Standing United or Falling Divided?
High Stakes Bargaining in a TV Game Show

Dennie van Dolder
Martijn J. van den Assem
Colin F. Camerer
Richard H. Thaler

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Abstract: We examine high stakes three-person bargaining in a game show where contestants bargain over a large money amount that is split into three unequal shares. We find that individual behavior and outcomes are strongly influenced by equity concerns: those who contributed more to the jackpot claim larger shares, are less likely to make concessions, and take home larger amounts. Although contestants who announce that they will not back down do well relative to others, they do not secure larger absolute amounts and they harm others. There is no evidence of a first-mover advantage and little evidence that demographic characteristics matter.

JEL: C70, C93, D03

Keywords: bargaining, negotiation, game show, natural experiment, equity theory, moral property rights, entitlements, fairness, concessions, first-mover advantage

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Van Dolder: Nottingham School of Economics, University of Nottingham, University Park, Nottingham, NG7 2RD (e-mail: dennie.vandolder@nottingham.ac.uk). Van den Assem: Faculty of Economics and Business Administration, VU University Amsterdam, De Boelelaan 1105, 1081 HV Amsterdam (e-mail: m.j.vanden.assem@vu.nl). Camerer: Division of the Humanities and Social Sciences, California Institute of Technology, 1200 East California Boulevard, Pasadena, CA 91125 (e-mail: camerer@hss.caltech.edu). Thaler: Booth School of Business, University of Chicago, 5807 South Woodlawn Avenue, Chicago, IL 60637 (e-mail: richard.thaler@chicagobooth.edu). We thank format holder Talpa for granting the right to use copies of Divided, and producer Endemol UK for providing us with recordings and background. We gratefully acknowledge support from Erasmus University Rotterdam, and from the Economic and Social Research Council via the Network for Integrated Behavioural Sciences (ES/K002201/1).

Bargaining is ubiquitous in our professional and private lives. Not surprisingly, bargaining has received considerable research attention. Because real-world data generally entail a lack of control, most empirical insights derive from laboratory experiments. It is still an open question, however, to what extent findings from the laboratory generalize to real-world environments (Levitt and List, 2007; Camerer, 2011; Baltussen, van den Assem and van Dolder, 2014). One of the concerns arises from the fact that the participating students are a non-random sample of the population. Also, most experiments use small or hypothetical stakes, begging the question whether results will generalize to situations of significant economic importance. In the present study, we use data from the British TV show *Divided*. This game show combines high stakes and a diverse subject pool within a controlled setting.

We find that individual behavior and outcomes are strongly influenced by equity concerns: those who contributed more to the jackpot claim larger shares, are less likely to make concessions, and take home larger amounts. Threatening to play hardball is ineffective: although contestants who announce that they will not back down do well relative to others, they do not secure larger absolute amounts and they harm others. There is no evidence of a first-mover advantage and little evidence that demographic characteristics matter.

I. Game Show and Data

Divided was developed by the Dutch media firm Talpa, and produced for the ITV network in the United Kingdom by Endemol UK. The show debuted on TV in May 2009 and ran until May 2010. A total of 53 episodes were aired.

Each game is played with three contestants who are strangers to each other. There are two stages: one in which the contestants team up to accumulate a communal jackpot through answering quiz questions, and one in which they have to divide the jackpot between them.

The first stage lasts for a maximum of five rounds. Round 1 has five questions that are worth up to £3,000 each. In the subsequent four rounds the number of questions and the maximum value per question are 4, 3, 2 and 1, and £7,500, £15,000, £30,000 and £75,000, respectively. How much a question actually contributes to the jackpot depends on the team's speed of answering. Incorrect answers halve the jackpot and after three mistakes the team is out of the game. At the end of each round, the team can decide to stop and divide the jackpot, but only if they make that decision unanimously. The online appendix includes a schematic overview of this first stage.

The second stage comprises the bargaining element that is central to our analysis. The jackpot is split into three unequal shares. The largest is marked A, the middle B, and the smallest C. The players unanimously have to decide who gets which. First, they each receive 15 seconds to make their case and stake their claim to one of the shares. The order in which they are asked to do so is determined by their positions on the stage (starting from the viewers' left). If they do not agree immediately, they have 100 seconds to reach consensus in a free-form discussion. With each second that passes they lose one percentage point of the initial jackpot, and after 100 seconds there is nothing left. After 50 seconds there is a time-out. In this brief pause, the contestants keep silent and the game show host summarizes the situation by emphasizing how much has been lost and what is left, or by enumerating the remaining values of the three shares. This final stage can thus be seen as a natural bargaining experiment where "subjects" have to unanimously decide on the allocation of indivisible shares, in a format that allows face-to-face communication and incorporates (close to) continuous costs to bargaining.

For each episode we collected data on the relevant observables, including demographic characteristics of the contestants, the results for each quiz question and the individual contributions to the answers, contestants' claims and how these changed during the bargaining phase, whether and when agreement was reached, and the individual payoffs. Combined, the 53 episodes comprise the games of 56 teams, with some starting in one episode and continuing in the next. Because 13 teams leave the show early after three incorrect answers, 43 are used in our analyses.

Men and women each represent half of the contestant pool. The average contestant is 36 years of age, the youngest 18 and the oldest 70. The average final jackpot is £33,512, the smallest £7,282 and the largest £115,755. These are considerable sums relative to the amounts typically used in laboratory experiments and also many times the median gross weekly earnings of £404 in the UK in April 2010 (Source: Statistical Bulletin Office for National Statistics, 8 December 2010).

Two-thirds of the time the three shares in the jackpot represent close to 60, 30, and 10 percent. Only two other subdivisions occur: 70/20/10 and 65/25/10, both in 16 percent of the cases. Most contestants initially claim the largest share: 79 percent opt for A, 16 percent pick B and 5 percent content themselves with C straight away. Only 9 percent of the teams agree immediately, 72 percent do so while the timer counts down, and 19 percent fail to reach agreement and go home empty-handed. The efficiency rate, or the average fraction of the jackpot that is actually awarded, is approximately 50 percent. The average outcome per contestant is £5,633. Would we have run this show as an experiment ourselves, the total costs in subject payoffs alone would have been £726,706. The online appendix displays the distribution of the bargaining duration and provides more detailed descriptive statistics.

II. Analyses and Findings

Table 1 summarizes our regression analyses. Model 1 is an ordered probit model that explains a contestant's decision to initially claim share A (3), B (2), or C (1). Model 2 is a probit model for a contestant's decision to make a hardball announcement at the start of the bargaining stage by stating not to back down from her initial claim. This model is estimated for the subset of contestants who initially claimed share A (only one contestant who claimed share B made a hardball announcement). When there is no immediate agreement, some will have to make concessions to bring agreement within reach. Model 3 is a probit model for the likelihood that a contestant lowers her claim. This model is estimated for those who initially claimed share A or B in situations with no immediate agreement, as only these contestants can make concessions.

A contestant's bargaining outcome can be defined relative to others and relative to the initial size of the jackpot. Model 4 considers the payoffs relative to others. This ordered probit model explains the share A (3), B (2), or C (1)that a contestant ends up with; contestants who fail to reach agreement and go home empty-handed are excluded. By solely looking at the share a contestant receives, this model ignores the efficiency of the bargaining process. Model 5 therefore analyzes the money that players take home as a fraction of the initial jackpot. Additional results are in the online appendix.

A. *Demographic Characteristics*

Psychologists have devoted considerable attention to individual differences in negotiation, especially during the 1970s and the early 1980s. The general picture arising from studies into the roles of demographic and personality characteristics is one of contradictory findings, frequent null results, and low explanatory power (Rubin and Brown, 1975; Thompson, 1990). For gender, meta-analyses indicate that males are more competitive and better in acquiring favorable outcomes, but the differences are slim and sensitive to the experimental conditions (Walters*,* Stuhlmacher and Meyer, 1998; Stuhlmacher and Walters, 1999).

The demographic variables that we study are gender, age and education. Contestants normally mention their age when they introduce themselves, but not their education. We have therefore estimated their education on the basis of occupation and other information they provide. We distinguish between contestants with and without a bachelor (or higher) degree. Those who are currently enrolled in higher education and those whose job title suggests work experience equivalent to the bachelor level or higher are also included in the higher education category.

In line with the general picture from earlier studies, we find little evidence that behavior and outcomes are related to demographic characteristics. Gender, age and education are insignificant determinants of contestants' initial claims, their hardball announcements and concessions, and the shares they end up with. The sole significant result is that younger contestants secure a larger part of the initial size of the pie.

B. *Contributions*

Entitlements are subjectively-held fairness judgments that people perceive as rights they wish to defend, and can arise from history, custom, the status quo, or contributions (Schlicht, 1998). Gächter and Riedl (2005) show that entitlements influence bargaining behavior and outcomes.

In *Divided*, the only and apparent source of entitlements are contestants' individual contributions to the communal jackpot. Theoretical and empirical work on equity theory suggests that contestants will care about the proportionality of outcomes and inputs, and deem it fair if those who contributed more to the jackpot receive a larger share (Adams, 1965; Konow, 2003).

To quantify contributions, we credit (in)correct answers by the team to the players who argued for (against) the correct answer. More specifically, if the group gave a correct answer, we divide the credit for the answer equally over all contestants who argued in favor of it; those who did not argue for any particular answer, argued for a wrong one, or argued for multiple answers (including or not including the correct one) receive no share of the credit.[1] If the group gave an incorrect answer, the credit is divided equally over those who argued in favor of one of the incorrect answers; those who did not argue for any particular answer or argued for the correct one only are not assigned any credit.

We distinguish between a composite measure that combines the credits for correct and incorrect answers into one metric, and measures that isolate the contributions to correct and incorrect

[1] There are three exceptions to this rule: (i) if all contestants argued both for and against the correct answer but managed to come to the correct answer together, they are each assigned one-third of the credit; (ii) if two contestants argued both for and against the correct answer and came to the correct answer together while the third remained silent, then these two share the credit; (iii) if contestants made a random guess and this guess turned out to be correct, then they share the credit.

answers. The former is computed by adding up the contestant's credits for correct answers and subtracting her credits for incorrect answers. We standardize by dividing by the total number of correct answers minus the total number of incorrect answers of the team. The separate measure for correct (incorrect) answers is calculated by adding up all credits of the contestant for questions answered correctly (incorrectly), and standardizing by the total number of correct (incorrect) answers.

We find that equity concerns play an important role in the bargaining process. Contestants who contributed more to the communal jackpot claim a larger share and end up with a larger prize. (The results for the composite measure are in the online appendix.) There are different effects for positive and negative contributions: positive contributions drive contestants' opening claims, while negative contributions determine whether a contestant makes concessions during the bargaining process. Consequently, both positive and negative contributions determine the final outcomes.

One explanation for this asymmetry is that those with negative contributions initially consider such contributions to be innocent mistakes for which they should not be held accountable, and that subsequent communication works to promote a more objective, less self-biased view. The asymmetric effect is also in line with query theory (Johnson, Häubl and Keinan, 2007): contestants' initial focus on positive contributions occurs when the problem is framed in positive terms ("what share do you deserve?"), but switches to negative contributions when the framing becomes negative ("who should move their claim downward?").

C. *Situational Variables*

The situational factors we consider are the order in which contestants make their initial claims, the stakes, and the differences between the percentage shares to be divided. To investigate whether there is a first-mover effect we include a dummy variable that takes the value of one if the contestant was the first to make her claim to one of the shares. For the role of stakes we use dummy variables representing the different quartiles of the stake distribution. We use the variance across the percentage shares as a measure for the divergence between the prizes.

There seems to be no first-mover advantage. Those who get to make their claim early do not behave differently and do not earn more. When the stakes are relatively low, contestants are less likely to announce a hardball strategy. The effect of the stakes on concessions is U-shaped: concessions occur relatively often with low and high stakes, and less so in between. Correspondingly, contestants retain a larger share of the jackpot if the jackpot is at the high end or the low end of the range. Last, a greater variance of the percentage shares leads to more hardball announcements and less efficient bargaining.

D. *Hardball*

A considerable line of research focuses on commitment strategies in bargaining (e.g., Schelling, 1956; Crawford, 1982). In our bargaining setting, contestants cannot formally commit themselves in the sense that they are always free to adjust their claim without incurring monetary costs. However, contestants may attempt to convince others that they feel internally committed to a specific share by making hardball announcements.

Announcing a hardball strategy of not backing down turns out to not be beneficial (the regression results are in the online appendix). Contestants who used this threat do well relative to others, but they do not manage to obtain larger amounts in an absolute sense. Their opponents are worse off, because contestants who make a hardball announcement also walk the walk: they are less likely to make a concession and thus frustrate the bargaining process.

III. Concluding Remarks

We have examined high stakes bargaining in the TV show *Divided*. One of the main findings is that entitlements derived from contributions are an important driving force behind behavior and outcomes. This refutes the commonly held belief that fairness concerns will be unimportant when monetary incentives are sufficiently large (Rabin, 1993; Telser, 1995; Levitt and List, 2007). Another interesting result is the inefficacy of adopting a hardball strategy. Due to bargaining costs, the total pie in our game shrinks such that there is no advantage left for the threatening party and others are worse off. This result is in line with game-theoretic reasoning, as simple strategies that anyone can follow should not increase earnings.

Possible selection effects can be a reason for external validity concerns. Contestants self-select into auditions and are then selected by producers to play the game for real. It is unclear to what degree such processes may have influenced our findings. Selection procedures are of course not unique to game shows, and form an intrinsic part of almost any field or laboratory setting. Yet, our sample varied widely in terms of background characteristics, seemingly forming a cross-section of middle-class society that is much closer to a cross-section of the general population than the university students commonly employed in laboratory and classroom experiments.

The game show setting can be another reason for concerns. While there is no live studio audience, contestants know that many people will observe their behavior on TV. This makes that the bargaining game is not strictly one-shot, as contestants' behavior and outcomes might affect their reputation. The specific setting provides an incentive to fight harder, as one may not want to appear weak on TV. However, being viewed as stubborn and responsible for losing a large fraction of the jackpot is also an outcome to be avoided. Furthermore, the game show setting might trigger a desire to "win the contest" and go home with more money than fellow team members, but contestants may instead also interpret the "contest" as a challenge to come to resolution with the people they teamed up with.

We do not consider the possible influences of the specific decision environment to be rendering our findings less interesting or less predictive of behavior in other settings. In laboratory and real-life situations there is always some degree of scrutiny, and each setting will cause particular motives to be more prominent than others. It is infeasible to study behavior under each and every possible set of conditions. The optimal approach is therefore to study behavior in a limited number of diverging settings. The contribution of the present paper should be evaluated in this light. We have employed the unique features of a TV game show to study bargaining behavior outside the laboratory and for stakes that are impossible to replicate in a behavioral laboratory.

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Table 1 – Regression Results

	(1) Initial claim	(2) Hardball announcement	(3) Concession	(4) Share won	(5) Prize won / Initial jackpot
Age	-0.013	-0.007	-0.007	-0.010	-0.003**
	(0.011)	(0.014)	(0.011)	(0.012)	(0.001)
Gender (male=1)	-0.230	-0.123	-0.096	0.066	-0.017
	(0.290)	(0.314)	(0.263)	(0.205)	(0.028)
Education (high=1)	-0.008	0.033	-0.057	-0.003	-0.017
	(0.333)	(0.329)	(0.303)	(0.212)	(0.035)
First mover (first=1)	0.007	-0.121	0.300	-0.181	-0.009
	(0.288)	(0.279)	(0.327)	(0.337)	(0.035)
Stakes 2nd quartile	0.288	0.934**	-0.532**		-0.089*
	(0.438)	(0.464)	(0.248)		(0.045)
Stakes 3rd quartile	0.090	0.746	-0.545**		-0.083*
	(0.355)	(0.461)	(0.231)		(0.043)
Stakes 4th quartile	-0.208	1.009**	-0.156		0.019
	(0.355)	(0.438)	(0.239)		(0.045)
Variance shares	11.742	31.002**	-9.183		-4.002**
	(12.180)	(14.469)	(10.580)		(1.500)
Contribution correct	4.133***	-0.533	0.085	2.969**	0.437***
	(1.436)	(1.841)	(1.722)	(1.424)	(0.153)
Contribution incorrect	-0.660	-0.005	1.801**	-1.260**	-0.114*
	(0.522)	(0.671)	(0.854)	(0.640)	(0.066)
Constant		-2.293**	0.330		0.397***
		(1.167)	(0.942)		(0.097)
α_1	-0.680			-0.285	
	(0.953)			(0.616)	
α_2	0.288			0.642	
	(0.950)			(0.618)	
Log-likelihood	-73.71	-53.79	-74.24	-109.52	
R^2	0.084	0.103	0.069	0.051	0.186
Observations	129	102	115	105	129
Clusters	43	43	39	35	43

Note: Standard errors (in parentheses) are corrected for clustering at the team level.
*** Significant at the 1 percent level
** Significant at the 5 percent level
* Significant at the 10 percent level

Online Appendix

Standing United or Falling Divided?
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Figures:

Tables:

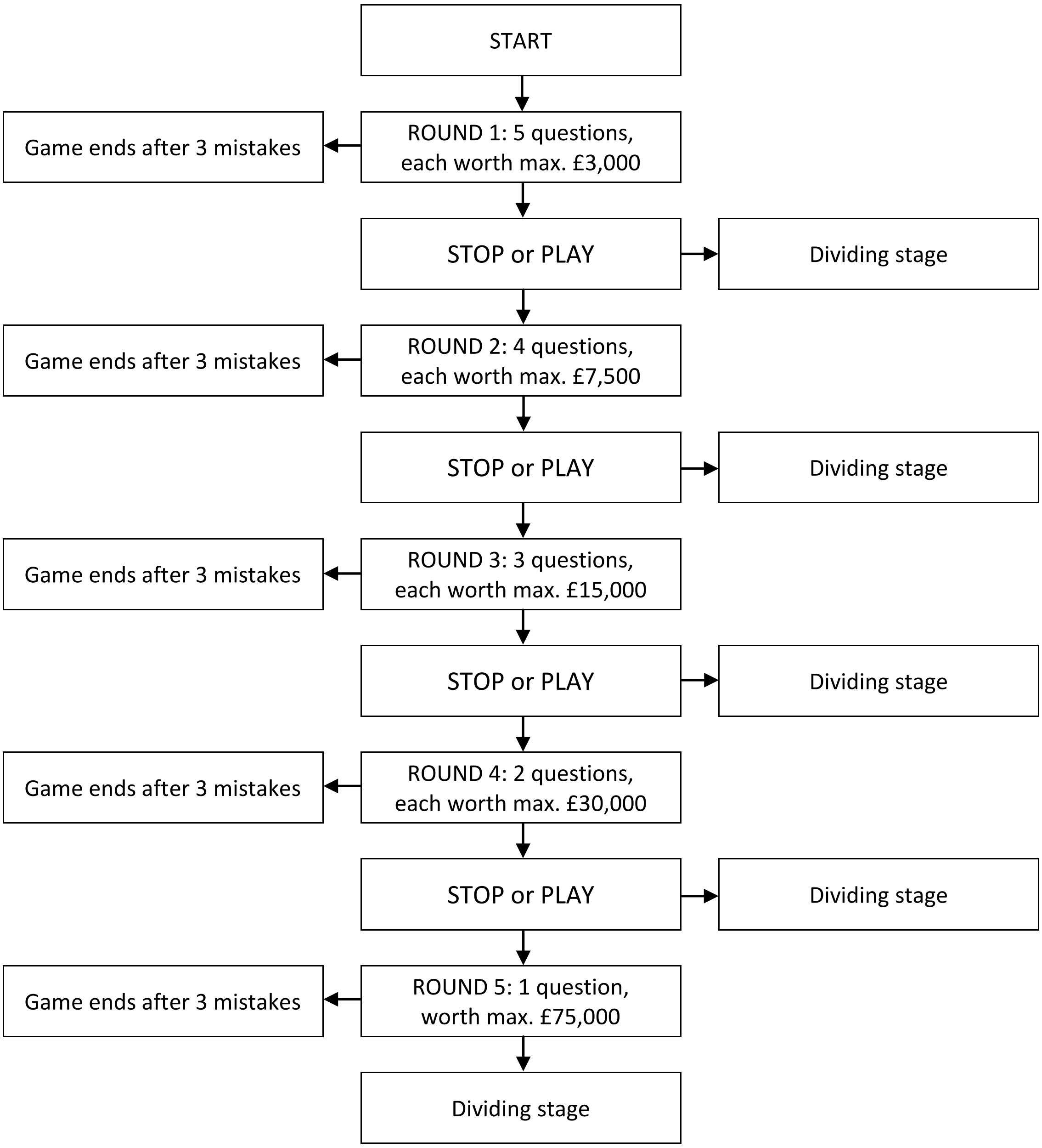

Figure A1: Flow Chart of the First Stage of the Game. Three contestants first play a maximum of five rounds of quiz questions in which they team up to accumulate a jackpot. Correct answers increase the jackpot, while incorrect answers halve it. A third mistake ends the game, and all contestants then leave empty-handed. At the end of each of the first four rounds, the team can voluntarily decide to proceed to the second stage. In this final part of the game they have to divide the accumulated money between them.

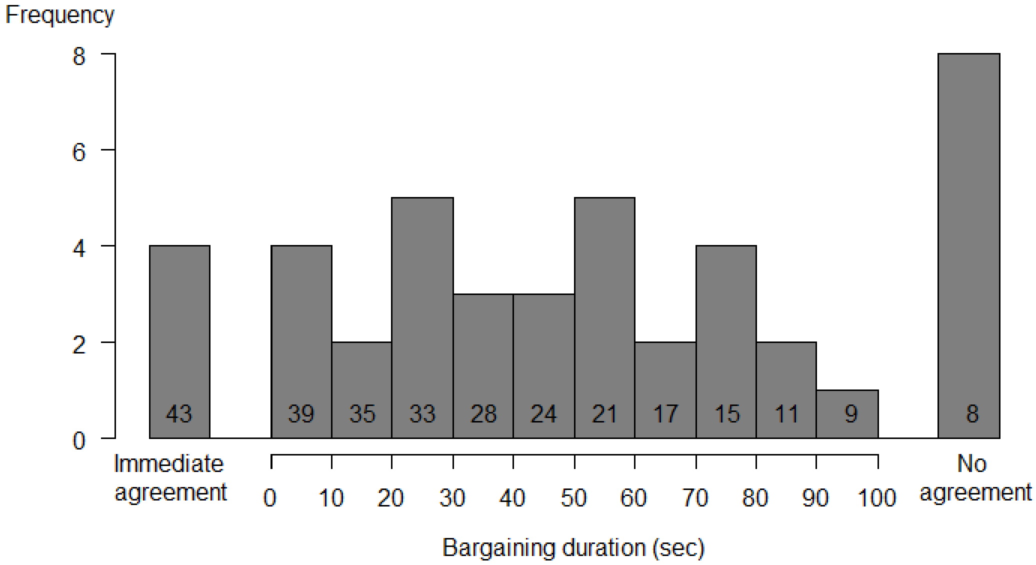

Figure A2: Bargaining Duration. The histogram shows the distribution of bargaining duration for the 43 teams in our sample, where the time frame is divided into ten-second intervals. The leftmost (rightmost) bar corresponds to the teams that reach immediate agreement (fail to reach agreement). The number of teams not yet in agreement immediately prior to a given duration category is displayed at the bottom of the bar.

Table A1: Selected Game Show Characteristics

The table shows selected characteristics for the British TV game show *Divided*, extracted from our sample of 53 episodes. *Answer in Round r* (*r* = 1, 2, … ,5) is the status of the team's answer to a question in Round *r*, with a value of 1 (0) for a correct (incorrect) answer. *Jackpot change Round r* (*r* = 1, 2, … ,5) records the difference between the size of jackpot at the end and at the start of Round *r* for all teams still in play at the end of the round. *Quiz rounds* measures the number of quiz rounds completed before elimination or entering the bargaining stage. *Mistakes* is the accumulated number of incorrect answers when the team enters the bargaining stage. *Jackpot* describes the size of the jackpot. *Prize A* (*Prize B*, *Prize C*) */ jackpot* expresses the size of the largest (middle, smallest) share as a fraction of the jackpot. *Initial claim* indicates the share that the contestant claims before the timer starts counting down, with a value of 3 (2, 1) for A (B, C). *Final claim* is the share that the contestant claims at the end of the bargaining process, with a value of 3 (2, 1) for A (B, C). *Resolution before t=0* (*t=50*, *t=100*) is a dummy variable taking the value of 1 if the team reaches agreement before the timer starts (before 50 seconds have passed, before 100 seconds have passed). *Time to resolution* measures the duration of the bargaining process in seconds. *Prize won* (*if non-zero*) records the prize the contestant takes home (if she did not leave empty-handed). *Prize won* (*if non-zero*) */ initial jackpot* records her prize as a fraction of the initial jackpot (if she did not leave empty-handed). All monetary values are in UK Pounds and can be translated into US dollars using a rate of $1,60 per pound, an approximate average of the exchange rate during the period in which the show ran.

	N	Mean	Stdev	Min	Median	Max
All teams						
Answer Round 1 (correct=1)	280	0.90	0.30	0.00	1.00	1.00
Answer Round 2	219	0.87	0.33	0.00	1.00	1.00
Answer Round 3	119	0.68	0.47	0.00	1.00	1.00
Answer Round 4	37	0.65	0.48	0.00	1.00	1.00
Answer Round 5	7	0.29	0.49	0.00	0.00	1.00
Jackpot change Round 1	55	9,010	3,135	2,963	9,360	13,170
Jackpot change Round 2	54	14,170	8,112	-5,648	16,125	25,500
Jackpot change Round 3	34	9,665	19,762	-25,342	5,293	37,950
Jackpot change Round 4	17	5,698	31,528	-51,919	-2,280	53,400
Jackpot change Round 5	5	-6,319	28,695	-41,040	-17,887	27,750
Teams eliminated after three mistakes						
Quiz rounds	13	2.23	1.09	0.00	2.00	4.00
Teams playing bargaining stage						
Quiz rounds	43	3.16	1.00	2.00	3.00	5.00
Mistakes	43	1.70	0.51	0.00	2.00	2.00
Jackpot	43	33,512	26,154	7,282	23,288	115,755
Prize A / jackpot	43	0.62	0.04	0.59	0.60	0.70
Prize B / jackpot	43	0.27	0.04	0.19	0.30	0.30
Prize C / jackpot	43	0.10	0.00	0.10	0.10	0.12
Initial claim (A=3, B=2, C=1)	129	2.74	0.53	1.00	3.00	3.00
Final claim (A=3, B=2, C=1)	129	2.14	0.83	1.00	2.00	3.00
Resolution before t=0 (resolution=1)	43	0.09	0.29	0.00	0.00	1.00
Resolution before t=50	43	0.51	0.51	0.00	1.00	1.00
Resolution before t=100	43	0.81	0.39	0.00	1.00	1.00
Time to resolution (in seconds)	43	50.26	35.39	0.00	50.00	100.00
Prize won	129	5,633	8,616	0	2,615	56,895
Prize won if non-zero	105	6,921	9,075	135	4,030	56,895
Prize won / initial jackpot	129	0.17	0.18	0.00	0.10	0.66
Prize won if non-zero / initial jackpot	105	0.20	0.17	0.01	0.15	0.66

Table A2: Descriptive Statistics

The table shows descriptive statistics for our sample of 129 contestants who bargain over their share of the jackpot in the final stage of the British TV game show *Divided*. *Age* is the contestant's age measured in years. Contestants normally mention their age when they introduce themselves. In eight exceptions, we had to estimate a contestant's age on the basis of her physical appearance and other information given in the introductory talk. *Gender* is a dummy variable taking the value of 1 if the contestant is male. *Education* is a dummy variable taking the value of 1 if the contestant has completed or is enrolled in higher education (bachelor degree or higher) or has equivalent working experience. This variable is estimated on the basis of the contestant's occupation and other available information. Contestants who provided no job or other relevant information (seven cases) are included in the lower education category. *Variance shares* denotes the variance across the three percentage shares to be divided. The contribution variables measure the contestant's entitlement to the communal jackpot. *Contribution overall* measures her contribution across all quiz questions. *Contribution correct* (*incorrect*) measures her contribution to the team's correctly (incorrectly) answered questions only. *Announce hardball, Opp. announce hardball* and *Concession* are dummy variables taking the value of 1 if the contestant stated not to back down from her initial claim, faced at least one opponent who had stated not to back down, or gave in during the bargaining process, respectively. *Concession* is not defined if the team agrees immediately or if the contestant initially picked share C. All monetary values are in UK Pounds and can be translated into US dollars using a rate of $1,60 per pound, an approximate average of the exchange rate during the period in which the show ran.

	N	Mean	Stdev	Min	Median	Max
Age	129	36.16	12.23	18.00	34.00	70.00
Gender (male=1)	129	0.50	0.50	0.00	0.00	1.00
Education (high=1)	129	0.30	0.46	0.00	0.00	1.00
Variance shares	129	0.05	0.01	0.04	0.04	0.07
Contribution overall	129	0.33	0.12	0.07	0.33	0.70
Contribution correct	129	0.33	0.09	0.10	0.33	0.56
Contribution incorrect	129	0.33	0.20	0.00	0.33	1.00
Announce hardball (hardball=1)	129	0.23	0.42	0.00	0.00	1.00
Opp. announce hardball (hardball=1)	129	0.30	0.46	0.00	0.00	1.00
Concession (concession=1)	115	0.50	0.50	0.00	0.00	1.00

Table A3: Ordered Probit Regression Results on Initial Claims

The table displays results from the ordered probit regression analyses of contestants' decisions to initially claim share A (3), B (2), or C (1) in the bargaining stage of the British TV game show *Divided*. *First mover* is a dummy variable taking the value of 1 if the contestant was the first to make her claim. The stakes quartile dummies are used as a flexible specification for the effect of stakes. Definitions of other variables are as in Table 2. Standard errors are corrected for clustering at the team level, *p*-values are in parentheses.

	Model 1		Model 2	
Demographic characteristics				
Age	-0.012	(0.233)	-0.013	(0.227)
Gender (male=1)	-0.187	(0.517)	-0.230	(0.428)
Education (high=1)	0.005	(0.988)	-0.008	(0.980)
Situational variables				
First mover (first=1)	0.018	(0.949)	0.007	(0.981)
Stakes 2nd quartile	0.279	(0.529)	0.288	(0.510)
Stakes 3rd quartile	0.082	(0.820)	0.090	(0.799)
Stakes 4th quartile	-0.235	(0.515)	-0.208	(0.558)
Variance shares	12.265	(0.313)	11.742	(0.335)
Contribution variables				
Contribution overall	3.007	(0.002)		
Contribution correct			4.133	(0.004)
Contribution incorrect			-0.660	(0.206)
α_1	-0.742	(0.373)	-0.680	(0.475)
α_2	0.219	(0.793)	0.288	(0.762)
Log pseudo-likelihood	-74.45		-73.71	
McFadden R^2	0.075		0.084	
Observations	129		129	
Clusters	43		43	

Table A4: Probit Regression Results on Hardball Announcements and Concessions

The table displays results from the probit regression analyses on contestants' hardball announcements (Model 1 and 2) and concessions (Model 3, 4, 5 and 6) in the bargaining stage of the British TV game show *Divided*. The hardball (concession) analyses are performed on the subset of contestants who initially claimed share A (who initially claimed share A or B and did not reach agreement immediately). Definitions of variables are as in the previous tables. Standard errors are corrected for clustering at the team level, *p*-values are in parentheses.

	Hardball announcements		**Concessions**			
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Demographic characteristics						
Age	-0.008 (0.553)	-0.007 (0.625)	0.000 (0.998)	-0.007 (0.562)	-0.003 (0.798)	-0.009 (0.433)
Gender (male=1)	-0.161 (0.576)	-0.123 (0.696)	0.080 (0.773)	-0.096 (0.715)	0.005 (0.987)	-0.184 (0.522)
Education (high=1)	0.011 (0.972)	0.033 (0.920)	-0.003 (0.992)	-0.057 (0.852)	0.064 (0.847)	0.034 (0.920)
Situational variables						
First mover (first=1)	-0.106 (0.701)	-0.121 (0.664)	0.179 (0.559)	0.300 (0.359)	0.154 (0.623)	0.278 (0.394)
Stakes 2nd quartile	0.942 (0.040)	0.934 (0.044)	-0.529 (0.029)	-0.532 (0.032)	-0.503 (0.056)	-0.535 (0.046)
Stakes 3rd quartile	0.767 (0.092)	0.746 (0.106)	-0.583 (0.009)	-0.545 (0.018)	-0.541 (0.013)	-0.508 (0.022)
Stakes 4th quartile	1.032 (0.015)	1.009 (0.021)	-0.239 (0.302)	-0.156 (0.514)	-0.175 (0.479)	-0.090 (0.720)
Variance shares	30.679 (0.033)	31.002 (0.032)	-6.632 (0.524)	-9.183 (0.385)	-4.396 (0.639)	-7.050 (0.461)
Contribution variables						
Contribution overall	-0.006 (0.996)		-1.273 (0.273)		-1.620 (0.201)	
Contribution correct		-0.533 (0.772)		0.085 (0.961)		-0.539 (0.764)
Contribution incorrect		-0.005 (0.994)		1.801 (0.035)		2.001 (0.027)
Claim variables						
Initial claim A (A=1)					0.388 (0.239)	0.524 (0.143)
Announce hardball (hardball=1)					-0.985 (0.002)	-1.000 (0.003)
Opp. announce hardball (hardball=1)					0.491 (0.098)	0.499 (0.099)
Constant	-2.397 (0.023)	-2.293 (0.049)	0.992 (0.233)	0.330 (0.726)	0.806 (0.322)	0.044 (0.961)
Log pseudo-likelihood	-53.84	-53.79	-76.59	-74.24	-69.87	-67.48
McFadden R^2	0.102	0.103	0.039	0.069	0.123	0.153
Observations	102	102	115	115	115	115
Clusters	43	43	39	39	39	39

Table A5: Ordered Probit Regression Results on Share Won

The table displays results from the ordered probit regression analyses on contestants' final claims A (3), B (2) or C (1) when agreement is reached in the bargaining stage of the British TV game show *Divided*. Definitions of variables are as in the previous tables. Standard errors are corrected for clustering at the team level, *p*-values are in parentheses.

	Model 1	Model 2	Model 3	Model 4
Demographic characteristics				
Age	-0.011 (0.357)	-0.010 (0.386)	0.000 (0.979)	0.002 (0.887)
Gender (male=1)	-0.011 (0.956)	0.066 (0.748)	0.138 (0.521)	0.245 (0.275)
Education (high=1)	-0.020 (0.925)	-0.003 (0.989)	-0.146 (0.590)	-0.120 (0.659)
Situational variables				
First mover (first=1)	-0.132 (0.687)	-0.181 (0.590)	-0.115 (0.735)	-0.160 (0.639)
Contribution variables				
Contribution overall	2.871 (0.002)		2.300 (0.030)	
Contribution correct		2.969 (0.037)		2.216 (0.167)
Contribution incorrect		-1.260 (0.049)		-1.243 (0.043)
Claim variables				
Initial claim A (A=1)			6.302 (0.000)	5.927 (0.000)
Initial claim B (B=1)			5.780 (0.000)	5.511 (0.000)
Announce hardball (hardball=1)			0.889 (0.011)	0.869 (0.017)
Opp. announce hardball (hardball=1)			-0.522 (0.018)	-0.547 (0.014)
α_1	0.059 (0.900)	-0.285 (0.644)	6.299 (0.000)	5.558 (0.000)
α_2	0.979 (0.040)	0.642 (0.299)	7.404 (0.000)	6.676 (0.000)
Log pseudo-likelihood	-110.10	-109.52	-94.37	-93.70
McFadden R^2	0.046	0.051	0.182	0.188
Observations	105	105	105	105
Clusters	35	35	35	35

Table A6: OLS Regression Results on Prize Won / Initial Jackpot

The table displays results from the OLS regression analyses on the fraction of the initial jackpot that the contestant takes home in the British TV game show *Divided*. Definitions of variables are as in the previous tables. Standard errors are corrected for clustering at the team level, *p*-values are in parentheses.

	Model 1		Model 2		Model 3		Model 4	
Demographic characteristics								
Age	-0.003	(0.022)	-0.003	(0.032)	-0.002	(0.030)	-0.002	(0.041)
Gender (male=1)	-0.019	(0.484)	-0.017	(0.551)	-0.014	(0.614)	-0.012	(0.682)
Education (high=1)	-0.017	(0.620)	-0.017	(0.641)	-0.025	(0.496)	-0.025	(0.495)
Situational variables								
First mover (first=1)	-0.004	(0.899)	-0.009	(0.809)	0.002	(0.951)	-0.001	(0.963)
Stakes 2nd quartile	-0.089	(0.056)	-0.089	(0.057)	-0.083	(0.124)	-0.082	(0.127)
Stakes 3rd quartile	-0.082	(0.063)	-0.083	(0.061)	-0.079	(0.126)	-0.079	(0.123)
Stakes 4th quartile	0.020	(0.655)	0.019	(0.671)	0.033	(0.531)	0.032	(0.543)
Variance shares	-4.037	(0.009)	-4.002	(0.011)	-3.769	(0.032)	-3.726	(0.036)
Contribution variables								
Contribution overall	0.388	(0.000)			0.374	(0.001)		
Contribution correct			0.437	(0.007)			0.436	(0.003)
Contribution incorrect			-0.114	(0.092)			-0.115	(0.086)
Claim variables								
Initial claim A (A=1)					0.071	(0.059)	0.079	(0.049)
Initial claim B (B=1)					0.072	(0.091)	0.089	(0.068)
Announce hardball (hardball=1)					0.053	(0.175)	0.054	(0.170)
Opp. announce hardball (hardball=1)					-0.068	(0.050)	-0.070	(0.050)
Constant	0.380	(0.000)	0.397	(0.000)	0.298	(0.003)	0.303	(0.003)
R^2	0.185		0.186		0.238		0.241	
Observations	129		129		129		129	
Clusters	43		43		43		43	