



The Costs of Free Land: The Oklahoma Land Rushes—Reply

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Noel Campbell's comments on our paper raise several issues about the Oklahoma land allocation. We agree with his observation that why specific methods of land allocation were used is an interesting and important question. Second, we recognize that, as Campbell points out, the risk preferences of potential settlers do matter. The problem is that it is not clear how to falsify assumptions about risk preferences in any but an heuristic way. These explanations are inevitably *ad hoc*, always capable of being replaced by another set of equally plausible speculations. Finally, we disagree with Campbell's assertion that our analysis "underestimates the cost of the land rush by the amount of the cheating or odds-altering expenses."

Addressing these points in reverse order, Campbell is absolutely correct in asserting that the odds-altering expenses of the land rushes were social costs. Indeed, the Oklahoma land rush is a classic example of a prisoner's dilemma: If all the Oklahoma Boomers had agreed to walk, (not run or ride horses) into the new territory, significant resources would have been saved. Nevertheless any individual Boomer would have wrested a great advantage by cheating. The lack of an enforcement mechanism coupled with individually self-interested behavior would inevitably have led to a breakdown of the resource saving covenant. Moreover, investments in odds-altering expenses were not a part of a land lottery, as he rightly notes. What Campbell fails to note, however, is that such expenses were part of the *private* costs of the land rush participant. Indeed, such odds-altering expenditures are one of the reason the costs of a land rush was greater than those of a lottery *per participant*. Campbell's observations about specific odds-altering expenditures, although interesting and informative, do not undermine our basic observation that rent-dissipation is likely in any non-price competition for valued lands. With risk neutrality, if costs in any competition are uniform over participants then rents are fully dissipated. The rent dissipation constitutes a social cost. In the land rushes the social costs were accounted for by higher participant costs, partly because of the odds-altering expenses as alluded to in Campbell's examples. In the land lottery, where odds-altering expenditures were forestalled by the structure of the competition, rent dissipation was simply taken up on another margin: excess participation. That the participation rate in the land lottery exceeded that of the land rushes corroborates the point.

Campbell's second point is about the risk preferences of participants in the various land allocation schemes. Whether the participants were risk neutral, risk averse, risk loving, or some combination is an interesting question. But the issue is probably unsolvable given

current data. Given this caveat we offer the following observation: assume that people maximize expected¹ utility and that their utility function is as described by Friedman–Savage (1948).² Assume this means that people are simultaneously willing: (1) to gamble a small amount for a chance at a large gain, and (2) to sacrifice a small amount to insure against a large loss. Recall that a land rush imposes a real risk of incurring a large loss (death, serious injury from falling from a horse, risk of a violent encounter upon claiming a property, risk that a claim will be subject to costly dispute, *et cetera*) Compared to a land lottery people would be less inclined to enter a land rush precisely to avoid the risk of a large loss. In contrast, the land lottery imposed small(er) downside risks on its participants. Given Friedman–Savage utilities, land rushes would offer a greater expected return to their participants relative to the less risky land lottery. In addition the rents from land rushes may not have been completely dissipated, while the rents from the land lottery would be completely dissipated or, more likely, over-dissipated. A number of other assumptions about risk could be explored, (i.e., if some potential participants were risk lovers, but not enough to capture all plots), but how could these alternative speculations be tested? The answer to this question is problematic at best.

Campbell's point concerning why these land allocation mechanisms were chosen is not explored in any depth in our paper. We have not discovered any definitive source that gives an explicit insight into the political/economic choice of land allocation methods. We suspect (but cannot provide evidence) that the initial land rush was designed to explicitly favor the Boomers who had agitated for the land opening. (The Boomers were familiar with the Territory and were living near it.) We conjecture that subsequent land rushes were a product of similar calculations and/or inertia. We speculate that the last land contest was a lottery because the original Boomers were mostly too old to be competitive in contests that required strength, agility and a lack of common sense. Thus, the lottery gave people residing nearby (read former Boomers and their relations) lower entry costs (physical presence was one of the lottery's conditions³) than people who lived at greater distances. This scenario explains: (1) why the land rush was the first approach, and (2) the subsequent lottery; it is also consistent with a public choice explanation. However, this is speculation. Additional resources may be fruitfully used in formalizing this and other hypotheses, and searching for evidence to test the hypotheses derived from political economy surrounding the distribution of the Oklahoma lands.

Notes

1. There are two major categories in the current literature on the maximization of utility: (1) People maximize expected utility, and (2) People maximize non-expected utility. For review on these literatures see: Mark Machina (1987, 1989), Kip W. Viscusi (1989), and Philip R.P. Coelho and James E. McClure (1998).
2. More accurately, the specified utility function is Friedman-Savage as modified by Harry Markowitz (1952).
3. Exceptions were made for veterans of the American military.

References

- Coelho, Philip R. P. and E. McClure, James. "Social Context and the Utility of Wealth: Addressing the Markowitz Challenge," *Journal of Economic Behavior and Organization* 37, 305–317.
- Friedman, Milton, and J. Savage, Leonard. (1948). "The Utility Analysis of Choices Involving Risk," *Journal of Political Economy* 56, 279–304.
- Machina, Mark. (1987). "Choice Under Uncertainty: Problems Solved and Unsolved," *Economic Perspectives* 1, 121–154.
- Machina, Mark. (1989). "Dynamic Consistency and Non-Expected Utility Models of Choice Under Uncertainty," *Journal of Economic Literature* 27, 1622–1668.
- Markowitz, Harry. (1952). "The Utility of Wealth," *Journal of Political Economy* 60, 151–158.