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**The evolutionary role of toughness in bargaining.** (English) Zbl 1099.91050  
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Summary: The experimental evidence on the “endowment effect” [*D. Kahneman, J. Knetch and R. Thaler, Experimental tests of the endowment effect and the Coase theorem, J. Polit. Econ.* 98, 1325–1348 (1990)] and the “self serving bias” in negotiations [*L. Babcock and G. Loewenstein, Explaining bargaining impasse: the role of self-serving biases, J. Econ. Perspect.* 11, 109–126 (1997), *L. Babcock, G. Loewenstein, S. Issacharoff and C. Camerer, Biased judgments of fairness in bargaining, Am. Econ. Rev.* 85, 1337–1343 (1995)] suggests that individuals enter a tough state of mind when they have to make a stand vis-a-vis somebody else. In this work we show how a toughness bias in bargaining may indeed be evolutionary viable. When the inherent toughness of the bargainer is observed by the opponent, this opponent will adjust his behavior accordingly, in a way which may enhance the actual payoff of the biased bargainer. Suppose, then, that a population consists initially of individuals with different inherent degrees of toughness or softness. They are often matched at random to bargain, and biases which are objectively more successful tend to appear more frequently in the society. We characterize a salient class of bargaining mechanisms under which the population will consist, asymptotically, of individuals with some moderate degree of toughness.

**MSC:**

[91B26](#) Auctions, bargaining, bidding and selling, and other market models  
[91A22](#) Evolutionary games

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[Asymmetric information](#); [Endowment effect](#); [Self-serving bias](#); [Toughness](#); [Evolution of preferences](#); [Payoff-monotonic dynamics](#)

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**References:**

- [1] Admati, A.; Perry, M., Strategic delay in bargaining, *Rev. econ. stud.*, 54, 345-364, (1987) · [Zbl 0633.90099](#)
- [2] Arlen, J., Spitzer, M., Talley, E., 2001. Endowment effects within corporate agency relationships. Mimeo. University of Southern California
- [3] Babcock, L.; Loewenstein, G., Explaining bargaining impasse: the role of self-serving biases, *J. econ. perspect.*, 11, 109-126, (1997)
- [4] Babcock, L.; Loewenstein, G.; Issacharoff, S.; Camerer, C., Biased judgments of fairness in bargaining, *Amer. econ. rev.*, 85, 1337-1343, (1995)
- [5] Benos, A., Aggressiveness and survival of overconfident traders, *J. finance markets*, 1, 353-383, (1998)
- [6] Bergman, N., Bergman, Y., 2000. Ecologies of preferences with envy as an antidote to risk-aversion in bargaining. Mimeo. The Hebrew University of Jerusalem · [Zbl 1032.91575](#)
- [7] Bester, H.; Güth, W., Is altruism evolutionary stable?, *J. econ. behav. organ.*, 34, 211-221, (1998)
- [8] Bolle, F., Is altruism evolutionarily stable? and envy and malevolence?—remarks on bester and Güth, *J. econ. behav. organ.*, 42, 131-133, (2000)
- [9] Chatterjee, K.; Samuelson, W., Bargaining under incomplete information, *Oper. res.*, 31, 835-851, (1983) · [Zbl 0537.90102](#)
- [10] Cramton, P., Strategic delay in bargaining with two sided uncertainty, *Rev. econ. stud.*, 59, 205-225, (1992) · [Zbl 0756.90033](#)
- [11] Fershtman, C.; Heifetz, A., Read my lips, watch for leaps: a theory of endogenous political instability. foerder working paper 8-02. tel aviv university, Available at
- [12] Fershtman, C.; Weiss, Y., Why do we care about what others think about us?, ()
- [13] Fershtman, C.; Weiss, Y., Social rewards, externalities and stable preferences, *J. public econ.*, 70, 53-74, (1998)
- [14] Frank, R., *Passions within reason—the strategic role of the emotions*, (1988), Norton New York
- [15] Güth, W.; Yaari, M., Explaining reciprocal behavior in simple strategic games: an evolutionary approach, ()

- [16] Guttman, J., On the evolutionary stability of preferences for reciprocity, *Europ. J. polit. economy*, 16, 31-50, (2000)
- [17] Heifetz, A.; Spiegel, Y., On the evolutionary emergence of optimism. foerder working paper 24-00. tel aviv university, Available at
- [18] Heifetz, A.; Shannon, C.; Spiegel, Y., What to maximize if you must. foerder working paper 27-02. tel aviv university, Available at
- [19] Heifetz, A.; Segev, E., The evolutionary role of toughness in bargaining. foerder working paper 25-01. tel aviv university, Available at
- [20] Horowitz, J., McConnel K., 2000. A review of WTA/WTP studies. Mimeo. University of Maryland
- [21] Huck, S., Kirchsteiger G., Oechssler, J., 1997. Learning to like what you have—explaining the endowment effect. Mimeo. Humboldt University, Berlin
- [22] Huck, S.; Oechssler, J., The indirect evolutionary approach to explaining fair allocations, *Games econ. behav.*, 28, 13-24, (1998) · [Zbl 0937.91024](#)
- [23] Kahneman, D.; Knetsch, J.; Thaler, R., Experimental tests of the endowment effect and the coase theorem, *J. polit. economy.*, 98, 1325-1348, (1990)
- [24] Kahneman, D.; Tversky, A., Prospect theory: an analysis of decision under risk, *Econometrica*, 47, 263-291, (1979) · [Zbl 0411.90012](#)
- [25] Koçkesen, L.; Ok, E.; Sethi, R., Evolution of interdependent preferences in aggregative games, *Games econ. behav.*, 31, 303-310, (2000) · [Zbl 1065.91522](#)
- [26] Koçkesen, L.; Ok, E.; Sethi, R., The strategic advantage of negatively interdependent preferences, *J. econ. theory*, 92, 274-299, (2000) · [Zbl 1112.91312](#)
- [27] Kyle, A.; Wang, A., Speculation duopoly with agreement to disagree: can overconfidence survive the market test?, *J. finance*, LII, 2073-2090, (1997)
- [28] Loewenstein, G.; Adler, D., A bias in the prediction of tastes, *The economic journal*, 105, 929-937, (1995)
- [29] Marshall, J.; Knetsch, J.; Sinden, J., 'agents' evaluations of the disparity in measures of economic loss, *J. econ. behav. organ.*, 7, 115-127, (1987)
- [30] Moulin, H., Dominance solvability and Cournot stability, *Math. soc. sci.*, 7, 83-102, (1984) · [Zbl 0541.90098](#)
- [31] Myerson, R.; Satterthwaite, M., Efficient mechanisms for bilateral trading, *J. econ. theory*, 29, 265-281, (1983) · [Zbl 0523.90099](#)
- [32] Oechssler, J.; Riedel, F., Evolutionary dynamics on infinite strategy spaces, *Econ. theory*, 17, 141-162, (2001) · [Zbl 0982.91002](#)
- [33] Plott, C.; Zeiler, K., 2002. The willingness to pay/willingness to accept gap, the "endowment effect" and experimental procedures for eliciting valuations. Social Sciences working paper 1132. California Institute of Technology
- [34] Possajennikov, A., On the evolutionary stability of altruistic and spiteful preferences, *J. econ. behav. organ.*, 42, 125-129, (2000)
- [35] Rotemberg, J., Human relations in the workplace, *J. polit. economy*, 102, 684-717, (1994)
- [36] Rubinstein, A., Perfect equilibrium in a bargaining model, *Econometrica*, 50, 97-110, (1982) · [Zbl 0474.90092](#)
- [37] Samuelson, L.; Zhang, J., Evolutionary stability in asymmetric games, *J. econ. theory*, 57, 363-391, (1992) · [Zbl 0770.90096](#)
- [38] Sethi, R.; Somanathan, E., Preference evolution and reciprocity, *J. econ. theory*, 97, 273-297, (2001) · [Zbl 1017.91007](#)
- [39] Sobel, J.; Takahashi, I., A multistage model of bargaining, *Rev. econ. stud.*, 50, 411-426, (1983) · [Zbl 0515.90085](#)
- [40] Thaler, R., Toward a positive theory of consumer choice, *J. econ. behav. organ.*, 1, 39-60, (1980)
- [41] Tversky, A.; Kahneman, D., Loss aversion in riskless choice: a reference-dependent model, *Quart. J. econ.*, 106, 1039-1061, (1991)

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