PROPERTY TAXES AND THE FREQUENCY OF URBAN RENEWAL

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I. The Consequence of Property Taxes

Members of this Association do not need very long memories to recall several sessions at which the property tax was buried, usually with more relish than eulogy, and it was forecast that any respect shown the subject by as late as 1964 would only be necrolatry. But like Mark Twain's, the reports of its death were greatly exaggerated; and I, unlike Marc Antony, come not to bury the corpse, nor yet to raise it, for history has already done that without my help, but to face up to how to live with this Presence that refuses to lie down and die.

The property tax has grown large, and is destined to grow larger as municipal debt expansion evolves into debt service and retirement. The tax burden and rate have by no means been increasing as fast as the levy because of the long rise of real estate values, both unit values and number of buildings, over a whole generation. Indeed, for a long time tax levies lagged behind rising real estate values. Now, however, real tax rates have risen, too. In Milwaukee city, for example, we are up to 3% of true market value. And these real tax rates are destined to rise farther because the real estate market has clearly lost its inflationary zing in most areas. If real estate values should drop sharply—an event not unknown to history—real estate taxes in some jurisdictions would reach crisis levels. Indeed, it is the increasingly evident impotence of market inflation and new building to offset building depreciation that helps account for the high rates already reached in many older central cities.

At 3% the property tax is consequential. Some housing economists used to shrug it off with a *de minimis non curat lex*. But a 3% property levy might take 30% of the gross income of a new apartment building, or of the imputed income of a residence.

To help appraise the effect of real estate taxes on construction, let us compare the building tax with an excise levied once, at the

time of construction. To be of comparable impact, the one-shot excise would have to equal the present value of the stream of yearly real estate tax payments anticipated over the life of the building. Using a standard table showing the present value of annuities, it is no trick to see that an annual tax payment of $1, continued for 60 years, has a present value (discounted at 5%) of about $19, [of which $12.50, or 66%, represents the first 20 years, $4.70 or 25% the second 20 years, and $1.70 or 9% the last 20 years]. As a rough first approximation, then, a yearly real estate tax of 1%, or $1 on $100, is comparable to an excise tax of 19% levied on new construction.

Of course, most buildings outlive 60 years, but on the other hand they are reassessed downwards well before 60 years, so one might argue for more or less than 19% as the proper figure, but 19% is a workable approximation. Each 1% of real estate tax rate is equivalent to a 19% tax levied as a lump sum payable at time of building. A 3% tax, such as Milwaukee and many other cities now impose, equals a 57% present lump sum tax, or let us just say about 50% as a good round figure.

That is quite a lump for a supposed corpse to hang on a new building. We have heard a good deal recently, from myself too, about high asking prices for land as a deterrent to new building, but rarely does the price of land reach 50% of the value of a new building. The present value of anticipated building taxes must now be counted as the larger deterrent in those jurisdictions where the rate exceeds 1½%.

Such a level of taxation breathes new meaning into the old saw about the power to destroy. But hereby hangs a paradox, one which the worthy Justice foresaw when he went on to observe that the power to tax is also the power to keep alive, and he might have added "bring to life." The upward assessment of undeveloped land in suburban fringes, and resulting higher taxes, is a prime force prompting the land's development! So the property tax is not only potent, it is potent to different effects, depending on whether buildings or site-potentials constitute the base.

This paradox may bear the clue of how we might recivilize this reluctant corpse with which we must live. If the real estate tax as it continues to grow is not to scorch the earth, it must be modified to exempt improvements. That can be done by focusing it on the base of land value or site-capability, which not only permits improvement but positively prompts it.

II. In Quest of a Less Erosive Tax Base

Few people take real pleasure in being fiscal surplus generators, that is of paying more in taxes than they receive back in services. New buildings, *vis-à-vis* old ones, under the property tax do enjoy that unenviable status. The tax base erodes as real estate owners develop a fiscally motivated preference for old age.

We often hear that heavy taxes stifle enterprise, but that is an artless slogan. It is not the mere weight of a tax that stifles enterprise. What matters is how the tax varies when the taxpayer acts enterprising. A non-erosive tax base must be one whose value derives from forces outside the control of the individual taxpayer, and which the taxpayer cannot therefore alter, with a view to tax-avoidance, by checking his enterprise.

The welfare economists have told us that an ideal tax base (in respect to incentives at least) would be some sort of faculty, capacity, or potentiality on which we might levy a tax not contingent or conditioned on the taxpayer's productive activity or allocative decisions, but purely on the exogenously determined capability of the base to earn income. Most of these same welfare economists have delicately declined to descend into the biosphere where the rest of us move and breathe and have our being, and have contented themselves with sighing that it would be intellectually gratifying if such a base might be conceived of. But we cannot tax a disembodied spirit. We need some object corresponding to the concept.

Capital will not do—it is migratory, and destructible as well (*via* consumption). It requires maintenance and replacement, and it can be replaced outside the jurisdiction that taxes it. One of Milwaukee's major industries, for example, is exporting capital to feed the growth of other regions as our own buildings depreciate without adequate replacement. Our nation as a whole has bumped into a serious balance of payments problem as capital leaks out seeking higher returns abroad.

Labor will not do, either. It is migratory, like capital, and its capacity to earn income is now generally regarded, I think rightly, as itself a species of capital, in whole or part, more than as an unearned genetic capacity that might be appraised and taxed as a "rent."

Land, however, does nicely as a tax base corresponding to the idealists' concept. Its value is determined largely by forces exogenous to the owner. It is appraisable, and is appraised, con-

stantly, separate from buildings, for several purposes: setting ground rents; buying real estate on the eve of demolition; right of way acquisition; and allocation of real estate value between depreciable and non-depreciable components for income tax accounting, fire insurance, etc. I do not vouch for the accuracy of appraisals often used.

> The land-building allocations commonly reported for property tax assessments are often arbitrary and meaningless; the allocations used for income-tax purposes systematically overstate the depreciable component; appraisals used by borrowers these days are tending to overstate all components. But for all that, land appraisal is an established art that was already as old as history when William the Conqueror ordered the Domesday Books. When the *intent* is to appraise accurately, we can do it.

Land is not migratory. Some theorists have alleged that the old distinction between "immobile" land and "mobile" labor and capital is passé, because land is economically "mobile" among different uses. But redefinition of a word is a pretty weak substitute for substantive new thought. In tax matters, the older physical concept of mobility is the relevant one. Land is immobile among taxing jurisdictions—that is the point. You can tax the living daylights out of it, and not one square foot will get up and walk out of town. Milwaukee keeps losing people to Los Angeles, and capital (and an occasional ball game), but so far it has not lost any land, regardless of taxes. For all the wonders of modern science, I doubt if it ever will. A jurisdiction can gain or lose chunks of land only by moving its boundaries, but that gets beyond our scope this morning.

It is true, of course, that increased land taxes, *if* unaccompanied by increased public services or reduced building taxes, would in a special sense "erode" their base by capitalization. But that is neither an insoluble problem where relevant, nor a relevant one this morning, for we are concerned today with the effects of a given real estate tax levy, financing given public services. We only ask how the effects might differ if the base were redefined to exempt buildings. The building exemption would tend to increase land values and offset the capitalization of increased land taxes. The same collection of real estate would bear the same tax levy—it would simply pay in a different way.

It is a remarkable quality in a tax base that its response to being taxed is not to flee, nor yet to shrivel up, but to offer itself like the fabled shmoo for the full accommodation of its human masters. Surely such a base is devoutly to be desired, and its possible use to be seriously considered by responsible fiscal authorities.

III. Defining the Tax Base

Once it is accepted that land possesses unique and desirable attributes as a tax base, there are several alternative ways to get at it. The base might be the realized net income from land, net of costs of improvement.[1] That would differ from present income taxation in deducting imputed interest on equity investment, and wages of management. Or, if we want to exert more fiscal leverage, the base might be the imputed net land income in the highest and best use, or a market value capitalized from that. I will discuss the last, since that is in form closest to the property tax whose reform we are now considering. Those who think the property tax exerts too much leverage may prefer later to go back and consider the first, the realized net income of land, which has a tempering element of fiscal profit-sharing and risk-sharing that many find attractive. Meantime, however, I will have suggested that the excessive leverage that is objectionable in property taxation derives from the building tax more than the land tax.

We may also sneak up on the land tax base by various halfway measures. Professor Richman has discussed the Pittsburgh plan, now inaugurated in Hawaii. There are countless more: frontage assessments, flat acreage assessments levied by various special service districts, land taxes levied by California Irrigation Districts, and discrimination within the latitude customarily given assessors—although, as we know, that usually works the other way.

There are in some states special tax abatement laws, like the

[1] A tax on the net income of land, with full deduction of building costs and imputed interest thereon, has its bugs but would constitute a big improvement over taxing buildings. For the optimal improvement with tax is (almost) as valuable as that without tax. Net rent after tax is smaller, but is maximized at the same intensity. The reduction of after-tax gross income is balanced, as intensity of use increases, by the deduction of costs, until the ultimate marginal increment of intensification of land use, where marginal revenue equals marginal cost, results in no net increase of the tax whatever.

Missouri Urban Redevelopment Corporations Law which exempts improvements in renewal areas from real estate taxes for 10 years entirely and the following 15 years 50%. In Wisconsin we call it a "freeze"—an allusion to our climate no doubt. It is the assessment that is frozen, for up to 20 years under certain quite limiting conditions. Milwaukee has two new buildings under the law, with seven-year freezes. Going back to my interest tables, assuming 60 year life and 5% interest, a 7 year freeze is as good as a 30% tax cut over full life; a 20 year freeze as good as a 66% cut. So these laws have already moved quite far towards full building exemption. And they have produced some outstanding buildings. Quality Hill in Kansas City; Marine Plaza and Cutler-Hammer headquarters in Milwaukee.

Some jurisdictions allow informal assessment freezes without benefit of law. By their nature, such cases are hard to document, but it is widely alleged that the assessor of one Milwaukee industrial suburb forgets to assess new factories for their first several years, and it is easily observed that this informal suburb contains several unusually handsome new factory buildings.

The land tax which I now propose to you resembles the assessment freeze, but differs in these important ways:

a. It would apply generally, rather than being granted to some and denied to others by the City Council.

b. The freeze under the land-base system would be permanent, but I hasten to qualify "permanent." The land value base remains unmoved by any building done by the landowner himself, but the base does move up or down as environmental forces make the site worth more or less. Thus a man is not taxed more as he improves his property, but as his neighbors and his city improve his opportunities by improving their property. And if public works should divert demand away from him, he is taxed less by way of compensation.

c. With a freeze, the assessment is based on the pre-freeze buildings. Under the land-value system, the assessment looks entirely to the future. It is based on the best future use of the site. Those might be the same at first, if the old buildings were worthless, and the land was properly assessed.

But in general the assessments would differ under the two systems. The land basis seems preferable because a) the freeze system creates an incentive to let buildings become blighted

before applying for a freeze; b) the land basis lets assessments change later as the neighborhood changes, and lets the city maintain revenues without coming under pressure to terminate the freeze and tax the building; c) the land basis lets the city assess the increment of land re-use value which the city creates by the very act of untaxing new buildings.

The last might seem to negate the whole tax benefit, and it does maintain city revenues, but it does so without taxing new buildings. Higher taxes from land recoup the revenues lost by exempting buildings, but do not impair the constructive incentives thereby unchained.

IV. PROPERTY TAXATION AND THE FREQUENCY OF URBAN RENEWAL

Property taxation has profound effects on land use, most of which may be summed up in one general principle: if the tax base is defined so that the tax depends on the use to which land is put, then the tax biases the landowner against the heavier taxed use. The fisc is interposing itself in the competition of the market in favor of the lighter taxed use.

This morning we are concerned with one application of the principle as it bears on the timing of urban renewal. Every parcel of land is in constant press or competition between the extant improvement and its prospective successors. Let us call the first the "defender," and the second the "challengers."

In this contest, the fisc is not a neutral party. The fisc, under prevailing tax policies, is interested to have the challenger unseat the defender, because the challenger will bear a higher assessment and pay several times as much in real estate taxes. That consideration is of great fiscal value, so much so that the fisc is often willing to subsidize urban renewal (although it is a peculiar logic to subsidize people to pay their taxes!).

But, as each man kills the thing he loves, so the fisc in its passion for new buildings tends to smother them. For that anticipated flow of taxes, which is of positive value to the fisc, is of an equal and opposite or negative value to the taxpayer. He can avoid it by avoiding renewal, and defer it by deferring renewal, and shrink it, when he does renew, by shriveling his renewal plans. And that is what he does, with the results that we continually deplore, but just as continually impose on ourselves by continuing to tax new buildings.

Let us put the point more generally by asking "when is the economic time to renew a site?" The answer, ably expounded by

Professor Ratcliff in his *Urban Land Economics*,[2] is plausible enough: when the defender ceases to earn a return on the value of the site in its highest prospective alternative use. After then, the bare land outvalues the land-and-defender combination. It is time to salvage the land by demolishing the defender. The defender, even if still sound and usable, has become absolutely worthless—a point that outrages the instincts of so many influential people that economists should try to preach on it every Sunday.

We can reduce that to yet simpler terms by expressing the challenge and defense in the form of annual rather than capitalized values. The defense comprises the current net revenue, R_d, yielded up by the defender. R_d is net of current costs, but gross of historical sunk capital costs even if embodied in outstanding debt. That is a privilege we cannot accord the challenger, for his capital costs are as yet unsunk and must be netted out to compute the corresponding challenge. Thus we are biassed for the defender, but properly so because historical costs are irrelevant to current decisions.

The challenge may also be annualized to a unitary value. The process is more complex, but not forbidding. We must enter all anticipated costs and revenues over life,[3] carefully dated, and then reduce them to an annual equivalent, A_c, using standard financial formulas and our friendly interest tables.

$$(1) \qquad A_c = \frac{i\sum_0^t[R_n(1+i)^{t-n}]}{(1+i)^t - 1}$$

where i = interest rate
    t = terminal year of life
    R = revenues (and costs, where negative)
    n = date of R in years from present

A_c is that annuity whose regular receipt is equivalent to the irregular outlays and receipts we actually expect. It is the challenge, expressed as a yearly net income. It is the ground rent expected from the best future use. It is the opportunity cost of the land. Let us not quail from such superficial complexity as it may present, for there is no simpler way to compute any of those three

[2] Pp. 403–405.
[3] Incidentally we should also estimate optimal life, a problem usually glossed over as we are here.

essential economic concepts whenever outlays and receipts are irregular and separated over time. Neither is there any simpler way to compute site value, which is A_c capitalized (simply by plucking i from the numerator).

Once having annualized ΣR_n with equation (1) we can revert to our more comfortable accustomed level of mathematical simplicity and declare that renewal must occur when the defender yields us less than the challenger will:

$$(2) \hspace{3cm} R_d < A_c$$

We have said nothing about taxes. Let us separate them out for observation. Land taxes, to begin, have no effect on the decision. They are the same before renewal as after. They appear on both sides of the inequality (2), cancel out, and disappear again. They are largely neutral in the renewal decision, at least at our present level of analysis. In practice they even tend to accelerate renewal by arousing sleeping landowners, bypassing credit rationing, substituting a visible explicit cost for an invisible implicit one, reducing the liquidity of slow landowners, compelling a more rational attitude toward "heirloom" land, and in general needling landowners to do what their self-interest would seem to have dictated anyway.

Building taxes are another matter. They hardly appear on the left side of (2) because there is hardly any building value remaining as we approach demolition.[4] Building taxes on the challenger, T_c, appear in full force on the right side, however.

$$(3) \hspace{3cm} R_d < A_c - T_c$$

T_c should properly be taken as an annualized figure, computed like A_c, but we are not too far off to take it simply as the initial tax level, T_1.

(3) tells us that the challenge, A_c, must now outweigh not only the defense, R_d, but also the building tax, T_c, before private renewal will normally occur. There is a fiscal deterrent reinforcing the free market deterrent to renewal.

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[4] [except on the books of laggard assessors, but that will not prevent them from reassessing the land under the new building at the previous level of land-and-old-defender together, and then adding to that the full cost of the new building.]

Of the two deterrents, the fiscal one is in fact the larger. Let us take a not uncommon case where a prospective new apartment building costing $300,000 challenges two old houses priced at $30,000 for the pair. T_c, at 3%, would be $9,000. R_d, if it is 10% of the price, is $3,000. A_c must exceed $12,000 to overcome the defense $(R_d + T_c$ or $3,000 + 9,000)$. In the absence of building taxes (T_c), $3,000 would be enough.

Thus the fiscal deterrent assumes not just a supplemental but the primary role in blocking urban renewal.[5] It may defer private renewal not just for decades but indefinitely, because there are reverberating neighborhood effects, from deterioration of old buildings, which progressively rob sites of their renewability.

There are large areas in our central cities which would be renewed forthwith in the absence of the fiscal deterrent. My student, Paul Downing, is just completing an isovalic cadastral contour map of Milwaukee County land values, based on several thousand actual sales either of vacant land or of land with old buildings on the eve of demolition.[6] Comparing the bare land values with the combined values of land and old buildings, it is clear that in 10% or more of the city the bare or renewal value of land already nearly equals the defender values. Remove the fiscal deterrent and the challenge values would move well above the defense values, bringing prompt private renewal.

Some wealthy Milwaukee suburbs, notably Whitefish Bay, recognizing their fiscal and neighborhood interest in site renewal, have quietly entered the real estate market, bid on older houses, and actually absorbed demolition losses of $6,000–$8,000, without Federal subsidy, in order to accelerate renewal. They buy for about $16,000, demolish, and resell land for about $9,000. They reckon that the present value of the augmented future tax stream is worth to them as tax collector at least $7,000, even though they receive only part of the increased property taxes.[7] Recalling that the tax collector's meat is the taxpayer's poison, that suggests that the removal of fiscal deterrence might push the thresh-

[5] And why stop there? Rural renewal is important too, and suffers the same problem.

[6] Research support from the Urban Land Institute is gratefully acknowledged.

[7] They are also largely motivated by shared state income taxes, so the example is not 100% attributed to property taxes.

old of renewal clear out into high income suburbs, [not in blanket fashion of course, but selectively]. That is, the prospective future tax stream has to the challenger a deterrent value of $7,000. If taxes were unmoved by renewal, the bidding power of challengers *vis-à-vis* defenders would rise by $7,000 or more (whether by a rise in the former or a fall in the latter, or both) and renewal would occur without any subsidy of write-down.

Another important benefit in replacing building taxes by land taxes has to do with credit rationing.

Land taxes differ from building taxes, among other ways, in their time-distribution. Building taxes are highest when a building is new, then taper off with age. Land taxes should usually remain constant or rise over time.

The replacement of building taxes by land taxes therefore constitutes a species of extension of credit from the municipality to the builder—more strictly, it is the present system of taxing buildings that constitutes a forced loan from builders to the fisc. A new building yields a fiscal surplus over public costs, as a rule, and often a deficit to the owner for some initial period. Old buildings constitute fiscal deficits, by which the owner tends in a sense to recover his earlier loan to the fisc.

Shifting to the land tax system would not, in general, detract from public revenues, because at any given time there are buildings in every stage of the life cycle. Lower taxes from newly improved sites would be compensated by higher taxes on sites under old buildings. In older central cities, indeed, the old buildings are the majority. Nor would the change discriminate against the older places, for in due time they will be renewed and enjoy the new policy of impartiality towards youth.

The uneven impact of the change is largely among persons—those benefit most who are most in need of credit. That is in harmony with accepted public policy, but it achieves the end without subsidy or public assumption of large contingent liabilities, and without the double incubus of combined bureaucratic and lender conservatism and routinization.

The uneven impact of the shift may be seen by comparing the present values of the streams of future taxes to two taxpayers under the two systems. Let us name the affluent taxpayer, Mr. In, and the hard-pressed borrower, Mr. Out. Mr. Out discounts future values at a higher rate per annum than Mr. In, because his friendly local loan company does not extend him the same terms as Mr. In, with his AAA credit rating. An ironic benefit

of Out's position is that the present value of a stream of future taxes appears lower to him than to In.

The more remote the future taxes, the greater the relative difference of their present valuation by In and Out. Since land taxes tend to rise over time, while building taxes tend to fall, the impact of land taxes is much heavier on In than Out, while the impact of building taxes is only slightly heavier. So a shift from building taxes to land taxes favors Out to the discomfort of In.

Let us take a simplified numerical example. Suppose land values, and therefore taxes, are expected to rise by $g\%$ per annum indefinitely. Then the present value, P_L, of the land tax stream is:

(4)
$$P_L = \frac{a}{i - g} \quad^{8}$$

where a is the tax in year one.

Suppose building taxes fall by $d\%$ per annum, then their present value, P_B, is:

(5)
$$P_B = \frac{a}{i + d} \quad^{9}$$

Now let In discount future values at 5%, and Out at 10%. Let $g = 1\%$, and $d = 5\%$. The table below shows the present values of the tax streams to Out and In.

	Land Tax P_L	Building Tax P_B	$\frac{P_L}{P_B}$
Out	$\frac{a}{.09} = 11a$	$\frac{a}{.15} = 6.7a$	1.64
In	$\frac{a}{.04} = 25a$	$\frac{a}{.10} = 10a$	2.50
In/Out	2.25	1.50	—

$$^{8} P_L = \sum_{0}^{\infty} \left(a \left[\frac{1+g}{1+i} \right]^{n} \right) = \frac{a}{1 - \frac{1+g}{1+i}} = \frac{a}{\frac{i-g}{1+i}} \cong \frac{a}{i-g}$$

$[g < i]$

^{9} Same proof as (4), substituting $(1 - d)$ for $(1 + g)$.

The land tax looms 2¼ times larger to In than to Out. The building tax looms only 1½ times larger to In. Again, that is essentially because the land tax is deferred farther into the remote future.[10]

The building tax not only increases the capital requirements of builders, but throws on them a great deal of risk. The income tax, whatever its failings, has the virtue of falling off when evil days betide so that the fisc shares some risk with the builder. The building tax is not based on income but on an initial capital outlay. It is at its maximum before there is much income, and it continues at a level based on gross outlay, regardless of income. It would be hard to contrive a tax calculated to throw more risk onto the builder in proportion to the revenues raised. It tends to make Messrs. Out poorer credit risks than they would be under another system of taxation, and beset with added difficulties the essential economic problem of putting capital in the hands of enterprising people.

Leon Hickman, writing in *Urban Land* 'for May, 1964, puts the point thus:

". . . the early and heavy imposition of property taxes will in the long run defeat this urban renewal concept and the hoped for improvement of the municipal tax base. If taxes could be imposed at lesser rates in the earlier and more difficult years . . . urban renewal would have a much more certain future than is the case today."

Mr. Hickman's company (Alcoa) does not qualify as a poor credit risk, which doubtless helps explain why they have survived the difficult early years. But there are others who have not made it, and countless more who can never try it, because of the perverse timing of our real estate taxes. One of the advantages of the land tax base is its easy starting level, and its consonance with Hickman's principle of deferred impact.

In conclusion, the property tax need not be a Frankenstein. In its present form it belongs back in the grave whence it so recently lurched, for it is grisly with the gore of aborted buildings

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[10] [Incidentally, the reason the land tax looms larger to both parties is because it raises more revenue. The land tax tends to rise from its initial level as land values appreciate, while the building tax tends to fall. In the example, the land tax and the building tax raise equal revenues, *a*, when buildings are new, but over time the land tax raises more revenue. That means that, to raise a given revenue, the land tax may be set so as to raise less revenue from parcels under new buildings.]

and guilty with the breath of suffocated communities and the
stifled lives of those who suffer from inadequate housing, from
unemployment in the building trades and building material in-
dustries, and the host of related problems. But if it were con-
verted to a tax on the base of site values it would become a
perfectly respectable member of the tax family. In a family with
so few of the description, it is an opportunity not to be lightly
dismissed.

Certainly it is not to be dismissed with the hackneyed inanity
that "it is no panacea." It is not competing with any panacea.
History has imposed a curious double standard on deliberations
of tax alternatives. Most taxes are adopted because they raise
revenue. Land taxes are rejected because they are no panacea.
If they simply raise revenue without doing much damage they
are a great improvement over what we have now. If they offer
additional benefits, so much the better, but let us not be so
enamored of the results of taxing buildings that we will consider
no alternative except a panacea. The land tax is a good tax, on
a non-erosive base. It lets us escape from the folly of taxing im-
provements. That is a sufficient character reference.