

## Winner's Curse

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The winner's curse story begins with Capen, Clapp, and Campbell (1971), three petroleum engineers who claimed that oil companies suffered unexpectedly low returns "year after year" in early Outer Continental Shelf (OCS) oil lease auctions. OCS auctions are common value auctions, where value of the oil in the ground is essentially the same to all bidders. Each bidder has their own estimate of the (unknown) value at the time that they bid. Even if these estimates are unbiased, bidders must account for the informational content inherent in winning the auction: the winner's estimate of value is (one of) the highest estimates. If bidders ignore this *adverse selection effect* inherent in winning the auction, it will result in below normal or even negative profits. The systematic failure to account for this adverse selection effect is referred to as the winner's curse: you win, you lose money, and you curse. (Unfortunately, many economists, particularly theorists, characterize the winner's curse as the difference between the expected value of the item conditional on the event of winning and the unconditional, naive expectation, using the term to refer to bidders fully accounting for this difference, rather than failing to do so and losing money as a consequence.)

Similar claims regarding a winner's curse have been made in a variety of other contexts: book publication rights, professional baseball's free agency market, corporate takeover battles, and real estate auctions (see, Kagel and Levin, 2002, Chapter 1 for references to this and the other work cited in this article). These claims have traditionally were greeted with a good deal of skepticism by economists as they imply that bidders repeatedly err, violating basic notions of rationality which are unsustainable in the longer run. It is exceedingly difficult to support claims of a winner's curse with field data

because of data reliability problems and plausible alternative explanations.

The ambiguity inherent in interpreting field data, and the controversial nature of the winner's curse, provided the motivation for experimental investigations. Initial experiments showed that inexperienced bidders are quite susceptible to the winner's curse in a corporate takeover game (Bazerman and Samuelson, 1983) and in first-price sealed-bid common value auctions (Kagel and Levin, 1986). Subsequent experiments have focused on the robustness of the phenomena and features of the environment that might attenuate its effects. Does the commonly-known presence of an "insider" who knows the true value of the item attenuate the winner's curse? (No, it does not.) Do open outcry (English) auctions in which bidders with higher value estimates gain information as a consequence of lower valued bidders dropping out attenuate the winner's curse? (Yes, but this experience does not transfer into doing better in sealed-bid auctions.) Are subjects who have learned to avoid the winner's curse in auctions with relatively few (four) bidders able to avoid it in auctions with larger numbers of rivals (seven) with its more severe adverse selection effect? (No, they do not.) Thus, although bidders are able to avoid the winner's curse with enough experience, this learning appears to be context specific, so that it does not easily generalize to related environments.

Research has also focused on key public policy issues. As theory predicts, public information that is correlated with the common value raises seller's revenue in first-price sealed-bid auctions in the absence of a winner's curse (i.e., for experienced bidders), but contrary to the theory lowers revenue for less experienced bidders who still suffer from a winner's curse. English auctions, where public information is released endogenously, have the same effect. Finally, there are striking parallels between laboratory outcomes and anomalous findings from field data, along with experiments in which experienced industry executives in the laboratory suffer to the same extent from the winner's curse as do student subjects, that lead us, and a number of other observers, to believe that the winner's curse is alive and well both inside and outside the laboratory (Kagel and Levin,

2002, Chapter 1).

### References

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