Property Taxation in Illinois: A Framework for Reform

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Abstract

Illinois is one of 23 states that limit both local property tax rates and property tax revenues. Because of its importance to local government finance, reforms of the Illinois property tax system are constantly debated and the debates recycle over the years. In order to discuss the potential benefits and costs of the property tax limits in Illinois, we compare a property tax system with limits to an unfettered system. By an unfettered system we mean a property tax system without limits on the access of jurisdictions to their tax base and the assessment of every property at its current market value. We make the comparison of an unfettered system to a limited system using the criteria of equity, efficiency, and simplicity, and we assume that the limited and unfettered systems collect the same amount of property tax. Comparing the equity, efficiency, and simplicity properties of constrained and unfettered systems identifies and clarifies important issues concerning the direction of and need for property tax reform.

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Table of Contents

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Introduction

The property tax is the most important independent source of local government revenues in the United States. In 2003, local governments in the United States collected over $286 billion in property tax revenue. This revenue amount is over $10 billion more than state governments collected in sales tax revenue, more than $70 billion more than state governments collected in individual and corporate income taxes, and more than $130 billion more than local governments collected from any other source.[1] Property tax revenue represented 46% of own-source local government revenues and 25% of all local government revenues. In 2003, local governments in Illinois collected $18.9 billion of property tax revenue. These revenues were more than the state collected in individual income taxes, corporate income taxes, and general sales taxes combined.[2]

Local property taxes finance the provision of local government services such as schools, public safety, fire protection, and transportation. Nationally, more than 40% of the property tax revenue collected by U.S. local governments funds the operations of school districts.[3] In 2003, Illinois' school districts received 62% of statewide property tax revenues, 19% were received by municipalities and townships, 11% by special districts, and 8% by counties. Per-capita property tax revenues in Illinois for 2003 were $1,403, higher than the national average of just over $1,000. Property tax revenues represented 4.4% of personal income in Illinois in 2003 compared to 4.0% of personal income in 1992, and 3.8% in 1982. For the entire United States, local government property tax collections were 3.1% of personal income in 2003.[4]

Because of its importance to local government finance, reforms of the property tax system are constantly debated and the debates recycle over the years. Proposed reforms have involved both the imposition of property tax limitation measures and their elimination.[5] Property tax limitations are prevalent in the United States. As of 2006, forty states constrain local government property tax revenues by limiting tax rates, limiting revenues, or limiting both rates and revenues. Twenty states have some form of limitation on increases in assessed values of individual properties. Illinois is one of 23

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[1] In 2003, the largest single source of local government revenue was state transfers at $370.6 billion. Own-source revenue refers to revenue raised by the local government itself and not received through transfers from higher levels of government. After the property tax, in 2003 the largest source of own source local government revenue was current service charges, at $163.2 billion. Source: U.S. Census Bureau, Summary of State and Local Government Finances by Level of Government: 2002-2003. We focus on 2003 figures because these are the latest years for which detailed Illinois data are available.

[2] For comparison, in 2003 the state of Illinois raised $9.7 billion from the individual and corporate income taxes combined and $8.2 billion from the general sales tax. Source: Illinois Department of Revenue.

[3] According to the U.S. Census Bureau, in 2002, school districts collected $126 billion, municipalities and townships collected $85 billion, counties collected $66 billion, and special districts collected $11 billion in property tax revenues.

[4] Source: US Census Bureau and Bureau of Economic Analysis.

[5] See McGuire and Papke (2008) for a discussion of the continued importance of the local property tax in the face of efforts to rein it in.

states that limit both local property tax rates and revenues. In addition, Illinois limits the growth rates of assessed valuations in Cook County.[6]

Complicated property tax systems are difficult for voters, policymakers, and researchers to understand, let alone reform. In order to discuss the potential benefits and costs of the property tax constraints in Illinois, we compare a property tax system with constraints to an unfettered system. By an unfettered system we mean a property tax system without limits on the access of jurisdictions to their tax base and the assessment of every property at its current market value. We make the comparison of an unfettered system to a constrained system using the criteria of equity, efficiency, and simplicity, and we assume that the constrained and unfettered systems collect the same amount of property tax revenues to be used for providing local government services.[7] Comparing the equity, efficiency, and simplicity properties of constrained and unfettered systems identifies and clarifies important issues concerning the direction of and need for property tax reform.

Three Criteria

The equity of a property tax system is measured by the relationship between the ultimate distribution of the tax burden and societal notions of fairness. For example, should two families with identical ability to pay owe the same amount in property taxes, and should a family with a higher ability to pay owe more in property taxes? In the context of tax systems, the two most commonly referenced equity standards are horizontal equity and vertical equity. A horizontally equitable property tax system ensures that two households with identical ability to pay owe identical property taxes. Vertical equity refers to the distribution of average tax burdens across individuals of varying ability to pay. For example, when individuals with relatively higher incomes pay relatively more in property taxes as a share of income, a property tax system is deemed to be progressive.[8]

All else equal, it is desirable for a tax system to raise revenue with minimal distortions to behavior. The efficiency costs of a tax system refer to the excess burden of the tax, or the deadweight loss, defined as the loss in social welfare attributable to the behavioral changes induced by the tax. Another aspect of efficiency concerns economic growth: if property tax system A would yield the same amount of revenue as system B and yet result in a higher level of local economic growth, system A would be viewed as more efficient than system B. Also relevant to a discussion of efficiency is whether local governments choose an efficient level of public services.

It is also desirable for a tax system to be relatively simple. Comparing the simplicity of two tax systems involves a comparison of the costs imposed on taxpayers and tax administrators by revenue-equivalent tax systems. The main costs of a tax system include the costs of compliance and administration. A simpler and less administratively

[6] See Anderson (2006) and Anderson (2007) for a review of property tax limits in the United States.

[7] Total revenues and revenues for public service provision differ because of the administrative costs of the tax system. The systems may collect different amounts of total revenues in order to cover differences in administrative costs. These differences inform as to the simplicity of a tax system.

[8] The concepts of vertical and horizontal equity apply generally to the concept of *ability to pay*. Under the property tax, ability to pay can be measured by the market value of an owner's property. Alternatively, society may view income as a superior measure of ability to pay.

costly tax system is desirable because it collects the same amount of revenue to be used for local government services at a lower cost. A more transparent property tax system may also make it easier for taxpayers to monitor the performance of local government officials.

A Property Tax Framework

All property tax systems are characterized by a definition of the tax base and by local government access to the tax base. Defining tax base involves specifying how each individual taxpayer's property is valued for tax purposes. Once each individual piece of property is appropriately valued, these values are summed to produce the total tax base. The value of a single taxpayer's property is referred to as that taxpayer's *own value*. Aggregating the own values of all taxpayers produces the total tax base, referred to as *total value.*

Access to tax base is the ability of a government entity to set taxes at desired levels and therefore to impose tax liability on a property. A single taxpayer's tax liability, referred to as *own taxes*, equals the product of her *own value* and the local tax rate. Aggregating own taxes over all taxpayers located within the government's taxing jurisdiction produces the total revenue remitted to the government, referred to as *total taxes.*

The steps to determining own taxes are as follows. The assessor measures the value of each property within a jurisdiction and determines the total assessed value of the jurisdiction. Next, the jurisdiction determines total required (desired) revenues. The statutory property tax rate (τ) falls out as the ratio of total required revenues to total assessed valuation. This statutory tax rate is then applied to each parcel in the jurisdiction, resulting in each taxpayer's liability or own taxes. We can portray a property tax system by the following two identities:

$$\tau \equiv \frac{\text{total taxes}}{\text{total value}}$$

$$\text{own taxes} \equiv \tau \times (\text{own value}).$$

From these two identities we derive a third, key identity:

$$\text{own taxes} \equiv (\text{total taxes}) \times \left(\text{own value} \Big/ \text{total value} \right).$$

This identity demonstrates that an individual property owner's tax liability depends on the amount of money being collected (i.e., total taxes), the taxable value of the property owner's property within the taxing district (i.e., own value), and the total taxable value of all taxable properties within the taxing district (i.e., total value). A property owner's tax liability depends on two factors: the total taxes, as set by the jurisdiction, and the property owner's share of total assessed valuation in the jurisdiction. This share can vary either because the value of the owner's property changes or because the values of other properties in the jurisdiction change.

Access to the tax base – can the jurisdiction set taxes in an unconstrained fashion? – and definition of the tax base – does the jurisdiction assess property according to current market value? – differentiate the constrained and unfettered property tax systems. An unconstrained, or unfettered, property tax system is defined as a system that places no constraints on local government access to the tax base. Constrained systems impose legal limits on local government access to the tax base. Limits on access to the tax base will constrain the amount of tax revenues (i.e., total taxes) that can be legally collected in a period. Total taxes (i.e., revenues) may be limited directly through revenue constraints, indirectly through tax rate constraints, or through limitations on both total value and tax rates.

The analysis in this report considers four mutually exclusive definitions of tax base (i.e., total value). The accuracy of local assessment is assumed to be the same across all four definitions of tax base. The analysis does not assume, however, that assessments are produced at no cost. The four definitions of tax base are current (or market) value assessment, fixed assessment, acquisition value, and classification.

Market value, the assessment method used in an unfettered system, assumes that the values of all properties are annually updated to reflect their current market values. Fixed assessment assumes that all properties are assigned their market values for a common year and that these values do not change over time.[9] For example, a fixed assessment system could define each property's own value in all periods as each property's market value in 1950.[10] Fixed assessments are an extreme version of policies that limit growth in individual assessments over time. Under a fixed assessment definition of tax base the growth in individual assessments is limited to zero percent over time.

An acquisition value system, similar to the current system in California, defines each property's own value as the purchase value of the property. That is, the own value of a property may only change when it is sold. A classification system defines the own value of each property as a percentage of its current market value, with these percentages (i.e., classification rates) differing across property classes (e.g., commercial, residential, industrial, apartment, non-profit, etc.).

The different assessment systems only define tax base and do not directly limit local government access to the tax base. They can, however, have important effects on the efficiency, equity, and simplicity of a property tax system. In the next sections, we evaluate constrained and unfettered property tax systems using these criteria.

Efficiency

The efficiency implications of property tax constraints depend on the nature of local government behavior. This analysis employs two extreme conceptions of local government behavior to assess the efficiency implications of both alternative definitions

[9] Actually, what is important is that the relative values do not change over time.
[10] A fixed assessment policy would have to describe methods for assessing the own value of new construction as well as renovations or improvements to existing properties.

of the tax base and limits on access to the tax base. While these extremes are unrealistic, and the truth is likely some where in between, analysis of the two extreme cases demonstrates the most important efficiency considerations.

Benevolent Government

Consider the first extreme view of local government behavior. Under this view, local governments conduct all policies by a majority vote and the preferences of the local majority completely guide local policy decisions. This is often called the median voter model because, under certain assumptions, a majority voting system will result in policies that follow the preferences of the voter with median preferences. In the context of the median voter model, the argument for limiting access to tax base and hence limiting revenues is weak. The government can be viewed as a benevolent or altruistic dictator, choosing policies with the singular goal of maximizing the well being of the electorate. Indeed, constraining benevolence might be considered misguided at best and malevolent at worst. Limiting a benevolent government's access to tax base will not increase efficiency and may actually reduce efficiency. For example, if local voters are willing to pay higher property taxes to fund a brand new computer lab in the local high school, it is difficult to argue that they should be denied. If denied, local voters may circumvent the limitation by raising the required revenue in a less efficient manner or by concealing revenues from oversight agencies. The concealing of revenues and search for alternative revenue sources has costs and results in the same output being provided at a higher cost. This is the very definition of inefficiency.[11]

Leviathan Government

At the other extreme of government behavior from benevolent government is the budget-maximizing, self-aggrandizing bureaucrat. Under this so-called Leviathan model of local government, local officials act to maximize their own well-being. The well-being of government officials may be a function of factors such as the size of the budget, the size of the staff, and the quality of office furniture and computers. The only constraint on the desire of bureaucrats to enrich themselves is the need to get re-elected or re-appointed so that they can keep enriching themselves. In the Leviathan model voters are simply pawns of the elected or appointed officials and do not have the power to make tax and expenditure policies correspond well with their preferences. Much of the tax revenue collected under a Leviathan local government is wasteful and thus inefficient. Everyone, with the exception of the bureaucrats, could be made better off by reducing tax revenues, eliminating wasteful spending, and maintaining the same level of real government services. Thus, limiting a Leviathan government's access to the tax base may increase efficiency.

As explained below, different definitions of the tax base have different implications for the ability of local voters to monitor the performance of local governments. Since local

[11] Limitations often include override provisions that allow for a vote to exceed limitations. This can help reduce inefficiency but even the calling of a vote has administrative costs that are unnecessary in the presence of an altruistic local government.

voters do not need to monitor the performance of a benevolent local government, the definition of the tax base is immaterial; under a benevolent government an efficient allocation will be achieved regardless of the tax base definition. With Leviathan local government, however, it is only the monitoring of government performance (and the need for reelection on the part of self-aggrandizing bureaucrats) that mitigates the government's ability to appropriate taxpayer resources.

Perhaps the simplest method for a taxpayer to monitor local government is to compare her tax bill to the quantity and quality of the services that her government provides. For example, if her tax bill increases but she sees no corresponding increase in the quantity or quality of government services she might suspect wasteful spending. Changes in her tax bill, however, are not necessarily a good signal of an increase in government tax revenues. Consider again the own taxes identity from above; an individual's tax bill (i.e., own taxes) may change over time because of changes in total taxes or changes in her tax share (i.e., the ratio of own value to total value). Under market value assessment, her tax share may change either because own value changes or total value of the jurisdiction changes. It may be costly for her to determine what portion of an increase in her tax bill is caused by an increase in total taxes (and possibly wasteful expenditures) and what portion is caused only by changes in her tax share. Because of the costs of correctly interpreting changes in tax bills, market value assessment makes it costly to monitor local government behavior. An increase in the costs of monitoring can allow Leviathan governments to be even more inefficient than otherwise. These same higher monitoring costs will exist under a classification system, since the underlying appraisals are based on market value.

A fixed value assessment system might lower monitoring costs by enabling an individual taxpayer to understand exactly how to interpret her tax bill. Without new construction or improvements, her tax bill will increase only as the result of increases in total taxes because her tax share remains constant over time.[12] Under a Leviathan government the reduced costs of monitoring can be an essential part of reducing the ability of the self-aggrandizing bureaucrats to undertake large amounts of wasteful expenditures. Assuming relatively small amounts of new construction, monitoring costs may also be relatively low in an acquisition value system because an individual property value will only change when a property is sold.[13]

Simplicity

All else equal, it is desirable for a tax system to be simple. Simplicity involves the ease of complying with the tax system and the costs of administering the tax system. The simplicity of a property tax system can be judged separately from the question of the nature of local government behavior.

[12] New construction will cause tax shares to change. The relative magnitude of these changes is likely to be much smaller than the potential for tax share changes under market value assessment.

[13] In systems other than fixed value assessment the magnitude of changes in tax shares will depend on the real estate market. For example, when all properties appreciate at the same rate, tax shares would be invariant under a market value assessment system.

Complying with and enforcing state limitations on rates and revenues may be administratively costly for both local governments and the state. Most revenue limits constrain the amount that property tax revenues can increase from one year to the next. In order to enforce these limits state governments must maintain databases of past revenues. Furthermore, most legal limitations on rates and revenues are subject to a variety of exceptions to the rule. For example, it may be possible to increase revenues dedicated to capital expenditures by more than 5% while other revenues may only increase by 5% each year. Local governments must put effort into understanding the definition of capital revenues and the state must make sure that local governments are actually following the definition and not evading the limitation. By simply avoiding these compliance and evasion costs, an unconstrained system is much simpler than a constrained system.

Property values must be assessed (measured) for tax purposes and this process of assessing values is more or less onerous depending on the definition of the tax base. As explained above, under market value assessment own value is continually updated in order to reflect the market values of real estate. In practice, continual updating usually implies annual updates to own values. Determining accurate assessments of market value for every property can be very expensive. Annually updating these values creates large administrative costs for both taxpayers and tax administrators. Taxpayers must monitor the accuracy of assessments and possibly appeal inaccurate valuations. Tax administrators must not only produce accurate assessments but they must also keep complete and updated records and handle appeals. Annual updates to property values should appear transparent and predictable, not mysterious and capricious. In addition, the state government may also incur costs if it chooses to monitor the quality of local assessments. Hundreds, perhaps thousands, of full-time administrators must be hired not only to assess properties annually but also to monitor the quality of the assessment process.

Fixed and acquisition value assessment systems have much lower administrative expenses than a market value assessment system. The fixed and acquisition value systems need to produce accurate assessments only once and there is no need for constant updating of all records. Fewer administrators will be needed at both the state and local level, and there will be much less need for individuals to evaluate assessment accuracy or appeal assessments. Under the fixed and acquisition value definitions of tax base, compliance costs are low and the assessment system is relatively transparent.

Equity

Because equity is defined in relation to the distribution of the tax burden, and the assessment system determines that distribution, the discussion of equity is a discussion of the four different assessment systems outlined above.

If income is superior to property value as a measure of ability-to-pay, all assessment systems will fail to some extent to distribute the tax burden according to societal notions

of fairness. The exact nature of the failure to achieve equity will depend on the exact nature of the relationship between property values and incomes.

Permanent income can often be a better measure of ability to pay than current income. For example, a retired person owning a $2 million mansion may have a low current income, but society will likely view her as having a high ability to pay. When permanent income is strongly associated with the market value of one's property a market value assessment system distributes taxes on the basis of permanent income. Society may deem this fairer than a system that distributes taxes based on current income.

Market value assessment can change the distribution of the tax burden as market values change. Fixed and acquisition value systems, however, do not allow for any significant changes in the distribution of the tax burden. Under an acquisition value system, a relatively low income person who purchased her home last year could easily pay more in taxes than a wealthy individual who purchased his home 20 years ago. A fixed assessment system can produce the same kind of inequity because, regardless of income, own value is fixed.

Although fixed value assessment can potentially lead to current tax payments that are misaligned with ideas of fairness, capitalization of property taxes into market values can ameliorate much of this unfairness. Property taxes are capitalized into the market value of a property when estimates of the future property tax obligations on the property affect buyers' bids for the property. The idea that future tax obligations on a property affect its sales price is not implausible and is confirmed by much evidence. Consider two parcels of real estate that are otherwise identical except that the owner of one property pays twice as much in property taxes as the other owner. The sales price for the high-tax property should be lower than the sales price of the low-tax property. In a competitive real estate market, the price of the high-tax property should be lower by exactly the discounted value of future tax differences. Thus, even though one owner pays twice as much in property taxes, she will have paid less for her property than the other owner. If her purchase price was lower by the exact amount of future taxes, she is not bearing the economic burden of current tax payments. Rather, the previous owner does.

Capitalization of property taxes into current market values thus eliminates or ameliorates much of the unfairness cited above. Still, even if capitalization is complete -- and it will be incomplete in many less-than-competitive markets -- the existence of disparities in current tax payments can easily create the perception of unfairness.[14]

When income (permanent or current) is generally positively related to property values, of all the systems considered here, market value assessment distributes the tax burden most equitably. While the substantial cost advantages and relative transparency of fixed value assessments may make it an attractive option, the potential conflicts with societal notions of fairness make fixed value assessments much less attractive.

[14] The main determinant of the extent of capitalization is the real estate market's ability to make accurate predictions of future tax payments. It may be easier to forecast future tax payments accurately under a fixed value or acquisition value assessment system than under a market value assessment.

When market values are assumed to measure ability to pay perfectly it is easier to distinguish among the assessment systems. A market value assessment system will do best at maintaining horizontal and vertical equity in actual tax payments as market values change. A classification system will sacrifice exact horizontal and vertical equity in order to appeal to other notions of fairness (e.g., commercial properties should pay more in taxes than residential properties, all else equal). Fixed and acquisition value assessment systems will reduce the potential for volatility in individual tax shares and thus individual tax payments, but these systems may not perform well in terms of equity.

Evidence on Local Government Behavior

The main determinant of much of the foregoing analysis is the likelihood that government behavior more closely resembles the Leviathan than the benevolent dictator. What is the evidence on the presence of Leviathan government? Many studies have analyzed the effect of property tax limitations on local government revenues and tax rates. If governments act as self-aggrandizing bureaucrats, we would expect to see an effect of limits because we would expect the limits to be binding. The evidence suggests that limitations on revenues and rates are binding in that they appear to reduce the growth rate of property tax revenues.[15] The effectiveness of limits is consistent with, if not definitive proof of, the existence of Leviathan governments.

Voter support for limitations is also consistent with the existence of Leviathan government. Many limitations were passed by state-wide initiatives, Proposition 13 being the most prominent example, and others are instituted through state-wide referenda. In a study of the decision of Illinois municipalities to adopt home-rule status and therefore to throw off state-imposed rate limits, Temple (1996) finds that less than ten percent of the cities in her sample chose to do so. We would not expect to see voter support for limitations if local governments were benevolent.

In a study of school district spending in California before and after the passage of Proposition 13, Downes (1996) finds that school officials valued spending on support staff above and beyond the effect on student outcomes of spending more on support staff. He also finds that school officials placed a higher value on student outcomes after the passage of Proposition 13 than they did before its passage. Both of these findings are consistent with Leviathan government.

We have argued that the effects of property tax constraints on equity, efficiency, and simplicity depend on the nature of local government behavior. If local government behavior more closely resembles benevolence the imposition of revenue and rate limitations reduces efficiency. A market value assessment system will tend to do best in terms of equity whether government behaves as a budget maximizing bureaucrat or a

[15] Preston and Ichniowski (1991) examine the effects of limits on municipal revenues, Poterba and Rueben (1995) examine the effects of limits on the public-sector wage premium, Dye and McGuire (1997) examine the effects of limits on property taxes in Illinois, and Cutler, Elmendorf and Zeckhauser (1997) examine the effects of Proposition 2 1/2 on municipal property taxes in Massachusetts. All find that limitations are effective.

benevolent dictator, but it is not likely to be nearly as transparent as a fixed value or acquisition value system. However, transparency is relatively unimportant if the government acts as a benevolent dictator.

Local government is certainly not inherently Leviathan or benevolent. However, it is likely that a transparent property tax system would reduce the ability of Leviathan government to persist. Taxpayer confusion may not only allow Leviathan governments to persist but it may also cause benevolent governments to be inefficiently constrained.

Evaluating Current Property Tax Institutions in Illinois

Illinois, Cook County in particular, strays far from the unfettered property tax system described above. The departures from the unfettered system affect the equity, efficiency, and simplicity of the Illinois property tax. As noted above, Illinois is one of 23 states that limit both the tax rates and tax revenues that can be selected by many of its local taxing jurisdictions. Limits on assessment increases and a classification system are currently used in Cook County. In addition, Illinois counties are not required annually to update the assessed value of individual properties.

Current Illinois Institutions

Illinois refers to local governments with the power to impose taxes as taxing districts. As of 2002, there were 927 school districts, 1,290 municipalities, 1,433 townships, 102 counties, and 2,222 special taxing districts in Illinois, for a total of 6,074 taxing districts. Pennsylvania had the next highest number of taxing districts at 5,031. Special taxing districts in Illinois include fire districts (835), park districts (360), assessment districts (345), and library districts (336).[16]

Illinois has developed its own terminology to describe each of the components of an individual tax bill. In Illinois the final taxable value (own value) of an individual property is referred to as the Adjusted Equalized Assessed Value (Adjusted EAV).[17] In 2002, the total adjusted EAV in Illinois was over $256 billion. Before arriving at the Adjusted EAV, the assessor must first estimate or appraise the market value of the property, multiply this estimated market value by an assessment ratio, multiply this new figure by a state equalization factor, and finally allow for any available exemptions. Essentially, this process, although complicated, boils down to the following equation, expressed twice, for the taxable value (own value) of a property:

$$\text{Own Value} \equiv (\text{Estimated Market Value}) \times (\text{Multipliers}) - (\text{Exemptions})$$
$$\text{Adjusted EAV} \equiv (\text{Equalized Assessed Value}) - (\text{Exemptions})$$

[16] Information is from 2002 Census of Governments, Government Organization report.
[17] Since 1979, Illinois has not taxed personal property. To replace the lost revenue to local governments, the state distributes to this day funds from income taxes to the taxing districts according to their original (1979) shares of personal property.

The multipliers are the assessment ratio and the equalization factors, which are explained in detail below.

The local assessor estimates the market values of all taxable properties within each taxing district and multiplies each market value by an assessment ratio to arrive at what is called the assessed value.[18] For all properties not located within Cook County, the assessment ratio is 33.33%, implying that the assessed value of a property is 33.33% of its estimated market value. For properties located within Cook County, the assessment ratio varies depending on the type (i.e., class) of property. The assessment ratios in Cook County range from 16% for residential property to 38% for commercial property.[19]

Once the assessed value of each property is determined, the State of Illinois acts to adjust property values across jurisdictions. The state adjusts values by multiplying the assessed values of all non-farm properties within a county by a county-specific and state-certified equalization factor. The equalization factor is used in an attempt to ensure that each county in Illinois has the same 33.33% ratio of total assessed value to total market value. This equalization factor is designed to inflate the non-farm assessments in counties that have under-estimated market value and deflate the assessments in counties that have over-estimated market values. In Cook County, the equalization factor reflects the fact that many properties are assessed at ratios different from 33.33%.

The Illinois Department of Revenue determines the equalization factor by computing the assessment-sales ratio for a sample of properties that have sold in the previous three years.[20] The assessment-sales ratio for a county is calculated by first adding up the assessed values of all properties sold within the last years and then adding up all of the sales prices for those same properties. The assessment-sales ratio for the county equals the sum of assessed values divided by the sum of sales prices. When the ratio of the sample's total assessed value to the sample's total sales prices is less than the constitutionally required 33.33% the department assigns an equalization factor of greater than one in order to increase the sample's total assessed value to a level that represents 33.33% of the sample's total sales prices. Once the equalization factor is determined, the assessed value of every non-farm property in a county, not just those non-farm properties that sold in the last three years, is multiplied by the county's equalization factor to produce an Equalized Assessed Value (EAV) for each property. For example, if an assessment-sales ratio within a county demonstrates that for properties sold in the last

[18] Each county in Illinois has a Chief County Assessment Officer (CCAO) who is either elected or appointed. The CCAO is also known as the county assessor or the supervisor of assessments.

[19] By law all counties with over 200,000 in population may elect to assess property at different rates. Of the six qualifying counties only Cook County has elected to do so. Although Cook County assessed properties at different rates for many years prior, the state constitution of 1969 made assessment at different rates within Cook County explicitly legal.

[20] Not all properties in the county will have sold in the previous three years requiring that a sample of properties with recent observed sales prices be selected. If the sample of properties is representative of the population of properties within the county, the assessment-sales ratio within the sample should be similar to the assessment-sales ratio of properties for which there are no recently observed sales prices. The final 2003 equalization factor for Cook County was 2.4598 indicating that the assessment-sales ratio was 13.55% instead of 33.33%.

three years the ratio of assessed value to sales price is 20%, the equalization factor applied to all non-farm properties within the county will equal 1.665. Thus, a property with an assessed value of $50,000 would have an equalized assessed value of $83,250 and a property with an assessed value of $75,000 would have an equalized assessed value of $124,875.

The last determinant of Adjusted EAV (i.e., own value) is the subtraction of any available exemptions that reduce the taxable value of the property. A few property tax exemptions are available to Illinois taxpayers. The most widely available exemption is the Homeowner Exemption, which is available to all homeowners for the tax bill on their primary residence. Currently the exemption reduces EAV by $5,000 without regard to previous assessments. In 2002, over 2.8 million homeowners received the general homestead exemption for a total reduction of EAV of $10.7 billion.[21] For the property described above with an EAV of $83,250, the homestead exemption would reduce the EAV by $5,000, creating an Adjusted EAV of $78,250.

Other exemptions are available to a smaller set of property owners. The Income Exemption is available only for homeowners with incomes less than $30,000 and reduces Adjusted EAV by an additional $5,000. The Senior Exemption is available on the principal residents of homeowners who are at least 65 years of age. There are no income qualifications on this exemption, which reduces the EAV by an additional $3,000. Owners of a principal residence who are at least 65 years of age are also eligible for another exemption if their household income is less than $45,000. This exemption is known as the Senior Freeze, and its amount changes as necessary in order to keep the Adjusted EAV of the property no greater than its Adjusted EAV in the year prior to the year the homeowner qualifies for the exemption. The Home Improvement Exemption applies only to primary homeowners who make capital improvements on their home. The maximum exemption is $75,000.

Illinois also allows counties to restrict the magnitude of increases in the taxable value of homestead property upon reassessment. As of 2006, only Cook County has elected to restrict the magnitude of increases in taxable value (own value). In Cook County, increases in the Adjusted EAV of a residential property are limited to at most 7%, unless limiting the increase in Adjusted EAV to 7% causes the difference between EAV and Adjusted EAV to be greater than $33,000.[22] When the 7% limit on increases in adjusted EAV results in the Adjusted EAV being more than $33,000 less than the EAV, the property's Adjusted EAV is allowed to increase by an amount greater than 7% until the difference between Adjusted EAV and EAV is $33,000. The 7% limit on residential assessment increases, formally referred to as the Alternative General Homestead Exemption, was originally passed by the state legislature in 2004 and was extended and modified in 2007.

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[21] Source: Illinois Department of Revenue, Property Tax Statistics, Table 21.

[22] The $33,000 applies only to the first year after revaluation. This maximum level falls to $20,000 by the third year after revaluation. Prior to 2007, the maximum exemption was fixed at $20,000. For seniors the difference between Adjusted EAV and EAV can be greater than $33,000 by the amount of other applicable exemptions.

All of the exemptions described above are unfunded exemptions in the sense that other local taxpayers, not the state government, must foot the bill for any revenue lost through the exemption. Through its income tax, the state government does provide a nonrefundable tax credit for property taxes paid. The Illinois Property Tax Credit is equal to 5% of the Illinois property tax paid on a taxpayer's primary residence and is available to all taxpayers regardless of income. The state offers another property tax related program through the Department of Aging. This program, called the Circuit Breaker, provides cash payments to taxpayers who are at least 65 years old and meet certain income requirements. Subject to a limit, the cash payment increases with the amount of property tax paid and decreases as household income rises. The cash payment ranges from $700 to $70.

Illinois defines the tax base through the exemptions and assessment processes described above. Given these definitions of the tax base, the state controls access to the tax base through constraints on revenues and tax rates. In Illinois, property tax revenues are referred to as property tax extensions. Extensions, unlike individual assessments, are allowed to change each year. The absolute level of a property tax extension in a given year is limited by relatively widespread limitations on tax rates. The tax rate in a taxing district is the ratio of the district's property tax extension to the total taxable value of property in the district. Tax rate limitations affect all Illinois school districts, special districts, community college districts, townships, and all non-home-rule counties and municipalities. Municipalities with populations greater than or equal to 25,000 and Cook County are defined as home-rule units of government and are not subject to the tax rate limitations.[23] The limitations on tax rates vary by taxing district and by fund within each taxing district. Many of these tax rate limits can be exceeded temporarily and sometimes permanently through a direct vote.

The Property Tax Extension Limitation Law (PTELL) restricts the magnitudes of extension increases in 39 Illinois counties. Although Cook County and the 5 Collar Counties are subject to PTELL by state mandate, the other 33 counties elected to participate in PTELL. PTELL affects all non-home-rule taxing districts in affected counties, limiting increases in property tax extensions to the lesser of inflation or 5%.[24] Once instituted, voters in a county can vote to override the PTELL temporarily in a general election.

Evaluation of Illinois Institutions

The institutional departure from an unfettered system that applies to the most taxing districts in Illinois is tax rate limitations. These limits set a maximum tax rate that a taxing district can employ and can potentially restrict local government access to the tax

[23] Most municipalities in Illinois are not home rule, with only 197 of 1,290 municipalities classified as home rule in 2000.

[24] If a taxing district reduced its extension in the preceding year the highest extension in any of the three previous years is used to compute the maximum allowed extension. In counties without PTELL a taxing district must notify, but does not require approval from, the public if the planned extension represents an increase of 5% or more over the previous year's extension.

base. Although it is unclear exactly how often the rate limits actually bind and therefore force a taxing district to have a lower tax rate than it would prefer, these limits are a constant consideration as districts subject to the limits make policy choices.

The tax rate limits in Illinois are incredibly complex and require their own manual. The limits on tax rates differ across types of taxing districts and also across funds within the same taxing districts. The implementation of these limits clearly reduces the simplicity of the property tax system and drives up administrative costs. Administrative costs are high because effort must be put into understanding, explaining, and complying with the limits. Even though the system allows taxing districts to temporarily override rate limitations, the overrides are themselves administratively expensive endeavors with uncertain outcomes.

If school districts in Illinois are prone to wasteful expenditures, the rate limits could produce a reduction in these wasteful expenditures. The districts, however, might just as easily reduce useful expenditures in order to maintain the wasteful expenditures that budget-maximizing bureaucrats desire. Again, the evaluation of efficiency requires judgments about the nature of local government behavior. The most efficient local governments, however, are made worse off by tax rate limitations, as they must bear the burden of the administrative costs of the restricted access to tax base.

Rate limits themselves will not affect equity within a district as they do not change tax shares and can only serve to reduce total revenues. The limits themselves, however, apply inequitably across districts. Although all districts are constrained by the same rates, districts with low levels of property wealth and those with slow growing property values are more constrained by the rate limits. Districts with large and growing tax bases are able to raise revenues at lower rates than other taxing districts and thus the rate limits are less binding. Since taxing districts ultimately desire revenues as opposed to tax rates, the rate limitation will only effectively constrain property tax revenues in districts with relatively small and slow-growing property tax bases.

Illinois' revenue limitations law, the Property Tax Extension Limitation Law, does not apply as widely as the tax rate limitations but still reduces the simplicity of the tax system. As with rate limits, the limitations on revenue increases restrict access to the tax base but do not alter the definition of tax base. PTELL also requires its own manual but is remarkably less complicated than the myriad of tax rate limitations. As explained above, the law requires that annual percentage increases in total taxes do not exceed the lower of 5% or the rate of inflation. Even though the law is relatively simple, the administrative costs are arguably large since the state government must provide oversight, and taxing districts face the costs of compliance.

As with the tax rate limits, the revenue limits will not affect equity within a taxing district since the revenue limit does not change individual tax shares. An evaluation of the revenue limit must then weigh the complexity costs against the potential gains in efficiency resulting from restraining Leviathan governments. Again, the most efficient governments are harmed by the limitation on increases in total taxes. Overrides are

available, but, even if higher revenues are desired by a majority of residents, an override may not be undertaken because of the costs and uncertain outcome of a referendum. An override referendum will only be called when the benefit of increased revenues exceeds the administrative costs and uncertainty surrounding an override referendum. The administrative costs and uncertainty can lead to less than efficient amounts of revenue being raised through the property tax.

The empirical evidence on the effects of PTELL in Illinois suggests property tax revenues in school districts subject to the limitation often grow more slowly than property tax revenues in unlimited school districts. Dye and McGuire (1997) find that school districts subject to PTELL in Illinois tended to exhibit slower growth in administrative expenditures than districts not under the limit. Furthermore, limited districts exhibited no different trend in the growth of instructional expenditures. If administrative expenditures are viewed as possibly excessive or inefficient, then the lower growth in administrative spending in limited districts suggests an increase in efficiency. Of course, a possible increase in efficiency in some districts does not imply that every district should have a revenue limitation. Dye, McGuire and McMillen (2004) conclude that revenue limitations did appear to result in slower growth in property tax revenues and expenditures in both the short run and long run. Thus, although PTELL does result in greater tax complexity, it does appear to increase the ability of some local residents to prevent potentially undesirably large increases in property tax revenues.

Other departures from an unfettered property tax system affect the definition of tax base without restricting local government access to that tax base. The lack of a requirement for annual updates in property valuations statewide and assessment limits and classification in Cook County both define property tax base in Illinois. In all counties except for Cook, own values of all properties are to be updated at least every four years. In practice, assessors appear to update individual own values more frequently than every four years. In Cook County, all properties are divided into one of three assessment districts and the value of any single property is usually updated once every three years. As noted above, non-annual assessments reduce the administrative costs of assessments and can potentially make the property tax system less complicated. Requirements to update all property values in Cook County on an annual basis would require much larger annual expenditures on property assessment.

A move to annual assessment could increase the equity of tax payments at one point in time if home value is an appropriate measure of permanent income or ability to pay. Annual updates may also act to "smooth out" large increases in own values that might occur if values are only updated every three to four years. Annual updates, however, may be more affected by short-term trends in real estate markets that do not accurately reflect the long-term value of property or taxpayer ability to pay. Furthermore, without a significant increase in resources for carrying out assessments, switching to required annual updates would likely result in less accurate assessments. An increase in inaccurate assessments would increase the number of valuation appeals, creating even higher administrative costs.

The most important aspect of assessments is that the process be transparent and easy for taxpayers to understand. Given the limited resources available for property assessment, a proper balance between accuracy and equity is very important. The costs of annual assessments must be weighed against any perceived gains in equity.

The last two policies affecting the definition of the tax base are classification and the Cook county assessment limit. Classification and assessment limits in Cook County create different distributions of the statutory tax payments than would occur under a system apportioning tax payments based solely on estimated market values. Both policies, assessment limits less explicitly, create larger tax payments for owners of non-residential property than would occur under a market valuation system. By altering the definition of tax base but not local government access to tax base, both policies shift the statutory burden of taxes across taxpayers rather than reducing property taxes as a whole.

Since classification involves a simple multiplication of estimated market value by a constant (the classification rate), it is difficult to argue that it makes the administration of the property tax system substantively more complex. Classification may, however, affect the equity and efficiency of the tax system.

If the market value of property is the best measure of ability to pay then the classification system results in a departure from distributing the statutory tax burden on the basis of ability to pay. Also, by raising the statutory tax burden on owners of business capital, classification may cause business to alter their location decisions. The alteration of business location decisions due to taxation is generally seen as an inefficient reallocation of resources.[25]

Since classification is likely to result in inefficiency, a strong argument involving equity must be made as justification for classification. An honest debate of the equity effects of classification must reflect on the fact that people, not businesses, pay taxes. Whether a corporate accountant, a small business owner, or a landlord mails in a property tax payment, some person's or persons' real incomes must be reduced as a result of taxation. Although it may be tempting to think of increasing property taxes on commercial property as a reduction in taxes paid by people, this is not true.

It is possible that increases in property taxes on commercial property may result in an increased share of property taxes being paid by non-residents, if the owners of the property are non-residents. It may be desirable for residents to export their taxes to non-residents in this way. Property taxes on business, however, will not always be exported. Business owners may increase prices or lower wages as a result of the increases in property taxes. For these and other reasons, it is often the case that the people bearing the actual economic incidence of the tax burden are not the same people that remit the check to the government. Given the ability of business owners to pass on their tax burden to employees and customers, it is difficult to argue that classification creates a more equitable property tax system.

[25] See Dye, McGuire, and Merriman (2001) for a study of the effects of classification on business activity in the Chicago metropolitan area.

The assessment limit that currently applies to residential properties in Cook County is officially known as the Neighborhood Preservation Homeowner Exemption. The assessment limit makes the property tax system more complex. By administering the policy as an exemption as opposed to an assessment cap, the policy creates confusion and is difficult to understand. Implementing the assessment limit increases the administrative costs of the tax system.

The assessment limit effectively restricts increases in own value and as a result increases in tax share. Yet a decrease in one taxpayer's tax share must result in the increase in at least one other taxpayer's tax share. As with classification, the ineligibility of non-residential properties shifts the statutory property tax burden away from residential homeowners.[26] As before, the ultimate economic incidence of the tax may differ from the statutory incidence so the equity implications cannot be gauged from tax bills alone. Furthermore, the assessment limit shifts the statutory burden away from residential properties experiencing large appreciations in value and towards relatively low appreciating residential properties. These shifts may be desirable if taxpayers wish to insure against large and unexpected increases in property taxes. Of course, assessment limits are not the only way to provide insurance against unexpected increases in property tax liability. Other solutions include tax deferrals and income tax credits or refunds directed towards those with large property tax increases.

All of the methods of insurance provision, however, must be paid by some taxpayer be it through higher property taxes or higher other taxes. If the relatively large increases in own values represent permanent wealth increases, those experiencing large increases in tax shares and tax payments may have the ability to pay for those increases. It is the case, however, that not all increases in assessed value reflect permanent increases in taxpayer wealth, especially in volatile real estate markets.

Concluding Remarks

Property tax systems, property tax reforms, and property tax relief programs define or alter local government access to tax base and the definition of the tax base. Policies that restrict access to tax base, such as Illinois' PTELL, produce lower tax payments, but this tax relief is not targeted, and has consequences for efficiency and simplicity. Changing the definition of the tax base can target relief to specific groups of taxpayers, however, it does not change overall taxes and thus results in shifts in tax liabilities across taxpayers. That is, reductions in tax liability for some must be offset by increases in tax liability for others. These shifts in tax liability have implications for equity, simplicity, and efficiency. Relief programs that reduce overall taxes must be financed with reductions in expenditures or increases in other taxes, generating new implications for the equity, efficiency, and simplicity of state and local fiscal systems.

Most property tax reform proposals in Illinois involve property tax relief rather than alterations to the structural foundations of the tax. Property tax relief takes two forms – across the board reductions or reductions targeted to specific groups of taxpayers. When

[26] See Dye, McMillen and Merriman (2006) for an analysis of the assessment limit in Cook County.

property tax reductions are targeted towards taxpayers with low abilities to pay, society could view the resulting property tax system as more equitable, but several of the recent changes to the structure of the tax in Illinois, while targeted to specific groups of taxpayers, are not targeted to low-income taxpayers. Across the board reductions in property taxes such as PTELL, while potentially efficiency enhancing, are not well justified on equity grounds. The property tax system in Illinois is both complicated and rife with inequities and inefficiencies. The framework provided herein could help policymakers devise a more efficient, more equitable and simpler property tax.

Appendix: A Brief History of the Illinois Property Tax

Illinois' first limit on property tax rates was placed on a Chicago sanitary district in 1907. It was not until 1961, however, that Illinois placed tax rate limits on municipalities and school districts. Rate limits were the only property tax limits in place for thirty years until property tax revenue limits were instituted in the suburban counties surrounding Chicago in 1991. In the intervening thirty years, Illinois instituted several property tax relief measures, including the homestead and senior exemptions and a home improvement exemption. The homestead exemption was originally enacted in 1978, at a level of $1,500, to combat sudden increases in property values. The exemption was increased to $3,000 by 1980 and to $3,500 by 1986. Initially, the exemption applied only to increases in Adjusted EAV from the 1977 assessment. Currently, the amount of the exemption is unrelated to changes in Adjusted EAV. In 2004, the exemption was increased from $3,500 to $5,000, except for in Cook County, where it increased from $4,500 to $5,000. The homeowner exemption is scheduled to increase to $5,500 in taxes payable year 2009, and to $6,000 in taxes payable year 2010.

First available in 1979 at a level of $1,500, the Senior Exemption is available on the principal residents of homeowners who are at least 65 years of age. There are no income qualifications on this exemption, which reduces the EAV by an additional $3,000. Prior to taxes payable year 2004, the exemption was $2,500 in Cook County and $2,000 in the rest of Illinois. The senior exemption is scheduled to increase to $4,000 in taxes payable year 2009.

The senior freeze exemption is available to homeowners at least 65 years of age whose income is low enough to qualify. Prior to 2004, household income had to be less than $40,000; this level was increased to $45,000 in 2004. In 2007, the maximum eligible household income was increased to $50,000.

The Home Improvement Exemption was originally enacted in 1975 for the amount of $15,000. Prior to 2004, the maximum exemption was $45,000. Currently, homeowners are allowed to make improvements of up to $75,000 without incorporating the value of these improvements into the EAV of their home for four years.

PTELL, also known as the tax cap, was passed in the state legislature and took effect, by state mandate, in the "collar counties" in 1991. PTELL took effect in Cook County in 1994, again by state statute. In 1996, all other counties in Illinois were given the option to elect to be subject to PTELL. As of 2006, 39 counties, including Cook County and the five collar counties, have elected or been required to participate in the PTELL. Four counties have adopted PTELL since 2000, with the remaining counties adopting PTELL between 1996 and 1999. Nine counties have attempted and ultimately failed to pass PTELL.

The Cook County limit on assessment increases for residential property, known as the Alternative Homestead Exemption or the 7% Expanded Homestead Exemption, was instituted in 2004. This exemption limits percentage increases in the Adjusted EAV of individual residential properties. The initial law expired after 2007 but was renewed until taxes payable 2011. Initially the maximum total exemption was $20,000. Under the new version of this exemption, the maximum exemption is $33,000 in the first year after reassessment, $26,000 in the second year, and $20,000 in the third year after reassessment.

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