

## **The Winner's Curse, Reserve Prices, and Endogenous Entry empirical insights from eBay auctions (Bajari and Hortaçsu, 2003)**

Markets are defined by the interactions of buyers and sellers. Economists want to understand how markets work, by analyzing the behavior of its agents – buyer or seller – and their incentives.

Auctions are a subgroup of markets game theorists have analyzed for decades. However, with the introduction of the internet a new type of auction was born with the eBay online platform.

### **One Sentence Summary**

This paper characterizes how sellers and buyers behave in an online action with “proxy bids” like eBay. They find that bidders (buyers) tend to wait to the last minute to place their winning bets.

### **Main Findings**

The eBay platform uses “proxy bids”. Where buyers need to choose a maximum (max) and minimum (min) amount to pay for the item, with a certain value of increments. Where a Seller will need to pick a time limit for the online auction and set a minimum price to enter the bid (reservation price). The reservation price can be zero, which lets every bid enter the auction. But if they choose a positive reservation price, only those bidders with higher minimum prices can participate. While For example, agent *A* bid with a 10\$ min, 20\$ max and 1\$ increment. *B* will bid the same min and increment but with a 15\$ max. The current winning bet of 16\$ - which will be the 2<sup>nd</sup> maximum plus the increment chosen - of agent *A* will be displayed on the post. If *C* comes and bid a max of 25\$ he will have a winning bet of 26\$. Agent *A* will be notified that their max was surpassed, and eBay gives *A* the option to place another maximum bid.

This type of auction hasn't been studied up until this paper. Using data from coin mints from 1998 on eBay they found an interesting behavior. Bidders tend to place their winning bid in the last minute, meaning most of the auctions are won when little time is left. They prove that this is a rational strategy to be played by the bidders. In other words, to gauge how likely someone is to win an eBay auction it's necessary to make the prediction on the last days.

### **Concluding Remarks**

Understanding the behavior and incentives of agents in a market is essential for economic policy. It provides the methodical and mathematical groundwork for policy makers to improve markets – e.g. better efficiency, disincentivize colluding behavior or even improving profit generation.

## References

- Bajari, P., Hortacısu, A., 2003. The Winner's Curse, Reserve Prices, and Endogenous Entry: Empirical Insights from eBay Auctions. RAND J. Econ. 34, 329. <https://www.jstor.org/stable/1593721>.