

[Reprinted from the Proceedings of the Sixty-Fourth Annual Conference on Taxation sponsored by the National Tax Association, 1971.]

## THE PROPERTY TAX IS A PROGRESSIVE TAX

M. MASON GAFFNEY  
Resources for the Future, Inc.  
Washington, D.C.

### *Introduction*

"The regressive property tax" has become a common block phrase among economists and in the popular press. President Nixon's support for revenue-sharing is increasingly based on the need to protect the poor from heavy property taxes. Some prominent tax economists are favoring even sales taxes to make the tax system more progressive, by lowering the property tax.<sup>1</sup> Even local income taxes, which are mainly payroll taxes, are being advanced to relieve property and the poor.

I find this implausible. To own property is to be rich, in the measure that one owns, and to tax the quality of richness should not be presumed to burden the poor more than the rich. As to the elderly, it is only traditional for interest groups to hide behind selected widows, and one should rarely take such appeals at face value. And so I propose critically to examine the bases for alleging the property tax to be regressive.

The Founding Fathers regarded property taxes as redistributive and equalitarian. James Madison wrote:

In England, at this day, if elections were open to all classes of people, the property of landed proprietors would be unsure. . . . Landholders ought to have a share in the government, to support these invaluable interests, . . . . They ought to be so constituted as to protect the minority of the opulent against the majority.<sup>2</sup>

Madison also wrote ". . . the most common and durable source of factions has been the various and unequal distribution of property." He foresaw that the landless majority might use government to redistribute property. "To secure . . . private rights against the danger of such a faction . . . is then the great object . . . ." <sup>3</sup>

The constitutional safeguard which the Founders established is the

<sup>1</sup> Joseph Pechman, "Fiscal Federalism for the 1970's," *National Tax Journal* 24 (3): 281-90 (September 1971), p. 284.

<sup>2</sup> Louis Hacker, *Triumph of American Capitalism* (New York: Columbia University Press, 1947), p. 187.

<sup>3</sup> *The Federalist* #73, cited in Charles Beard, *An Economic Interpretation of the Constitution* (New York: The Macmillan Co., 1935), pp. 156-58.

"regulation of apportionment." "Representatives and direct taxes shall be apportioned among the several States which may be included within this Union, according to their respective numbers, . . . ." <sup>4</sup> It was designed to win the support of property owners by assuring them that the new federal government would be financed mainly by excise taxes rather than property taxes <sup>5</sup> and that when property taxes were used, states above average in property per capita would be spared. <sup>6</sup>

Property qualifications on voting were widespread at this time. ". . . in the opinion of conservative people they barely sufficed to exclude from the suffrage such shiftless persons as had no visible interest in keeping down the taxes." <sup>7</sup> Throughout the 19th century the suffrage was extended (it is not universal even yet), and government functions increased. Public schools became popular, and increasingly tax-financed. E. R. A. Seligman seems to perceive the property tax as redistributive in opposing exclusive reliance on it: ". . . it involves some risk for a small class to pay the taxes and for a large class to vote on them . . ." <sup>8</sup> (Ironically, Seligman is known as a proponent of the ability ethic of taxation.) A common argument for sales and income taxes over property taxes is their "broad base," discouraging the poor from voting for public extravagance. "Broad-based" seems quite like "regressive."

Property qualifications for the vote are not dead. Special improvement district boards throughout the west are elected by landowners alone (notably excepting California Wright Act Irrigation Districts). The prevailing argument for limited suffrage is that so nicely distilled by Seligman *supra*. <sup>9</sup> In the settlement of the west, the county property tax was traditionally the fiscal means by which small settlers and homesteaders asserted some public equity in the lands of large absentees, ranches, and speculators. In some areas, owners covering whole counties (like Kenedy County, Texas) refused to sell to immigrants, to keep them from voting and raising county taxes—which the big owners evidently perceived as redistributive. Company towns like Arvin, California, have been kept unincorporated to keep migrant laborers from using the property tax on the owners. All of northern Maine is unincorporated, ostensibly because Great Northern and a few

<sup>4</sup> Article I, sect. 2, clause 3; and sect. 9, clause 4.

<sup>5</sup> A. Hamilton, *The Federalist* #12.

<sup>6</sup> Charles Beard, *An Economic Interpretation of the Constitution, op. cit.*, p. 169. See also pp. 100-03, on Hamilton's support from speculators in western lands.

<sup>7</sup> John Fiske, *The Critical Period of American History* (Cambridge: The Riverside Press, 1888), p. 70.

<sup>8</sup> *Essays in Taxation* (London: Macmillan and Co. Ltd., 8th ed. 1919), p. 78.

<sup>9</sup> See Wells Hutchins, *Irrigation Districts*, U.S. Department of Agriculture Technical Bulletin #254, 1931, pp. 15-16.

other paper companies want to avoid letting immigrant voters tax their property. Similarly, industrial tax enclaves in metropolitan areas keep out resident voters. In the Southeast half the poor have been disenfranchised because of poll taxes and race. The southeast relies less on the property tax than other regions. If the property tax were regressive the dominant minority would seem rationally to have imposed it on the disenfranchised poor. Instead they pioneered the state sales tax.

H. D. Simpson has pointed out how property owners favored the "contract" as opposed to "organic" theory of government. Under the contract theory, property could be charged only for benefits received (rather narrowly construed). Under organic theory, the public asserts its equity for redistributive ends, taxing *ad valorem* without reference to the source of value. "The opponents of expansion (of public services), representing largely the property classes who would have to carry the cost of these expansions and who would participate least in their benefits, necessarily fell back on the Benefit Theory, . . ." <sup>10</sup> The benefit or contract theory lives today under the saying that property should only pay for services to property, not services to people. The animus is that property taxes to finance schools are redistributive. Services to property are often opposed, too. Property taxes to finance any mass system that favors small over large holdings inspire resistance in the spirit of attorney Maxwell's image of water districts as "Communism and confiscation under guise of law." <sup>11</sup> Such language suggests these taxes were viewed as progressive, and the history of irrigation shows they were indeed the weapon of small farmers against large. <sup>12</sup>

It is quite a wrench to shift from this historical perspective to the modern image of the property tax as regressive. But times have changed, and even the modern examples could be exceptional and atavistic. Also, today we have the income tax as a reference datum. Allegations of property tax regressivity usually imply a contrast with the income tax, lacking in Madison's day and weak in Seligman's. Current and recurrent proposals for property tax relief entail substituting income tax (and other state and federal tax) revenues for property taxes. To meet the argument in its strongest general form, therefore, we must compare property and income.

To define and narrow the issue I am making, I here define the property tax as one levied at a uniform rate on the base of the capital value of property as revealed by the current market. This is a property tax

<sup>10</sup> H. D. Simpson, "Historical Development of the Property Tax from the Legal Viewpoint," *American Economic Review* (September, 1939), pp. 457-467, p. 462.

<sup>11</sup> *Fallbrook v. Bradley*, 1895, 164 U.S. 112.

<sup>12</sup> Albert Henley, "Land Value Taxation by California Irrigation Districts," in A. Becker (ed.), *Land and Building Taxes* (Madison: University of Wisconsin Press, 1969), pp. 137-46.

reduced to its essence, stripped of the regressivity that may result from maladministration and Balkanization, which are not the issues I raise here because they are not peculiar to the property tax. Maladministration often entails regressive assessment, a serious problem. But all taxes are applied regressively, and for about the same unhappy reasons related to legal costs and financing politics. The income tax may be the worst administered of the lot, in this respect. It is an unbalanced literature that would compare a badly run property tax with an idealized income tax.

As to Balkanization, this is not inherent in the property tax as such, but in local taxation as such. A local income tax similarly lets tax havens attract the rich by low rates. Wisconsin municipalities, indeed, have a local income tax (state-collected and returned). Since the rates are common, regressivity takes the indirect form of higher services and lower local property taxes in the favored enclaves, but it is nonetheless a feature of local income taxation. California, on the other hand, may move to a statewide property tax in response to the recent state Supreme Court decision, bringing in to finance education not only the property of Emeryville and the Cities of Commerce and Industry, but also rich, undertaxed farm, timber, recreational, and above all, mineral-bearing real estate.

To hang the tax enclave problem on the property tax as such would, therefore, be an example of the fallacy of identification, one which I seek to avoid here by focusing on property value — the idealized tax base — rather than collections.

Today's common concept of regressivity owes much to an early work by Musgrave, Carroll, Cook, and Frane.<sup>13</sup> Their selection of data sources, assumptions, concepts and methods set a pattern followed in many later studies which repeated the general finding, with individual variations. It is my thesis that the finding is inherent in the sources, assumptions, concepts and methods, not in the subject. To demonstrate this I make four points: property ownership is much more concentrated than income; the property tax is not primarily shifted forward, as assumed; the studies commit basic errors of correlation analysis with systematic biases toward their conclusion; and the studies misdefine both income and property, again with systematic bias toward their finding.

#### *A. Property Ownership Is More Concentrated Than Income*

To begin, a large share of the adult population — half, as a rough measure — are renters and own no meaningful value of taxable prop-

<sup>13</sup> "Distribution of Tax Payments by Income Groups: A Case Study for 1948," IV, *National Tax Journal* (1): 1-53, March, 1951. For a list of others see Dick Netzer, *Economics of the Property Tax* (Washington, D.C., Brookings Institution, 1966), pp. 247 ff., and the Netzer book itself, Chap. III.

erty at all. Most of these essentially propertyless adults do earn taxable wage income. (We consider later whether property taxes are shifted onto them.)

Savings rise with income, faster than income. With savings one acquires property, and we would naturally expect therefore higher income groups to own property in proportion to their greater saving, which is a disproportionately high share of their high incomes. And we would also expect a high share of high incomes to come from property.

Musgrave *et al.* support this. They rank 1948 U.S. "Spending Units" by income and group them, using Treasury sources of data. The highest class got 23% of the income, but 78% of dividend income and 45% of rental income, and only 12% of the wage and salary income.<sup>14</sup> Other sources might be cited, too.

Musgrave *et al.* omitted capital gains. These are probably the most concentrated source of income, and of course property-derived. Realized gains swell from virtually nothing at the \$10,000 income level to about half of income at the million dollar level.<sup>15</sup> Unrealized accrued gains, which we should include in a proper Haig-Simons income concept, are probably larger yet, and more concentrated. There are no easy data on this, but several *a priori* and indirect reasons to think them concentrated. The rich have a comparative advantage in waiting for deferred cash. They are known to favor growth stocks, undistributed profits, speculative landholdings and unripe minerals, major sources of unrealized accruals.

Among those who do own material amounts of property, concentration is high relative to that of income. The top 10% of income receivers, as income is usually defined and reported, get about 30% of all income. Every study of property owners shows figures in another ballpark altogether. Table 1 summarizes what several such studies show about the top group. Note that most of these figures show only concentration among those who own enough property to be counted, thus understating concentration among the whole population.

Wealth is measured by value in all cases except where acreage is specified (rows 4, 5). Here, some will object that the acreage measure overstates concentration, on the premise that large holdings of acreage are below average in unit value. But even if they are, to accept that objection from this premise would be a splendid case of regression fallacy. When we move to the value measurement we must rerank the owners on the new basis, and the new top group would consist in part of different individuals. And there is no way to know whether the new top group would have a higher or lower share, short of actu-

<sup>14</sup> Musgrave, *et al.*, *op. cit.*, Table 1, p. 11.

<sup>15</sup> *Business Week*, March 29, 1969, p. 96, "Making the Burden More Equal," citing the Brookings Institution.

ally reranking, regrouping, and recounting.

Most data sources don't do this for us, but a few such comparisons may be found. A special U.S. Census study of the ownership of rented farms in 1900 measured them both by area and land value. By area, the top 45% had 83%. By value, the top 45% had 85%.<sup>16</sup> In 1951 Danish farming: by area, the top 2% had 14%; by value, the top 1.3% had 14%.<sup>17</sup> For Milwaukee industrial real estate, I ranked firms in 1960 by both land area and land value (my mass appraisal). By area, the top 10% had 75%; by land value, 76%. For the Milwaukee CBD (east side) 1968, I ranked owners by area and land assessment (City Tax Commissioner's appraisal). By area, the top 10% had 48%; by assessed value, 60%. (Preliminary, subject to adjustment.)

These scraps of evidence show there is no presumption that acreage rankings overstate concentration of wealth as a general rule, although they doubtless do in some regions.

Corporate shares are not taxable property, but of course corporate income is mostly derived from taxable property.<sup>18</sup> Some will object that corporations have many owners and should not be treated as single units. That is true, but again, it smacks of regression fallacy. Wealthy owners also have many corporations, and in general corporate shares are the most concentrated kind of asset.

Ownership of large property gives one control of other assets. Property is borrowing power and credit rating: all studies show interest rates to be very regressive with size and quality of collateral, and terms easier. But simple borrowing is only the beginning. With great wealth one goes into banking and exerts multiple leverage. The story has been told many times, if not as well, since Brandeis' *Other Peoples' Money*: collateral, leverage, conglomerates, interlocking directorates, mergers, lender suasion, industrial leadership, pyramiding, the Wallenberg Grip, subcontracting market power, control of dealerships, . . . . Control is power and status (psychic income), and control is a source of additional income, as revealed by the premium prices of shares during battles for control.

Data in Table 1 probably understate concentration, for four general reasons: omitting the unpropertied, accepting and reporting regressive assessments, accepting the bias in partial inventories, and accepting and reporting straw owners as separate owners.

1. Omitting the unpropertied. Few families have no income, so income data cover most people. Many have too little property to count, however, so many studies omit them. General asset ownership

<sup>16</sup> *U.S. Census of Agriculture 1900, Part I, pp. xc, xcii.*

<sup>17</sup> *Danmark's Statistik Arbog, 1953, p. 50.*

<sup>18</sup> For an exegesis on this point, cf. the writer's "Adequacy of Land as a Tax Base," in Daniel Holland (ed.), *The Assessment of Land Value* (Madison: University of Wisconsin Press, 1970).

TABLE 1. — Share of Wealth Held by Top Wealthholders

Investigator	Kind of Wealth	% of Holders in Top Group(s)	% of Wealth in Top Group(s)
FTC <sup>a</sup>	{ U.S. Estates, 1926	0.1	8.5
	{ U.S. Estates, 1926	2.5	46
Smith and Calvert <sup>b</sup>	U.S. Wealth, 1958	1	24
Lampman <sup>c</sup>	U.S. Wealth, 1961	1	28
U.S. Census <sup>d</sup>	U.S. Farm Acreage, 1949	2.3	43
R. Nader <i>et al.</i> <sup>e</sup>	Calif. Acreage, 1971	<.01	13.5
M. Gaffney <sup>f</sup>	Milwaukee, CBD, east side, assessed value, 1968	10	60
M. Gaffney <sup>g</sup>	Milwaukee Industrial Real Estate, assessed value, 1960	10	89
	Same, land area	1	59
	Same, land area	10	75
TNEC <sup>h</sup>	U.S. Corporate Shares	3	50
Crockett and Friend <sup>i</sup>	U.S. Corporate Shares, 1960	0.1	20
	U.S. Corporate Shares, 1960	1	50
Judiciary Comm., U.S. Senate <sup>j</sup>	Shares of GM, 1956	<.01	33
Lydall and Lansing <sup>k</sup>	U.S. Net Worth, 1953	10	56
U.S.D.I. <sup>l</sup>	Federal Coal Leases, 773,000 acres, 1970	10 holders	49

<sup>a</sup> U.S. Federal Trade Commission, *National Wealth and Income*, Senate Doc. No. 126, 1926, p. 59.

<sup>b</sup> James Smith and Staunton Calvert, "Estimating the Wealth of Top Wealth-holders from Estate Tax Returns," *American Statistical Association*, 1965 Proceedings of the Business and Economic Statistical Section, Table 5, p. 258.

<sup>c</sup> Robert Lampman, *The Share of the Top Wealth Holders in National Wealth* (Princeton: Princeton University Press, 1962), updated to 1961 by Lampman in *Business Week*, "Rich Get Richer — but not for Long," January 27, 1962, p. 31.

<sup>d</sup> 1950 U.S. Census of Agriculture, Vol. 2, Ch. 10, p. 775.

<sup>e</sup> Robert Fellmeth (ed.), "Power and Land in California" (Washington: Center for Study of Responsive Law (1971)), Preliminary Draft (mimeo), Vol. I, p. I-17.

<sup>f</sup> Data taken from City of Milwaukee assessment rolls and ranked by Patricia Bevic, research assistant.

<sup>g</sup> I ranked 626 City of Milwaukee industrial firms by assessed value, using data collected by Norbert Stefaniak.

<sup>h</sup> Temporary National Economic Committee, Monograph 29, *Distribution of Ownership of the Largest 200 Non-financial Corps.* (Washington: GPO, 1940), pp. 37 ff. and Monograph 30, *Survey of Shareholders in 1710 Corps.*, p. 50.

<sup>i</sup> James Crockett and Erwin Friend, "Characteristics of Stock Owner-

studies use the estate-multiplier technique. Here the minimum is \$60,000. Corporate shareholder data omit most people, because most own no stock. Farm data omit hired labor, treat tenants as owners, and say nothing about former 'croppers now crowded in city ghettos.

My Milwaukee CBD data are in percentage terms relating only to other owners. But the whole east side area studied has only 401 owners of record, while some hundred thousand people work and pay sales taxes there.

2. Accepting regressive assessments as fact. Regressive assessment is not universal, but some kinds of property are systematically assessed regressively and, if not overtly, at least openly enough so assessors under questioning do not deny but explain and defend the practice. Unsubdivided land in large tracts is usually given a lower assessed unit value, specifically because the holding is large. The result may be seen by ranking Milwaukee industries by value of land (estimated from reported area adjusted by mass appraisal technique). The top 10% have 76% of the land value, but only 61% of the assessed land value. Thus the Table 1 datum, based on assessed value (of land and buildings), probably understates concentration.

This factor also affects findings of studies using U.S. Treasury data. For IRS practice gives weight to locally assessed values in appraisals for Federal estate and income taxation. The notion that malassessment only affects local taxes is a myth.

Another factor is the watering of prices charged to the poor in and around ghettos. A speculator often buys cheap and sells for what looks like a huge markup. But the buyer has no cash. The seller takes his profit in an inflated and risky second trust, which he quickly sells at a large discount. The sage assessor knows how to dehydrate watered prices if he wants to, but there is pressure to maintain tax revenues from these areas, often resulting in watered assessments on the poor.

Of course, if property assessments are regressive, property taxes are based on them anyway, not on true values. But I distinguish tax concept from tax administration, as noted. This is important for policy.

ship," American Statistical Association, 1963 Proceedings, reported in Milwaukee *Sentinel*, September 18, 1963.

<sup>j</sup> *Bigness and Concentration of Economic Power — a Case Study of General Motors*. Staff Report, Subcommittee on Antitrust and Monopoly, Committee on the Judiciary, U.S. Senate, 84th Cong., 1st Sess. (Washington: GPO, 1956), p. 7.

<sup>k</sup> Harold Lydall and John Lansing, "A Comparison of the Distribution of Personal Income and Wealth in the U.S. and Gt. Britain," *AER* 49 (I): 43-67 (March 1959), (using data from University of Michigan Survey of Consumer Finance).

<sup>l</sup> U.S. Department of the Interior, "Working Paper" (unpublished), cited in Milwaukee *Journal*, August 29, 1971.



A regressively conceived tax remains regressive under the best of management. If the property tax is progressive in essential concept, then it needs reform and new life rather than the gas chamber.

Regressive assessment is usually explained by assessors on grounds of regressive use of property. Large holdings are generating less activity per dollar of value. In Oregon, for example, larger timber holdings are overtly assessed lower with the rationale they are worth less because of the owners' slower cutting schedule. But note this says activity-based taxes (sales and income) are then less progressive than property taxes. Thus the very explanation of regressive assessment is a phenomenon that shows the property tax, properly administered, to be progressive relative to income and sales taxes.

3. The bias in partial inventories. Any wealth inventory short of universal will usually understate concentration because larger holders are more diversified. The largest owners in one city, region, industry, or other class are most likely to have holdings outside the class.

As to housing, it is the rich who have second homes, hobby farms, summer resorts, tax shelters, ski houses, Caribbean hideaways, lake frontage, and advance sites for future building. Yet studies of income and housing, from which some would damn the property tax, compare a full statement of income (at least wage income) with housing narrowly defined. Walter Morton (p. 143) goes so far as to judge the entire property tax on the basis of housing alone. He not only omitted second homes, but other property comprising half the total: commerce, industry, rental, vacant, farm, forest, mineral, water, and miscellaneous. Again, ownership of these is concentrated among those ranking high in the housing scale.

Studies of foreign-owned farms in America have shown them to be larger than owner-occupied holdings. The 1900 *Census of Agriculture* (a high water mark in good government statistics) reported on farm landlords. In-county landlords averaged 85 acres; out-of-county but in-state landlords, 126 acres; out-of-state but U.S. landlords, 159 acres. Foreign landlords were highest of all. 28% of them held over 2500 acres, while only 10% of U.S. landlords did.<sup>19</sup> I take this to be a universal tendency, deducible *a priori* from the fact that it doesn't pay to range far abroad to invest only a small sum. As U.S. residents change from colonials into the world's absentee owners, this universal tendency is clear. It is our largest oil firms, the international majors, who cover the entire U.S. with marketing and the world with mineral holdings. The largest holdings in any one jurisdiction, industry, or other narrow class of property, thus are usually owned by those with large holdings outside. With every passing year of mergers and conglomeration this grows more true.

<sup>19</sup> 1900 *Census of Agriculture*, Part 1, p. xc.

Thus my data on Milwaukee's CBD understate concentration. The third largest holder on the west side there for example is the Schlitz Company, yet the area omits the brewery that made Milwaukee famous, millions of dollars in the controlling family's vast speculative suburban landholdings, and large worldwide interests. Smaller owners have outside interests too, but on the whole are less diversified.

Again, the data on industry take no account that the large firms either have or are branch plants. Increasingly they are merged into conglomerates. In Wisconsin, Udell finds recent conglomeration has resulted in large drops in activity-based income taxes from the merged properties. Conglomeration is partly motivated, indeed, to avoid income taxes. That means the corporate income tax is regressive in practice.<sup>20</sup>

Many popular recent studies omit all property but housing, following Walter Morton. The better studies, as by Musgrave and Netzer, avoid this outright blunder. But wide currency and credibility have gone recently to a study by Daniel Lucas for the D.C. Government, based entirely on housing — first home only — and hypothetical housing at that.<sup>21</sup> The Wisconsin Department of Revenue released a study in May "in defense of Governor Lucey's use of the income tax to provide property tax relief" with the same blunder.<sup>22</sup> This study follows the precedent of a 1959 release by the University of Wisconsin School of Commerce.<sup>23</sup>

Many writers exempt corporate shares from taxable wealth, faulting the property tax for not reaching such "intangibles." Yet most corporate assets are very tangible at a price. In most jurisdictions the largest property taxpayers are corporations.<sup>24</sup> Studies based on individual ownership alone and omitting corporate wealth are simply not relevant.

A large genre of partial inventories is the farm study, of which every Agricultural Experiment Station must have issued one or more. Hardly anyone wealthy enough to own a large farm today lacks nonfarm income. One cannot afford to keep a large farm without using it as an income tax shelter — that is the "highest and best use" under our income tax law. Studies purporting to compare "farm income" with farm property taxes are founded on the obsolete premise that "farmers" are a separate class of people, and have no value.

<sup>20</sup> Jon Udell, *Social and Economic Consequences of the Merger Movement in Wisconsin* (Madison: Bureau of Business Research, 1969).

<sup>21</sup> D. Lucas, "Major Tax Burdens in Washington Compared With Those in the 25 Largest Cities," D.C. Government, press release, December 1970.

<sup>22</sup> *Milwaukee Journal*, May 25, 1971.

<sup>23</sup> University of Wisconsin Tax Study Commission, *Wisconsin's State and Local Tax Burden* (Madison: University of Wisconsin School of Commerce, 1959).

<sup>24</sup> M. Mason Gaffney, *loc. cit.*

4. Accepting straw owners as separate owners. Large land assemblies are habitually arranged through straw owners. Thus one large owner often appears on records as several small ones. The Milwaukee CBD study, as reported, is premised on one certain block's having several separate owners, as recorded. Some time after the First Wisconsin Bank announced it was building on the assembled site,<sup>25</sup> we did not find it listed as owner.<sup>26</sup> Nor did we find Northwestern Mutual Life listed for more than its home office, although Gordon Davidson, director of real estate, stated the company had been acquiring land in our area "over the years."<sup>27</sup> Small owners, on the other hand, are not likely to appear as large ones. Wealthy families wear several guises: banks, insurance companies, corporations, estates, utilities, etc. Property is assigned to children and relatives to split income. Rarely are these veils pierced by formal quantitative studies. Even the ICC has never found out who owns the railroads. But we can be quite certain ownership is held more closely in fact than on paper.

*B. The Property Tax is not Primarily Shifted Forward*

With a base so concentrated, it requires some creative methods to find the property tax regressive. One is to assume general forward shifting. Then the property owner is exempt, exempt as a homeowner. Tenants do not escape. No one does. The property tax becomes a general consumption tax, and therefore regressive. I submit several reasons why the property tax is not shifted forward.

1. All studies have greatly understated the share of land in real estate value. Some overlook it altogether. The good ones assign it a value, and allow for nonshifting, but the value is much too low. They are all pre-Douglas Commission Report, and rendered obsolete by Manvel's study of how high a share land values are.<sup>28</sup> Manvel's study plus my Milwaukee study plus Gustafson's California data support a land share of 40% and up, much higher than the 15% or so used by Musgrave *et al.* At present the assessed value of land is 40-50% of the total in Washington, D.C., California, and some other jurisdictions that have updated assessments.

It is true that in most jurisdictions land is underassessed, and Musgrave's numbers were reasonable in their day as a statement of what assessors were doing. As noted, however, maladministration should be blamed on administrators, not on the property tax *per se*. And Musgrave omitted three important points.

<sup>25</sup> Milwaukee *Sentinel*, February 14, 1969.

<sup>26</sup> Report by Patricia Bevic, Research Assistant, March, 1969.

<sup>27</sup> Milwaukee *Sentinel*, February 14, 1969.

<sup>28</sup> Allen D. Manvel, "Trends in the Value of Real Estate and Land, 1956-66," in National Committee on Urban Problems, *Three Land Research Studies*, Research Report #12 (Washington: GPO, 1968), pp. 1-17.

One, the share of land in real estate tends to rise with value of holdings.<sup>29</sup> So nonshiftability of the property tax rises with wealth.

Two, the share of land in real estate is lowest in owner-occupied residences, where the shifting assumption has no effect on progressivity. The land share is highest, normally over half, in commerce, where the assumption is critical. In Milwaukee, 40% of all retail land space is in gas stations! The property tax on downtown and other retail landowners with wide parking lots in good locations is one of the most progressive imaginable, but Musgravian assumptions convert it into a regressive sales tax.

Three, taxes on land actually have some positive effect on supply. They are not simply neutral, but apply leverage prompting earlier and more intensive use of land. To assume non-shifting understates their impact on landowners. They weaken his market position vis-a-vis non-owners, making them doubly progressive. This is a *fortiori* true of mineral bearing lands. Here, property tax critics often forecast panic liquidation if rates rise. They overdraw the point, but there is a point there, and it is in the reverse of forward shifting.

2. Taxes on buildings are not mostly shifted forward. There is no reason to assume forward shifting of taxes on capital, and I find no persuasive rationale in Musgrave *et al.*,/or Morton. Netzer mugwumps the issue.

To be simply shifted forward, a tax would have to be proportional to output. Taxes on capital are not proportional to output, but to one input. They fall differentially hard on capital intensive firms and industries, which could not recoup from customers without raising prices relative to labor-intensive competitors. Capital-intensity varies over a very wide range — see any issue of *Fortune's* annual analysis of the top 500 corporations. And it is the large firms that own more capital per unit of output. That is, the *use* of property is regressive, so that activity-based taxes are regressive relative to taxes on capital. Even if there be some tendency toward forward shifting it would be very uneven, the more capital-intensive firms being less able to shift.

But of alternative shifting hypotheses, forward shifting seems the least likely. It would only make sense if the tax were levied on one industry, exempting others, thus reducing supply and raising real price. But the property tax is a general tax on capital. It cannot be analyzed with tools of partial equilibrium. It chases capital out of capital-intensive and into labor-intensive uses. The tax on buildings (not on land) encourages land-intensive use, too, i.e. a low capital/land ratio.

Where we go from here depends on what we are analyzing. If it is

<sup>29</sup> President's Commission on Urban Housing, *Report on Urban Housing* (Washington: GPO, 1968), p. 351; M. Gaffney, "Land Speculation," unpublished Ph.D. dissertation, University of California, 1956, pp. 210-17; 1940 *Census of Agriculture*, Vol. 3, p. 80; R. Hurd, *Principles of City Land Values* (New York: Record and Guide, 1902), p. 102.

an open economy like the typical local taxing body, then wage rates and interest rates are fixed exogenously, leaving only land to bear any local tax. The local tax on capital thus is largely shifted to land. The shifting is differential, owing to different capital/land ratios; and density is reduced. But the point here is that the tax is not shifted off property and is not made regressive.

If it is federal revenue-sharing we analyze, the rules change. Now the proposal would affect property taxes nationwide. Here we cannot assume that interest and wage rates are fixed exogenously.

In a completely closed economy, capital should bear most of the tax on capital. If it cannot emigrate, its escape routes are limited to dissaving and tax-exempt public works. Supply being fairly inelastic, capital has to accept a lower rate of return after taxes. If capital did not absorb the tax, the tax rate added to the pre-tax interest rate would drive capital out of capital-intensive and into labor-intensive uses. In the latter it complements labor, raising demand for labor, preventing a shift of the tax to labor.

But the U.S. economy is not entirely closed. Capital now emigrates, not without cost, but more freely than labor. Thus the position of capital vis-à-vis labor is stronger than in a completely closed economy, and labor does suffer from the tax. But the position vis-à-vis land is strong too. So the capital tax as a national institution is borne by land and capital and labor, all three. Thus property still bears much, and probably most of the capital tax.<sup>30</sup> Remember now, that the other half of the property tax falls directly on land and stays. Putting it all together, it seems most likely that the property tax is indeed largely what it purports to be, a tax on property.

The case for forward shifting is strongest with utilities, and rails, not for analytical but institutional reasons. Here, however, a simple forward shift would only result if we took regulatory piety at face value, as no one does who really looks into the matter. We cannot develop that here. But note that the rate required to attract capital into utilities is lowered by taxes on non-utility property. Thus indirectly, if regulation works at all, utilities bear the property tax too, at least in part.

The case for forward shifting seems weak with timber, livestock, and all appreciating capital in the short run, since it hastens liquidation.

<sup>30</sup> Adding the property tax rate to the interest rate affects the allocation of new investments in much the same way as raising interest rates by the amount of the property tax rate. This forces capital into labor-intensive forms, moderating the damage to labor by increasing demand for labor. Saving capital also involves substituting land, but this is tightly limited, because using more private land would require more social overhead capital (like longer streets). And saving capital entails lowering longevity of capital, which substitutes labor for land, as explained by Wicksell in *Value, Capital and Rent*.

But this is only short run, and a partial analysis. In the long run the tax drives capital out of capital-intensive uses. The case is *really* weak where cartels are engaged in underutilizing capital or land—the common condition according to students of industrial organization. These holding actions are extremely vulnerable to the property tax. Far from being shifted forward, the tax forces idle capital and land into use, increasing supply and lowering prices. All cartels are characterized by excess capacity—that is of the essence. When you consider that half the wells in Texas are surplus—need I go on? In a cartelized society like ours the forward shifting thesis is not just shaky but ludicrous. Untaxing property, as by revenue sharing, would strengthen the hand of every cartel now locking up excess capacity. It is not the property tax but the lack of one that would be shifted forward in higher prices.

C. *The Need to Correct for Regression Fallacy,  
or Which Top 10% Do You Mean?*

Most studies of property tax regressivity stumble squarely into the pratfall of regression fallacy. The problem in brief is this. Income and property are positively related but the scatter of points is loose, with great individual residuals from any fitted curve, and a high error of estimate. We want to know which rises faster as they rise together. The answer depends on which we arbitrarily select as the ranking variable. Let us say we rank by income on the abscissa and find the top 10% have 30% of the income and 25% of the property (a hypothetical number). It looks as though the property tax is regressive. But now rank them by property on the ordinate. The top 10% are now a different group—we have taken a stratum of points at right angles to the original column. Some of the humble have been exalted, and the mighty laid low. This top 10% has say 50% of the property and 25% of the income, and the property tax looks progressive (in terms of income).<sup>31</sup>

When the *Census of Housing* ranks families by income, rent payments do not keep up with income.<sup>32</sup> But ranking them by value of dwelling units, value quintuples while income only doubles.<sup>33</sup> That is the difference a technical detail or two can make.

So which top 10% do we mean? Most studies have uncritically

<sup>31</sup> Good discussions of regression fallacy are in Allen Wallis and Harry Roberts, *Statistics* (Glencoe: The Free Press, 1956), preceding p. 263; Lawrence Klein, *Introduction to Econometrics* (Englewood Cliffs: Prentice-Hall, 1962), pp. 68-69; George Stigler, "Labor Productivity and Size of Farm: A Statistical Pitfall," *Journal of Farm Economics* 28: 821-25 (1946); and A. E. Waugh, *Elements of Statistical Method* (New York: McGraw-Hill, 1943), pp. 387-89.

<sup>32</sup> *U.S. Census of Housing*, 1960, Table A-3.

<sup>33</sup> *Op. cit.*, Table B-3, p. 14.

chosen income as the proper ranking variable, by assumption, thus practically preordaining the conclusion — and largely invalidating it.

The Chicago school of permanent income hypothesizers have counter-attacked sharply on the housing salient. Margaret Reid<sup>34</sup> undertook to narrow the scatter of points by removing random year-to-year income changes. She related housing to a definition of permanent income, and came up with income-elasticity of demand for housing well above unity.

One of Reid's methods of avoiding regression fallacy was the inter-area comparison, where data are grouped by a neutral variable (neighborhood) which is neither housing nor income. Brodsky has repeated this for Census Tracts of the District of Columbia. His findings strike me because he is a geographer who is not concerned with the permanent income or regressivity question and presents his findings just as interesting facts. He finds residential improvement values rise with the 1.3 power of income; land values rise with the 1.8 power.<sup>35</sup>

Muth has refined and expanded Reid's methods. He now suggests 1.2 or 1.3 as correct income-elasticities of demand for housing.<sup>36</sup> Lee has criticized Reid's methods and come up with an elasticity of about .81. However, Lee's data were too small a sample to lean on heavily, and more important they excluded land.<sup>37</sup> We have seen that land is the most progressive share of housing, so this biases Lee's findings downwards.

Another needed correction is the treatment of realized capital gains. Say an asset rises slowly for twenty years and is sold. In the year of sale, reported income is high, but property taxes are normal or fall. In the first 19 years there were property taxes and no reported income. This creates a statistical illusion of regressivity. If accrual of value were treated as current income, the illusion would be dispelled.

Another needed correction is the treatment of normal life-cycles of accumulation and liquidation. It is normal for the retired elderly to draw on savings in years of low income, and get help from children, if needed, to hang onto property the children will inherit. The property tax which has not been regressive in a lifetime sense looks regressive when no correction is made for this statistical illusion.

But these are only glancing blows. The central question is, why rank by income at all — any concept of income? When we do that we accept income-fundamentalism, a kind of philosophical imperialism

<sup>34</sup> M. Reid, *Housing and Income* (Chicago: University of Chicago Press, 1962).

<sup>35</sup> H. Brodsky, "Residential Land and Improvement Values in a Central City," *Land Economics* 46 (3): 229-47 (August 1970), p. 239.

<sup>36</sup> R. Muth, "Permanent Income, Instrumental Variables, and the Income Elasticity of Housing Demand" (MS, n.d., ca. 1971, pp. 1-40).

<sup>37</sup> Tong Lee, "Housing and Permanent Income," *Review of Economics and Statistics* 50 (4): 480-90 (November 1968), p. 487.

where Adjusted Gross Income on Form 1040 is the basic reference datum against which to measure and judge everything. "Similar circumstances" mean similar AGI, and similar circumstances deserve similar taxes. In effect this means we judge the property tax on the basis of how closely it resembles the income tax, in every detail. Since nothing resembles the income tax so much as the income tax, the property tax looks inferior.

Again, the concept called "income-elasticity of demand for wealth" contains implicit income — Chauvinism. It implies one-way causation: income causes wealth. But wealth also causes income, and as Klein points out that changes the rules for relating them.<sup>38</sup> No longer can income be the simple ranking variable.

If the property tax had no rationale of its own we would be forced to accept income fundamentalism. But if the property tax has a rationale, then it is legitimate to rank by wealth, and fault the income tax for failing to tax large properties adequately. Here is an outline rationale for the property tax.

1. "Ability-to-pay" derives from wealth as well as current income. James Tobin, Arnold Zellner, Taylor and Houthakker, Harold Somers, and others have stressed this lately. The old cliché that "taxes are paid out of income" is as empty as the one that we consume "out of income." We spend money, and it is not labelled.

2. The property tax asserts a public equity in land which was won and is defended by joint efforts, and whose value derives from public works and spillovers, not from the owner's efforts. It exempts human effort, thus rewarding service to the community and denying the state any equity in the bodies of its citizens whose freedom and dignity is thus enhanced in their capacity as human beings, as distinct from owners of wealth.

3. Property taxes reduce the differential effect of inherited wealth on the current generation. They strike directly at concentration of economic and other power based on wealth, promoting competition and equal opportunity. Property as collateral is a source of invisible income (credit rating). Taxing property reduces the differential advantage of the rich in credit rationing.

4. Property income of a given dollar value places the receiver on a higher welfare plane than labor income, because he needn't work for it. \$10,000 a year received by dint of working long hours in a coal mine with black lung disease is not the same as \$10,000 plus a life of ease.

5. The property tax is needed to plug loopholes in the income tax, which is inexorably devolving into a payroll tax.

If one finds that rationale compelling, then the proper approach is to rank by wealth. Doing so, one finds that property is used regres-

<sup>38</sup> Klein, *op. cit.*, p. 68.



sively, *i.e.*, the larger holdings generate less taxable sales and income per dollar of wealth. Thus in the Milwaukee industries reported in Table 1, ranking by value, the top 10% who have 89% of the value have only 69% of the employees.

If one likes the property tax rationale partly but not wholly, then he may follow Wallis and Roberts<sup>39</sup> who tell us that to avoid regression fallacy a valid way to compare two populations is to compare their standard deviations or other measure of variability. If there is less income than property in the upper groups, the variability of the income distribution will be less. But we have already seen that is so (Table 1). Table 1 only gives the top group, but in each case I have computed Gini (or Lorenz concentration) ratios for the entire distribution, and they are as you would expect much higher than for income. (The Gini ratio is, in my experience, closely correlated with the coefficient of dispersion.)

The more we correct for regression fallacy, then, the more progressive the property tax looks.

#### D. On Defining Income and Wealth

Dick Netzer, like others, uses AGI as the reference standard against which to match the property tax and find it regressive.<sup>40</sup> A certain citizen in 1970 reported no AGI, but heavy property taxes, which might make the property tax quite regressive were it not Ronald Reagan. Yet he is not alone, and it seems harsh to select a measure that makes the property tax regressive because it is the only tax many rich men pay. General Oppenheimer has written a fine set of manuals on how to reach Zero AGI by losing money farming,<sup>41</sup> and they work so well that taxable farm income is down to about \$3 billions while the USDA estimates farm income at \$14 billions.<sup>42</sup> I do not think that AGI will do.

It is not just farming. Property is the paramount tax shelter. How does it cover thee? Let me count the ways. There is expensing of intangibles and soil and water conservation, percentage depletion, capital gains rates, deferred realization, non-distribution of profits, non-realization, conversion of interest into cost recovery by watered sales prices, accelerated depreciation, multiple depreciation, de facto expensing of capital improvements, deduction of interest, covert write-off of

<sup>39</sup> *Op. cit.*, p. 263.

<sup>40</sup> *Op. cit.*, p. 49.

<sup>41</sup> H. L. Oppenheimer, *Cowboy Economics*, 1966; *Cowboy Litigation*, 1968; *Cowboy Arithmetic*, 1964 (Danville, Illinois: Interstate Printers and Publishers).

<sup>42</sup> Hendrik S. Houthakker, "The Great Farm Tax Mystery," *Challenge*, January and February, 1967, pp. 12-13 and 38-39; Edward Reinsel, *Farm and Off-farm Income Reported on Federal Tax Returns*, ERS-383 (Washington: GPO, 1968).

undepreciated land value, deferral of tax beyond date of sale, and many others.

At the same time, property is a large source of income that is not counted in AGI. Unrealized accruals and imputed income are the most obvious, and each is a huge item.

Thus the ownership of property tends on a large scale to reduce AGI and increase real income. When we rank by AGI, property owners move into lower brackets than they belong; non-owners move into higher brackets. Property tax payments move into the lower brackets, pre-ordaining a finding of regressivity which is totally illusory.

At least two studies have sought to correct for the Reagan Effect. Both corrected only partially, and with spectacular results. The Survey Research Center made the tax progressive simply by including imputed income.<sup>43</sup> Brainin and Germanis do a similar job with California data.<sup>44</sup>

Another common method is to define property tax payments as only the net burden after deducting payments from taxable income. This is to impute a regressive feature of the income tax to the property tax. That would be wrong at best, but more so when one is comparing the property tax with the income tax itself.

If one does choose to evaluate the two taxes jointly, he should note above all that the Federal Government has moved far toward abandoning the taxation of property income. That is the cumulative effect of a hundred loopholes, available to property but not to the poor stiff with his W-2 Form. Equity suggests that state and local treasuries move in on this unpreempted tax base.

Definition of the property tax base is also a source of serious error in a number of studies based on cash rents. Netzer for example assumes that property taxes are proportional to rents. They aren't. The base is not rent but capital value. The poor live in declining neighborhoods and buildings nearing abandonment, where capital value is a very low multiple of rent. Rents include high costs for collection, turnover, damage, loss of status, maintenance and repairs, and general unpleasantness. In Milwaukee's "Inner Core" or slum area the rule of thumb is you pay 30 months' rent to buy a dwelling unit. Tenant incomes are low, but higher than such capital values. The rich live in new buildings of long future life in appreciating neighborhoods. Incomes are high, but normally less than half of lot or acreage plus house values.

It is true that slums are often overassessed, but again, maladminis-

<sup>43</sup> Survey Research Center, *Income and Welfare in the U.S.* (New York: McGraw-Hill, 1962).

<sup>44</sup> David Brainin and John J. Germanis, Comments on "Distribution of Property, Retail Sales and Personal Income Tax Burdens in California: an Empirical Analysis of Inequity in Taxation," *National Tax Journal*, March 1967, pp. 106-112.

tration is the fault of administrators. The property tax in concept is progressive precisely because it is based on capital value. Owners of appreciating property often complain that capital value as a base hits them harder than would current income or service flow as a base, and they are right. That is precisely what makes the property tax, correctly administered, so progressive.

RESOURCES FOR THE FUTURE, INC. is a nonprofit corporation for research and education in the development, conservation, and use of natural resources and the improvement of the quality of the environment. It was established in 1952 with the cooperation of the Ford Foundation.

**DIRECTORS:** Erwin D. Canham, *Chairman*, Robert O. Anderson, Harrison Brown, Edward J. Cleary, Joseph L. Fisher, Luther H. Foster, F. Kenneth Hare, Charles J. Hitch, Charles F. Luce, Frank Pace, Jr., Emanuel R. Piore, Stanley H. Ruttenberg, Lauren K. Soth, Maurice F. Strong, Mrs. Robert J. Stuart, P. F. Watzek, Gilbert F. White. *Honorary Directors:* Horace M. Albright, Reuben G. Gustavson, Hugh L. Keenleyside, Edward S. Mason, William S. Paley, Laurance S. Rockefeller, John W. Vanderwilt.

**OFFICERS:** Joseph L. Fisher, *President*; John E. Herbert, *Secretary-Treasurer*.

*The Resources for the Future Reprint Series:* A small number of individual papers by staff members are made available for wider distribution in this form. The papers in this series are selected for their possible value to persons interested in problems of natural resources.