AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
http://ageconsearch.umn.edu
aesearch@umn.edu

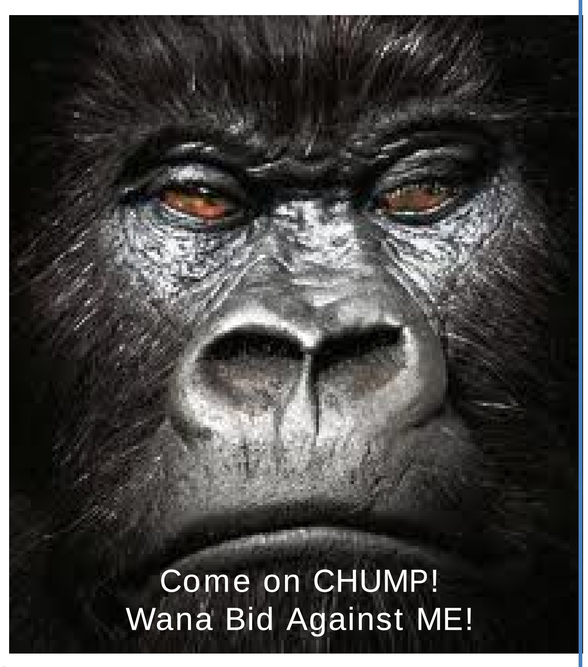
*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

BIDDING BEHAVIOR IN ALMOST COMMON VALUE ENGLISH AUCTIONS

Kalyn T. Coatney, Matthew G. Interis and Yang Wang, Mississippi State University

INTRODUCTION

- Almost common value auctions (ACV)– one bidder holds a value advantage.
- Advantaged bidder theory predicts:
  - advantaged bidder bids aggressively while disadvantaged bidder(s) bid passively to avoid the heightened *winner's curse* (Bikhchandani 1988; Klemperer 1998; Rose and Kagel 2008).
  - ***Explosive effects*** - advantaged bidder wins all units and pays prices below the second highest reservation bid.
- Experimental research has shown mixed evidence of ***explosive effects*** *:*
  - No ***explosive effects*** - Levin and Kagel 2005; Rose and Levin 2008.
  - Some ***explosive effects*** - Coatney, Shaffer and Menkhaus 2012:
    - advantaged bidder won most units at prices below disadvantaged bidders.



- Lack of congruency between theory, experimental and empirical literature.
  - Theory *in re* real world – no outside option for disadvantaged bidders.
  - Experimental findings – no outside option and did not account for bidder psychology.
  - Real world empirical analyses – strategic bidding could not be econometrically identified.

OBJECTIVES

- Allow bidders an outside option. If you had your druthers, would you take on the beast?
- Account for relevant psychological attributes of bidders. Theoretical results require a stone cold killer v wimps.

METHODS

- Experiments conducted at Mississippi State University.
- Subject pool – primarily upper level undergrads and graduate students from the Department of Agricultural Economics.
- Control for bidder psychological attributes of:
  - assertive behavior - Rathus Assertiveness Schedule
  - aggressive behavior – Buss & Perry Aggression Test
  - altruistic behavior – Dictator Game
  - risk aversion – Holt and Laury Test.

- Conducted 2 ACV treatments – 6 replications each:
  - ACV English Auctions – with and w/o outside option
  - 4 bidders – 1 advantaged bidder - 4 auction sessions – each bidder advantaged once per replication

RESULTS

- ACV – no outside option – no ***explosive effects*** as in (Levin and Kagel 2005; Rose and Levin 2008).
- ACV – with outside option – no ***explosive effects*** , however, **i)** significant exit of disadvantaged bidders, **(ii)** advantaged bidder won most units at lower prices than disadvantaged bidders as in Coatney, Shaffer and Menkhaus (2012).
- Psychological Attributes – **i)** More assertive participants are more likely to stay in the auction when there's an outside option and are more likely to stay in the bidding longer. **(ii)** More altruistic participants are more likely to drop out of the bidding early or not enter at all. **(iii)** Risk aversion has no effect on whether bidder participates in auction but more risk averse participants dropout of the bidding earlier. **(iv)** Aggression results were mixed.

CONCLUSIONS

- The results of real world auctions are more consistent with ACV theory with an outside option.
- Bidder psychology matters. To observe the ***explosive effects***, the advantaged bidder must be willing to exert their advantage and disadvantaged bidders must be willing to yield to the advantaged bidder.

Selected Poster prepared for presentation at the Agricultural & Applied Economics Association's 2012 AAEA Annual Meeting, Seattle, Washington, August 12-14, 2012. Copyright 2012 by [author(s)]. All rights reserved. Readers may make verbatim copies of this document for non-commercial purposes by any means, provided this copyright notice appears on all such copies.