

## Temporal Excess Burden of Taxes on Buildings

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A special aspect of excess burden is in the fourth, or temporal, dimension. There is an excess burden in the deferral of site renewal. Any tax that varies with the use to which land is put biases the owner in favor of the lighter taxed use. That means the building tax favors old buildings over new.

There are large areas in our central cities that would be renewed forthwith in the absence of the fiscal deterrent. In the 1960s I drew an "isovalic" 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. Comparing the bare land values with the combined values of land and old buildings, it was clear that in 25% or more of the city the bare or renewal value of land already nearly equaled the defender values. Remove the fiscal deterrent and the challenge values would have moved well above the defense values, bringing prompt private renewal. Thus, the fiscal deterrent played a primary role in blocking urban renewal. Today, land prices are much higher than they were then, and the buildings thirty years older.

Few would deny that the market has failed to renew our cities fast enough. For this the real estate tax, bearing differentially on new buildings, must shoulder much of the blame. The economical time for an individual to clear and renew land is when the current cash flow from existing or "defender" use ceases to yield a fair return on the "scrap value" of the site in the most eligible succeeding use (the "challenger"). This scrap value is the "discounted cash flow" (DCF), i.e., the present value of future income less the present value of future costs.

The land-based tax is neutral in this decision, because it is unmoved by renewal: It is the same on the defender as the challenger. The building-based tax is unneutral and inhibiting because it rockets upward when new succeeds old. It weakens the challenger vis-à-vis the defender, by the amount of tax increase. Not only is the new building valued higher than the old: often assessors seize this occasion to reassess the land upwards, adding to the bias against renewal.

The general qualitative direction of the bias is clear. Quantitatively, the number of years during which building taxes retard site renewal depends, among other things, on how the cash flow from old buildings drops off. If it plummets off steeply, then renewal dates would be preordained by nontax factors, and tax policy would be unimportant. If it tails off gradually, a substantial tax bias against new buildings retards the renewal of each site regarded individually; and of neighborhoods and school districts even more, as the nonrenewal of each site robs neighboring sites of their renewability, and suppresses competition from new buildings that would pull tenants from old defenders.

A number of time series showing historical income experience of commercial buildings have been compiled and published by Leo Grebler, Fred Case, and Louis Winnick. I have deflated them for price level changes. They are much affected by cycles of depression and war. The general time pattern and period of drop-off is clear enough, however. Real income from old

buildings dwindles away slowly over many decades, in spite of depreciation and obsolescence. There is no sharp cutoff, no predestined date of demolition determined by technology or taste. Even when an old building has gone vacant, it may come back. After World War II, real income of many buildings rose sharply.

Another source of data is the Institute of Real Estate Management "Experience Exchange" among members of the N.A.R.E.B. In 1967, their 1,069 respondents reported on operating ratios (total expenses including real estate taxes divided by total actual collections) for apartment buildings classified by age groups. For elevator apartments the ratio rose gently from 45% for 1961-1966 birthdays to 59% for all buildings over forty-seven years old, that is, pre-1920. For low-rise apartments it was from 41% to 58%; for garden apartments, from 40% to 48%. In other words, almost half the gross collections from old apartments represents net income to the owner. A powerful factor helping hold down these operating ratios is that real estate tax expenses keep falling as a building ages.

Measured in years, therefore, the fiscal deterrent to urban renewal—the threat of increased taxes on new buildings—retards by decades renewal of the individual urban site.

The deterrence is greater than simple numbers show. Unwise taxes 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. Unused and blighted land lies among used parcels and disrupts their symbiotic interactions, which are the heart of public land planning and the essence of urban civilization. With that in mind, cities are constantly intervening in the real estate market to subsidize renewal in various ways. For example, some Milwaukee suburbs, recognizing their fiscal and neighborhood interest in site renewal, have quietly entered the real estate market, bid on older houses, and willingly absorbed demolition losses, without federal subsidy, in order to accelerate renewal. They buy for the market, demolish, and resell land for a loss. They reckon that the present value of the augmented future tax stream is worth to them as tax collector at least the loss, even though they receive only part of the increased property taxes. (They are also motivated by shared state income taxes.) Recalling that the tax collector's meat is the taxpayer's poison, that suggests that the removal of fiscal deterrence would push the threshold of renewal clear out into high-income suburbs, selectively. That is, the prospective future tax stream has to the challenger a high deterrent value. If taxes were unmoved by renewal, the bidding power of challengers vis-à-vis defenders would rise by that amount 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.

I could give you a precise number of years, using a real tax rate of some percentage between 1% and 5% found in practice, but it would be a false precision, since it would be based on the individual site in isolation. Let us look at the extended effects on neighborhoods. Urban renewal is a social, synergistic phenomenon.

The renewal of one site speeds the renewal of nearby sites in at least three ways. First, it raises the renewal or challenger value of nearby land. One new building gives heart to potential builders of others, who naturally prefer new buildings for neighbors. Slum environs can virtually destroy the renewal value of land—a problem often noted. One or a few sound new buildings as inspiration can support supplementary and complementary renewal round about. The GM building on 5th Avenue, New York, at the southeast corner of Central Park, when new, was reported by *Fortune* to have doubled floorspace rentals across the street. Once a new

neighborhood or city or region gets well started, renewal snowballs because people like to locate near their customers, contacts, suppliers, workers, and friends.

This, of course, raises the negative possibility that new buildings strengthen adjacent defender values as well as challenger values. There are frequent complaints that successful urban renewal projects, for example, raise the cost of nearby land for the next project. However, these higher land "costs" are merely asking prices and may be based on higher anticipated challenger values, plus the knowledge that federal funds are on tap to buy. They do not in general represent higher defender cash flow nearly as much as challenger values.

The reason is that new buildings pull tenants from old, in general weakening defenders. This is the second way that renewal reinforces itself. It is especially true when the new buildings are at higher density than what they replace—something that building taxes also discourage—and represent net new supply. Where tenants have a choice, they move to newer quarters. The oldest defender filters down to be demolished. Its successor then pulls tenants from others, repeating the cycle. In the right conditions the reverberations from one new structure resound through several rounds of induced renewal.

For example, Milwaukee's progress during the 1960s represented the ramifying effects that may flow from one new building. Through a series of historical accidents and legal technicalities, Wisconsin had an assessment freeze law that proved unconstitutional after being used essentially just once, in 1960, for the Marine Plaza—a high-rise office and bank building. It was the first downtown building of consequence in thirty years. It pulled tenants from other buildings, forcing a wave of remodeling and renewal that changed the face of downtown Milwaukee. By general account, this one new competitor set off the chain reaction. There is a multiplier the like of which few other economic processes approach. The facts are there, and they speak volumes.

It is not that this one stroke alone was enough. The ripples died out, long before the job was fully done, but the point is if one original cause can ramify and drive a multiplier process so far, even though every induced new building was fully taxed, twenty original causes would transform a city, if every induced new building were to be tax free.

A third way that renewal reinforces itself is through the higher income that it brings. Renewal means capital inflow, construction payrolls, material sales, new jobs, and so on. This pushes up local income levels. Now new buildings are "superior goods." The higher the local income, the greater the premium paid for new over old floor space, and the stronger are challengers relative to defenders.

So neighborhood and aggregate effects multiply the good done by each new building; conversely, of course, they multiply the damage from the present tax policy, which defers renewal.

But neighborhood effects are not the whole of the story of multiplied effects from taxing challengers more than defenders. Consider that most building is done on borrowed money. We live in a world of credit ratings, cash flows, front money, cash squeezes, and leverage—matters too often underweighed in rarefied theoretical economic analysis. A tax on new buildings, coupled with low taxes on old, weakens the credit of challengers and strengthens that of defenders. It adds to challengers' needs for front money and reduces defenders' needs for any money at all.

A tax on new buildings is at its maximum in the early years, the time of tightest cash squeeze. A high property tax rate today, say at 4%, may take 30% of gross income from a new building. If other expenses take 30%, that is three-sevenths of the net operating income. If the entrepreneur is highly leveraged, as is standard, most of the rest of net operating income goes to debt service. The net cash remaining for the entrepreneur then, especially during the early cash squeeze, is doubly leveraged, so a small rise in building taxes can wipe him out.

His credit rating in turn is leveraged by the prospects for his equity position. It is a familiar fact that a small rise of mortgage rates causes a large drop in building. Loanable funds rush out of building, not just because borrowers balk at higher rates, but because lenders lower everyone's credit rating because of lower equity income. Real estate taxes on new buildings add to costs in the same way as interest rates—that is, they are a fixed percent of value. A 3%-of-true-value property tax rate hits new building with the impact of a rise of mortgage rates from 4% to 7%; except that the real estate tax is worse because the tax rate applies to the whole value, while mortgage rates apply only to the debt. The tax not only defers renewal by its simple direct impact, but additionally by its leveraged effect on entrepreneur net cash flow and thence on credit ratings.

So it is powerful medicine to convert the real estate tax base to the site value basis. My study comparing challenger and defender values in Milwaukee County found that a small rise of challenger values over defender values would cause 20% of the central city area to be renewed forthwith; and that the large change resulting from a full exemption of buildings from real estate tax would cause some 50% to be renewed—if the labor and money could be found to do it. Again, these results would be magnified by consideration of the neighborhood effects previously described.

They would be magnified again by consideration of the positive effect of cash squeeze on defenders. So far I have written only of exempting new buildings, but the land basis of real estate taxation does more than that. It raises taxes on defenders. The result is a potent cash squeeze effect. Today's real estate tax puts the squeeze on buildings. The proposed land tax puts it on defenders, holdouts, and preemptors of land.

The economic time to renew a site is when the standing building ("defender") ceases to earn a return on the scrap value of the site, as imputed by the outstanding "challenger." But challengers pay much more taxes than do defenders. The scrap or renewal value of land is reduced by the full present value of future building taxes. This defers renewal. The unrepaid rents of the deferred renewal period are a deadweight loss.

Time forbids elaborating on how challenger income is computed, and how building taxes magnify the growth rate of value of "ripening" land and prolong speculative withholding. The general point is that land held unrenewed to avoid building taxes is yielding less taxes under present policy than it would under land value taxes.

Let us underscore here a basic point developed above, that has wider meanings. The ATCOR principle says that untaxing buildings will raise land rents by the amount of the abated tax. That understates the matter by a large factor. Land rents and corresponding land values will rise by more than the abated taxes. **THE LAND TAX BASE WILL RISE BY THE AMOUNT OF THE ABATED TAXES ON THE HIGHEST AND BEST FUTURE BUILDING THAT MIGHT BE PUT ON A SITE.** Generally, that will be much more than the taxes yielded by the extant building.