

James Fearon, "Bargaining, Enforcement, and International Cooperation," *International Organization* 52 no. 2 (Spring 1998): 269-305.

Analysts of international relations increasingly apply simple formal models to different cases to explain whether or not cooperation occurs. As a result, a debate has risen about what kinds of models most often reflect the structures that are empirically observed. The most popular of these models is the repeated prisoner's dilemma model which may allow for cooperation to frequently occur by means of a Tit-for-Tat-like regime. For scholars who advance this argument, the fundamental problem of cooperation revolves around the enforcement of commitments.

But the problem with this approach is that there are usually several possible ways to craft an enforceable agreement. Thus Fearon argues that we have neglected the extremely important issue of bargaining. Bargaining problems and enforcement problems will interact to alter the dynamics of cooperation in ways we would not expect if we focussed on enforcement problems alone.

Thus, Fearon proposes a two-stage model: 1) states bargain to choose between two enforceable agreements, and 2) they implement and enforce that agreement. The first stage is modeled as a war of attrition game and the second stage is modeled as a repeated prisoner's dilemma game.

Major Conclusions:

1) *The shadow of the future cuts two ways.* Although the long shadow of the future makes cooperation easier to enforce, it raises the potential stakes of the agreement. This makes the states bargain harder which may delay agreement. In contrast to received cooperation theory which predicts that longer shadows increase cooperation, the relationship between the shadow of the future and the likelihood of agreement is ambiguous. NB: Fearon interchangeably describes the shadow of the future as the leaders' discount rates (low discount rate, long shadow) or as the length of time the agreement is expected to remain in force (more time, longer shadow).

2) There is a *selection effect* that makes bargaining appear to be more of an obstacle to cooperation than enforcement is. If monitoring and enforcement is not feasible for a given issue, we will not observe attempts at negotiation on that issue because states cannot commit to an agreement. Conversely, we only see serious negotiations in cases where both sides believe that monitoring and enforcement can be effective. Hence a sample of cases where serious negotiations take place is biased in favor of cases where the chief obstacle to agreement is the bargaining problem. Received cooperation theory previously ignored this selection bias. To overcome the selection effect, Fearon proposes selecting cases by issue area, and also seeking for evidence that leaders are looking for ways to overcome monitoring and enforcement problems as an indicator that monitoring problems are blocking agreements.

3) Relative gains concerns are distinct from bargaining problems. Relative gains concerns are actually a credible commitment issue—states must credibly promise not to use current gains for a later attack. If they cannot do that or if they cannot redistribute current gains to maintain the existing power balance, some additional bargaining problem must exist.

Caveat:

The most restrictive assumption of the model is that the actors are choosing between only two proposals. Fearon admits that bargaining theory currently cannot consistently generalize about the equilibria that will occur if actors can choose between 3 or more proposals. On the other hand, in these cases there are at least some equilibria that yield a war of attrition result similar to the two-proposal model.

Predictions:

1) In cases where effective monitoring and enforcement is thought infeasible, we should observe a) discussions about how to make monitoring and enforcement feasible, b) nonserious bargaining, or c) no bargaining at all.

2) We should sometimes observe costly noncooperative standoffs in precisely those situations where received cooperation theory predicts cooperation (i.e. when the shadow of the future is long and there are large potential mutual gains from agreement). In general the likelihood of cooperation is proportional to: a) the cost of delay relative to the size of the stake at issue; b), the shortness of the time period of the agreement, for fixed-time-period agreements; and c) the shortness of the shadow of the future.

Fearon does not do a thorough test of these propositions, but he does review some of the literature around international cooperation. He argues that although specific situations within the Cold War point to the importance of monitoring difficulties for blocking arms control, the entire Cold War was itself a thirty year bargaining problem. Other issues that are anomalous for cooperation theory, such as extended civil wars and territorial disputes, fit the combined bargaining-enforcement model much better.