George on Land Speculation and the Winner's Curse

By NICOLAUS TIDEMAN*

ABSTRACT. Henry George anticipated the winner's curse phenomenon and suggested an antidote to prevent wasteful land speculation. In these ways his economic ideas still resonate today as part of modern finance theory.

Adam Smith knew about the neutrality of taxes on land. He says of a tax on land, "As it has no tendency to diminish the quantity, it can have none to raise the price of that produce. It does not obstruct the industry of the people" (1937 [1776], p. 780). Smith's view of taxes on land has been the general view among economists since then, and in fact one can trace Smith's argument to the French physiocrats who preceded him.

Henry George claimed more for a tax on land. He stated that taxing land has not only the virtue of not stifling production the way other taxes do, but also the virtue of eliminating land speculation. He wrote:

> And to shift the burden of taxation from production and exchange to the value or rent of land would not merely be to give new stimulus to the production of wealth; it would be to open new opportunities. For under this system no one would care to hold land unless to use it, and land now withheld from use would everywhere be thrown open to improvement.
>
> The selling price of land would fall; land speculation would receive its death blow; land monopolization would no longer pay. Millions and millions of acres from which settlers are now shut out by high prices would be abandoned by their present owners or sold to settlers upon nominal terms. And this not merely on the frontiers, but within what are now considered well settled districts. Within a hundred miles of San Francisco would be thus thrown open land enough to support, even with present

*Professor Tideman (ntideman@vt.edu) now serves as a Professor of Economics at Virginia Polytechnic Institute and State University in Blacksburg, Va. He is a frequent contributor to this journal and an expert on Henry George's economic contributions. This paper was first presented at the Southern Economic Association Meetings held in New Orleans in November 2002.

The American Journal of Economics and Sociology, Vol. 63, No. 5 (November, 2004).

> modes of cultivation, an agricultural population equal to that now scattered from the Oregon boundary to the Mexican line—a distance of 800 miles. In the same degree would this be true of most of the western states, and in a great degree of the older eastern states, for even in New York and Pennsylvania is population yet sparse as compared with the capacity of the land. (1960 [1879], pp. 436–437)

George's claim is much more than the claim that taxes on land are neutral. Where Smith's claim of neutrality is readily seen to be compatible with modern economic theory, George's poses more of a challenge.

Before addressing George's claim in terms of modern economic theory, it is important to note first its empirical foundation. George observed a widespread practice of people taking title to much more land than they could use and leaving it unused. Earlier, in *Progress and Poverty* he wrote:

> We have hitherto assumed, as is generally assumed in elucidations of the theory of rent, that the actual margin of cultivation always coincides with what may be termed the necessary margin of cultivation—that is to say, we have assumed that cultivation extends to less productive points only as it becomes necessary from the fact that natural opportunities are at the more productive points fully utilized.
>
> This, probably, is the case in stationary or very slowly progressing communities, but in rapidly progressing communities, where the swift and steady increase of rent gives confidence to calculations of further increase, it is not the case. In such communities, the confident expectation of increased prices produces, to a greater of lesser extent, the effects of a combination among landholders, and tends to the withholding of land from use, in expectation of higher prices, thus forcing the margin of cultivation farther than required by the necessities of production.
>
> The cause must operate to some extent in all progressive communities, though in such countries as England, where the tenant system prevails in agriculture, it may be shown more in the selling price of land than in the agricultural margin of cultivation, or actual rent. But in the United States, where the user of land generally prefers if he can, to own it, and where there is a great deal of land to overrun, it operates with enormous power.
>
> The immense area over which the population of the United States is scattered shows this. The man who sets out from the Eastern Seaboard in search of the margin of cultivation, where he may obtain land without paying rent, must, like the man who swam the river to get a drink, pass

> for long distances through half-tilled farms, and traverse vast areas of virgin soil, before he reaches the point where land can be had free of rent—*i.e.*, by homestead entry or pre-emption. He (and with him, the margin of cultivation) is forced so much farther than he otherwise need have gone, by the speculation which is holding these unused lands in expectation of increased value in the future. And when he settles, he will, in his turn, take up, if he can, more land than he can use, in the belief that it will soon become valuable; and so those who follow him are again forced farther on than the necessities of production require, carrying the margin of production to still less productive, because still more remote points.
>
> The same thing may be seen in every rapidly growing city. If the land of superior quality as to location were always fully used before land of inferior quality were resorted to, no vacant lots would be left as a city extended, nor would we find miserable shanties in the midst of costly buildings. These lots, some of them extremely valuable, are withheld from use, or from the full use to which they might be put, because their owners, not being able or not wishing to improve them, prefer, in expectation of the advance of land values, to hold them for a higher rate than could now be obtained from those willing to improve them. And, in consequence of this land being withheld from use, or from the full use of which it is capable, the margin of the city is pushed away so much farther from the center. (1960 [1879], pp. 255–257)

A person who wished to stand on theory might say that George's claim is inconsistent with economic theory. In standard economic theory, we expect competitive markets to lead to efficient resource allocation. If George says that the failure to tax land leads to inefficiency, he must be denying some assumption of standard economic theory. In a variation on this point, Richard T. Ely (1920) argues that "land speculation" should be seen as the socially valuable activity of determining the most efficient time to develop land.

Ely's interpretation is not consistent with the facts. In every U.S. city with skyscrapers that I have visited, there are one- and two-story buildings within a block or two of the skyscrapers. The skyscrapers have been around long enough for at least one, if not two or three, tall buildings to have been built and fully depreciated where one- and two-story buildings currently stand. The optimal time of development is not being identified by the holders of such land. Similarly, today, as in George's time, urban development is characterized

by leapfrogging rather than continuous outward expansion. Thus, patterns of land development are not consistent with economic efficiency. Why not?

Economic theory is sometimes developed under an assumption of perfect foresight. But if everyone had perfect foresight, there would be no possibility of gain from any form of speculation. So if speculation does occur, a theory of speculation should not be evaluated in terms of a theory that incorporates an assumption of perfect foresight.

Economists have a theory of the maximization of expected utility under uncertainty, which does not incorporate an assumption of perfect foresight. This theory allows for the possibility of action based on mistaken belief. One insight that emerged from analysis of the combination of the actions of different individuals acting from different mistaken beliefs goes by the name of "the winner's curse" (Milgrom and Weber 1982). This is the phenomenon, when people with varying beliefs compete for something of uncertain value, that the one who bids the most for it is the one who has made the greatest upward error in estimating its value. The winner's curse is a very persistent phenomenon (Ball, Bazerman, and Carroll 1991). Fully rational people who are aware that they are competing with others, none of whom have perfect knowledge, should take account of the winner's curse and lower their bids so that they would expect nonnegative profits when they succeed in their bids. But they don't. Even when people are aware of the winner's curse, they have a very hard time keeping their bids down to levels that would yield expected profits that were nonnegative.

The winner's curse applies directly to land speculation. It says that when the future value of land is uncertain, the person who will bid the most for it is the one who has made the greatest upward error in estimating its value. Since the value of land is the present value of the future rent of land, errors with respect to the value of land are centered on errors regarding the future growth of the rent of land. People who have made the most extreme upward errors in their beliefs about the future value of land are not inclined to invest in it now, because that would mean foregoing the even greater investments that would be worthwhile (in their imaginations) when the future time of higher value arrives. Thus the people who value land

most, out of a mistaken belief that its value is about to rise rapidly, keep it out of production. As George says in the above quote, "[T]he confident expectation of increased prices produces, to a greater or lesser extent, the effects of a combination among landholders, and tends to the withholding of land from use, in expectation of higher prices" (1960 [1879], p. 255). To some extent, widespread land speculation provides the self-fulfilling prophecy of higher prices generated by the artificial scarcity of land induced by the speculation, as if the speculators were engaged in a conspiracy to reduce the supply of land and increase prices.

George goes on to argue in *Progress and Poverty*, Book V, Chapter 1, that depressions are caused by the crashes of land prices that occur when the expectations of speculators come to be seen as unsupportable. But that is a story for another day.

The point of this paper is that George had a theory of land speculation that is inconsistent with an economic theory that assumes perfect knowledge by economic actors but is consistent with the modern theory of the winner's curse, a very robust and productive theory that has been developed only in the last two decades.

References

Ball, Sheryl B., Max H. Bazerman, and John S. Carroll. (1991). "An Evaluation of Learning in the Bilateral Winner's Curse." *Organizational Behavior and Human Decision Processes* 48(January): 1–22.

Ely, Richard T. (1920). "Land Speculation." *Journal of Farm Economics* 2: 121–135.

George, Henry. ([1879] 1960). *Progress and Poverty.* New York: Robert Schalkenbach Foundation.

Milgrom, Paul, and Robert J. Weber. (1982). "A Theory of Auctions and Competitive Bidding." *Econometrica* 50: 1089–1122.

Smith, Adam. ([1776] 1937). *The Wealth of Nations.* New York: Random House.