

What Is Property Tax Reform?*

By MASON GAFFNEY

CAN PROPERTY TAX REFORM help the propertyless, the working men and women who-labor-for-wage incomes—the majority of Americans? Property is owned by people of property—the rich. Ownership of this rich tax base is concentrated in a few hands, much more so than income. The top 10 per cent of income receivers in the United States receive something like 30 per cent of the income, and we call that concentrated. But a high share of that 30 per cent is property income, while lower bracket income is more largely composed of wages. Most property income receives privileged tax treatment of various kinds, so the effective income tax rate applied to property income is much lower than that on labor earnings. Moreover, official definitions of income are so sloppy that much property income is not even included in the data, much less taxed.

As to concentration of property, about half the people own none; they are tenants. So we begin with the top 50 per cent of families owning 100 per cent of the property. They are not an underprivileged class, but some are more equal than others. Among those owners I estimate the top 10 per cent—that's 5 per cent of all families—own around 60 per cent of the property. No overall data relevant to the property tax base are available, but some aspects of the base are measurable.

The top 2.3 per cent of farmers had 43 per cent of the farm land as long ago as 1950. If the Census Bureau measured farm land by value instead of area the concentration would not have been any less (1).

Since 1950 the rate of engrossment has not slackened, so today control is even tighter. Federal subsidies lavished on these favored few in proportion to their landholdings are legendary. The effective rate of the property tax in rural areas is about 1 per cent.

I

CONCENTRATION OF URBAN PROPERTY-HOLDING

URBAN CONCENTRATION is less well documented. I analyzed the assessed value of real estate on the west side of the Milwaukee central business district (C.B.D.) in 1969 (2). The top 10 per cent have 53 per cent of the assessed value there, and more elsewhere. If the names lurking behind

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the disguised ownerships were known, I believe the top 10 per cent would have a good deal more.

The largest owner in the small study area was the William Plankinton Trust. Its properties were worth \$6 million. That is also the value of 1,200 slum dwelling units valued at \$5,000 each (many in Milwaukee sell for less than that). That should be recalled the next time someone speaks of the poor man's stake in property tax relief.

The Schlitz Company is on the rolls for \$3 million in the small study area. This omits the brewery that made Milwaukee famous. It omits the family's (their name is Uihlein) 200 acre "farm" on the choicest residential site in the county, by the lake in posh Bayside where land goes for more than \$20,000 an acre ($200 \times \$20,000$ equals \$4 million). It omits the Polo Grounds on the speculative northwest side. And who knows what else? For the larger the ownership in one area, the more likely is the owner to hold land outside it, often around the country and the world.

On the East Side of Milwaukee's C.B.D., I found the top 10 per cent own 60 per cent of the value of the property.

I ranked Milwaukee's industrial firms by assessed value and found the top 10 per cent to have 89 per cent of the assessed value of industrial land and buildings. In this study I also found evidence that assessment of industrial *land* (I do not know about buildings) is regressive, indicating the top 10 per cent have a yet higher share of the true value of property—but this is a point that need not be pursued here—89 per cent is high enough. The point is that taxable property is highly concentrated in the hands of a few, even in Milwaukee which is notable for diversification. In Seattle, Dearborn, and Gary one might expect to find even greater concentration.

It is noteworthy that these big owners, the firms with 89 per cent or more of the property, employed only 69 per cent of the workers. It is the small shops that hire more men in proportion to their assets.

II

THE TAX YIELD REDISTRIBUTES INCOME

TURNING TO EXPENDITURES, much of the tax money raised from this progressive base is used redistributively, to pay for schools and welfare. The property tax is the traditional means in American law whereby the poor assert their equity as citizens in the property to which the rich hold title. It is as good a claim as the other, the one we call 'property' in fee simple. The public claim in fact is prior in law—taxes are senior to mortgages,

for example. The public claim is not limited. The fee holders' right to retain what is left after taxes (and debt service) is not a contract between him and the State, it is a matter of legislation and common law. Like eminent domain, taxation of real estate expresses the ultimate sovereignty of the State. I assert this not as a revolutionary but as a believer in law and order in a nation whose laws are radical enough to let the poor accomplish more than any revolution, if they only will learn how.

The property tax base is big and strong. The national levy on property now is around \$40 billions (3). There is gnashing of teeth and rending of garments. The pain of the wealthy is loud and they never lack sympathy. And yet the market value of this tax base keeps rising, rising in the teeth of higher tax rates *and* higher interest rates, the latter at 6½ to 7 per cent making most tax rates (about 2 per cent) look small. Allen Manvel estimated the value of taxable real estate in 1967 at \$1.4 trillion, double the 1957 value (4); and to that must be added the value of minerals, timber, water rights, and a great variety of miscellaneous forms of property I think escaped his net. (The owners of nearly \$2 trillion of real estate value are not a collective welfare case; they just sound that way. That is not so funny when one considers the punitive and destructive way we treat many real welfare cases.)

"Property tax relief" for the orphaned blind widow in the ivy-covered cottage is a popular theme. But that means sloughing the social obligation of property onto others. How? Sales taxes, including their most regressive form, the value added tax, hit the poor. The so-called income tax has degenerated into a payroll tax primarily, because property has learned to duck it in a thousand clever ways. "Social security" is a slick name for another payroll tax, the most regressive one going. The corporate income tax cannot touch unincorporated property and is full of loopholes that corporations can use by misallocating their resources.

Naturally property owners resist sharing with the propertyless. But the struggle of the poor in America has been fought before, and won. It is a repetitive theme in our history. Each generation of poor must fight the battle anew, must rediscover the levers of power that our system avails them. The Nation survives because the establishment has some give, and is attuned to accommodate—however grudgingly—some of the demands of the poor.

That requires pressure from the poor, and this we have. There are plenty of excitable ready to march, confront, agitate and demonstrate.

It also requires know-how, so far not much in evidence. Pressure alone is not enough. If the poor could rout the police and loot at will they would enjoy only a one-shot gain, with nothing to loot tomorrow. But know-how! There is a permanent revolution, built right into the system we already have, with the police coming down on the side of the poor.

The method is taxation, which is tempered looting according to rules that can be quite constructive and provide a permanent support for welfare, education, and many other things.

III

REFORM PRIORITY NO. 1—LAND ASSESSMENT

WHY DON'T THE POOR know how? It's not that no one tells them, and it's not that they never listen. The problem is that so many are telling the poor so many and complex and confusing things they don't know whom or what to believe, and their energy is lost charging down blind alleys following delusions. Property's spokesmen ask for tax relief—and the sales tax. They defend regressivity in the rhetoric of progressivity.

The defense of property is to generate negative information to clog the channels of communication. This is the problem. And the citizen with special training in economics and public finance is the solution, because he or she is dedicated to finding and publicizing positive information—some call it truth.

Negative information on the property tax now circulating makes a long scroll. But high on the list is the refrain that it is regressive. A high-powered, organized, well-oiled campaign has been mounted to persuade us that we can help the poor by shifting taxes off property onto the Federal Payroll Tax—usually called the income tax for public relations purposes.

To make the property tax look as though it socks the poor when most property is so closely held calls for some fancy sophisms. In my analyses of basic studies alleging the property tax to be regressive, I have defined 17 fallacies, and I fear my list is not yet complete (5). The main argument has to be that the tax is shifted. Indeed some go so far that they seem to say that big owners shift it and only widows and orphans really get stuck with it. (This exaggerates, but not much.)

To the extent there is any truth in the shifting thesis—and I grant readily that there is some—the process can be stopped by reforming the property tax.

Reform Priority No. 1 concerns the assessment of land. Much of what is wrong with the property tax can be remedied by upgrading land assessment, so it is a big step, one sufficient alone to benefit us greatly and necessary to most other steps.

I see seven good reasons why land assessment is our No. 1 Priority:

1. Taxing land encourages good use; taxing buildings doesn't.
2. Land is more underassessed than buildings.
3. Land is a large share of real estate value.
4. Land ownership is more concentrated.
5. Regressive assessment is most evident with respect to land.
6. Citizen involvement is most feasible with respect to land.
7. Correct land assessment is necessary to close loopholes of the income tax.

IV

TAXING BUILDINGS IS OFTEN COUNTERPRODUCTIVE

A CRITIC OF THE PORK BARREL once defined an engineer as a man who tells you the very best way to do something that shouldn't be done at all. The same might be said for the art of assessing buildings. The city of Milwaukee illustrates the tragedy of good assessment applied to the wrong base. For years Tax Commissioner Thomas Byrne was one of the best: honest and true, capable and respected. And did Milwaukee then flourish? The record shows that it did little but grow older under this exemplary regime. A heavy tax on capital is not much more attractive to investors by virtue of being levied accurately.

When taxes on buildings are increased, a city increases the danger that it may stifle renewal. Newark, Boston, and in lesser measure Milwaukee, each with real tax rates over 4 per cent, serve as cases in point.

When buildings are taxed, the tax on a parcel of real estate depends on the use to which the owner puts it. If the tax is high enough to matter, it biases owners against the heavier-taxed use. It biases them against supplying new floor space and shelter, and in favor of billboards, gas stations, junkyards, open storage, parking lots, baronial estates, obsolescence, speculation, and dilapidation. In general it favors old over new and ranks high among factors that retard urban renewal. It tends to restrict supply and maintain rents paid by the poor, thus shifting some tax to the poor and putting what regressive element there may be in the property tax.

Taxing buildings raises the spectre of interurban competition and puts a ceiling on feasible property tax rates, limiting the revenues it can raise.

Capital has loose feet. Land, on the other hand, has only square feet; you can tax the very all out of land and not one square foot will get up and walk out of town—not one.

So to help the unrepresented, it makes more sense to raise land than building assessments, at least to the point where true market value is reached.

V

LAND IS MORE UNDERASSESSED

EVERY STUDY of assessment discrimination finds land to be the most underassessed class of property. The most comprehensive study is the *1967 Census of Governments*, Vol. II (6). On p. 42 appears a summary for the whole United States. The Census Bureau compared assessed values to sale prices of parcels of real estate sold over a period, and arranged the results by classes of property. For "all types" the assessment to sales ratio is 31 per cent. That is a measure of the fractional assessment conventionally practised. Let's call it "parity." Any class assessed at 31 per cent is assessed at 100 per cent of parity; 15½ per cent is 50 per cent of parity; and so on.

The lowest assessment to sales ratio is for the class called "Acreage and Farms," at 19 per cent. That's 61 per cent of parity. Next is "Vacant Lots" at 24 per cent, which is 77 per cent of parity. "Residential" is at 35 per cent, or 113 per cent of parity; and "Commerce and Industry" at 36 per cent, or 116 per cent of parity. The last figure refers only to very small holdings, because the Census excluded holdings larger than \$250,000, which means it excluded most commercial-industrial property, an enormous omission. Yet it is clear that interclass discrimination of a gross order is the rule nationwide.

Interclass discrimination like that is not reflected in the Census statistic assessors usually cite to evaluate their work. This statistic is the "Coefficient of Dispersion." It is a kind of average of the deviation of assessment ratios from 100 per cent of parity. Coefficients under 20 per cent are considered passing—sort of like a D grade in school—and under 10 per cent pretty good. Many assessors flunk.

But those who earn high grades (low coefficients) and wave them around are not necessarily doing a good job. "The" Coefficient of Dispersion is really only "a" Coefficient of Dispersion, a partial score. It is computed from one class of property only—single family residences. An assessor can enter land at zero and still get good marks on his Coefficient.

Look at Maryland. It gets the best marks for a low Coefficient of Dispersion, and enjoys the highest reputation for good assessment. Yet

its interclass bias is bad. On p. 44 it is reported that assessment parity in Maryland is 43 per cent. "Acreage and farms" show an assessment to sales ratio of 18 per cent—that's only 42 per cent of parity. Vacant lots are at 29 per cent, 67 per cent of parity. But residential property gets hit for 117 per cent of parity. Comparing classes directly, that means residential property is assessed nearly 3 times too high compared to acreage and farms. *Three times* too high! That's not just one deviant; that's a systematic bias between classes. And that's not a chamber of horrors case from Arkansas, Mississippi, or Alabama. That's Maryland, a beacon light in the assessment jungle.

The truth is even sadder than the Census shows. Census Table 9 which I have been citing doesn't dig into the worst abuses. The Census omits that class of land most underassessed: unsubdivided acreage inside Standard Metropolitan Statistical Areas (SMSAs). Its class called "Acreage and Farms" is only outside SMSAs; and "Vacant Lots" means subdivided, improved lots. But a large share of all land inside SMSAs, maybe half or more, is unsubdivided acreage. This is the stuff assessors can't see, and the Census hasn't touched it.

Look at Michigan. The Census gives Michigan fair marks on interclass bias; parity is 29 per cent; acreage and farms are at 25 per cent—not bad by Maryland standards. But Professor Dan Fusfeld of the University of Michigan studied Michigan assessments independently in 1969. He zeroed in on the neglected class—acreage inside SMSAs. He pronounced it a "scandal" of underassessment (7). One Michigan city, Southfield, wrought a modern economic miracle by electing a mayor in 1962 who had acreage assessed at value. The mayor—James Clarkson—and his assessor, Ted Gwartney, tell me that this meant multiplying previous land assessments severalfold.

This is consistent with my findings in Milwaukee. The Census says that parity in Wisconsin is 49 per cent; acreage and farms are at 35 per cent; and vacant lots at 23 per cent—or 47 per cent of parity. That sounds bad, and it is. But I found worse. After extended study and data collection and map analysis I estimated Milwaukee land values to be \$2.3 billions. The assessor's values, when equalized, total \$700 millions—that's 30 per cent of parity. The details are presented in a book edited by Daniel Holland, *The Assessment of Land Value* (Madison, Wis.: Univ. of Wisconsin Press, 1970).

Of course there are worse cases. For instance, Edgartown, Massachusetts, where some land was not even on the tax rolls until 1969 when

they started finding it on aerial photographs. Or Sonoma County, California, where the state paid 62 times the assessed value for Salt Point Ranch. Or Jasper County, Missouri, where an assessor was forced out after using a university soils expert to help reassess farm land. Or Texas, where Nader's Raiders have documented systematic underassessment of oil and timber lands. But I must not belabor my point. Land assessment is the No. 1 reform priority because assessors have been favoring it scandalously.

VI

LAND IS A LARGE SHARE OF REAL ESTATE VALUE

MOST PEOPLE have no notion of how high a share of real estate value is land value. Returning to Milwaukee, the present land assessment is only 23 per cent of the whole. My calculations triple the land figure. That does not triple the land share because it also raises the total, and I don't know by how much because some of the increase represents simply a reallocation of value from building to land while some is a net gain. The detail, indeed, gets complex. But I'm sure land is over half the total—when land is rigorously assessed—by comparison with current sales of adjacent land.

The District of Columbia enjoys superior assessment. Assessor John Rackham worked over land values a few years back and brought them up to 43 per cent of the total. I suspect my approach would put them higher yet, but one new broom can only sweep so clean in a complex institutional setting.

In California, Ron Welch of the State Board of Equalization estimated land values at 43 per cent of real estate. That was a few years back. Mr. Welch and I have a friendly disagreement about the use of maps to infer and interpolate land values between sales data points, and if he says 43 per cent my methods would probably yield a higher figure. More recently Bob Gustafson, a statistician who works with Mr. Welch, set the figure at \$70 billions. (That's as much as anyone would admit the whole United States was worth a few decades ago, which gives some idea of the magnitudes involved.)

These figures apply only to land in an orthodox limited definition. They do not include many natural resources held by license or in other exotic legal-administrative form. Reform of land assessment should include the project of getting these penumbra properties classified as taxable real estate.

For example, the California figures I cited do not include the value of

hydroelectric power drops controlled by Pacific Gas & Electric and Southern California Edison. There is no market in waterfalls, so they give up and call the value minute, which is nonsense. Big western stockmen graze their herds on our federal land at nominal rents. These rights are worth millions, maybe billions, but they are not directly taxable. The rent, of course, is recoverable through grazing fees. Broadcast licensees enjoy virtual tenure of a nondepreciable frequency band—tax free. The rent, again, could be recovered from a franchise fee. And so on. Get these assets in the property tax base as an alternative to a fee system and the widow in her ivied cottage could truly find tax relief.

VII

LAND OWNERSHIP IS MORE CONCENTRATED

REFORMING LAND ASSESSMENT is Priority No. 1 because the rich are more heavily invested in land than in buildings.

Nader's Raiders, after a survey in Savannah, Ga., charged that substantial landholdings of the Union Camp Corporation there were under-assessed. This corporation holds 1.6 million acres of land elsewhere in the southeastern states. This is mostly timberland, but several new highway interchanges are on its land. A recent inventory by U.C.C. disclosed that 40,000 acres which they held were worth *more* than \$400 per acre—a total of \$16 million or more for this portion of the corporation's landholdings alone. Continental Can, another Savannah firm, has 1.3 million acres of land in 7 southeastern states.

It was not by chance that the Savannah Raiders stumbled on landowning corporations. The corporate form of organization originated as a landholding device, and it still is that above all (8).

Larger corporations tend to invest more heavily in land than smaller ones. Ranking corporations by value of assets, 6 of the top 11 are mineral-based: U.S. Steel and 5 oil companies. And the large corporation is not just interested in minerals. There are 324,000 gas stations in the United States, mostly in cities on what speculators would call hot corners; the land totaling \$16 billions or more in value as an educated guess. Professor David Martin of Indiana University has shown that larger mineral corporations also tend to hold more mineral reserves in relation to output (9).

Turning to residential sites, the share of land in residential real estate value rises steadily with total value. This is shown in the Kaiser Commission Report (10).

Professor Harold Brodsky of the University of Maryland, in his study of the District of Columbia, ranked Washington Census Tracts by median income and found the land share in real estate to rise with income (11). The method he used was multiple regression analysis, but anyone who tours Foxhall Drive can make the same discovery by field inspection.

At the bottom of the heap, in Milwaukee 23 per cent of the families live on buildings the sites of which cover 3 per cent of the residential area. These are the slums, where the residents pay a base price for a roof over their heads regardless of the neighborhood. The poor use little land area per person, and the land is cheap because of the neighborhood. Several studies show that the poor think shelter while the rich think neighborhood—that is, land value. And the super-rich? 1,000 acres of front yard is nothing to a family in the upper crust, and one family may hold several such estates scattered around the jet-age world. They have lain field to field until there be no place, that they may be alone in the midst of the land—in the words of Isaiah, a prophet who foretold more than Christmas day.

Turning to commerce, in Milwaukee I ranked the holdings of the C.B.D. by value. Then I figured the share of land in each decile—that is in each 10 per cent of the holdings. The share rises with size of holding. The trend is less steady than might be expected, but I think that is because of the small numbers and some technical problems arising from the data.

As to industry in Milwaukee I ran a study of 626 industrial firms. Here my data are better—I have a way of estimating market value of land from my map, rather than relying on assessed values. For the top 10 per cent the land share is 35 per cent; and they reported much additional land held for expansion. For the smallest 10 per cent the land share is very low—under 5 per cent. Of course the smallest industrial firms are often little more than old garages converted to tool and die shops.

What the data reveal is that the land share rises with value of real-estate holdings. Theory predicts this, too. Raising land assessments therefore will make the property tax bear heavier on larger owners than it does now, and it will make the tax more progressive.

VIII

REGRESSIVE ASSESSMENT OF LAND

IT IS THE CUSTOM to assess large industrial tracts at less per acre simply because they are larger. Assessors defend this on the ground that large

tracts sell for less per acre. One might think that they had never heard of subdivision. Yet at the same time, the City of Milwaukee land bank is stockpiling large industrial tracts as bait for giant industries that allegedly put a premium on large, unsubdivided tracts.

These attitudes obviously lead to regressive assessment of land. I was unaware how far this went, however, until I ran my study of the 626 industrial firms. Since I had my own estimate of market value of land to compare with assessed values, I could figure assessment to market value ratios for each firm and then compare the treatment given the large and the small. The findings are startling. The top 10 per cent had their land assessed at 20 per cent of parity. The bottom 10 per cent had their land assessed at 200 per cent of parity—10 times too high compared to the biggest firms.

It may be, of course, that there is some compensatory underassessment of the buildings of the small firms. But there is no way of checking that. All one can be sure of is that the assessment of industrial land in Milwaukee is regressive beyond belief.

A key factor in this pattern is the bias against subdivision. The smaller the parcel, the higher unit value the assessor gives it. Assessors defend the practice. Moreover, raw acreage is left at farm valuation until subdivided. *Then* the assessors raise the value—not just by the cost of subdivision but by all the pure unearned increment that has accrued over 30 years. So the big owner—no matter whether he calls himself a farmer, speculator, investor, or orphan—the big owner gets the low assessment, and the 50 small owners he sells to get high ones. That is not just an industrial pattern, it is universal. The result is regressive land assessment. Since most residential land is subdivided and most industrial land is not, this is also a bias against homeowners relative to industry.

I know of no comparable pattern leading to regressive building assessment. Land assessment is reform priority No. 1 because that's where assessment is demonstrably regressive, and reform is demonstrably easy: all the reforming assessor needs to do is use a map and apply standard unit values regardless of parcel size.

IX

CITIZEN INVOLVEMENT

FOR AVERAGE CITIZENS it is more feasible to check on land than on building assessments. Anyone can read a map, and anyone can use known values to estimate unknown values nearby. In my study of industrial land

values, I inferred them from sales of all land round about. Land is versatile, and all uses compete for it. So residential land values, which everyone knows, tell a lot about industrial land values. House values on the other hand tell little about overhead cranes, warehouses, pulp mills, and breweries.

The assessor who wants citizens to get involved can publish city land value maps. The cost is not prohibitive, and it's been done before. Milwaukee did it in the early 1930's, and I have a collection of land value maps from Budapest, Copenhagen, Chicago, Vancouver, Sydney, etc. They make good conversation pieces, along with aerial photographs.

Assessors really don't know much about valuing big industrial complexes, and they say as much. How could they? The properties are rarely up for sale. There's no objective reference point. How can the citizen inquire intelligently into a subjective judgment?

With land there is a foolproof test of good assessment. Theory and common sense tell us that if a building is demolished, it is done to salvage the land underneath. That means the bare land is worth more than the land together with the old building; and this means the old building had no value. In fact it had a minus value—the cost of demolition.

So to test the assessor, check on the eve of demolition. The land share should be 100 per cent or more—the building is worth zero. It is that simple. Most assessors flunk this test cold, which gives the timid inquiring citizen the confidence he needs to ask more questions.

In Milwaukee I checked 2,500 demolitions and the assessor was generally allotting half or more of the value to the old junkers, less than half to the land. That gives you some idea of what to expect from a test of this kind.

One may generally expect a friendly reception from assessors, even when he is critical. They are pleasant human beings—how else could they survive in that job? They take a lot of flak from the ignorant and neurotic. Unless of course, they are dishonest. I have never had to face that, although there is evidence from some cities. The problems are philosophical, not motivational, as a rule.

X

LAND AND THE INCOME TAX

LAST, LAND ASSESSMENT is Priority No. 1 to close a huge loophole in the income tax. Landlords can take depreciation on buildings but not land to reduce their taxable income. When they buy an old building, however,

they can depreciate its value all over again. They can take depreciation on their cost—what they paid—less the value allotted to land. Naturally, they allot as little of the value to land as possible. Now what happens if they're audited and challenged? They simply cite their friendly local assessor's land valuation. The income tax instructions invite them to. The result: they depreciate part of the value of the land, not just once but several times. They depreciate it even though it actually may be rising. When they sell out they pay only capital gains rates on the book profit. They sell for a higher price because the buyer can depreciate the value of the land again—and sell to repeat the cycle again, again, and again. As Edward Lear would put it:

There was an old shelter on Main
Depreciated once, then again
And again and again and a capital gain
And again and again and again.

This tax shelter depends entirely on the understatement of land value. So the local assessor is under great pressure from influential local owners to underassess land—even if that means overassessing buildings—so they can pay less income tax; and the consequence is that wage and salary earners have more withheld from their paychecks to cover the realty owners' share. If we want to make real property a taxpayer instead of a tax shelter, we must reform land assessment.

Resources for the Future, Inc.
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3. Advisory Commission on Intergovernmental Relations, *State and Local Finances* (Washington, D.C., 1969 and annually).
4. Allen Manvel, "Trends in the Value of Real Estate and Land," U. S. National Commission on Urban Problems, *Research Report No. 12* (Washington, D.C., 1968), pp. 1-17.
5. See M. Gaffney, "The Property Tax Is a Progressive Tax," *Proceedings of 64th Annual Conference*, National Tax Association (in press). (Also processed, available from the writer).
6. U. S. Department of Commerce, Bureau of the Census, *1967 Census of Governments*, Vol. II, *Taxable Property Values*.
7. Daniel Fustfeld and Joseph Kowalski, "Reforming the Michigan Property Tax," mimeographed (Ann Arbor, 1969).
8. Mason Gaffney, "Adequacy of Land as a Tax Base," in Daniel Holland, ed., *The Assessment of Land Value* (Madison, Wis.: Univ. of Wisconsin Press, 1970), pp. 157-212, particularly pp. 159-67, 208-10.
9. David Martin, "Resource Control and Market Power," in Mason Gaffney, ed., *Extractive Resources and Taxation* (Madison, Wis.: Univ. of Wisconsin Press, 1967), pp. 119-38.

10. President's Commission on Urban Housing, *Report on Urban Housing* (Washington, D.C.: Government Printing Office, 1968), p. 351. For more data see M. Gaffney, "Land Speculation," *op. cit.*, pp. 210-17, and *1940 Census of Agriculture*, Vol. 3, p. 80.

11. Harold Brodsky, "Residential Land and Improvement Values in a Central City," *Land Economics*, Vol. 46, No. 3 (August 1970), p. 239.