

## SPECIFIC INSTRUCTIONS FOR FFCA(gamma certain and arbitrator also places weight on the midpoint of the bargainers' final offers)

### Specific Instructions for FFCAEXTRA - 3

Mid-way through the round, if you and your counterpart have not yet agreed on a value of  $X$ , then a computerized "suggerster" will make a suggestion for you. You do not have to agree upon the suggestion, but the suggestion will play a role in the computer's determination of the value of  $X$  for that round should you and your counterpart fail to agree for the remainder of the round (i.e., you will resume bargaining after the suggestion). Should you reach the end of the round without having mutually agreed upon a value of  $X$ , you will then be prompted for a final offer. If you and your counterpart's final offers come to agreement, then that is the value of  $X$  for the round (if they overlap, then  $X$  will be the average of the final offers for that round). If there is still no agreement, then the computer will generate a value of  $X$  for you.

Specifically, the value of  $X$  for that round will be determined based on a combination of how close your final offers are, what the computer suggestion was, and an  $X$  value drawn by the computer at the end of the round. The closer your final offers are to agreement, the higher the weight the computer will place on the mid-point between your final offers (and, hence, the lower the weight it will place on a weighted-average of its own choice of an  $X$  value and the computer suggestion for  $X$ ). For example, suppose that there are two scenarios, one with final offers of 10,000 for Player A and 11,000 for Player B (the mid-point is 10,500) and another where final offers are 10,000 and 14,000 (mid-point is 12,000). In each scenario the computer would weight both the midpoint of your final offers and its own weighted-average choice of  $X$  (weighted between the end-of-round computer choice and the suggestion) in determining the final value of  $X$  for that round, but in the first scenario it will place a higher weighting on the mid-point value of  $X$  since the final offers are closer together. Basically, a higher weighting on the mid-point value of  $X$  means that the final  $X$  outcome for the round will be closer to that mid-point value. If your final offers are farther apart, then the computer will more heavily weight the weighted-average value between its own choice of an  $X$  value and the computer suggestion.

The term "weighted-average" just means that the percentage placed on both the computer suggestion and the computer's new draw of an  $X$  value need not be 50% each. For purposes of your experiment, the weighted average will be a 20.0% weight on the computer suggestion from earlier in the round and a 80.0% weight on the end-of-the round computer draw of  $X$ . A higher than 50% weighting implies that the result of the weighting will be closer to the value weighted more than 50% (e.g. a 25% weighting on 10,000 and a 75% weighting on 1000 yields the weighted-average of 3250).

These percentages describe how the computer will combine its own draw of  $X$  and the computer suggestion in determining its weighted-average of  $X$ . It is still always the case that the computer will weight the mid-point of your final offers more heavily than its weighted-average when the final offers are close, and it will weight the mid-point value of  $X$  less heavily-and, hence, weight the computer's weighted-average more heavily-when the final offers are farther apart.

### Specific Instructions for FFCAEXTRA - 3

When the computer offers a suggestion midway through the round, some values of  $X$  are more likely to be suggested than others, but there is a random element to the computer's suggestion of  $X$ . To give you some information about this random number generation procedure, below are the last 100 values of  $X$  randomly generated by the computer as "suggestions" (the order in which they are shown is irrelevant) using the exact same procedure that would apply in your case. This can be used to give you an idea of more likely and less likely suggestions of  $X$ .

472	436	396	528	529	447	588	494	563	422
519	443	507	580	540	589	442	468	517	480
491	474	564	485	554	485	504	510	487	430
539	516	584	553	412	566	393	441	458	342
418	521	589	569	489	463	574	537	581	504
564	416	434	392	617	555	437	507	421	468
500	443	551	517	489	493	577	483	572	477
579	489	651	505	476	510	486	593	568	577
502	555	471	445	485	473	469	420	582	442
572	506	549	453	392	550	619	568	380	391

Similarly, when the computer draws its own choice of an  $X$  value, some values of  $X$  are more likely to be drawn than others, but there is a random element to the computer's choice of  $X$ . To give you some information about this random number generation procedure, below are the last 100 values of  $X$  randomly generated by the computer (the order in which they are shown is irrelevant) using the exact same procedure that would apply in your case. This should be used to give you an idea of more likely and less likely values of  $X$ .

697	403	492	405	419	482	495	519	563	460
502	440	512	449	478	486	491	441	399	412
416	603	381	450	558	461	576	497	536	444
453	628	564	434	577	595	425	436	587	447
579	490	437	560	562	513	529	428	512	433
477	482	505	576	560	477	449	527	484	505
459	513	499	486	424	503	459	408	467	515
463	525	448	528	588	366	539	524	553	514
441	493	466	481	502	433	520	412	464	466
501	471	620	448	502	553	578	624	428	584

Again, midway through the round, you will be offered a "suggested" value of  $X$  if you have not yet agreed (based on the same random number generation procedure as drew the first table of 100 numbers above). You are not required to agree on this value of  $X$ , but it does play a role in the end-of-round determination of  $X$ . If you and your counterpart have not reached agreement by the end of the round, you will be prompted for a final offer. If final offers still do not agree, then the computer will determine the value of  $X$  for you for that round by drawing its own value of  $X$  (based on the same random number generation procedure as drew the second table of 100 numbers above) and weighting the mid-point of your final offers along with the computer's own weighted average of the computer suggestion and its end-of-round draw of  $X$ . A higher weighting will be placed on your final offers the closer they are to agreement.

If you have any questions, please raise your hand before starting the round. If you do not have any questions, then please click below to start.