

The Unplumbed Revenue Potential of Land

by Mason Gaffney

"You see, but you do not observe." — Holmes

The revenue potential of land is greater than anyone thinks. It should go without saying, but these days does not, that the purpose of raising more land revenues is not to fatten vexatious bureaucrats, but to replace vexatious taxes, to provide needed public infrastructure and services (including a reasonable national defense), to pay off public debts, and to fund social dividends (including existing social dividends like Social Security). This is a progress report on a study that identifies and unclosets elements of enhanced revenue potential by using truer and more comprehensive measures of rent and land values.

There are at least fifteen elements of land's taxable capacity that previous researchers have either trivialized, or overlooked entirely. First, we will consider corrections for the downward bias in standard data. The subsequent installments will broaden the concepts of land and its rent, and show how exempting production, trade and capital uncaps potential tax rates.

Standard data sources neglect and understate real estate rents and values. These standard sources are both local — assessed valuations used for property taxation, and national — as reported by various national agencies, most of whom use IRS data on reported rents.

The Local Problem: How Assessments Get So Wrong

I will only enumerate, not elaborate much on the many reasons assessed values usually fall short of the market. Scanning the bullets below, however, gives a clue as to how landowner pressure has subverted the property tax over the years.

- ❖ Conventional use of fractional assessments in many states (the property tax rate is applied not to the full valuation but to a percentage thereof, which has the effect of masking increasingly fictitious valuations).
- ❖ Lag of assessments behind the rise of land values, and behind the fall of building values with depreciation and obsolescence. Increasingly, this extra-legal process has been institutionalized, as in California's Prop. 13.
- ❖ Use of capitalized income method for assessing business properties (other than apartments, which are often overassessed). The bias is against intensive uses at every margin between lower and higher uses.
- ❖ Conventional preference given to acreage, regardless of location, regardless of industrial use. (Allis-Chalmers's large plant in the center of West Allis, Wisconsin, for example, was assessed several times lower per square foot than the adjacent parcels.)
- ❖ Classification of land for taxation, with preferential low assessment for

lower uses (rarely are assessments above the market for any use, except apartments and rentals for the poor). In California, some favored use-classes are farming, timber, and golf. Alabama has another set of low-tax classes, favoring land in forests and hunting grounds, catering to the Heston vote in league with absentee corporate owners (and, for no visible theological reason, organized fundamentalists). Lands in classified uses are assessed by capitalizing their visible money income from the official use only, thus exempting from the tax base all values from rustic manorial, recreational, and blood-sport uses, and all speculative values

A look at standard sources can leave the impression that there are two equally-valid methods of assessment: the "Land-Residual" and "Building-Residual" methods. What do these terms mean?

In the "Land-Residual Method", the income from the improvements is deducted from the total annual net income of the property. The resulting figure (presumably the income due to the land) is capitalized to give the land value.

In the "Building-Residual Method", the land is valued first, at market value, as though it were vacant, based on highest and best use. One then subtracts this land value from the total value of land and building as currently improved; the residual — if any — is building value.

Here's a New York street scene, to illustrate the difference. This is the corner of Lexington and 28th (the building has since been remodeled, but it was as you see it here for over ten years). The income from this building includes rent from the diner and the billboard company, but zero from the boarded-up apartments in the upper floors. A glance at the large buildings to the rear, and two doors down, shows that the highest and best use of a lot in this neighborhood, particularly on a corner, would be much greater. Nevertheless, a land-residual assessment of this parcel will yield a much lower figure for land value (for, as in many cities, New York publishes separate figures for land and buildings) than the nearby lots that have bigger buildings — and, unfortunately, that is just what a look at NYC's assessment rolls will show.



Building values are determined by examination of the factors of cost, depreciation and regulations upon the building's use. Land values depend on location, location, and/or extractible resources. The "Building-Residual" assessor understands that the income stream from the building that sits upon it has nothing whatsoever to do with the *land's* value — that a vacant lot has the same value, per square foot, as its neighbor that sits under a huge building. The "Land-Residual" method fails to recognize that fact, and therefore cannot provide accurate assessments of the market values of real estate.

— L. D.

based on higher future uses. In vast rural and sylvan areas these other influences are the main source of market value.

- § Assessments capped by zoning, even when the market does not believe the zoning will endure, or be enforced.
- § Regressive assessments, swayed by case law which reflects differential ability to finance lawsuits and appeals.
- § Discounts for large lots or other holdings that would sell for a price based on their potential for being subdivided.
- § Failure to publicize assessed values. In some states the values are not even open to public inspection. (Lee Reynis, Director of the Bureau of Business and Economic Research, University of New Mexico, told the CGO audience of secrecy enforced by law in New Mexico.)
- § Reluctance to recognize the premium for plottage potential (the gain in value p.s.f. when small lots are combined, say, to create a lot big enough for a high-rise building).
- § Exempt lands, owners, and land uses. Churches, often targeted by critics, are minor offenders. Cemeteries are major: they also include commercial ventures holding vast lands for future sale. Commercial or not, they consume more than their share of water, often at preferential rates. In industrial-dependent Milwaukee, cemeteries preempt more space than all industry, which helps account for the city's 20% population decline since 1960. Public lands held by schools and the military tie up much of San Diego. New York City and Washington, D.C., are notorious for their "free lists" of exempt lands. Once an agency acquires land it never again appears in the budget, so bureaucrats squander it.
- § Homestead exemptions — widely abused in some states.
- § Preferential underassessment of lands with low turnover. Extreme underassessment of lands that do not sell: corporate holdings; proprietary golf clubs; dynastic holdings; inherited lands.
- § Rights of way. Assessors ignore monopoly power inherent in ROW, merely assessing ROW land on its value in the best alternative use
- § Rail and utility adjunct landholdings (i.e. other than their ROW). These are state-assessed, not on local tax rolls; are assessed as acreage, usually, which means underassessment; anyway, taxes are passed on to ratepayers in the rate-regulation process. (Some examples: vast holdings by rails, e.g. 10% of Chicago; 5% of Milwaukee; vast SP holding south of Market Street in San Francisco; hydrocarbon holdings by regulated utilities.)
- § Discounts to large owners who have policy of slow sales or leasing. (Such discounts are given to Oregon timber; to Appalachian coal; and many extractive resources. They are given to laggards in ecotones*.)
- § Conventional reluctance to base assessments on speculative values, even

when condemnation awards are so based.

- § Failure to assess land first, using maps (with building value as the “residual”).

The National Problem: Internal Revenue Data

Many economists rely on data generated by the IRS, taken from tax returns, to tell them the sources of income in the US. This is an exercise in crediting bad data. The standard tax procedure of landlords is to deduct alleged “depreciation” from their net operating rents (“cash flow”) to arrive at taxable rents. They accelerate depreciation enough, usually, to report little or no taxable rent. This is what the IRS then aggregates and reports as the sum of all rents. To accept such fiction as fact is inexcusable, but economists do it anyway. Their credulity lends their authority to the IRS, while the IRS “official” status helps legitimize the economists — mutual validation of mutual error, the curse of science.

When owner A has exhausted his tax “basis” by overdepreciating, he sells to B for a price well above the remaining basis. B then depreciates the same building all over again, then sells to C, and so on — each building is tax-depreciated several times during its economic life. In any given year, most income properties in the U.S.A. are being tax-depreciated, even though most have already been depreciated at least once.

In addition, all owners after the original builder are in a position to depreciate some of the land value, as well. This is because the owners control the “allocation of basis” between depreciable building and non-depreciable land. The IRS has no defense against secondary owners who overallocate value to the depreciable building. Congress has never authorized the IRS to develop any in-house capacity to value land. The most the agency does, if it will not accept the word of the tax filer, is to look at allocations used by local assessors. These parties, in turn (with a few notable exceptions), underassess land relative to buildings, by using the “land-residual” method. This is partly to accommodate their local constituents — assessors are locally elected or appointed, and do not report to the IRS. A little math will tell you that to depreciate land just once is to achieve perpetual tax exemption. To depreciate it again and again is a continuing subsidy for holding land.

When A sells to B there is a large excess of the sales price over the remaining or “undepreciated” basis. This excess is, to be sure, taxable income. However, Congress has defined this kind of income as a “capital gain.” Most rents, therefore, show up as capital gains. These, in turn, are subject to lower

**Urban transition zones — such as the long-derelict parcels underneath I-93 in Boston, which are soon to become choice real estate, thanks to the taxpayers, along the new “Greenway” as the old elevated highway is removed to complete the “Big Dig”. — L.D.*

tax rates, deferral of tax, forgiveness at time of death and constant political pressure to lower rates to zero. These are known to every lawyer, accountant and Congressman, but apparently not to most economists, who lazily report from “official” data that rents are a low fraction of national income.

In addition, the IRS reports nothing at all for the imputed income of owner-occupied lands, because this kind of non-cash income is not taxable. Todd Sinai and Joseph Gyourko of the Wharton School reported aggregate owner-occupied “house” values in the U.S. in 1999 were \$11.1 trillion. The annual rental value of that, figuring at 5%, would be roughly half a trillion dollars a year — quite a chunk to omit from the rental portion of national income. We also know that the prices of lands for both housing and recreation have risen sharply since 1999, perhaps by 50% or so, so that \$11.1 trillion may be over \$16 trillion now. That means that the imputed rent income is 50% *higher* than half a trillion (more like, in other words, \$750 billion per year), and also that the net worth of the owners has risen by about \$5.6 trillion. Such silent gains are also a form of income from land. To all that, many economists remain blind, dumb, and curiously incurious.

Sinai and Gyourko’s treatment is superior to what one usually sees, with some effort made to treat land separately. However, even they, like others, write of the imputed income of owner-occupied “housing,” exclusively. That is doubly misleading. First, it emphasizes the building. That is wrong because the income properly imputable to the house *per se* is much less than its rent equivalent. The house requires constant expenses for upkeep, heating, maintenance and repairs, cleaning, painting, etc. The house also depreciates, physically. Those expenses and the depreciation must be deducted from the rental equivalent to get the net income.

The land does not depreciate physically, and so its rental equivalent is its net current income. Usually, it appreciates in value, and that annual increment is also a current income. So the “imputed income of owner-occupied housing” is mostly attributable to the land — but no one is saying so.

Second, the standard characterization of “house values” misleads by omitting vast lands beyond the narrowly defined “house” lot, which includes the land under the building and a little yard or curtilage. What about other lands held for the owners’ personal enjoyment? No agency collects data on such lands and their values, but common observation tells us they are vast and valuable, and dominate values in many “rural” counties.

Another Lode of Error: The “NIPA” accounts

The standard source of data on GNP and its components is the National Income and Product Account (NIPA), kept and published regularly by the U.S. Department of Commerce. When it comes to rent, NIPA

depends on the IRS figures, which thus are passed along to all students of economics as the “official” accounting. We have just seen how far from reality these data are.

NIPA is worse, in a way, because it explicitly excludes “capital gains” from National Income. That is, first the IRS converts rents into capital gains, and then NIPA banishes capital gains from GNP, National Income, and National Product. “Capital gains” is an artificial term, that includes all gains realized from the sale of what Congress defines at any time as “capital assets” — which include land and improvements, housing, common stock, growing timber, breeding herds (including race, show and riding horses), mineral and hydrocarbon reserves in the ground, and several other favorite holdings of the rich and well-connected. As we saw above, most commercial rents show up as capital gains, so that NIPA does not report them at all. Then along come highly visible economists, like Paul Samuelson, Robert Solow, Theodore Schultz, Edwin Mills and Jan Pen, to look up this datum, and declare that land rents, at no more than 5% of national income, cannot possibly support modern governments. This is unfortunate, and quite misleading.

NIPA does, however, make a gesture at including the imputed value of owner-occupied housing. Whether they do it right is a question on my agenda.

Other Prestigious Sources of Error

The Federal Reserve Board is ensnared in the same intellectual webs as the other agencies, so its nominal independence is wasted. Michael Hudson has dissected FRB methods, which resulted in reporting rents of income property far below reality. The *reductio ad absurdum* arrived when its clerks, evidently plodding “on automatic,” duly reported that the rents of all the income property in the USA are negative. Someone in authority finally noticed, was embarrassed, and discontinued the series.

Many economists treat numbers from the National Bureau of Economic Research (NBER) as iconic. The press routinely cites their datings of US recessions and recoveries as “official.” Many writers cite Raymond Goldsmith’s estimates of United States land values, dating from 1955 and 1962, as “authoritative,” because they carry the NBER imprimatur. Yet they do not bear examination, even for their times. They were generated as incidents to other work in an offhand and indefensible way.

It is not easy to retrace Goldsmith’s steps; one must track interlocking footnotes from several sources. At the end of the trail, however, he simply takes residential land value as 13 percent of real estate value. The basis of this allocation is the share of land in the cost of houses insured by the Federal Housing Authority, which was about 20 percent. (He does not explain why he cut this down to 13 percent.) Goldsmith applies this basis to nonresiden-

tial real estate as well. As for corporate-held lands, he enters them at book value — an attitude that opened the door to an epidemic of corporate raiding. Goldsmith also seems to omit vacant lots and unsubdivided land.

These methods are not worthy of the faith with which several economists cite the results. FHA-insured houses are not typical. They tend to be new and on cheap land. Those not new are not very old — in 1967 the median age of insured existing homes was thirteen years. To apply such data to a typical American city, most of whose dwelling units in 1965 antedated 1920, was outlandish then, and even more outlandish today.

FHA clientele is lower middle class, which means the land share is low, land being both a consumer luxury and a rich man's hedge. Land share rises sharply with overall value. The high land share in enclaves of wealth such as Beverly Hills, Greenwich, Belvedere, Santa Fe Springs, Palm Beach or Kenilworth is missing from FHA data.

The FHA is most active at the expanding fringe of cities. A basic fact of urban land economics is that the land share rises toward the center. In Manhattan, for example, the share of assessed land value has always been higher than in the other boroughs.

Applying a land fraction derived from residential data to commerce and industry is not believable. The land share is highest in retailing, the more so now that retailing entails vast parking areas. Filling stations and drive-ins of all kinds entail vast aprons for small buildings with short lives. Some retailers, such as auto dealerships and lumber yards, store their inventories outdoors. Many wholesalers and industries do the same: tank farms, railroad yards, utility easements, industrial reserves, dumps, salt beds, terminals, heaps of coal and salt and sulfur, and so on and on. In downtown Milwaukee, half the assessed value is land. In Manhattan, it is instructive to consider the Empire State Building. If ever a structure overdeveloped a site, this should be it. Yet in two transactions since 1950 the site was valued at one-third the total. One may infer what this implies of the whole island.

Anyone active in real estate would have caught Goldsmith's error. Yet it passed muster with the NBER, his publisher the Princeton University Press, and several learned academic reviewers. This is not a measure of their general incompetence, but of the extent to which academicians have walled themselves off from anything bearing on the realities of land values and rents. Goldsmith treated land carelessly, as a trivial side-issue, and his finding was ignored by everyone except those who needed to invoke an authority to trivialize land value.

Another Goldsmith error is to exclude subsoil assets. In cities overlying oil pools, like Huntington Beach, that would make a big difference. In

most cities that may not matter, but is symptomatic of how insouciantly Goldsmith handled this whole matter of land values.

Ernest Kurnow's Work Under Lincoln and Moley

Ernest Kurnow low-balled land and rent values in a chapter in *Theory and Measurement of Rent* by Keiper, Kurnow, Clark and Segal, 1961. In an introduction, the authors thank the Lincoln Foundation for financing their work, and go on to thank David Lincoln and Raymond Moley personally for intellectual guidance. Then, extraordinarily, they omit the standard disclaimer which absolves their advisors and takes full responsibility for their own work. This is a unique omission. *Res ipsa loquitur*: David Lincoln is speaking. That helps explain why researchers seeking full estimates of land values seek in vain at the Lincoln Institute of Land Policy.

Kurnow's basic source is tax assessments. He accepts their allocation of value between land and buildings. He admits that errors are possible, but dismisses them because "in all likelihood there is a tendency for such errors to cancel each other." We have seen how wrong and biased that is. He does not even correct for the assessment bias shown by sales-assessment ratios of Manvel's *Census of Governments*, nor for the greater degree of underassessment revealed by mapping of land values. He does not consider any of the 18 bulleted points shown above.

In short, **the Land Fraction of Real Estate Value is much higher than standard modern sources show.** One of many indications is that on most assessment rolls the value of old "junker" buildings, on the eve of demolition, is listed as higher than the land under them. It should be obvious that the old junker has no residual value: that is why it is being junked. Real estate people recognize this concept instantly. It is not obvious to everyone, everywhere, which helps keep it concealed, and provokes a lot of nostalgic resistance. People who make a virtue of recycling old cans and papers can be oblivious to the much higher social value of recycling old urban sites. Many of these old "junkers" even appear sound and valuable, as in enclaves of high values like Winnetka, Illinois, or Beverly Hills, California, but suffer from "locational obsolescence," which is the key concept. That means the growing value of the underlying site for recycling has cannibalized the residual building value.

Most modern economists who look into these matters rely upon the standard sources I've listed here, mindless (or perhaps even glad) of their downward biases. Young students are intimidated and awed, or at least impressed and convinced, by the "official-looking" auspices of the standard sources.

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