

### 3 Bargaining

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1. (2001) “A negotiator must balance the gain from greed against the loss of an agreement from excessive greed.” Can this intuition help explain the links between different models of bargaining?
2. (2000) Two people need to reach an agreement to divide a sum of money. What factors influence the outcome?
3. (1999) “The most important gap in bargaining theory is its failure to incorporate considerations of fairness.” Discuss.
4. Will bargaining always lead to an efficient outcome?
  - (a) What is the Nash Bargaining Solution? What are its four conditions?
  - (b) Outline the Rubinstein bargaining model and its solution.
  - (c) How do the two models relate to each other, and what role do they play in our understanding of bargaining theory?
5. “Experimental evidence invalidates bargaining theory”. Discuss.
6. Outline Rubenstein’s model of bargaining under complete information. Does the model’s conclusion that players will conclude their bargain without delay mean that this theory cannot explain strikes?

7. A plaintiff has filed a claim for damages against a defendant. If the case goes to court, the plaintiff will incur legal costs of  $k$  ( $0 < k < 1$ ) and the defendant will have to pay damages of  $x$  to the plaintiff (but incur no other costs).  $x$  is drawn from the uniform distribution on the unit interval ( $0 \leq x \leq 1$ ). The defendant knows the value of  $x$  but the plaintiff does not.
- (a) The day before the trial, the plaintiff can offer an out-of-court settlement to the defendant. If the latter accepts it then the plaintiff will receive the settlement and incur no legal costs. If he rejects it then the case will go to trial. The two parties have the same discount factor  $\delta$ . What offer should the plaintiff make?
- (b) Suppose now that there are two days to go before the trial. The plaintiff can offer an out-of-court settlement to the defendant and, as before, if it is accepted receive it and incur no legal costs. If it is rejected, he can make another offer the day before the trial, as in (a). Show that the plaintiff can do no better than wait until the day before the trial to make a serious offer. (Consider only pure strategy equilibria). Discuss.