

Bargaining in International Relations

Introduction

Bargaining - whether over arms control, the terms of a peace settlement, exchange rate coordination, alliances, or trade agreements - is a central feature of international relations. In the past decades the literature on bargaining in international relations has seen much interesting research and has been at the forefront of formal work in international relations. Because bargaining is an activity in which the strategic interdependence of decision-making is central, much of the literature is based on game-theoretic modeling.

Bargaining is the negotiation over the terms of an agreement. While often more than one agreement exist that two or more actors would prefer to no agreement, the actors disagree over their ranking of the mutually preferable agreement. Moreover, bargaining involves interdependent actions. In other words, the decisions made by one actor will depend to a large degree on the actual or likely decisions made by another actor. In addition, bargaining often has 'rules of the game'. For example, actors can make demands or offers simultaneously, one actor could make a demand or offer and the other accepts or rejects (a so-called take-it-or-leave-it game), or the actors can make demands or offers sequentially. This brings us to another feature of bargaining; it is often dynamic. Finally, bargaining typically involve uncertainty about the other actor's preferences.

In sum, the process of bargaining in international relations is complex and the literature on the topic spans the fields of history, economics, political science and international relations. As we will see, conventional measures of power (physical strength or financial resources) are an important, but certainly not the only determinant of bargaining power. Issues such as credibility,

multiple bargaining levels, enforcement possibilities, asymmetric information, indivisibility, commitment problems, political bias, and the social context all affect the bargaining outcome in important ways.

Bargaining and credibility

Schelling's 1960 book, *The Strategy of Conflict*, remains the classic work on bargaining in international relations. He argues that bargaining power depends to a large degree on the credibility of threats and promises. More physical strength or more financial resources are by no means the only advantages in bargaining situations. On the contrary, Schelling argues that in some situations, restricting one's options may be beneficial. Weakness may be strength since it can force others to make concessions.

Schelling illustrates this concept through the example of a union bargaining with management. If the union insists on, say, \$2 and expects the management to counter with \$1.60, persuading the management to pay \$2 is not the only option available to the union. Schelling argues that the union should lead the management to believe that it cannot accept less than \$2 even if it wished to. The union may, for example, argue that it no longer controls its members. By portraying its own weakness, and confronting management with the threat of a strike the union itself cannot avert, the threat is made credible. The paradoxical result is that in bargaining weakness is often strength. We also find this dynamic in international relations. In a seminal 1994 article, Fearon illustrates how audience costs, the cost statesmen suffer among their constituency of backing down after escalating a conflict, can make actions such as troop mobilization and other forms of escalation credible signals. As we shall see later, states can often deliberately restrict their options in order to achieve better bargaining outcomes.

Bargaining at multiple levels

As the last example has demonstrated, bargaining in international relations often happens at more than one level. At the international level a statesmen may bargain over an agreement with fellow statesmen, while at the same time bargaining with domestic constituents over the ratification of such an agreement. Thus, the statesman must take into account the interests of international actors, while at the same time taking into account pressures from different domestic actors, each pressuring the statesman to adopt policies favorable to their interests. This is what Robert Putnam termed as the two-level game. The introduction of the domestic level bargaining made an important contribution to the literature on bargaining in international relations. It also challenged the state-centered approach of Realism and Neorealism, which conceive states as unitary rational actors. Conceiving bargaining as a multi-level game enriches the level of strategic interaction, which Putnam analyzed this in terms of win-sets, which are the sets of possible agreements at the international level that would find the necessary approval at the domestic level. In other words, larger win-sets make agreements more likely because they leave more room for agreement. Conversely, if the win-sets of two negotiators do not overlap, no agreement will be reached.

Just as domestic constraints can improve statesmen's international bargaining power, international constraints can serve to enhance the bargaining power of the statesmen at home. Indeed, international negotiations sometimes enable government leaders to do what they privately wish to do, but would otherwise be powerless to do domestically. Secondly, and similar to Schelling's argument, the less 'powerful' a negotiator the more bargaining power he may have. That is, being under severe domestic constraints, and therefore having a small domestic

win-set, can be a bargaining advantage to a statesman as it limits what he can promise at the international level. Lastly, negotiators have a strong interest in the domestic support of their bargaining counterpart. If the domestic support of bargaining partners increase, so does the size of their win-set, thereby increasing the likelihood of reaching an agreement, and the relative bargaining leverage of the other state. Negotiators in international relations are therefore to be expected to try to reinforce one another's standing with their respective constituents.

Bargaining and international cooperation

Bargaining over an agreement is often only a first step. States need to look down the road at the monitoring and enforcement of any agreement reached. An agreement reached in principle is no worth the paper it is written on if it cannot be enforced in practice. This second stage of bargaining is addressed by cooperation theory. Compliance with agreements, according to cooperation theory, is akin to the Prisoner's Dilemma. States may have an incentive to keep their end of the bargain, but only if the other side is likely to do so as well. Cooperation under the security dilemma can be sustained if states interact over a long span of time. States can deter defection from a bargain through conditional retaliation such as tit-for-that. A key condition for such mechanisms to work is that states should care sufficiently about future payoffs. This is often described as 'the shadow of the future.' If the utility of future cooperation is greater than the utility of immediate defection and subsequent punishment, cooperation can be sustained.

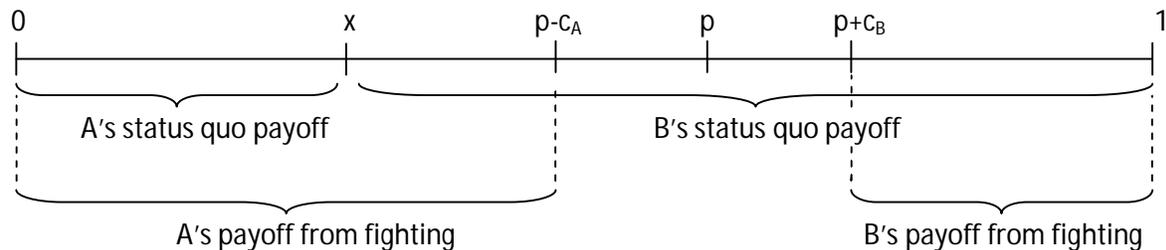
In an important 1998 article, Fearon explains how the shadow of the future can affect international bargaining. First, in cases where effective monitoring of an agreement is not possible, statesmen know that no bargaining agreement will be enforceable. Consequently, it is

possible to observe non-serious bargaining in which states will only commit to vague agreements for various political purposes, or there will be no bargaining at all. Second, and more interestingly, while better monitoring and a long shadow of the future may make enforcing an international agreement easier, it also gives states an incentive to bargain harder, delaying agreement in hopes of getting a better deal. That is, the more the future is valued the greater the incentives for states to bargain hard for favorable terms. It is therefore possible to observe costly, non-cooperative standoffs in precisely those situations where cooperation theorists predict cooperation, that is, in situation where the shadow of the future is long and there are potential mutual gains from an agreement.

Bargaining and war

A great deal of work on international relations bargaining has dealt with war. This topic is also at the forefront of game-theoretic modeling in international relations. In a seminal 1995 article, Fearon illustrates the central puzzle about war. If a war is costly to its parties, each side would have been better off if they could have achieved the same outcome without suffering the costs. Consequently, war should be considered as a bargaining breakdown. Figure 1 illustrates. State A and B compete over a piece of territory that covers 0 to 1. Initially, state A (B) owns part 0 to x (x to 1). If country A fights it wins the whole territory (0 to 1) with probability p . However, fighting results in a cost equal to c_A (c_B) to state A (B). Accordingly, the payoff from fighting for country A (B) is given by 0 to $p - c_A$ ($p + c_B$ to 1). The central puzzle about war is this *ex post* inefficiency because any settlement between $p - c_A$ and $p + c_B$ is preferred by both parties over fighting. Why then does war, as a bargaining breakdown, occur? Fearon suggests that there can

be only three rationalist explanations for war: asymmetric information, indivisibility, and commitment problems.



The bargaining range

Asymmetric information

Asymmetric information occurs when one state knows more about its capabilities than does the other. According to Fearon, asymmetric information can lead to war. Indeed, if both sides knew who was going to win a war, they would not bother fighting it. But to know which side would win the war, there must be symmetric information between potential belligerents. For example, suppose state A makes a take-it-or-leave-it offer, which B can accept or reject by fighting. If the states have complete information then A will make the largest demand that B will accept ($p + c_B$). B will accept because it can't do better by fighting. However, if A is unsure about B's cost of fighting (c_B), A does no longer know what to ask without provoking war. There is now a tradeoff for state A between obtaining better terms and a higher probability that war will occur. Conversely, in misperceiving the capabilities of its opponent, B may mistakenly opt for war. Most tragically, information asymmetries are difficult to overcome because states have incentives to misrepresent their capabilities in order to achieve better bargaining outcomes. Thus, while states may wish to avoid war, they often choose not to be completely transparent.

Indivisibility

The indivisibility of issues can also lead to war. If state A and B bargain over an issue that is indivisible - some issues maybe do not admit finer graded divisions or compromise - then there may not be any feasible outcome that both states prefer to fighting. If the issue allows only a finite number of resolutions, it might be that none falls within the bargaining range ($p - c_A$ and $p + c_B$). However, while this is a potential reason why rational states may go to war, Fearon does not find this explanation compelling. The issues over which states bargain typically are multi-dimensional. Side-payments or linkages with other issues typically are possible. Also, states could alternate or randomize among a fixed number of possible solution to a dispute. Empirically, as a result, all issues can be divided up.

Commitment problems

Lastly, Fearon, and a more recent article by Powell, considers that war may occur if states cannot credibly commit themselves to follow through on a negotiated agreement. That is, mutually preferable bargains may be unattainable because one or more states would have an incentive to renege on the terms. The Prisoner's Dilemma is the classic example of this problem. While both actors prefer the cooperative outcome to mutual defection, both have an incentive to renege. Commitment problems are usually illustrated in a dynamic bargaining setting. If state B is expected to decline in military power ($p_2 > p_1$), and if state A cannot commit itself not to exploit the greater bargaining leverage it will have starting in the second period, a preventive attack may be rational for state B.

Political bias

In a recent article, Jackson and Morelli suggest that political bias may also lead to war. It is possible that a pivotal decision-maker – whether an executive, a monarch, the median member of an oligarchy, or the median voter – may have relative benefits or costs of war that are different from the state at large. In an authoritarian regime for example it may be that a leader can keep a disproportionate share of the gains of war. Jackson and Morelli show that, given sufficient enough bias on the part of one or both countries, war cannot be prevented by any transfer payment. Interestingly, they also show that a country may choose a biased leader because it will lead to a stronger bargaining position.

Social context and bargaining

Most of the literature on bargaining in international relations takes relations among states as a function of the material capabilities and interests of nations. However, inter-state relations are often embedded in socially-constructed norms. This social context can play a role in shaping international bargaining outcomes. In an important article, Schoppa introduces the social context in the field of international bargaining and argues how issues such as identity, trust, and norms influence bargaining. The amount of trust among bargaining parties, for example, can dramatically affect the likelihood of achieving cooperative agreements. In addition, in the context of bargaining, threats that are perceived as 'fair' (i.e. in accord with procedural rules stipulated under for example an international regime) are more likely to be effective in extracting concessions. These examples illustrate how the social context might have an effect on bargaining in international relations, independent of the power and interests of the players.

Conclusion

Bargaining in international relations is at the forefront of (formal) research in international relations. Bargaining can take place in different policy dimensions, with two or more players, at more than two levels, with single or repeated interaction, with perfect or asymmetric information, social context, and so on. Great insights have been generated by the literature on bargaining in international relations. These insights have also paved the way for future potential empirical work.

Peter van der Windt

Columbia University

See also: Bargaining, Tacit Bargaining, Prisoner's Dilemma, Thomas Schelling, Cooperation, Nash Equilibrium, Game Theoretical Approaches.

Further Readings

Fearon, J. D. (1994). Domestic Political Audiences and the Escalation of International Disputes. *American Political Science Review*, 88, 3, pp. 577-592.

Fearon, J. D. (1995). Rationalist Explanations for War. *International Organization*, 49, 3, pp. 379-414.

Fearon, J. D. (1998). Bargaining, Enforcement, and International Cooperation. *International Organization*, 52, 2, pp. 269-305.

Jackson, M. O. & Morelli, M. (2007). Political Bias and War. *American Economic Review*, 97, 4, pp. 1353-1373.

Nash, J. F. Jr. (1950). The bargaining problem. *Econometrica*, 18, 2, ppp. 155-162.

Powell, R. (2006). War as a Commitment Problem. *International Organization*, 60, 1, pp. 169–203.

Putnam, R. D. (1988). Diplomacy and Domestic Politics: The Logic of Two-Level Games. *International Organization*, 42, 3, pp. 427-460.

Rubinstein, A. (1982). Perfect equilibrium in a bargaining model. *Econometrica*, 50, 1, 97-110.

Schelling, T. C. (1960). *The Strategy of Conflict*. Cambridge, MA: Harvard University Press.

Schoppa, L. J. (1999). The Social Context in Coercive International Bargaining. *International Organization*, 53, 2, pp. 307-342.