

Report on Grant #121: Eminent Domain and Efficient Land Assembly

In April of 2013 professors Abel Winn and Matthew McCarter were awarded IFREE Grant No. 121, titled “Eminent Domain and Efficient Land Assembly.” January of 2015 we submitted an article based on that study to the *Journal of Legal Studies*, where it is currently under review. The working paper is available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2437405.

Summary of Design and Results

We used a simple bargaining framework to compare the efficiency of land assembly in three treatments. In the *Baseline* treatment the buyer made offers to two sellers who could not be forced to sell. In the *Eminent Domain* treatment the buyer could force a seller who rejected his offer to sell, but the price of sale was determined in a Tullock Contest in which both sides could expend resources. Higher spending by the buyer (seller) made it more likely that the low (high) price would be chosen. In the *Competition* treatment the buyer could not force a sale, but if one or both sellers rejected their offers in a period then the buyer could offer to buy a less valuable substitute parcel from a third seller.

The results of these experiments suggested that eminent domain is a poor solution to the land assembly problem, but that even weak competition is very effective in discouraging seller holdout. In the *Baseline* 23% of sellers rejected a profitable offer, and participants captured 82% of the available gains from trade. The loss of efficiency was primarily due to costly delay, as the average negotiation took 4.2 periods (out of a maximum of 5). In the *Eminent Domain* treatment only 4% of sellers rejected a profitable offer and the average negotiation took 1.4 periods, but participants captured only 81% of the available surplus. This is because buyers and sellers spent heavily in the Tullock Contest and so wasted substantial resources in an attempt to influence the sales price. In the *Competition* treatment 7% of sellers rejected a profitable offer, which is not statistically significantly higher than in the *Eminent Domain* treatment. Moreover, negotiations in the *Competition* treatment took an average of 2.7 periods and the participants captured an average of 89% of the available surplus.

These results cast significant doubt on the usefulness of eminent domain in enhancing economic efficiency. Moreover, we found that much of the delay in the *Baseline* and *Competition* treatments were caused by overly conservative offers from buyers rather than strategic holdout among sellers. Whereas 23% of sellers in the *Baseline* treatment rejected a profitable offer, 60% of buyers’ highest offers were lower than their profit maximizing bid. In the *Competition* treatment 22% of buyers’ highest offers were below the profit maximizing level, compared to 7% of sellers who rejected a profitable bid.

Use of Funds

We received \$6,368 for subject payments, of which we spent \$5,678.25. The remaining \$689.75 was returned to IFREE in the form of a check issued on 9/3/2014.