

The Value of Land Seminar 2002

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(Some details added after distribution at seminar)

I. Definitions

A. Land: all kinds of natural resources

Urban sites; soils; fisheries and their habitats; wild game and birds and their habitats; the gene pool; minerals (hardrock, hydrocarbons, sand, and gravel); waste disposal sites; pollution easements, de facto and de jure (air and water); fresh water and adjunct resources (see LON); forests (mature timber is mostly stored-up rent) and forestlands, with their “compatible” uses; grasslands; recreation and amenity lands; ROWs (see LON p. 226, and Tapping Rents) and their backlots; harbors, mooring spaces, “water lots,” filled and fillable land; beaches (Wendy McCaw and David Geffen vs. surfers and waders); radio spectrum and adjunct sites; aircraft easements; strata rights; etc.

B. Value of land

Public value (Marshall: has three causes).

Value is gross of attached debt.

Separating land from value of standing buildings; Marshall, Somers, and the “building-residual” method, using the opportunity cost of bare land. Somers’ System and similar systems widely used, 1890-1940 or so.

Mapping, now enhanced by GIS. A little data goes a long way.

Public equity:

- from property taxes on land itself, e.g., 40% of California real estate as assessed;
- from income taxes on land income;
- from taxes that are shifted to land: the ATCOR concept, based on mobility of labor and capital among taxing jurisdictions with open economies (see IV, below);
- from other public obligations under the police power;

Lessors’ equity under rent control

II. Finding market values

A. Allegations of difficulty:

- French economists whom Leon Walras scored without naming.
- J.B. Clark, capital of land buyers is “transmuted” into land.
- R.T. Ely.

- Th. Schultz, replicating all the above, alleging farm values are all products of the owner's care (ignoring natural soils and maps of them, actions of continental ice sheets, alluvial deposits, climate, location, slope, availability of water, and other natural conditions).

- Richard Ratcliff.

- Edwin S. Mills, citing landfills, etc.

B. Cf. difficulty of defining income (which requires us to define land value, along with thousands of other details). This does not stop economists from citing income figures as meaningful (perhaps it should).

C. Ways of finding and using market evidence:

1. Vacant land:

- a large fraction of every central business district as seen in aerial photos.

Observations of Peter Colwell:

- urban fringe

e.g., 3040 Tyler St., Riverside, surrounded by ten vast vacant parcels of many acres . This urban fringe is only a quarter mile from Tyler Galleria, the city's major shopping area.

e.g., Audie Murphy ranch near Perris, currently up for development.

2. Teardowns: sales on eve of demolition are basically land sales

- Beverly Hills, aka "teardown city."

- current observations of Winnetka, Illinois, an older near-in suburb of Chicago, with about one recent teardown per block.

- Whitefish Bay, Wisconsin, an older near-in suburb of Milwaukee, which accelerated teardowns from 1960 onwards by action of the village council.

- ecotones everywhere.

3. Parking lots

- capitalizing income.

- acquisitions to provide parking and access ways for retailers, employers, churches, warehouses, service stations and other drive-ins, auto dealers, etc.

4. Trailer park rentals

5. Buying for expansion, open storage, enlarging or "protecting" residential lots, etc.

6. Leases:

- farm: on best soils, share rentals give one half or more of crop to landowner; best soils jibe with soil maps based on natural conditions.

- fish: recent privatization of fishing rights in some areas, with licensee taking up to 80% of the catch while bearing none of the costs.

- oil and gas: rates vary because quality of lands vary, and are divided into at least three elements: royalty, delay rental, and "bonus" up front. Usually, but not always, the bonus is the

bid variable, soaking up the surplus where the royalty and delay rental are too low. In some regions, like Kern County, extraction costs are high and petroleum quality is low, and yet these areas were in production at much lower price levels than today's.

- retail: leases again have multiple elements, a base rate plus participation. Retail leases are largely land leases because they include use of landlord's parking spaces. Ratio of parking land to floor space in typical mall is five-to-one.

- water: contractors getting federally subsidized water from CVP at \$3.50 per acre-foot can sell to coastal cities for several hundred dollars per acre-foot (when they can overcome legal obstacles).

- land under urban buildings but owned separately: this is a surprisingly common arrangement in central cities and elsewhere. Examples from London (Grosvenor lands, Mayfair, et al.); New York (Empire State Building, Rockefeller Center); Illinois (Chicago's Merchandise Mart built on pylons over railroad tracks; Techny, in Northfield, IL. "Techny" has been owned for over a century by the Sisters of the Divine Word, hence has not been on the tax rolls for most of that time. It is inside the New Trier Township High School District, considerably enhancing its land value. It is two square miles straddling Willow and Waukegan Roads. Industrial parcels are leased to the Kraft Co., Crate and Barrel, and Ameritech, with modern industrial and office buildings on land they lease from the sisters. There are also hundreds of residences on leased land); California (Irvine Co. lands in Orange County, Seaciff Land Co. lands in Ventura County, et al., where ground rents on small lots just rose to \$3,000 per month); Hawaii, statewide, where leasing is the rule, not the exception ("fee simple" lands are rare, and command a premium).

7. Condemnation values: shoe is on other foot; owner wants to maximize estimated value. Domenigoni case, Riverside County near Hemet, site of new Diamond Valley Reservoir, the case went to court, seller got price of thirty times the assessed value. Case of Salt Point Park, Bay Area, similar finding. Case of Union Station, L.A., owners got \$39 per square foot for fifty acres, high above assessed value, but based on future use that would be contingent on rail lines proposed by the buyer itself—somewhat circular reasoning. Case of Leo Drey and the Current River area, Ozarks of Missouri.

New York State, some judicial rulings require that assessments be based on current use (*In rebus stantibus*), while condemnation values must be based on highest and best future use.

8. Observing height of buildings (Alfred Marshall's method). Height of parking structures, a quick rule of eyeball for land appraisers.

9. Interpolating by map, and GIS.

10. Violence and warfare. This does not yield any precise values, but it indicates the high value that many parties place on landownership, along with the power and political control that it embodies. Death squads in many Latin American nations operate to stifle demands for land. Iraq invaded Kuwait to establish control over oil, and today an American invasion of Iraq is threatened, with oil a primary consideration. American invasions of many Latin American nations have served to firm up land tenures there.

III. Estimates of market value

A. Some better-known trivializers of market value

Willford King, 1916. King was a statistician patronized by R.T. Ely, another trivializer of values, but one lacking data of his own. Allyn Young, among other reviewers, faulted King's methods, but was ignored. Marc Blaug, writing currently, still cites the authority of King. It reminds one of the classic article by Diane Paul, "The Nine Lives of Discredited Data."

Ernest Kurnow, 1961, *Theory and Measurement of Rent*. Kurnow simply took reported assessed valuations. He accepted their notorious inaccuracies by writing that the errors would tend to cancel each other out. This approach was soon dispelled by the pioneering Census of Governments work of Allen Manvel, from 1965. Manvel was sponsored by Illinois Senator Paul Douglas, former professor of economics at the University of Chicago, and used by Douglas in his Report of the National Housing Commission, 1967. Manvel relied on sales/assessment ratios, and showed patterns of bias in assessed values, systematically undervaluing land relative to buildings. Edwin Mills currently is citing Kurnow's work as "the best"—another life of discredited data.

Raymond Goldsmith, 1955, 1962. Goldsmith's work carried great authority, as he published for the NBER. Yet, his estimate of land values was simply a minor incident of his work, and was developed in a casual way. Even to find his methods one must trace through interwoven footnotes in two or more sources. He took the ratio of land values to the values of new residences insured by the FHA. This was 20%, which he lowered to 13% with no explanation—it is possible he even lost track of it himself, buried as it is in footnotes. He then extrapolated this figure to all real estate. The procedure is indefensible, opaque, and heavily biased to understate land values. Details are in Gaffney, 1971, pp. 176-77 and ff.

Later parties leaning on the above primary authorities are Edwin Mills, Marc Blaug, Robert Solow, LILP, Lowell Harriss, and Paul Samuelson. All of these have confidently declared land values to be trivial, but without any support from primary research of their own, and without mentioning published research (e.g., by this writer) indicating the opposite.

B. Primary sources that trivialize

1. Assessments for property taxation

As noted, the Census of Governments found these, over several quinquennial studies after 1965, to underreport land values.

There are several reasons why this happens.

a. To abet avoidance of income tax. Land is not depreciable for income tax; buildings are. The IRS does not check on the land/building allocation of basis reported by taxpayers, other than to advise them to use data from the local assessors. These assessors' constituents are the local taxpayers, not the IRS. The political pressure on them is therefore in the direction of understating land values, and they comply.

Before we had an income tax, and also when rates were low, the land share of assessed values was much higher than now. In California, circa 1920, the land share was 78%; today it is 40%—still higher than most people think, but much lower than then.

b. To abet regressive assessment. The land share of real estate value (LSREV) rises sharply with the total value of property. (Data available from B.C., California, Cook County, and elsewhere.) Where voters are of an egalitarian bent, and/or a developmental bent, land may even be overassessed. In recent times, voters have had other views, resulting in a propensity to

acquiesce in and even support regressive assessment (which tends to occur anyway, in the absence of political pressure, through the greater influence of wealthier people in court, etc.). In Winnetka, Illinois, for example, we now observe that residences east of Sheridan Road, with lake views, are assessed at about half the level of those in humbler areas on the old west side. (A humbler area in Winnetka is still valued at a minimum \$500,000 per unit—it's all relative.)

c. Tendency to assess by capitalizing cash flow, by law or custom. This results in omitting the non-cash or imputed service flows of land. Thus in many rural and most sylvan areas assessments must be based on capitalizing cash flow, however minor that may be relative to amenity values.

d. Preferential assessment by law. (Separate sheaf available with details on the virtual exemption of timber and timberland in California.)

e. Abatement of older political awareness of land.

2. NIPA

a. Omits rent in business profits, and mortgage interest.

b. Omits capital gains. Most rent from income property is converted to capital gains by fast write-off, followed by sale, hence disappears from NIPA accounts. Any serious scholar would detect this, and yet many economists mindlessly cite the rent figure in NIPA as authoritative on the point.

c. Uses IRS data on income from real estate. Congress has progressively legislated such favorable treatment of real estate income that NIPA's flow accounts, using IRS data, began reporting zero income from real estate—a result so ludicrous that they abandoned the series a few years ago.

Details on the income-tax treatment of land income are available from the writer. Understating income results from the interaction of four factors: converting ordinary income to capital gains by fast write-off; lowering rates on capital gains (and in NIPA's case, excluding capital gains from income); repeated depreciation by successive buyers; overallocating basis to depreciable capital, thus in effect depreciating land value, even as it appreciates in the market.

3. FHA data—Goldsmith's error, cited above.

IV. The public equity in land (or "ATCOR," All Taxes Come Out of Rent)

To the extent that supplies of labor and capital are elastic, all taxes are shifted to land, because its supply is inelastic within any taxing jurisdiction. Tax jurisdictions are defined as areas of land, but mobile factors come and go.

The economics profession has been surprisingly obtuse on this point, as illustrated by its taking seriously the Harberger model of tax incidence, wherein supplies of capital are assumed inelastic to the nation. (This follows the tradition of J.B. Clark, which the profession also took seriously.)

Most people recognize today that arbitrage tends to equalize AFTER-tax rates of return, meaning taxes on capital are shifted. This is of course illustrated in the market for tax-exempt municipal bonds.

The elasticity of labor supply is less widely granted. Yet, the dynamic population shifts within this nation, and around the world, suggest high mobility. In the early history of Chicago, 1833-1838, population arrived well before capital, resulting in extreme crowding of the available housing. In the ensuing crash, population left massively, while fixed capital took years to leave.

It follows that the public equity in land includes not just taxes on land itself, but taxes on labor and capital as well. To the extent that we can include this in land value, we get an extremely high figure.