Tiger Women: An All-Pay Auction Experiment on Gender Signaling of Desire to Win*

Preliminary! Comments welcome!

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ABSTRACT: Women's lower wages and underrepresentation in the most competitive professions have been well documented. Numerous experiments suggest that women are less competitive. However, currently competitiveness is measured indirectly by using the residual of the choice of competitive payment after controlling for ability, confidence, and risk attitude econometrically. More recent results with different tasks, children, single sex schools, and Muslim countries have shown no gender differences, indicating the possible influence of cultural stereotypes in prior results. Furthermore,

and top-tier universities. Our treatments consisted of informing paired bidders of the gender and school rank of their opponent. We derived the implied valuations (desire to win) and risk attitudes using an extension of standard auction theory. In principle our method should be a direct measure of competitive attitude which eliminates ability, confidence and stereotype confounds. Contrary to the literature and our expectations, we found that women had higher desire to win, most significantly at the top tier school, where they were even less risk averse. Furthermore, this pattern of results was anticipated in across school bids, which is consistent with our signaling hypothesis. If willingness to pay to win is related to willingness to prepare, our results support other evidence showing that women's superior academic achievement is due to greater self-discipline. Our result could also help explain overbidding in apparently common value(re)4.78uctions.

I. INTRODUCTION

Women's lower wages and underrepresentation in the most competitive professions is well documented. For example, only 2.5 percent of top five executives for a large group of U.S. firms were women (Bertrand and Hallock 2001). Only about 17 percent of partnerships at major law firms in the US were held by women in 2005 (O'Brien 2006). Flory et al. (2010) controlled for many possible confounds in the empirical data with a field experiment and still found that women tended to select out of competitive jobs. Their results confirmed a large body of laboratory experimental results initiated by Gneezy et al. (2003), who found that men's performance increased under a competitive payment scheme while women's did not. Niederle and Vesterlund (2007) showed furthermore that women were less likely to choose the competitive over the piece-rate incentive scheme controlling for ability, confidence in ability, and risk attitude. See Niederle and Vesterlund (2011), referred to as NV (2011) from now on, for a survey.

There has been some evidence showing that difference in competitiveness is due to

small business owners. NV (2011) concluded that measures of risk attitudes play a limited role in explaining the gender gap in tournament.

Croson & Gneezy's (2009) survey of the gender difference literature characterized results on gender difference in altruism as mixed and dependent on women's choices being sensitive to context. One might expect that if women are less selfish, they would also be less competitive. In that case, women's lack of competitiveness should also depend on context. Some recent work has already begun to corroborate this logic. Gender differences in competitive attitude decreased in women against women competitions (Gneezy et al. 2003), at single sex institutions (Booth and Nolen 2009), in Muslim countries where schools were single sex (Fryer and Levitt 2009), for verbal tasks (Grosse and Riener 2010), when incentives were high (Antonovics et al. 2009), when women

competitive payment (when ability, confidence in ability, and risk attitude are controlled for). There are a number of possible problems with the use of real tasks to measure

contest is a kind of victory. We do not use DTW in that sense.

To our knowledge, the only prior work measuring gender difference in competitive attitude through contests is Morgan et al. (2008), which did so incidentally in a repeated contest with endogenous entry. They found that women entered contests with more contestants and bid more aggressively (higher), as if they wanted to beat more people while lowering their own payoffs. However, they did not identify DTW. It would be hard to identify because of the multiplicity of players and reputational motives for bidding possible in repeated games. Furthermore, there are alternative explanations for why women behaved more aggressively. Establishing a reputation with a changing multiplicity of opponents, when only entry and bids but not identities were observable, would be a complex strategic and learning task. Their data is also consistent with women learning this complex game less quickly. Self-selection into the experiment was not controlled for. A more general problem with measuring competitive attitude using contests is that in contests, when players pay more, they only win with greater probability. Thus winning arguably requires explicit calculation of odds and therefore could introduce ability and confidence in ability as confounds in entry and bidding, as well as distortions in estimating probabilities (Baharad and Nitzan 2008).

We similarly presupposed that abstract contests, where subjects invest money to win money, capture incentives present in all contests, e.g., exams and job promotions. However, we greatly simplified the contest by using a one shot all-pay auction with a single opponent with observable gender. All-pay auctions have often been used to model real life contests. For complete information examples, see Ellingsen (1991); Baye (1996); Hillman and Riley (1989). For incomplete information examples, see Amann and Leininger (1996). For risk averse players, see Fibich et al. (2006).

Auctions have some important advantages for measuring DTW. All-pay auctions eliminate ability and confidence in ability confounds possibly present in real tasks used in prior gender differences studies. Winning in auctions is only a function of willingness to pay. Willingness to pay depends on DTW (which would be included in the total valuation of players) and risk attitude.

In principle, willingness to pay is a direct measure of competitive attitude, eliminating the need to infer competitive attitude as a residual (after controlling for ability,

confidence in ability, and risk attitude, which themselves may be measured with error). Furthermore, differences in intrinsic motivatio

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mo ed standard all-pay auction theory for complete information to separate valuation fro sk attitude effects in bids. The results implied that women *could be* more risk ave However, they seemed to have higher DTW (marginally insignificant). We also teste ether per ons at SZ were consistent with our initial unexpected finding at

common value auction. Thus, our results could help explain systematic overbidding found in auction experiments. See Heyman et al. (2004), Gneezy and Smorodinsky (2006) for examples. To the gender difference literature, we introduce a new method to directly measure competitiveness without ability and confidence as possible confounds. This method has the further advantage of being less provocative of gender stereotypes and logically opaque, and therefore less likely to induce culture/identity based demand effects. The use of willingness to pay to measure competitive attitude could be more relevant to real life competitions where forgoing leisure is often the cost of success. Even if men are more willing to compete when leisure is not an option, that may not make them more competitive when leisure is-Sciursetit8(e)7(n)(l)5mp2(r)2.tat8(e)7()12(p).3(.8(etim)7.3(3.29953(e)4.2( )]TJ09

gender and institutions for validating measures of competitive attitude. To our knowledge, this is the first lab evidence that university women, and therefore the professional women which are from them, are more competitive than men, even to the extent that they are less risk averse at the top ranked graduate school. We find evidence that school rank/level in China may sort in less risk averse women and out less risk averse men. We discuss other possible expressions of female DTW in the context of evidence that women have higher educational attainment despite lower ability as measured by standardized tests because they are more self disciplined than men.

II. THEORY

In a separating equilibrium, different genders at different schools 'signal' different DTW and risk attitudes. In that case, we can use the perfect information auction theory. Baye 1996; Ellingsen (1991); Hillman and Riley (1989) showed that the mixed strategy equilibrium for asymmetric all-pay auction with complete information and risk neutral players was:

$$(V_2 - b_2)G_1(b_2) + (-b_2)(1 - G_1(b_2)) = 0$$
$$(V_1 - b_1)G_2(b_1) + (-b_1)(1 - G_2(b_1)) = V_1 - V_2$$
$$where\ V_1 > V_2$$

where V_i is the value of prize, b_i is the bid, and $G_j(b_i)$ is the probability that player j bids lower than b_i. The risk averse bidding strategy in all-pay auction with complete information can be derived in a similar way. As with all-pay auctions with risk neutral players, there are only mixed strategy equilibrium when players are risk averse. In a mixed strategy equilibrium, each player's equilibrium strategy has to make the opponent indifferent across all his strategies. Therefore, the equilibrium condition of all-pay auctions with risk averse players requires that each player's expected utility equals the utility of the value of the auction for that player. For the higher valuation player, the value of the auction is the gap between the two players' valuations; for the lower valuation player, the value of the auction is zero. As with Bertrand compn8(d)si(n8(d)si)-4.62ncom37.1(p)2.5(n67.1

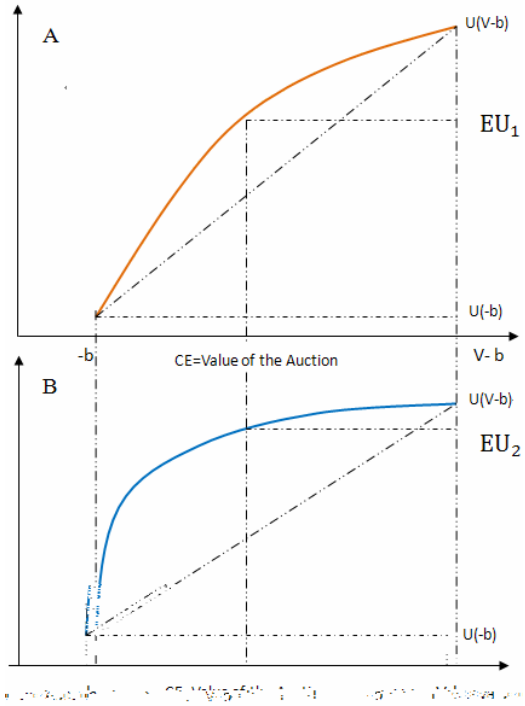
difference. Thus, the equilibrium conditions for risk averse players are:

$$U_2(V_2 - b_2)G_1(b_2) + U_2(-b_2)(1 - G_1(b_2)) = U_2(0)$$
$$U_1(V_1 - b_1)G_2(b_1) + U_1(-b_1)(1 - G_2(b_1)) = U_1(V_1 - V_2)$$

Therefore the cumulative distribution functions (CDF) of equilibrium strategies are:

$$G_1(b) = \frac{U_2(0) - U_2(-b)}{U_2(V_2 - b) - U_2(-b)}$$
$$G_2(b) = \frac{U_1(V_1 - V_2) - U_1(-b)}{U_1(V_1 - b) - U_1(-b)}$$

Note that because player 1 has the higher valuation, , his equilibrium strategy, is a decreasing function of . Thus, the higher valuation player's bid is an increasing function of the lower valuation player's valuation. Correspondingly, player 2's bid decreases with , the higher valuation player's valuation, but increases with . Furthermore, both players' bids decrease with the opponents' risk aversion only. Their own risk aversion does not affect their own bids. This result can be made more intuitive. First, one should note that in a mixed strategy equilibrium, bids decrease with the opponent's risk aversion to keep the op



strategy changes. To make this claim more intuitive, we now use graphical analysis in Figure 1 to show what happens when the opponent's risk aversion increases. In a mixed strategy equilibrium for an all-pay auction with complete information, players are indifferent between all bids; all bids give them the same expected value. In particular, they are indifferent to the bid which gives them the minimal value, 0 for sure, which would be given by a bid o(pl)7 0. This is their certainty equivalent (CE in Figure 1) o the gamble. Thus, fohe loer valuatio player (player 2 in our example), in a mixed strategy equilibrium, where he gets an expected value from all o(3.2(t)2.2(he)3.6(r)5.1(bids,)5.2(in)3.2(dif)21.4(f)5.9(ere)8.8(n)-7.1(c)3.6(e)3.6(to)5.1(0 r

must increase to to keep player 2 indifferent to the CE. Thus, player 1 (player 2's opponent) must bid lower when player 2's risk aversion increases.

Here are the basic rules of inference which we follow. For convenience, we will use DTW synonymously with valuation. First, if all bids are the same, no diference in either valuations or risk aversion can be inferred. Now, for same gender pairs, e.g., if MM>FF, we can rule out F having both higher valuation and lower risk aversion. In other words, M must have either higher valuation or be less risk averse. For differencnot1 mdvo bofix.2(exp)-9.les,

genders, e.g., if MF>FM, either M has higher valuation or F has lower risk aversion. The reasoning can be seen in the following. We rewrite the equilibrium bidding function for F against M when F has a lower valuation than M. Here MU_i stands for the marginal utility of player i={M,F}.

The complete set of implications is below in Table 2 and 3. Proofs are in Appendix A.

III. EXPERIMENTAL DESIGN

We recruited a total of 582 subjects. The first 156 (78 of each gender) from UT were to test our initial hypothesis. 92 of these gave us what seemed to be preliminary confirmation that men had higher desire to win. This was disconfirmed when we added 64 more subjects in UT. See Figures 6 and 7 in Appendix C. All these subjects were recruited with posters around UT. For our 2nd set of studies, where we controlled for selection effects, one coauthor, (Charlie Chen) contacted the class monitors at SZ (economics majors) and UT (Tsinghua Law School for our UT within school treatments and Peking University Law School for our UT across school treatments[7]) to see if they would agree to announce the possibility of participating in the experiment at the end of class. These monitors sent all their students a message asking them to stay for 10 minutes longer after class to participate in our paid experiment on the following day. They also asked students not to leave unless they had an emergency. We recruited 416 subjects (201 male, 215 female), 213 of them (120 male, 93 female) came from SZ and 203 of them (81

monitors were given envelopes to hand out based upon estimates of the gender mix in

set of experiments with whole class recruitment.

SZ Treatments	***Number of Subjects***	***UT Treatments***	***Number of Subjects***
SZ-MM	26	UT-MM	16
SZ-FF	22	UT-FF	27
SZ-MF	25	UT-MF	23
SZ-FM	25	UT-FM	28
SZ-MC	23	UT-MC	19
SZ-FC	23	UT-FC	22
(SZ-M, UT-M)	23	(UT-M, SZ-M)	23
(SZ-M, UT-F)	23	(UT-F, SZ-M)	22

seems that the main change as the tier of the school increased was that males in UT were much less competitive than at SZ. See Figure 8 Appendix C for the distribution of bids. However, the bidding behavior of SZ students against UT women in Figure 4 shows that women were at least perceived to be different in top graduate schools.

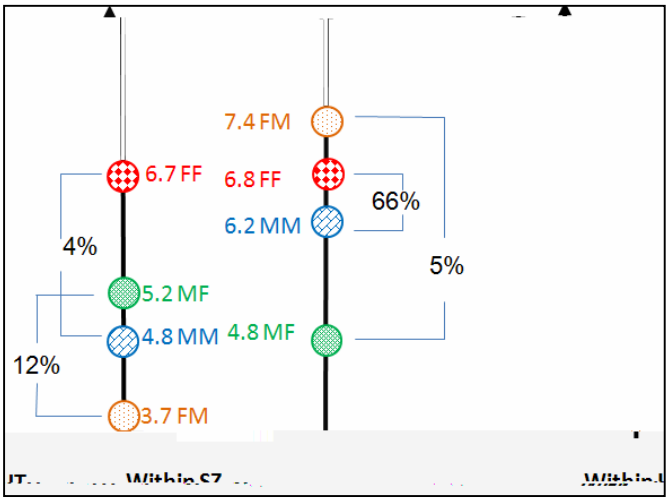


Figure 2: Same gender bidding behavior within SZ and UT.

Figure 3 adds on the incomplete information bidding behavior within each school, where the bidder did not know the gender of the opponent. Within SZ, women bid between the perfect information cases at FC=7.3 CNY, as one would expect. In contrast, men bid lower than either perfect information cases at MC=4.5 CNY. Within UT, women and men bid about the same: MC=6.1 CNY and FC=6.0 CNY, but again, men bid higher than in either of the perfect information cases. We are not sure how to interpret male behavior in either SZ or UT for the imperfect information cases. In any case, none of these differences between male bidding with incomplete information and the closest point of male bidding with perfect information are significant.

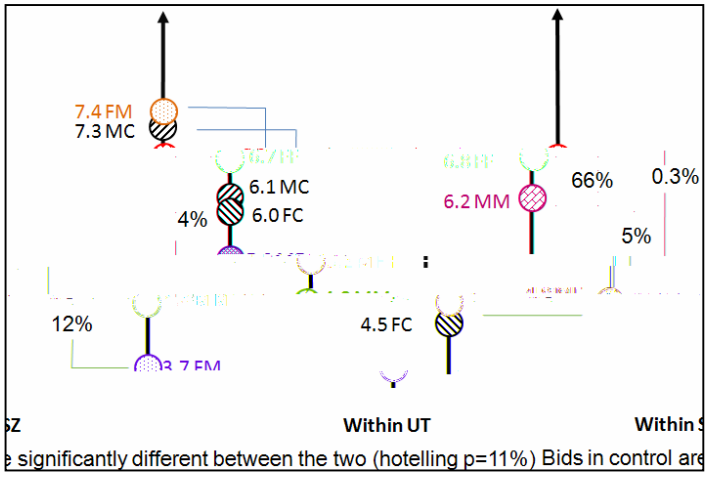


Figure 3: Incomplete information bidding behavior within SZ and UT.

Figure 4 shows how SZ women and men bid higher against UT women, (SZ-F, UT-F) =7.7 CNY, (SZ-M,UT-F)=6.5 CNY, than against UT men, (SZ-M, UT-M)=5.1 CNY. Due to our budget constraint, we do not have (SZ-F, UT-M) treatment). See Figure 9 Appendix C for the distribution of bids.

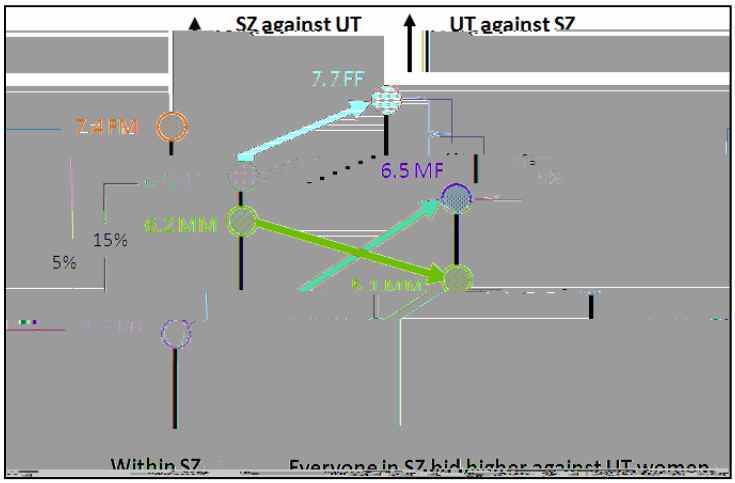


Figure 4: SZ bid higher against UT women than against UT men.

Figure 5 shows how UT women bid lower against SZ men, (UT-F, SZ-M)=4.8 CNY, than against SZ women (UT-F, SZ-F)=4.9 CNY.

The rough pattern of across school bidding, ignoring statistical significance, is as follows. Everyone bid higher against males at SZ. Everyone bid higher against females at UT. See Figure 5 for all the data.

Figure 5: All data.

The payoffs for all players are in Figure 11 in Appendix D. UT males (UT-M in the left most column) made the most money with an average payoff of 11.4 CNY, and that against UT females (UT-F in the highest row). However, as can see from Figure 5, though UT males tend to bid low, UT females bid even lower against them at 3.7CNY.

2. IDENTIFICATION OF DESIRE TO WW

Data Result 1: Women have higher desire to win than men.

Gender Pairs	*Diff valuation (V), risk neutral*		*Same valuation, diff risk aversion (R)*	
	V:M>F	V:M<F	R: M<F	R: M>F
MM VS. FF	>	<	>	<
FM VS. FF	<	<	>	<
MF VS. MM	<	<	<	>
FM VS. MM	<	=	=	=
MF VS. FF	=	<	=	=
MF VS. FM	>	<	<	>

Table 2: Theoretical predictions for the a) different valuations, risk neutral, b) same valuation different risk aversion cases.

Gender Pairs	*Different valuation (V), different risk aversion (R)*			
	V:M>F,R:M<F	V:M>F,R:M>F	V:M<F,R:M<F	V:M<F,R:M>F
MM VS. FF	>	<=>	<=>	<
FM VS. FF	<=>	<	<=>	<
MF VS. MM	<	<=>	<	<=>
FM VS. MM	<	<	=	=
MF VS. FF	=	=	<	<
MF VS. FM	<=>	>	<	<=>

Table 3: Theoretical predictions for the different valuations and different risk aversion case.

The pooled data showing that women have higher DTW is shown in Table 4. FF-MF is significantly different from zero at less than the 1% level, while the difference FM-MM is not significantly different from zero. These are one tailed tests. P-values are always from the Mann-Whitney (MW) test.

Gender Pairs	***SZ***	***SZ-across***	***UT***	***UT-across***	***Pooled***	***Predicted***
FF-MF	>0 (15%)	>0 (25%)	>0 (8.7%)		**>0 (p=0.03%)**	**>0**
FM-MM	>0 (28%)		<0 (42%)	>0 (45%)	**>0 (p=32%)**	**=0=0**

opponent pair as a function of the school. (UT-M,UT-F) – (UT-M,UT-M) should be greater than zero if UT men bid higher against UT women than against themselves. (SZ-M, SZ-M) – (SZ-M,UT-M) should also be greater than zero if SZ men bidding against UT men bid higher than when they bid against themselves. (UT-M,SZ-M) – (UT-M,UT-

Column 4 in Table 7 is uniquely consistent with all of the data, though some of the data which identify it are not significant. Thus, the unique 0 TD 8u rse ifonuoihes 0s ts seeng-1.2(e)s ts

UT women (6.7) (p=6%) implying that they believed SZ women were either more risk averse or had lower DTW than UT women. This is consistent with the estimate of SZ women against UT women mentioned just above. Furthermore, UT women bid higher against SZ men (4.8) than UT men (3.7) (p=23%) *weakly implying* that they believed that SZ men are either less risk averse or have higher DTW than UT men. However, we did not match SZ men against UT men due to our budget constraint. We do not have data to confirm this estimation. In any case, these bids from UT women do not have within school implications for SZ because unlike SZ bids against UT men and women, these relate UT women to SZ women and UT men to SZ men.

Data Result 6: The simultaneous test of: a) the assumption that SZ women have higher desire to win and are more risk averse than SZ men, and b) the assumption that UT women have higher desire to win and are less risk averse than UT men are highly significant.

We used separate data from different combinations of genders to indentify which of the 4 combinations of desire to win and risk attitudes were most likely. However, we can also test all of the data within each school against the null simultaneously. We test first the hypothesis which we indentified above in Data Result 3 that SZ women have higher desire to win and are more risk averse; V:M<F, R:M<F in column 4 of upper part of table 10. Note that the first two rows of this column are not predictive. The 4th row predicts equality, but that cannot be tested by a test of significance. However, the 3rd predicts MF<MM, the 5th predicts MF<FF, and the 6th predicts MF<FM. The one tailed MW test at the bottom of Table 10 shows a level of significance that is less than 1% (0.36%). We next test the hypothesis that UT women have higher desire to win and are less risk averse; V:M<F, R:M>F in column 5 of upper part of table 10. Note that the 3rd and 6th rows of this column are not predictive. Again, the 4th row predicts equality, but that cannot be tested by a test of significance. However, the 1st predicts MM<FF, the 5th predicts MF<FF, and the 5th predicts MF<FF. The one tailed MW test shows a level of significance that is less than 1% (1.8e-05). When we pool all of the data, we get an even greater level of significance <1e-06. This indicates that our model fits the data very well.

Gender Pairs	***Different valuation (V), different risk aversion (R)***			
	V:M>F,R:M<F	V:M>F,R:M>F	V:M<F,R:M<F	V:M<F,R:M>F

GRE, GMAT, AP (Coley 2001). The pattern is similar for grade school education in less developed countries (Grant and Berhman 2010) including China (Lai 2010). Even when fixing the course of study to law, the only field for which we could find data, the almost equal number of women LSAT test takers (Dalessandro, Stilwell, Lawlor, Rees, 2010), though women have lower measured ability on the LSAT, suggests that women are in fact more competitive than men. Lower ability with higher achievement implies that women are paying more in effort and leisure than men. Chinese girls may be particularly willing to pay due to the traditional Chinese cultural preference for boys which has been recently exacerbated by the one child policy. This is supported by anecdotal evidence that girls may have to “prove their worth” to the family. Consistent with this, Zhang (2011a) found no gender difference in competitive attitude among Han Chinese women, but did find it with their neighboring non-Han (minority) Chinese women, who were less restricted by the one child policy.

The significant change in risk attitude from SZ and UT could(c)5.2((withl5())-v-5.c.3(in)-5.6(-4.d)-5

representation in the most competitive profession. Male lower self discipline could be an advantage for the most able men in the most competitive professions. The susceptibility to the temptation for salient competitions ,i.e., showing off, could drive low ability men into street fights at the same time that it drives high ability men to “workaholism.”

VI. CONCLUSIONS

To our knowledge, this is the first study to separate ability, confidence in ability from competitive attitude – a priori. Our measure of competitive attitude has the further advantages of being econometrically direct and logically opaque. The latter should minimize possible demand effects based upon social or self-image. Consistent with the literature, we found that women *could* be more risk averse, but only at mid tier undergraduate institution. In contrast to the literature, in a sample of nearly 600 subjects, we found no evidence that women had less desire to win and were more risk averse – consisten, 12 -w[c)3.9(uns)5.8uau u id(i)7.5()23.5(g) inet1e70 e e.9(ma)8.8oure,whsedti t1e70 -
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MF VS FM

Proposition 2: If males have a higher valuations than females (V: M>F), and are more risk averse (R: M<F) , then MF>FM.

Proof:

Therefore, as long as male are less risk averse, MF should be lower than MM.

MF VS. FF

Proposition 5: If males have higher valuations than females (V: M>F), then MF=FF

Proof:

Proposition 6: If males have lower valuations than females (V: M<F), then MF<FF

Proof:

Therefore, whenever males have higher valuation, MF=FF; whenever males have lower valuation, MF<FF.

APPENDIX B: TIE BREAKING AND DISCRETIZATION

If ties are broken by equal probability of getting the prize (hereafter “flip”, as flip of a coin), then in a mixed strategy equilibrium, player 1’s expected utility equals the utility

from the expected payoff from the auction:

After rearrangement,

If ties are broken by splitting the prize (hereafter “split”), the mixed strategy equilibrium relation becomes:

After rearrangement,

It is easy to see that for risk averse players,

(Che and Gale 1998) showed that when there was a cap in an all-pay auction, and , then the expected payoff of player 1 is

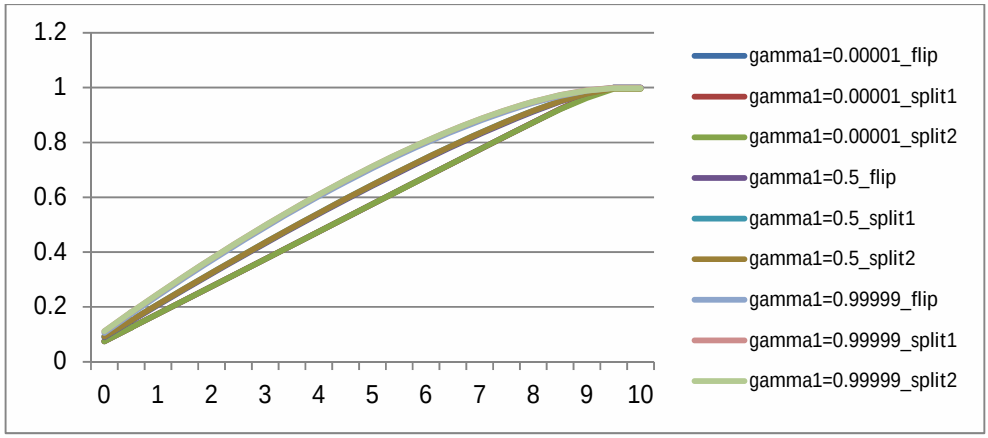

Figure 1: Shape of G2 when V1=10, V2=10, cap=10

"Flip" means equal probability of winning when ties

"split1" means each player receive half of their valuation when ties

"split2" means both players receive 5 when ties

Figure 2: Shape of G2 when V1=15, V2=10, cap=10

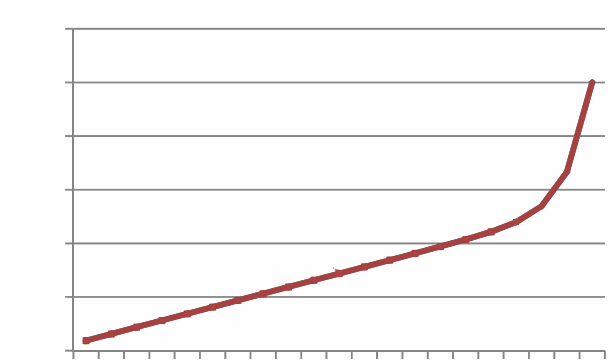

Figure 3: Shape of G2 when V1=20, V2=10, cap=10

APPENDIX C: CUMULATIVE DISTRIBUTION FUNCTIONS FOR INITIAL STUDY

Only males' bids increased significantly after finding out gender of opponent (p=10%).

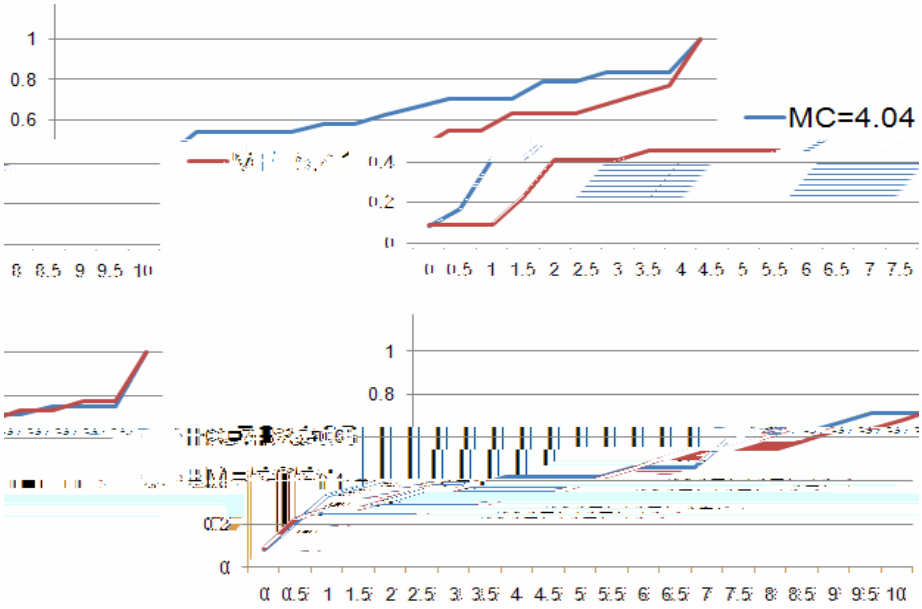

Figure 6: CDF of initial study with initial sample of 92 subjects

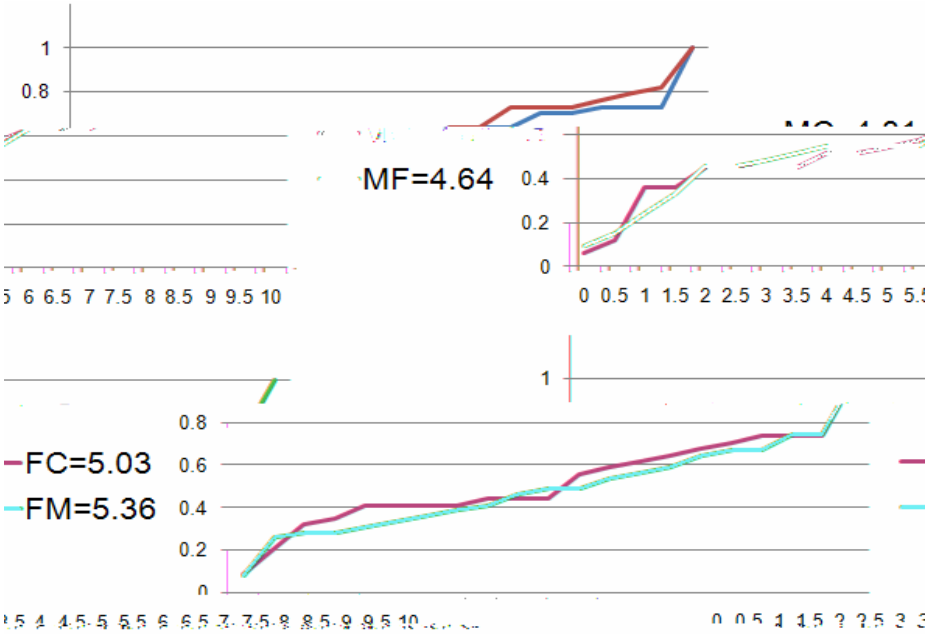

Figure 7: CDF of initial study with enlarged sample 156 subjects.

APPENDIX D: CDF OF BIDS IN TREATMENTS

Figure 10: CDF of SZ bids against UT.

Figure 11: Average payoffs for all players.

APPENDIX E: STUDIES ON GENDER DIFFERENCE IN CHILDREN

demand effects of self-consciously competitive choices, as apparently changing the task

- There will be an auction between the two of you.
- From now on, each of you is endowed with 10 CNY.
- When the auction begins, you will use the 10 CNY we give you to bid in the auction.
- The prize of this auction is 10 CNY as well.
- Both you and your opponent can only bid once in the auction. When you decide your bid, please mark the corresponding circle on the right graph. Please mark only one circle. Mark more than one will be treated as a mistake. If you do not mark any circle in the graph, then you are bidding zero.
- Please note that if your opponent chooses a lower bid than you do, you are the winner in the auction and earn the extra 10 CNY, which is the prize of the auction. Your opponent earns no extra money since he/she loses, but he/she still has to pay his bid.
- In the same reasoning, if your opponent chooses a higher bid than you do, he/she will be the winner and earns the extra 10 CNY. But both of you have to pay your own bid.
- If both of you choose the same bid, you will split the 10 CNY prize and pay your own bid.
- If both of you bid zero, that is, both of you do not mark any circle, none of you earns any additional payment.
- Please note that your final payment in this experiment is exactly equal to the payment after you bid using the 10 CNY we give you in this auction. We do not provide any other payment.
- Please now decide your bid.
- After you finish marking your bid, please write down your name and bank account in the box, and then put this paper back to the envelop.

APPENDIX E: AN EXAMPLE OF BIDDING SHEET

You are…		Your opponent is…
Name	⇔	A **Female** student in **UT**

- Please write down your name in the left block
- Your opponent is also a subject in this experiment. You can find the school or school and gender of your opponent in the right block.
- We paired you and your opponent randomly before today.
- There will be an auction between the two of you.
- From now on, each of you is endowed with 10 CNY.
- When the auction begins, you will use the 10 CNY we gave you to bid in the auction.
- The prize of this auction is 10 CNY as well.
- Both you and your opponent can only bid once in the auction. When you decide your bid, please mark the corresponding circle on the right graph. Please mark only one circle. Mark more than one will be treated as foul. If you do not mark any circle in the graph, you are bidding zero.
  - Please note that if your opponent chooses a lower bid than you do, you are the winner in the auction and earn the extra 10 CNY which is the prize of the auction. Your opponent earns no extra money since he/she loses, but he/she still has to pay his bid.
  - In the same reasoning, if your opponent chooses a higher bid than you do, he/she will be the winner and earns the extra 10 CNY. But both of you have to pay your own bid.
  - If the two of you choose the same bid, you will split the 10 CNY prize and pay your own bid.
  - If both of you bid zero, that is, both of you do not mark any circle, then none of you earns any additional payment.
- Please note that your final payment in this experiment is exactly equal to the payment after you bid using the 10 CNY we give you in this auction. We do not provide any other payment.
- Please now decide your bid.
- After you finish marking your bid, please write down your name and bank account in the box, and then put this paper back to the envelop.

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Name _____

Bank account No. _____