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TAX INCIDENCE: PROPERTY TAXES, INCOME TAXES, AND EQUITY

J. Fred Giertz

Property tax has been the major source of revenue for local governments in the United States from the beginning. and it remains so today in both the nation and in Illinois. Despite its longevity, it is still a controversial tax. It is controversial in regard to its relative importance among the array of various state and local taxes, its administration, its effect on business activity and industrial location, and especially, in regard to the distribution of the ultimate burden of the tax. Despite its use over the course of several decades — even centuries, there is still substantial controversy among economists and confusion among the public about who bears the burden of the property tax.

The purpose of this report is to clarify the issue of the incidence of the property tax as compared with alternative revenue sources, especially the state income tax. An understanding of the distribution of the burden of the existing property tax and the effects of changing the level of taxation is vital in evaluating possible policy alternatives, such as the full or partial replacement of local property taxes which finance schools with an increase in the state income tax. Obviously such choices involve many other considerations in addition to the incidence of the various taxes, yet incidence questions are of crucial importance and the focus of much public debate.

TAX INCIDENCE AND EQUITY: AN OVERVIEW

An analysis of tax incidence deals with the question of who pays the ultimate cost of a particular tax or of the tax system in general. The difficulty in analyzing incidence questions is that the person or organization legally responsible for the tax and its remittance to the government may shift part or all of the cost to others in the economic system. The possibilities for such shifting are numerous and often very complex. For this reason, the analysis of the distribution of the cost of the tax among the members of society is much more complicated than simply looking at who makes actual payment to the government.

Most incidence studies begin with an explanation of the shifting of the tax through the economic system. The final burden of the tax on individuals is then related to their incomes to ascertain whether the tax is regressive, proportional, or progressive. For a *regressive tax*, the tax burden as a percentage of income decreases as income increases. It should be noted that a regressive tax does not mean necessarily that low-income persons pay more than high income taxpayers, only that those earning a low income pay a larger percentage of their income in taxes. For a *proportional tax*, the tax rate remains constant as income increases, that is, individuals of all income levels pay the same proportion of their income in taxes. For a *progressive tax*, the percentage of tax paid increases as income rises. Not only do high-income individuals pay more with a progressive tax, they pay at a higher rate.

It should be emphasized that the base for making calculations as to regressivity or progressivity is income and not the legal base of the tax itself. For example, the state sales tax is a flat rate tax based upon retail sales whereby all income levels pay the same percentage on each purchase. This tax is not necessarily proportional, however. People of different income levels spend differing proportions of their incomes on taxed items making the sales tax slightly regressive rather than proportional.

The analysis of tax incidence is an exercise in economic analysis that attempts to explain the distributional effects of an existing or proposed tax. The results of such studies can then be used to address the question of tax equity. While incidence analysis is an attempt to explain "what is" or "what might be," equity considerations deal with the question of "what should be." Tax equity questions intrinsically are normative or ethical in nature and involve the value judgments of decision makers. They can never be settled completely by the results of technical studies such as incidence analyses, although such studies should play an important role in the decision-making process.

THE PROPERTY TAX

The property tax in Illinois is a tax based upon the value of real property: the value of land and its improvements. In recent years, the Illinois property tax system has moved away from the concept of a truly general tax on property — one that taxes all assets at a uniform percentage of actual value. The tax base has been narrowed for a variety of reasons. Property owned by various levels of government and property owned and used for educational, charitable, or religious purposes have always been exempt from taxation.

The taxation of personal property has been eliminated in Illinois over the last decade. Personal property refers to all property other than land and the improvements on land. It includes such items as automobiles, furniture, tools, and machinery and business inventories. A constitutional amendment passed in 1970 eliminated personal

J. Fred Giertz is a professor at the Institute of Government and Public Affairs. he holds a joint appointment with the Department of Economics at the University of Illinois at Urbana-Champaign

property taxes on individuals, while the constitution of 1970 contained a provision that effectively eliminated the tax for business personal property for assessments beginning in 1979.

In addition to the removal of personal property from the tax base, other provisions have reduced the effective rate of taxation for some real property based upon its ownership or use. Elderly homeowners receive a homestead exemption which reduces assessed value. Elderly homeowners and renters, as well as the disabled, may qualify for "circuit breaker" subsidies if their property taxes (or 30 percent of rent for renters) exceed 4 percent of household income. All homeowners receive a limited exemption of up to $3,000 for increases in assessed value over 1977 levels. In addition, there are other special provisions for the disabled and for home improvements as well as differential assessment practices for agricultural land. Cook County, under a constitutional provision, classifies property for assessment purposes based upon its use. Residential and agricultural property is assessed at a lower proportion of actual value than other classes of property.

The property tax differs from such taxes as the sales or income tax in that its base is not determined by a market transaction. Instead, the tax base is the assessed value as determined by local assessors. In Illinois outside of Cook County, property is supposed to be assessed at 33⅓ percent of fair cash price. In actual practice, assessment ratios (assessed value divided by market value) vary widely both within and among counties. Intercounty differences are dealt with through a statewide equalization procedure.

Once the assessed value is set, tax liability is determined by multiplying the tax rate times the base of the assessed value for each piece of property. The rate is not determined solely by any one unit of government. The final rate is the combined rate independently set by many different local governments. Over five thousand jurisdictions have property taxing powers in Illinois with any one piece of property subject to taxation by many different governments, such as counties, school districts, townships, and municipalities as well as many special purpose districts. The property tax is by far the most important source of tax revenue for local governments. In Illinois, it accounted for over 80 percent of local tax revenues in 1977. For most local governments including public schools, it is the sole source of tax revenue over which they have direct control.

ILLINOIS GOVERNMENT RESEARCH
Institute of Government and Public Affairs
University of Illinois
1201 West Nevada Street, Urbana, Illinois 61801

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The Incidence of the Property Tax

The view of economists concerning the incidence of the property tax has changed considerably. Traditionally, the property tax has been viewed as a regressive tax. The burden of the tax was thought to be borne by the occupants (either renters or owners) of residential property and by the customers of businesses which were taxed. Since low-income families were believed to spend a larger proportion of their income for housing and other items reflecting the effect of the tax as compared to high-income families, the tax was therefore considered regressive. Recent empirical research has suggested that even with this traditional view of incidence, the property tax is much less regressive than was formerly believed.

The new view suggests that the property tax (as it affects the nation) lowers the rate of return on all property and not just the property directly taxed. If this is the case, the burden of the tax would fall on the owners of capital in general and thus would make the tax progressive. The two approaches are not incompatible. Each is applicable to a particular circumstance and relevant for certain policy questions.

THE TRADITIONAL VIEW OF INCIDENCE

The traditional view of property tax incidence makes a distinction between the effect of the tax on land and the effect on the structures on the land. The tax on land was considered to be borne by the owners without any shifting. Since land is basically fixed in supply, the imposition of a tax on land will not elicit any response in terms of a reduction in the quantity of land supplied. This means there is little, if any, possibility of shifting the burden.

The effect of the property tax on other assets was thought to be very much like that of an excise or sales tax on the services of those assets. For example, a property tax levied on rental structures would lower the rate of return on investments in rental housing, so that the immediate burden would fall on the owners of existing rental structures. Since rental housing — unlike land — is not fixed in the long run, the reduced rate of return would discourage new investment and would eventually lead to a contraction in rental housing stock which would lead to higher rents. This increase in rents would, after some time, effectively shift the burden of the tax from the owners to the renters. A similar process would take place in the case of business property. The tax on assets other than land would be shifted to the consumers of the firms' products by way of higher prices. With owner-occupied housing, the tax would not be shifted, since owners would bear the entire tax burden as owners of the land and consumers of the housing services.

Under the traditional view, the incidence of the property tax can be summarized as follows: (1) *tax on owner-occupied homes* is borne by the owner, not shifted, and is distributed among income classes according to how housing values as a percentage of income vary with income levels; (2) *tax on rental housing* is shared by owners and renters with the owners bearing the tax on land and the renters paying the tax on the structures; and (3) *tax on business property* is shared among the owners and the customers of the business with the owners paying the tax on the land and the customers, through higher prices, bearing the remainder of the tax with the burden being distributed according to the purchases of the taxed firms' products.

THE REPLACEMENT OF PROPERTY TAX REVENUE WITH ALTERNATIVE REVENUE SOURCES

An increase in the state income tax (both individual and corporate) is often suggested as a source of revenue to finance a reduction in local property taxes. It is important to know the incidence of these taxes for a meaningful evaluation of this option.

The analysis of the incidence of a tax on the income of individuals is considerably less complex and controversial than that of the property tax. With little shifting possible, the individual income tax is largely borne by the persons paying the tax. In general, an income tax provides considerable potential flexibility in regard to the degree of progressivity or regressivity through the variation in marginal tax rates by income and through exemptions and deductions.

Income taxes in Illinois are the most important source of state revenue with combined individual and corporate collections slightly exceeding sales tax collections. At the same time, the state's income tax system is rather tightly constrained by constitutional provisions. Thus the tax is limited to nongraduated rates — at present it is 2½ percent — which eliminates one element of potential progressivity. Some progressivity is introduced into the system through the $1,000 per person exemption. This flat dollar amount means that low-income taxpayers exclude a larger percentage of their income than high-income persons. Higher-income individuals have the advantage of the deductibility of the tax from their federal tax base. An Advisory Commission on Intergovernmental Relations (ACIR) study for 1977 estimates that the tax in Illinois is fairly progressive through lower income ranges with little progressivity above the $10,000 to $15,000 range.

In comparison with the property tax the individual income tax tends to be more progressive at very low income levels, but it is probably less progressive in higher income ranges. A change away from the property tax to the income tax would probably not greatly change the overall progressivity of the state and local tax system.

One important consideration in regard to the income tax is that, while the rate of taxation at the state level is relatively modest, this tax is effectively added to the federal personal income tax and the payroll tax which finances social security to yield a very high combined marginal tax rate for many taxpayers. Public opinion surveys in the early and middle 1970s consistently found the property tax to be the least fair tax in the economy, with the income tax considered the most equitable. Today that is no longer the case. Another ACIR study has revealed that the federal income tax is now considered the worst, or least fair, tax. This would seem to bode ill for increases in the state income tax which relies substantially on the same base as the federal tax.

The analysis of the incidence of taxation on corporate income is more complex and controversial among economists than the analysis of the property tax. For present purposes, it is sufficient to say that an increase in this tax would very likely have incidence effects much like those of the property tax. The movement from property taxation to corporate income taxation would probably have relatively little overall effect on incidence.

CONCLUSIONS

Conclusions about the incidence of the property tax as compared to the income tax in Illinois may be summarized as follows:

1. A synthesis of the traditional and new views of the property tax suggests that a reduction in the statewide average rate of taxation would largely benefit property owners and consumers in Illinois and not the rest of the nation.
2. The incidence of the existing property tax when based upon permanent income is proportional or slightly progressive except at very low-income levels. A reduction in the tax would increase slightly the regressivity of the state and local system.
3. While the overall incidence of the state and local system would not change dramatically if the tax were eliminated, property owners would experience substantial and often capricious gains and losses
4. Any major administrative change in assessment for property tax purposes would have results similar to the elimination of the property tax. Thus a gradual change toward the desirable goal of property assessed at a uniform percentage of actual value would seem worth pursuing, although it should be noted that much of the recent dissatisfaction with this tax has been generated by reassessment procedures designed to produce such uniformity.
5. The individual income tax in Illinois is progressive at low-income levels while roughly proportional at high-income levels.
6. The replacement (either full or partial) of the property tax with an increase in income taxation would not dramatically change the overall incidence of the tax system. After such a change, the combined system would likely become somewhat more progressive at very low-income levels while becoming less progressive at high-income levels.

For a small area such as a city, the older view of the tax as an excise is more appropriate. For example, a small city that naively accepted the new view might raise property taxes with the expectation that most of the burden would fall on the owners of capital in other jurisdictions and thus have little effect upon the taxpayers in the city itself. This would not be true, however. Raising property tax rates in an isolated locality will reduce the rate of return on capital in that jurisdiction below the rate available in other areas. This would force the outmigration of some capital thereby driving up the cost of locally produced goods in the area, including housing services. In this case, a change in one small area has incidence effects for the jurisdiction very much like the traditional view where increases or decreases in property taxes are borne by the owners of immobile local capital and the consumers of locally produced goods and services.

In summary, the new view of the property tax as a burden on all capital is the appropriate approach for analyzing a change, such as the reduction of the average rate of property taxation across the whole nation with replacement income coming from the federal government. The traditional view is more appropriate, however, if a city or school district is deciding on an increase or decrease in property tax rates.

This raises the important question under consideration here. What would be the effect of a statewide reduction in property tax rates in a large state such as Illinois? The answer is that it would involve a combination of the two views. There would be local excise effects along with a certain amount of shifting of the benefits of lowered taxes to capital in general across the nation. On balance, the excise effects would likely dominate. A reduction in statewide property tax rates would attract a certain amount of capital into the state which would raise the rate of return (at least slightly) in other parts of the country. Some of the benefits of the tax reduction would, therefore, spread to areas beyond the boundaries of Illinois. However, this effect would be swamped by the excise effects of lowered prices within Illinois of locally produced goods and services, including housing services. In addition, the owners of capital within the state would experience a windfall gain from the change.

This conclusion that the excise effects dominate the effects on capital is very important for policy purposes in considering a statewide reduction in property taxes. If most of the effects of lower property taxes in Illinois were shifted to the owners of capital outside the state, such a plan would obviously be ill advised. Such is not the case, however. While some fraction of the benefits will go beyond the boundaries of the state, most of the benefits would go to property owners and consumers within the state.

The Capitalization of the Property Tax

One source of potential inequity in property taxation is the variation within districts of the ratio of assessed value to actual value. If similar property is assessed at varying percentages of actual value, this would violate the principle of horizontal equity which calls for the equal treatment of equals. In addition, if different types of property have different assessment ratios (for example, if expensive houses are assessed at a lower percentage of actual value than less expensive homes), this would have implications for vertical equity as well.

Since variations in assessment ratios resulting from either intentional or unplanned actions by property tax administrators are a source of unfairness, it would seem that their elimination would improve the equity of the system. While a gradual movement in this direction is very likely desirable, a sudden elimination of the differential would probably have some unforeseen consequences. To examine this problem, it is necessary to determine who gained and lost when the variations in assessment came into being and who would gain and lose with their elimination.

If two identical pieces of property of equal value were for some reason assessed at different values, the owner of the overassessed property at the time of the assessment would experience a loss while the other owner would experience a gain. If these differences were to continue indefinitely, they would eventually be reflected in the values of the two pieces of property. This process is called *capitalization*.

The higher taxed asset now has a continuing tax liability attached to it which is greater than the tax bill attached to the similar property assessed at a lower rate. If these properties are sold, the price of the assets will reflect the differing tax liability with the higher taxed property selling at a lower price than the more lightly taxed one. In this case, the property tax differential has been capitalized in the value of the assets.

What are the effects of the differential taxes and their capitalization? The major effect is that the owners experience a gain or loss at the time the differential is established. A person who subsequently buys lightly taxed property will be forced to pay a higher price (which reflects the future stream of tax savings) than will a purchaser of heavily taxed property (whose value is depressed because of the expected heavy future tax burden). The second-generation owners receive no special benefits, nor do they bear any special costs of the differing assessments since these differences were accounted for in the values of the two assets.

This has implications for the unexpected elimination of such differences also. If the assessment variations were eliminated, the present owners of the properties would experience windfall capital gains or losses. The present owner of the lightly taxed asset loses the tax advantage which the previous owner captured in the selling price of the property. Likewise, the owner of the highly taxed property would experience a windfall gain which would not be passed on to subsequent owners.

This idea of capitalization applies to changes in the property tax system as well. Many of the changes that reduce taxes will be appropriated by the present owners through increased property values and will not be passed on to subsequent owners. For example, the favorable special, long-lasting differential treatment of agricultural land in regard to property taxation will largely be captured by the present owners through increased land value. In the future, people who wish to buy agricultural land to go into farming will not be helped by the change at all. Their lowered taxes will be offset by the higher cost of land. This same idea holds, to a certain extent, for many other changes, including a general statewide reduction in property tax rates.

Using this approach, the incidence of the tax has been viewed as regressive. This conclusion is based on the following assumptions: (1) housing as a percentage of income declines as income increases, thus placing a greater burden (measured as a percentage of income) on low-income homeowners than on high-income individuals; (2) rent as a percentage of income is higher for low-income families than for high-income ones; and (3) low-income consumers spend a larger percentage of their incomes on goods and services (which reflect the tax on business property) than do high-income consumers. These excise effects, which contribute to regressivity in the tax, were believed to more than offset the progressive element of the tax related to land ownership.

Even among those who accept this approach, there have been suggestions in the last decade that past estimates of incidence have significantly overstated the degree of regressivity of the tax. Much of this criticism relates to the use of annual incomes of taxpayers as the standard for computing incidence estimates as opposed to long-term measures of income. There is much economic research suggesting that family decisions about consumption and savings are strongly influenced by long-term income expectations (referred to as permanent income) as opposed to the actual income received during a particular twelve-month period. For example, families which experience temporarily lowered incomes because of illness or unemployment normally do not make major changes in their consumption behavior. These families seem to bear a disproportionately heavy property tax burden. Their tax burden would appear much less onerous, however, if it were compared to their permanent income.

In addition, it has been found that family expenditures for housing and other goods and services as a percentage of permanent income (as opposed to annual income) do not vary a great deal among various income levels. On the average, families of different income levels spend approximately the same percentage of their permanent income for housing and other items which reflect the property tax in their prices. This means that even if the tax is distributed according to the traditional view as an excise on housing and consumption, it is more likely a proportional or slightly progressive tax when incidence is based upon a long-term measure of income as opposed to a regressive tax. A note of caution is needed here, however. If housing owned or rented by low-income families is assessed at a significantly higher percentage of market value than that owned by high-income families, these conclusions would not obtain.

THE NEW VIEW OF INCIDENCE

While the traditional view of the property tax has not been abandoned, it has been modified to a significant degree by research in the last decade. This research has focused on the effect of the property tax on capital investment decisions and has concluded that the burden of the system of local property taxes in the United States falls much more heavily upon capital than was once believed.

This can be explained in a general way by examining the effects of a hypothetical national property tax of a uniform rate on all property. Such a tax would have the effect of lowering the rate of return on all capital investments. It should be noted that a relatively low percentage rate of taxation on the value of an asset can have a very substantial impact on the percentage yearly return on the property. Since all types of property in all locations are taxed uniformly in this hypothetical system, there is very little the owners of capital can do to shift the burden of the tax. In this circumstance, the tax would be distributed as the income from capital is distributed. Since the percentage of income derived from capital generally increases as incomes rise, such a tax would be sharply progressive except at very low income levels because some low-income taxpayers have substantial property holdings.

In addition, there might be some long-term effects of the tax if it affects personal decisions about saving. If saving and investment are reduced because of the reduction in the rate of return caused by the tax, there might be a reduction in productivity resulting in lowered wages. This sequence, however, is the subject of considerable controversy and is yet to be resolved.

Obviously, the property tax system in the United States is not a truly national system but a decentralized one with varying bases, assessment practices, and rates. Some modification of the results presented for the hypothetical national system is, therefore, necessary. When the effective rates vary among districts, the short-run effect would be that the owners of property in high tax rate areas would clearly bear a greater burden than those in more lightly taxed jurisdictions. This would not necessarily remain true in the long run, however. To the extent that capital is mobile, the differing rates of return on capital in different areas caused by the local property taxes would induce a reallocation of investment.

Capital would tend to move from higher taxed areas into jurisdictions with lower tax rates. This movement of capital from high to low tax rate locations would eventually tend to equalize the aftertax rate of return among the various areas. The increase in the supply of capital in lighter taxed areas would reduce the rate of return there while the rate of return in areas with higher taxes would rise because of the exodus of capital. This process effectively shifts some of the burden from the high tax jurisdiction to all owners of capital through the equalization of aftertax rates of return. On immobile assets such as land, this shifting process could not take place, and the burden would remain with the original owners. For a series of many local taxes, this is very much like the consequences of the hypothetical national property tax discussed above whereby the major burden is borne by the owners of all capital with the property tax system markedly progressive in incidence.

A SYNTHESIS AND RECONCILIATION OF THE TWO VIEWS

In assessing and comparing the two views, it would seem that they are almost diametrically opposed in their conclusions. This is not the case, however, since each view is valid in a particular context and for particular policy questions. The new view is particularly relevant for analyzing the effects of a major change in the property tax over a broad geographic area such as the nation. Thus, a decrease in the average rate of taxation for the nation as a whole would reduce the progressivity of the tax system by reducing the burden borne by the owners of capital.

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UNIVERSITY OF ILLINOIS
1201 WEST NEVADA STREET / URBANA, ILLINOIS 61801