likely fail, and the result would be a sanctions attempt.⁵⁹ In June 1994, negotiations appeared to break down, and North Korea withdrew from the IAEA. In response, the United States, South Korea, and Japan issued a joint pledge to impose economic sanctions, and the United States redoubled its efforts to persuade the United Nations Security Council to mandate economic sanctions. Washington also dispatched more warships to the North Pacific in order to enforce a naval embargo.

Sanctions, even if they had been imposed by Japan and South Korea alone, would have imposed significant costs on North Korea. Pyongyang relied on transfers from ethnic Koreans living in Japan as a source for hard currency. These flows were estimated at somewhere between \$600 million and \$1.8 billion annually. The Japanese also represent North Korea's largest hard-currency export market; for example, ten percent of Japanese business

57. Quoted in Sigal, *Disarming Strangers*, 59.

58. Quoted in Snyder, "North Korea's Nuclear Program," 62.

59. Byung Chul Koh, "Confrontation and Cooperation on the Nuclear Peninsula," *Korean Journal of Defense Analysis* 6 (1994): 53-83. See also Mazarr, *North Korea and the Bomb*, 126-27.

suits are stitched in the DPRK.⁶⁰ By 1994, South Korea was also a significant export market. Roughly \$200 million worth of goods were shipped to the ROK, making it Pyongyang's fourth largest trading partner. Sanctions would have disrupted this exchange. A naval embargo would have also frustrated North Korea's oil-for-arms trade with Iran and Libya. By the mid-1990s the DPRK military was selling roughly \$500 million in ballistic missile technology to Middle Eastern customers.⁶¹ Applying the most conservative estimate to Japanese transfers and exports, sanctions applied by Japan alone would have been the equivalent of 3.6 percent of North Korea's GDP. Adding in exports to South Korea, the figure jumps to 4.5 percent; a cutoff of the missile sales would have increased the amount to almost seven percent. The impact of sanctions against North Korea in 1994 would have been greater than South Korea's estimated costs of coercion in 1975. Furthermore, because of the peculiar nature of North Korea's economy, these sanctions would have hurt the DPRK elite much more than the average North Korean citizen.⁶²

North Korea refused to acquiesce in the face of this pressure, however, because of its expectations of future conflict with the United States and South Korea. Evaluating the dispute, Paul Bracken noted:

there are two "games" being played on the Korean peninsula. The first game is non-zero sum in character. It amounts to bargaining around a military and nuclear negotiation where the gains of one side do not necessarily come at the expense of the other. The second, and more important game, is zero sum. It is a game of control, and only one state can gain control of the entire Korean peninsula....it is the state-survival competition, rather than the one concerning nonproliferation and arms control, that shapes the dynamics of interstate relations among all affected parties....

the immediate threat to North Korea is...strategic isolation leading to greater economic isolation, and opportunities for international intervention in Korean affairs. This is what is now happening, most notably with the pressure on the North to open suspect nuclear facilities to inspec-

60. For more on the Cho'chong'ryun, see Jennifer Lind, "Gambling with Globalism: Japanese Financial Flows to North Korea and the Sanctions Policy Option," *Pacific Review* 10, no. 3 (fall 1997): 391-406; "Kim Il Sung's Money Pipeline," *Time*, 13 June 1994, 27; and David E. Sanger, "North Koreans in Japan are Seen as Cash Source for Nuclear Arms," *New York Times*, 1 November 1993, 1.

61. Mitchell Reiss, *Bridled Ambition: Why Countries Constrain Their Nuclear Capabilities* (Washington: Woodrow Wilson Center Press, 1995), 232-33.

62. Vasily Mikheev "Reforms of the North Korean Economy: Requirements, Plans and Hopes," *Korean Journal of Defense Analysis* 5 (March 1993): 81-95.

tion by the IAEA. But such demands must surely be seen as only the first moves to open up the entire North Korean state.⁶³

North Korea's specific concerns were that permitting inspections would give the United States valuable information about North Korea's defenses.⁶⁴ Such concerns were not just the product of North Korean paranoia. During its existence, North Korea had been the subject of no less than seven nuclear threats from the United States. In late 1991, as the crisis was heating up, JCS chairman Colin Powell told reporters about North Korea, "If they missed Desert Storm, this is a chance to catch a re-run." During a January 1992 trip to the DMZ, Bush administration officials told reporters that to answer the nuclear question, they would need a "mandate to roam North Korea's heavily guarded military sites."⁶⁵ Revelations that the United States used intelligence gathered from UNSCOM inspections of Iraqi facilities in planning Operation Desert Fox make North Korean suspicions quite plausible.⁶⁶ Because it was concerned about the material consequences of acquiescing to an adversary, North Korea preferred to stand firm in the face of both economic and military coercion.⁶⁷

With conflict expectations preventing coercion from generating significant concessions, and after a year and a half of repeated threats to sanction, the Clinton administration finally opted for the carrot instead. In October 1994 the United States and North Korea signed a Framework Agreement. North Korea agreed to dismantle its gas-graphite nuclear reactors and submit to full IAEA inspections in exchange for a U.S. commitment to build two light-water nuclear reactors, supply Pyongyang with fuel oil while the reactors were built, and lift diplomatic and economic barriers to exchange. The cost of the carrots was estimated to be \$5 billion, by far the largest foreign investment in North Korea's history.⁶⁸ Averaged out over the

63. Paul Bracken, "The North Korean Nuclear Program as a Problem of State Survival," in *Asian Flashpoint: Security and the Korean Peninsula*, ed. Andrew Mack (Canberra: Allen and Unwin, 1990), 86, 91.

64. "Nude, Absolutely Naked," *Far Eastern Economic Review*, 23 June 1994, 15.

65. Powell quoted in Sigal, *Disarming Strangers*, 31. Bush officials quoted in Bruce Cumings, *Korea's Place in the Sun: A Modern History* (New York: Norton, 1997), 469. On U.S. nuclear threats against North Korea, see Cumings, *Korea's Place in the Sun*, 450–70.

66. Tim Weiner, "U.S. Spied on Iraq under U.N. Cover, Officials Now Say," *New York Times*, 7 January 1999, 1.

67. There are indications that North Korea was prepared to make some concessions in the face of sanctions, but that the United States needed total acquiescence because of concerns about renewing the NPT in 1995. See Drezner, *The Sanctions Paradox*, chap. 8.

68. U.S. Senate, Committee on Armed Services (94th Congress, 1st session), *The Security Implications of the Nuclear Non-Proliferation Agreement with North Korea* (Washington: U.S. Government Printing Office, 1995), 18. Japan and South Korea agreed to finance significant portions of the reactor construction.

agreement's eight years, the deal injected capital investment equal to 2.8 percent of the gross domestic product of DPRK. The electrical power from the reactors had the potential to boost electrical output by 27.4 percent.⁶⁹

U.S. defense secretary William Perry explanation of the administration's decision-making calculus fits very well with the theory of inducements presented here:

While the United States and the international community were prepared to resort to sanctions if all other diplomatic remedies had failed, the outcome of a sanctions regime would have been highly unpredictable. Certainly, sanctions would have heightened tensions on the peninsula and would have obligated the United States and South Korea to take measures to prepare for military hostilities, especially in light of North Korean assertions that sanctions were tantamount to war.

In general, our past experience shows that the North does not usually respond well to such blunt applications of pressure and, given the North's need to nurture its national pride, it is unlikely that the North would have acquiesced to U.S. demands after sanctions had been imposed.⁷⁰

For the United States, the costs of implementing economic or military sanctions would have been considerable. North Korea had repeatedly stated that sanctions would be equivalent to war. The commander of U.S. forces in Korea estimated that a ground war would have cost over \$1 trillion to all combatants; U.S. damages were estimated at \$100 billion, with 80–100,000 U.S. soldiers dead. Plus, even if the United States was capable of defeating the North Korean regime, it would have been more costly to the United States than the DPRK. Washington would have had to bankroll some of the damage suffered by Seoul, as well as some of the costs of reunification. In a war, North Korea's costs would have eventually boomeranged back into the lap of South Korea and the United States.⁷¹

With no other feasible options available, the United States opted for the carrot, despite the high expectations of future conflict with North Korea. Policymakers in and out of the Clinton administration viewed the carrot as a second-best option that was preferable to war. As predicted by the transaction costs hypothesis in the case of mixed dyads, however, both sides have engaged in opportunistic behavior. Since the framework agreement

69. Council on Foreign Relations, *Success or Sellout? The U.S.-North Korean Nuclear Accord* (New York: Council on Foreign Relations, 1995), 7.

70. U.S. Senate, *Security Implications*, 94.

71. See John Burton, "Seoul on Hook of Unattractive Options," *Financial Times*, 6 June 1994, 6.

wassigned, the United States has held back agreed-upon shipments of fuel oil and refused to lift trade barriers with Pyongyang. North Korea, in response, has threatened to restart its nuclear weapons program.⁷² The success of the inducement in this case is still an open question.

Like any plausibility probe, the empirical results are tentative. Data and space constraints prevent any testing of whether international regimes help to make inducements a more attractive policy option. Nevertheless, the results presented in this section are encouraging. Both the statistical results and the case studies support the theory of inducements developed here. Because of reduced transaction costs, carrots are more likely to be proffered and accepted between democratic dyads. Conflict expectations affect the sequencing of carrots and sticks. With allies, senders are likely to coerce receivers because they can use preexisting inducement flows as levers. With adversaries, senders will prefer to sanction first, because of the elevated expectations of future conflict. Because these expectations also sharply limit the concessions that could be extracted from a receiver, a sender will often choose to use inducements after coercion has failed.

CARROTS, STICKS, AND THE DEMOCRATIC PEACE

THIS ESSAY generates two reasons why carrots are not more common in international relations. First, there are situations where carrots are not a feasible option. The high transaction costs of trading political favors at the international level make the market for carrots remarkably thin. These transaction costs are even greater if the either the sender or the receiver is not a democracy, or if the carrot is proffered outside the framework of an international regime. Second, even if the carrot is a feasible option, there are still several roadblocks before a carrot is proffered and accepted. If conflict expectations are high, coercion is the preferred strategy. If conflict expectations are low, senders will still prefer to coerce if that option is feasible. These conditions severely circumscribe the possibilities of a successful carrot.

Despite these restrictions, it is possible to predict the use, success and sequencing of carrots. They are likely to be proffered if the sender and receiver are both democracies, because democratic regimes possess certain features that reduce the transactions costs of exchange. Inducements

72. Manning, "Time Bomb"; Philip Shenon, "North Korean Nuclear Arms Pact Reported Near Breakdown," *New York Times*, 6 December 1998, 16.

should be more common and more successful within the context of international regimes, because regimes also help to reduce transactions costs. Between allies, carrots should be observed, but just as often senders will use preexisting inducement flows as a means of coercion. Between adversaries, senders will prefer to sanction, and only turn to inducements as a second-best option. A plausibility probe of U.S. arms and aid transfers provides some initial support for this theory, as do case studies of U.S. nonproliferation policy toward North and South Korea.

The theoretical and empirical results have several implications. The theory of carrots developed here suggests why nation-states continue to employ economic or military coercion despite persistent doubts about its utility as a form of statecraft.⁷³ As David Baldwin has observed, influence strategies can only be judged in comparison to the likely success of other options.⁷⁴ Because the feasibility of carrots is sharply constrained, it is not surprising that economic coercion remains a popular course of action. The track record of economic or military coercion might not be sterling, but in many situations it is superior to an inducement-based approach. Furthermore, the theory developed here suggests how the use of carrots and sticks are intertwined. In some situations, the sender has an incentive to use inducements only after sanctions has been attempted. In others, the ability to use the stick can only occur if a previous carrot has been accepted. This equivalency suggests an international relations version of the Coase Theorem.⁷⁵ Regardless of the relationship between the sender and receiver, something is exchanged for a political concession.⁷⁶ Looking at either inducements or sanctions in a vacuum would be theoretically counterproductive.

Finally, this article also suggests another mechanism that helps to explain the democratic peace. Theories of the democratic peace have focused on normative and structural qualities of democratic regimes that make them less willing to go to war with each other. Indeed, one article argues that

73. For a pessimistic assessment of economic sanctions, see Pape, "Why Economic Sanctions Do Not Work"; T. Clifford Morgan and Valerie Schwebach, "Fools Suffer Gladly: The Use of Economic Sanctions in International Crises," *International Studies Quarterly* 41, no. 1 (March 1997): 27–50; Richard Haass, "Sanctioning Madness," *Foreign Affairs* 76, no. 3 (November/December 1997): 74–85. For a pessimistic assessment of military coercion, see Robert Pape, "Coercion and Military Strategy," *Journal of Strategic Studies* 15, no. 4 (December 1992): 423–75.

74. Baldwin, *Economic Statecraft*.

75. See Ronald Coase, "The Problem of Social Cost," *Journal of Law and Economics* 3, no. 1 (October 1960): 1–44.

76. This point is also made in R. Harrison Wagner, "Economic Interdependence, Bargaining Power, and Political Influence," *International Organization* 42, no. 3 (summer 1988): 461–83.

because of this preference, democracies will simply choose other means of coercion in dealing with each other.⁷⁷ The theory of inducements developed here offers an additional explanation. Democracies are less likely to go to war with each other because their ability to provide information and credibly commit gives them a policy alternative that other dyads lack. With the ability to use inducements, democracies are able to bargain efficiently without resorting to force. Surely availability of inducements is not the only explanation for the democratic peace, but it is an explanation that until now has been overlooked.

77. Patrick James and Glenn E. Mitchell, "Targets of Covert Pressure: The Hidden Victims of the Democratic Peace," *International Interactions* 21, no. 1 (March 1995): 85–107.