Norms of fairness and strategic behavior: An experiment using the ultimatum game

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I wish to thank my students in Econ 411 at the American University in Cairo, for planning, organising, and executing the experiment described here, as well as for contributing valuable insights. My colleagues Isis Badawi, Rich Burchett, and John Willoughby were kind enough to induce students in their classes to participate in test runs of the experiment described here.

Abstract

Experiments using the ultimatum game have repeatedly shown that, in addition to selfishness, some consideration of 'fairness' plays a part in determining individual behavior in strategic situations. This paper describes an experiment designed to investigate how that norm of fairness is constituted.

We run the experiment in two groups. Each group plays the ultimatum game ten times, with participants being paired randomly and anonymously each time. After each round, we announce the average of the offers that were made in that round. The first group is given true information, but the second group is given numbers which are generated by systematically biasing downward the results obtained in the first group. In other words, the second group is led to believe that average offers are much lower than they actually are.

We find that, while the averages for the two groups are fairly close in the first round (before any announcements are made), the actual offers made in the second group quickly fall to a much lower level than in the first, indeed they fall to a level comparable to the false announcements. However, the fraction of offers rejected is not significantly different between the two groups. We interpret this as showing that the actions of the members of the second group conform to what they are told to be the accepted norms of behavior in that group. Each player's behavior, which derives initially from a pre-acquired sense of fairness, undergoes revision in the light of information regarding how others have behaved in similar situations.

In an ultimatum game, two players attempt to divide a given 'pie' according to the following process. One player is selected (usually at random) to offer a certain fraction of the pie to the other, the fraction being of the first players choosing. The second player then has the option of accepting or rejecting the offer. If he accepts, then the pie is divided accordingly, if he rejects then neither player gets anything, and the game ends. Rational utility-maximizing behavior suggests that the second player would accept any positive fraction--this being better than nothing--and the first player, foreseeing this, would offer the smallest possible amount, and any positive fraction offered would certainly be accepted.

Recent evidence from ultimatum game experiments suggest strongly that the assumption of pure selfishness does not generate good predictions of actual behavior. Several sets of experiments have by now been performed to substantiate this conjecture, as well as a few attempting to restore the viability of selfishness. The balance of evidence is not in favor of the latter (see Roth 1995 for a recent survey). In actual experiments, proposers routinely offer significantly more than the minimum permissible, and responders as frequently reject small but significant offers, which they presumably deem 'unfair'. Most studies conclude that factors other than selfishness— such as a sense of fairness— play a role in determining behavior.

There have, however, been relatively few attempts to quantify these other factors which purportedly enter the agent's decision function. For example, it would be useful to know whether the sense of fairness implicit in an agent's behavior is an innate constant which is transferred to the agent through genetic encoding, whether it is inculcated in the individual in the course of her upbringing, or whether it is determined by her perception (or anticipation) of what other agents in her immediate environment accept as fair.

In an elaborate set of matched experiments, Roth et.al. find significantly different behavior between subject pools playing the ultimatum game in four countries. They find that the distributions of offers in different countries are significantly different, implying that in some countries (Japan and Israel) the probability of a high offer being made is lower than in other countries (Yugoslavia and USA). However, there are no correspondingly significant differences in the probability that an offer will be rejected. They cautiously conclude that the tendency to make lower offers and accept lower offers in the former countries is a function of 'culture' (also defined cautiously). We may perhaps

interpret this as meaning that the perception of what constitutes a fair division under the circumstances differs between socio-economic contexts. Fairness may then be constituted as a function of socialization, which inculcates in individuals a strong perception of acceptable versus unacceptable behavior in potentially cooperative situations. This sense, adequately nurtured, may well enter the utility functions of individuals in a quantifiable way, whereby one experiences disutility in accepting a patently unfair offer.[1]

In their paper, Roth et al do not offer any definite explanation for the fact that significantly positive offers are frequently rejected, and, within each country pool of players, the probability that an offer will be rejected decreases uniformly with the size of the offer. They do observe that, *given* this pattern of responses, the behavior of agents making offers seems to conform to the accepted interpretation of economic rationality.

In this paper I present a set of results from an ultimatum game experiment designed to test whether an individual's sense of fairness is a rigid characteristic, or whether it adapts to her perception of the norms of the society she is in. The impression that is obtained is that the sense of fairness is context-sensitive rather than absolute. There is clearly a personal aspect to each agent's actions and her responses to the actions of others (which is perhaps the result of upbringing and past experience), otherwise all agents would act roughly in the same way, which they do not. However, if the agent perceives that the group that she is interacting with generally seems to be acting on the basis of a particular set of norms, then she adjusts her actions and responses accordingly. Individual predispositions manifest themselves in behavior *relative to* the norm.

The design of the experiment is described in section 1. The main results are discussed in section 2. In section 3 I evaluate the data at the level of the behavior of individual agents, emphasizing the correlation between offers and responses for each of three types of agents.

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[1]Frank (1987) suggests that acquiring a strong sense of morality (which he calls a "conscience")— which governs behavior in a way that the individual can no longer control— may act as a precommitment device, and in the long run benefit the individual in situations requiring trust.

1. The Experiment Described

The experiment consisted of two modules, denoted Beta and Delta. Subjects were drawn from the population of undergraduate students at the American University in Cairo, who had responded to advertisements posted on campus and in the weekly student bulletin. Participants were randomly assigned to one of two dates which were about two weeks apart. No student participated on both dates. Twenty subjects participated in module Beta, and twenty-two in module Delta.[2]

The experiments were conducted by two overlapping teams of students drawn from an undergraduate class in Game Theory and Information (Econ 411). These teams were well versed in the nature and purpose of the experiment, and had practiced the procedures. They were also closely involved in every step of the preparations, and had assured themselves that all preparations were in order for smooth conduct of the experiment. The conduct of both modules were supervised by the present author.

In each module, the set of subjects were divided into two groups A and B. Each module consisted of ten rounds (games) of play. In the first round, subjects from group A were randomly and anonymously paired with those from group B, and each pair was asked simultaneously to play the ultimatum game for a specified sum of money. The player from group A was chosen proposer, and the player from group B was the responder.

The participants were then given some summary information about the offers and responses made by the entire set of participants in the round just concluded, following which they were randomly paired again, and played the game again, this time with the group B players as proposers. This continued for ten rounds, so that each player proposed in five rounds, and was a responder in

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[2]In fact a third module (Gamma) in which thirty students participated, was also conducted after Beta and before Delta. While the results were in conformity with the ones presented here, we decided to disregard that module—because substantial communication between participants could not be prevented in spite of repeated exhortations. Since this was contrary to instructions, and unlike the conduct that had been obtained in Beta (and was later obtained in Delta), it seemed improper to compare the results with the other modules.

five rounds. Offers and responses were made on message cards which did not reveal the identities of the agents, or whether an agent was interacting with a partner he had interacted with in an earlier game. At the end of ten rounds each participant was paid the amount which he/she had won.

Each game was played for five Egyptian pounds (LE, $1=3.4 LE), divided into one hundred units of five piastres each. In each game the proposer made an offer of an integer number of units x (between zero and one hundred) which he offered to give to the responder. The responder then accepted or rejected the offer. Acceptance resulted in the responder getting $5x$ piastres and the proposer getting $500-5x$ piastres. Rejection resulted in both players getting zero.

In module Beta, after each round of games the participants were told the average offer that was made in the previous round, and the number of offers that were rejected. In module Delta, they were also told that they were being given this information. In fact, however, part of this information was systematically falsified. The average offer that was announced after the k-th round in module Delta was obtained by subtracting the number 15 from the average offer made in the k-th round of module Beta. Thus in all rounds except the first one (before which no information was given), the participants in Delta were given a false perception of the size of offers that had been made by all proposers in the previous rounds. Only in the first round did the players in both modules have exactly the same information, which was the information regarding the rules of the game.[3] In both modules, the announcements regarding average offers and rejections in the previous round were made publicly, the figures were written on the blackboard and remained on the blackboard until the end of the module.

[3]Prasnikar and Roth (1992) describe experiments which are conducted under differential information. However, in their (matched) experiments, subjects have different information about the structure of the game, whereas we provide different information about the behavior of other players.

2. Group Behavior: Basic Results

Table 1 at the end of the paper shows the aggregate behavior regarding offers and responses in the two modules. The average offer made in each round in Beta is shown in the top row, followed by the number of offers rejected in each round of Beta. The third row shows the announcements made at the beginning of each round of Delta regarding the average offer made in the previous round. Note that the entry for game k in row 3 is equal to [(the entry for game k-1 in row 1) — 15]. Row 4 shows the average offer made in each round in Delta, and row 5 shows the number of rejections that were made in each round in Delta. The information in the first, third and fourth rows is also summarised in figure 1.

It will be noted immediately that in game 1, the average offers in the two modules were fairly close to each other. But beginning with game 2, the average offers made in module Delta were significantly lower than those in Beta, and in fact for the most part approximated the false announcements made in that module. This becomes visually clear from figure 2, which compares the distributions of offers from the two modules for games 1, 4, 7 and 10.

The basic presumption in this experiment is that the subjects in the two modules are drawn from the same underlying population, and the differences in their behaviors results from the different information that they are provided about the behavior of their peers. Both parts of the above statement need to be substantiated statistically. The natural way to do this is to compare the distribution of offers from each game in the two modules, to see if the samples are drawn from the same population or not. The hypothesis is that, in the first game, the samples of offers in the two modules come from the same underlying distribution, while in the later games the samples from the two modules come from different distributions.

Since our intention is to compare the whole sample distributions, the Wilcoxon-Mann-Whitney test is an appropriate test to perform in this case. The null hypothesis is that, for each game *k*, the sample of offers made in Beta and the sample of offers made in Delta are drawn from the same distribution. The alternative hypothesis is that the distribution F_β from which the Beta sample is drawn is stochastically larger than the distribution F_δ from which the Delta sample is drawn. The following table shows the test statistic for each game, and the probability that the test statistic may take this or a higher value given that the null hypothesis is true.

Game (k)	1	2	3	4	5	6	7	8	9	10
zk	.827	2.217	1.217	3.544	3.28	2.95	2.298	3.11	3.38	3.154
Prob{z >zk} if H0 is true	.2033	.013	.111	.0002	.0003	.0016	.0107	.0009	.0003	.0008

In other words, the hypothesis that the two samples come from the same distribution cannot be rejected for the first game at the 0.80 confidence level, but for game 4 onwards, with the exception of game 7, it can be rejected at levels considerably exceeding 0.99.[4] It is therefore reasonable to conclude that the subjects in the two modules were drawn from the same distribution, but that the false announcements in the later games led the participants in Delta to make offers consistently lower than the participants in Beta.

A more interesting observation is that the proportion of rejections is not significantly different in the two modules. In games 2 through 10, the two modules were provided qualitatively different information, and the offers were systematically lower in Delta. In these games, the responders in Beta rejected 17 out of the 90 offers made (about 18.9%), while the responders in Delta rejected 18 of the 99 offers made (about 18.1%).

Figure 3 shows the normalised distributions of offers, and figure 4 shows the normalised distributions of accepted offers for games 2 through 10 in the two modules. It is clear that the overall distribution is shifted significantly to the left in module Delta. A cursory inspection suggests that in Delta, both the distribution of offers and the distribution of accepted offers are shifted to the left by about 10-12 units.

However, the adjustment to the perturbed perception of group behavior does not seem to be entirely effortless. This is underlined by the last two columns in table 2, which show the probabilities

[4]Very similar results are obtained if the Kolmogorov-Smirnov test is used. The hypothesis that the two samples come from the same distribution cannot be rejected with acceptable degree of confidence for games 1-3, but can be comfortably rejected at levels exceeding 99% for later games, with exception of game 7.

that offers in certain ranges will be accepted. In Beta, the probabilities of acceptance increase uniformly with the offers. In Delta, however, there is a clear lack of such uniformity. All four offers in the 11-15 range were accepted, while only 6 out of the 10 offers in the 16-20 range were accepted. The probability of acceptance falls marginally again in the next step (21-25), rises dramatically as we go to the 26-30 range, then falls marginally again before rising to unity for offers above 35. This non-monoticity is in contradiction not only with the results of Beta, but also the results reported in Roth et al in their four-country experiment, who find acceptance probabilities increasing uniformly with the size of offer in each of their country pools.

Speaking after each module to the participants in the two groups, I obtained the idea that, in Beta, the participants found the overall trend of offers to be 'normal', or as to be expected, and hence had no difficulty in individually deciding which offers they would accept and which they would reject, though individual attitudes of course varied in this regard. In Delta, however, from the announced averages they thought "everyone was being very mean", and hence were often in doubt as to whether to accept or reject an offer. As a result, an individual subject occasionally accepted an offer which s/he would "normally" reject, and usually made offers which were far less generous than they would normally make (for example, than the offers they actually made in the first round).

This presumption is strengthened by looking more closely at the dynamic pattern of rejections in the two modules. The correlation coefficient between the average offers and the numbers of rejections in games 1-10 in Beta is -0.66. the same coefficient for Delta is -0.47, i.e., rejections are more strongly correlated with average offers in Beta than in Delta.

Discussion

In the experiment described in Roth et al, The differences in the distribution of offers, without a corresponding divergence in rejection rates, that was observed in the different country experiments was attributed to differences in 'culture', which in this context may be interpreted as perception of what constitutes a fair offer. Our results suggest that individual behavior adapts readily to the perceived norms of the immediate interacting group, thus the perception of fairness is relative and pliable rather than absolute. While different agents place themselves differently around this norm (as we shall see in the next section), this overall tendency to conform implies that changes in

behavior in this regard may be wrought by changes in circumstances less substantial than culture. This agrees with the widespread perception that individuals migrating between societies with very different cultures tend to adapt themselves quite well to behavior suitable to the new culture, while at the same time retaining the ability to comfortably blend back in the cuture of origin when situations so require.

3. Individual Behavior

In analysing individual behavior, I shall ignore games 1 and 2 of each module, and consider only games 3-10. This allows us to concentrate on the games that were played with differential information in the two modules, and at the same time consider an equal number of offers and responses from each individual subject.

In module Beta, group A consisted of subjects numbered 1-10, and group B consisted of subjects numbered 16-25. In module Delta the groups comprised of subjects numbered 1-11 and 16-26, respectively. In each module, the lower numbered subjects made offers in the odd numbered games (G1, G3, G5, G7, G9), and the higher numbered players responded, while the higher numbered players made offers in even-numbered games (G2, G4, G6, G8, G10), and the lower-numbered subjects responded.

The behavior of our agents in the two modules is summarised in table 3. For each module and for each player in the module, the table lists various average indicators of behavior. In order, the columns list the average offer made by each player, the average offer received, lowest offer accepted, highest offer rejected (a 0 in this column means the player rejected no offers), lowest offer made, lowest offer received, average offer accepted and average offer rejected.

The average offer made in Delta (games 3-10) was 29.3, and the standard deviation was 5.16, while in beta the corresponding numbers were 41.9 and 5.07 respectively. I have divided the players in each module into three groups, the ‘meanies’ who on average made offers more than one standard deviation below the mean, the ‘levelheads’ who made offers within one SD of the mean, and the ‘warmhearts’ who on average made offers more than one SD above the mean. For each group, the groupwide values are also listed.

It is interesting to note that in neither module did any of the 'meanies' reject any offer. Further, for the lowest offer accepted by each of the meanies in each module, there were several higher offers that were rejected by levelheads and warmhearts. Conversely, for the highest offer rejected by each of the levelheads and warmhearts (except for players 21 and 22 in Beta), there is at least one lower offer that was accepted by a meanie in that module. The fact that meanies made low offers (relative to the average) may indicate either that they were pursuing a high-risk strategy, or that they were rational in the economists sense of the word, and expected others to be rational as well. The fact that they also accepted offers that others found unacceptable lends weight to the latter presupposition.

The levelheads and warmhearts, on the other hand, seem to be driven by a definite sense of fairness. The fact that they made larger offers, once again, may point to risk-aversion just as well as to fairness, but the fact that they rejected offers which were small though significantly positive suggests that fairness is a better explanation of their actions.

If this is true, then these two groups differ in their perception of what constitutes a fair offer. In Delta, for instance, the warmhearts rejected offers of 20, 25, 26 and 33, whereas the levelheads accepted several offers lower than 20 (offers of 15,15,17,18,20). Combined with the fact that warmhearts also made higher offers, this leads to the conclusion that the warmheart's perception of a fair offer is closer to 50-50 than is the levelhead's.

Generally, the average offers received are not very different between the three groups within each module[5], nor are the average accepted offers. Thus grouping players on the basis of the size of offers they made does not shed much light on their behavior with regard to responses to offers received.

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[5]the average accepted by the warmhearts in Delta is pulled down by player 2, who accepted three offers of 20. The average received, the average accepted, and the average rejected by warmhearts in Beta are all pulled up by player 23, who initially received offers of 70 and 90, and subsequently rejected quite generous offers. Group values for this group excluding player 23 are shown below the full group values.

Conclusion

The sharp difference in behavior between the players in modules Beta and Delta indicates strongly that agents derive their benchmarks for fairness by observing the behavior of other agents around them, they do not develop permanent and individual benchmarks which they use irrespective of context. This suggests that the concern for fairness, and the heed paid thereto, is a result of a desire to conform to what is perceived as acceptable behavior. In the case of responders, conformity consists of rejecting what is perceived as abnormally unfair offers, and the tendency to conform is strong enough that significant rejections occur even under anonymity. The divergence in behavior between Beta and Delta show quite clearly, however, that it is conformity within the immediate context that is important, more so than to wider 'social' norms.

There remains a strong suspicion that adjustment does not occur frictionlessly to a significant change in norms. If we assume that, on aggregate, the behavior in Beta was natural given the shared social backgrounds of the participants, then it follows that in Delta the participants adjusted their behavior to a changed context. This generated sufficient confusion that lower offers were accepted marginally more frequently than higher offers, which is a reversal not seen either in Beta, nor in the large number of experiments performed by Roth et.al.

It is much more difficult to formalise in an explanatory framework the differences between the behaviors of individual agents. There does not seem to be any clear relation between the size of offers which agents make, and the ranges of offers they will accept. This last aspect of behavior---responses---is of course the greatest puzzle in this area of research. Far more innovative and careful experiments than this one will have to be designed to shed light on this phenomenon.

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	SUMMARY									
	G1	G2	G3	G4	G5	G6	G7	G8	G9	G10
Beta Average offer	48.40	45.50	40.40	45.80	47.40	44.90	36.30	39.90	40.40	40.00
Beta, 'No's	2	0	4	0	2	0	4	3	2	2
DeltaAnnouncedAv		33.40	30.50	25.40	30.80	32.40	29.90	21.30	24.90	25.40
DeltaAverage Ofr	44.64	34.55	33.55	25.27	30.45	32.64	30.64	26.82	29.18	25.82
Delta, 'No's	1	2	0	5	4	0	2	2	0	3

Table 1

Summary of behavior: Beta and Delta

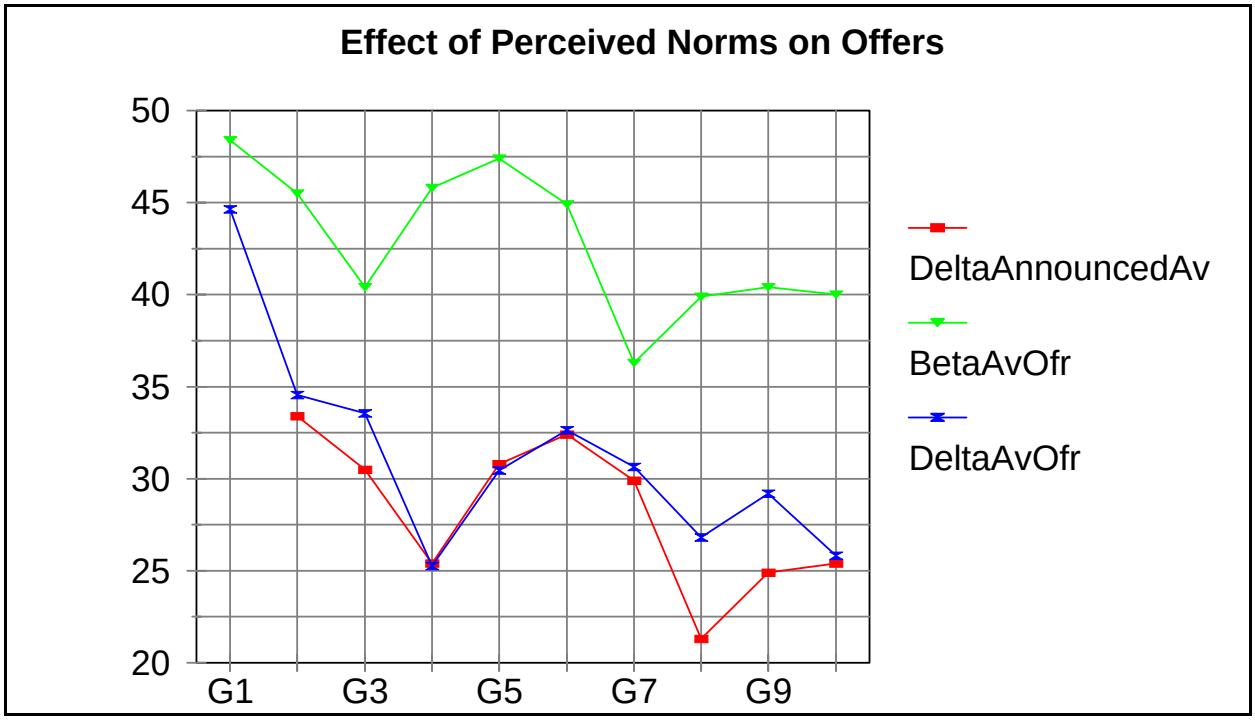

Figure 1

Summary of behavior: Beta and Delta

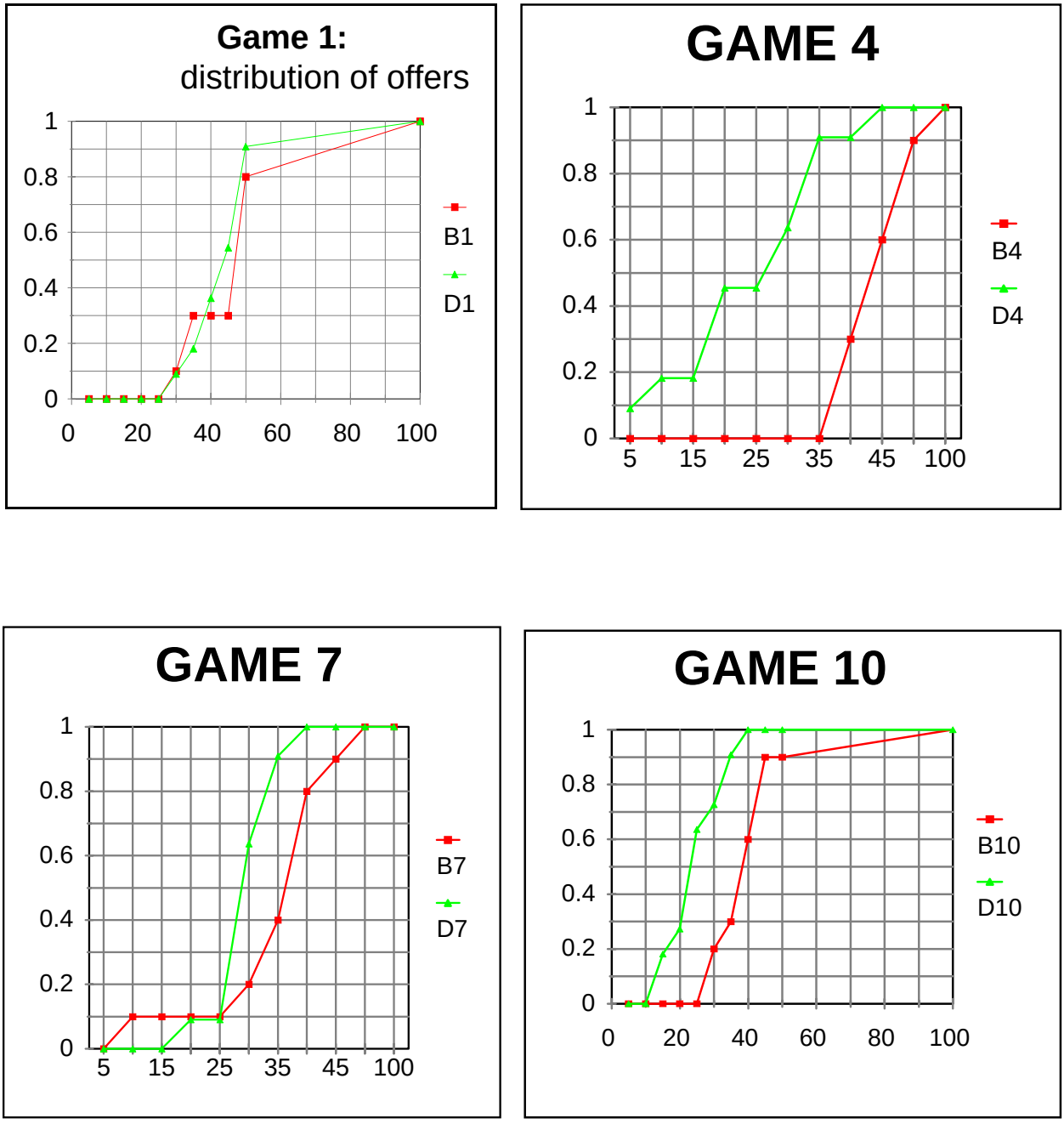

figure 2

Distribution of offers in individual games:

Beta and Delta

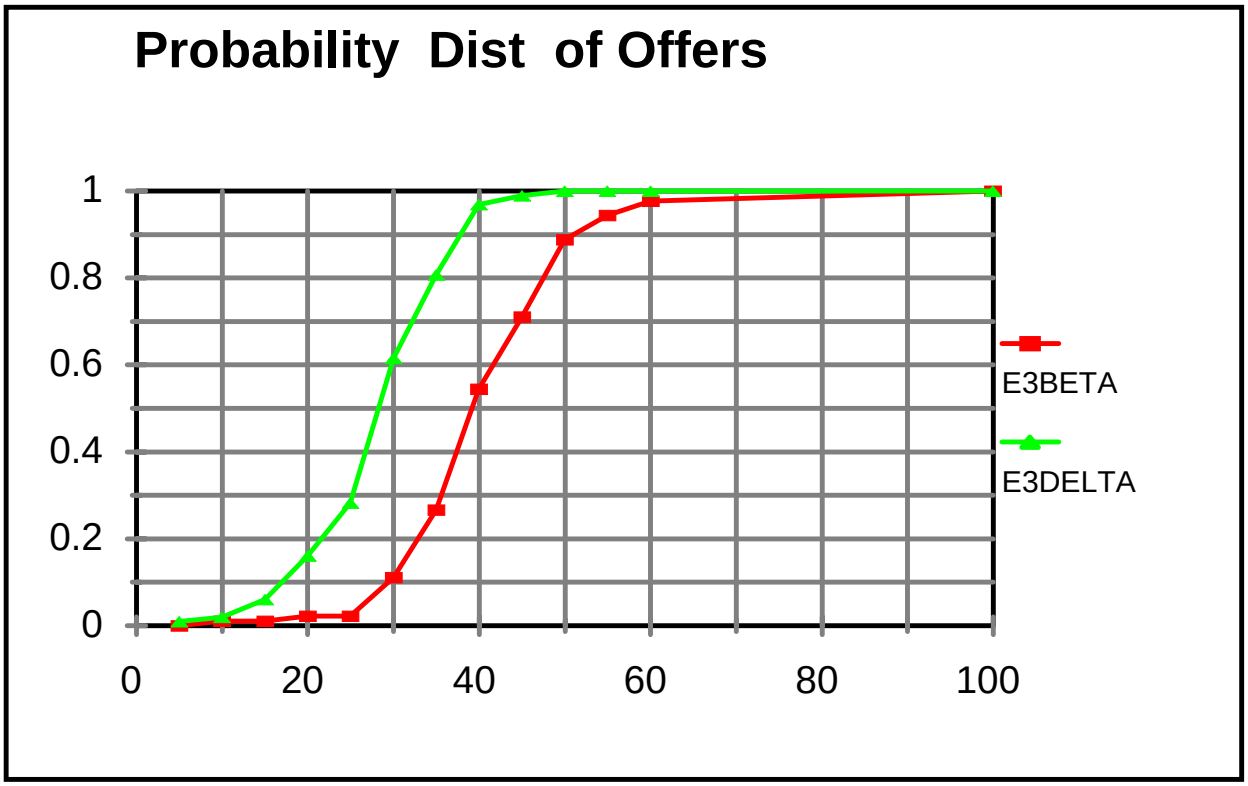
Probability Dist of Offers
1
0.8
0.6
0.4
0.2
0
0
20
40
60
80
100
E3BETA
E3DELTA

Figure 3

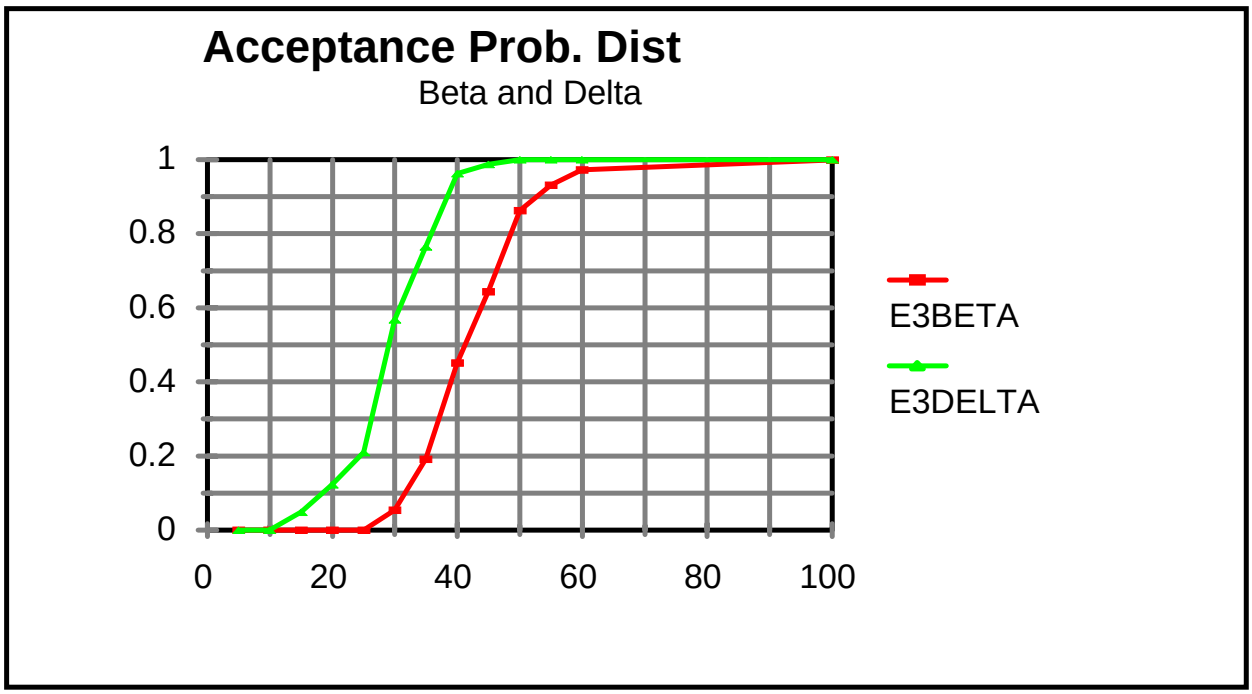
Acceptance Prob. Dist
Beta and Delta
1
0.8
0.6
0.4
0.2
0
0
20
40
60
80
100
E3BETA
E3DELTA

Figure 4

LAST	NINE	GAME	S					
	BETA			DELTA			BETA	DELTA
Range	Accept	Reject	Total	Accept	Reject	Total	Probability of	Acceptance
0-5	0	0	0	0	1	1		0.00
6-10	0	1	1	0	1	1	0.00	0.00
11-15	0	0	0	4	0	4		1.00
16-20	0	1	1	6	4	10	0.00	0.60
21-25	0	0	0	7	5	12		0.58
26-30	4	4	8	29	4	33	0.50	0.88
31-35	10	4	14	16	3	19	0.71	0.84
36-40	19	6	25	16	0	16	0.76	1.00
41-45	14	1	15	2	0	2	0.93	1.00
46-50	16	0	16	1	0	1	1.00	1.00
51-55	5	0	5	0	0	0	1.00	
56-60	3	0	3	0	0	0	1.00	
61-100	2	0	2	0	0	0	1.00	
ALL	73	17	90	81	18	99		

Table 2

Probability of Acceptance of offers in various ranges

Table 3: Individual Behavior

		D	E	L	T	A							B	E	T	A			
				Mean	29.30									Mean	41.89				
				SD	5.16									SD	5.07				
	Meani		M		x <	24.14					Meanie		M		x <	36.83			
	Levelh		L	24.10	< x <	34.46					Levelh		L	36.80	< x <	46.97			
	Warm		W	34.46	< x						Warm		W	47.00	< x				
		Avg	Avg	low	high	low	low	avg	avg			Avg	Avg	low	high	low	low	avg	avg
	player	Offer	recd	accpt	rej'd	made	recd	accpt	rej'd		player	Offer	recd	accpt	rej'd	made	recd	accpt	rej'd
M	3	18.30	30.30	25.00	0.00	15.00	25.00	30.30	0.00	M	10	34.3	44.30	40.00	0.00	20.00	40.00	44.30	0.00
	23	20.00	28.50	15.00	0.00	10.00	15.00	28.50	0.00		17	35.8	40.00	35.00	0.00	30.00	35.00	40.00	0.00
	22	22.50	30.00	30.00	0.00	15.00	30.00	30.00	0.00		1	36.3	40.30	35.00	0.00	35.00	35.00	40.30	0.00
	21	22.50	31.30	30.00	0.00	20.00	30.00	31.30	0.00		8	36.3	43.30	33.00	0.00	30.00	33.00	43.30	0.00
	19	23.80	29.30	23.00	0.00	5.00	23.00	29.30	0.00										
	All	21.40	29.85	15.00	0.00	5.00	15.00	29.90	0.00		All	35.6	41.94	33.00	0.00	20.00	33.00	41.94	0.00
L	20	25.50	31.30	30.00	25.00	15.00	25.00	33.30	25.00	L	21	37.5	37.50	35.00	20.00	35.00	20.00	43.30	20.00
	25	26.30	32.50	30.00	20.00	20.00	20.00	36.70	20.00		25	37.5	38.80	35.00	0.00	35.00	35.00	38.80	0.00
	18	28.80	30.00	30.00	25.00	25.00	25.00	31.70	25.00		20	38.5	37.50	40.00	35.00	37.00	35.00	40.00	35.00
	9	28.80	27.30	15.00	0.00	25.00	15.00	35.00	0.00		18	38.8	35.50	35.00	37.00	30.00	30.00	37.50	33.50
	8	28.80	31.30	25.00	20.00	25.00	20.00	33.30	20.00		6	40.0	38.50	39.00	30.00	35.00	30.00	47.00	30.00
	17	31.00	36.00	32.00	0.00	29.00	32.00	36.00	0.00		7	41.8	51.30	40.00	0.00	40.00	40.00	51.30	0.00
	7	31.00	32.50	40.00	35.00	23.00	25.00	40.00	30.00		4	42.5	43.80	30.00	35.00	40.00	30.00	46.70	35.00
	10	31.30	26.00	40.00	29.00	30.00	10.00	40.00	21.30		9	42.5	40.80	38.00	0.00	30.00	38.00	40.80	0.00
	11	32.30	28.00	25.00	0.00	30.00	25.00	28.00	0.00		16	43.3	41.00	45.00	40.00	30.00	30.00	47.00	35.00
	5	32.50	24.00	15.00	0.00	30.00	15.00	24.00	0.00		3	44.5	42.80	35.00	0.00	39.00	35.00	42.80	0.00
	4	32.50	33.30	17.00	0.00	30.00	17.00	33.30	0.00		2	45.0	40.00	40.00	35.00	10.00	35.00	41.70	35.00
	16	32.50	29.50	18.00	20.00	30.00	18.00	32.70	20.00		19	45.3	43.50	42.00	39.00	40.00	39.00	45.00	39.00
	All	30.08	30.13	15.00	35.00	15.00	10.00	31.90	24.00		All	41.4	40.90	30.00	40.00	10.00	20.00	43.50	33.00
W	26	35.00	33.30	30.00	33.00	30.00	30.00	33.30	33.00	W	24	47.5	38.80	30.00	40.00	45.00	30.00	38.30	40.00
	2	35.00	22.50	20.00	0.00	30.00	20.00	22.50	0.00		5	48.3	41.80	37.00	37.00	45.00	37.00	43.30	37.00
	6	35.00	26.50	30.00	25.00	30.00	20.00	30.50	22.50		22	48.8	37.50	40.00	10.00	37.00	10.00	46.70	10.00
	1	35.30	22.50	25.00	5.00	26.00	5.00	28.30	5.00		23	53.8	61.30	70.00	45.00	45.00	40.00	80.00	42.50
	24	36.30	29.00	30.00	26.00	25.00	26.00	30.00	26.00										
	All	35.30	26.75	20.00	33.00	25.00	5.00	28.40	21.80		All	49.5	44.81	37.00	45.00	37.00	10.00	49.50	34.20
											All*	48.1	39.33	37.00	40.00	37.00	10.00	42.80	21.80
											*disregarding player 23								