

CHAPTER 3





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Rethinking Property Taxation

By Nathan B. Anderson and Rob Ross

This chapter takes a look at local governments' biggest source of revenue: property taxes. The authors provide a primer on how the taxes are calculated, and new formulas for understanding an individual's tax share. The authors also propose an alternative format for local property tax statements that can be used to better communicate answers to taxpayers who wonder why their property tax liability has changed.

NEED TO KNOW

- Local governments in Illinois rely heavily on property taxes as a source of revenue—in 2010, local governments collected approximately \$23.4 billion in property taxes. Illinois has the fourth highest property tax burden in the United States.
- The property tax base in Illinois is determined using a four-step process based on the property's fair cash value. The sum of the tax bases of all individual properties within a taxing district creates the total tax base. The tax share is the ratio of a property's taxable equalized assessed value to the total tax base in the taxpayer's jurisdiction.
- A large portion of annual changes in individual property tax liabilities are due to changes in tax shares rather than changes in tax extensions, or revenue.
- The authors present a new property tax statement that conveys the changes in tax liability by including information on the jurisdictions' revenue and tax bases and the taxpayer's tax shares.

Local governments in Illinois collect more in property taxes than the state government collects from any of its major taxes. In 2010, local governments collected approximately \$23.4 billion in property taxes, \$8 billion more than the state government collected from its individual income tax and general sales tax combined.¹ When comparing the tax burdens of Illinois taxpayers to taxpayers in other states, Illinois ranks fourth highest in property tax burden and 22nd highest in both individual income tax burden and general sales tax burden.²

The debate over property taxes in Illinois seems to be an endless recycling of reforms. The one thing that is clear is that property taxes are confusing. We believe this is so primarily because people expect

their property taxes to behave like other major taxes. Yet the institutions of property taxation are not at all like the institutions of income and sales taxation, and we should expect the property tax to behave differently. In this chapter, we invite you to rethink the Illinois property tax and appreciate its unique institutions.

¹ U.S. Census Bureau, State and Local Government Finances, Table 1, 2010.

² This comparison is based on 2007 data. We use 2007 because the US Census of Governments is the only nationwide survey of state and local government finances, and the most recent data are from 2007. Tax burdens are measured as a percentage of state per capita personal income. Per capita personal income data are from the Bureau of Economic Analysis. Rank includes the District of Columbia.

\$23.4
BILLION

Amount local governments in Illinois collected in property taxes in 2010, \$8 billion more than the state government collected from its individual income tax and general sales tax combined.

We believe this rethinking is important because a failure to understand property taxes may cause voters and policymakers to propose and support property tax policies and reforms that are not in their best interest, or in the best interest of their community or the state of Illinois. We believe that full information is essential to understanding the consequences of tax policies and tax reforms and that this information is often lacking in debates about property taxes.

We begin by reviewing some basic facts about the level of property taxation in Illinois and then move on to discuss Illinois' property tax institutions. Although the institutions of property taxation are different from other major taxes, the property tax institutions in Illinois are similar to those of most other states.

The most unique feature of property taxation is that, instead of selecting property tax rates, local governments in Illinois and other states have the ability to select property tax revenue. This ability to select revenue, rather than rates, has important implications. Chief among these is that the property tax is best thought of as a local cost-sharing system that determines how the members of a local community share the total cost of providing the community's public services.

Next, we argue that thinking about the property tax as a cost-sharing system helps explain why a person's property tax liability changes from one year to the next as well as how tax relief programs affect tax liabilities. Most importantly, we explain why increases in your property tax liability are unreliable signals of increases in government revenue. These unreliable signals make it difficult for taxpayers to monitor the relative fiscal restraint of their local governments.

In the final section of the chapter, we propose a modest innovation to property tax statements. Twice a year, counties mail property tax statements to property owners. We propose to reshape these statements so they can provide additional information to explain changes in individuals' tax liability. We argue that incorporating new information will make it easier for taxpayers to understand why their property tax liability changes from one year to the next, thereby reducing the cost to taxpayers of monitoring their local governments' fiscal policies. In addition, we argue that our modified property tax statement makes it easier for taxpayers to predict future changes in their tax liabilities, anticipate the consequences of tax reform proposals, and evaluate the cost of proposed increases in government spending.

Basic Facts About Illinois Property Taxes

Property taxes are relatively high in Illinois because our local governments rely more heavily on property taxes than local governments in many other states. Local governments rely on two broad revenue sources: money they raise themselves and money they receive via transfers from other governments. In 2010, local governments in Illinois had \$70.1 billion in total revenue, \$39.9 billion of which they raised

themselves, \$17.2 billion from the state government, and \$3.3 billion from the federal government. Property taxes represented 59 percent of revenue raised locally. The share of locally raised revenue derived from the property tax is higher in Illinois than all other neighboring states except Wisconsin.³

Many people associate property taxes primarily with the funding of K-12 public education. In 2010, school districts in Illinois collected more than half of all property taxes, while municipalities collected about 17 percent and all other jurisdictions combined collected the remaining 25

"The debate over property taxes in Illinois seems to be an endless recycling of reforms. The one thing that is clear is that property taxes are confusing."

³ U.S. Census Bureau, State and Local Government Finances, Table 1, 2010.

percent.⁴ In the United States overall, property tax revenue accounts for 35 percent of school districts' general revenue. In Illinois, that figure is 52 percent. Illinois ranks fourth highest among the states in terms of the share of school district revenue raised by the local property tax.⁵

Within Illinois, however, there are large differences between school districts in the extent of property tax reliance. In Cook County, local taxes—the vast majority of which are property taxes—account for 60 percent of all public school revenue. In the northeast of the state, excluding Cook County, local taxes account for nearly 80 percent of all public school revenue, but in the southeast, they account for 36 percent.⁶ The across-district differences in the relative importance of the property tax are driven by across-district differences in the amount of state and federal aid.

The Institutional Structure of the Illinois Property Tax

All property tax systems are defined by a state's choice of the definition of the tax base and the restrictions it imposes, if any, on the freedom of local governments to access that tax base. Illinois defines the tax base of an individual property using a four-step process. In the first step, the assessor determines the property's fair cash value, usually by estimating the price that the property would sell for in an arms-length transaction as of January 1 of that year. Next in Step 2, the assessor multiplies the fair cash value by a number called an assessment ratio. In Step 3, the assessor multiplies the number from Step 2 by another number (that may exceed one) called an equalization factor. The value produced after Step 3 is called equalized assessed value (EAV). In Step 4, the assessor subtracts certain amounts—called

Math Legend

- ≡ is identical to
- Δ the change from one year ago in
- ≈ is approximately equal to
- % Δ the percentage change from one year ago in

exemptions—from the EAV to produce “taxable” EAV. The equation for taxable EAV is below.

$$\text{taxable EAV} = (\text{estimated market value}) \times (\text{assessment ratio}) \times (\text{equalization factor}) - (\text{total exemptions})$$

Thus, the tax base of an individual property is determined via estimation (Step 1), multiplication (Steps 2 and 3), and subtraction (Step 4).

As a consequence of defining tax base in terms of market value, the state must determine how often it requires local assessors to update their market value estimates to account for actual changes. In counties other than Cook, local assessors must update market value estimates at least every four years.⁷ In Cook County, estimates must be updated at least every three years.⁸

The sum of the tax bases of all individual properties within a taxing district—county, municipality, school district, special district, and/or township—creates the district's total tax base. In all counties, assessors update the total tax base each year to incorporate the estimated value of new and improved property.

⁴ The Illinois Department of Revenue.

⁵ U.S. Census Bureau, Local Government Finances by Type of Government and State, Table 2, 2006-07.

⁶ Illinois I-Learn: <http://webprod1.isbe.net/ilearn/ASP/LstARCDData.asp>

⁷ The four-year standard applies to counties with fewer than 3 million inhabitants. 35 ILCS 200 §9-215.

⁸ The three-year standard applies to counties with more than 3 million inhabitants. 35 ILCS 200 §9-220. Local assessors have the authority to update estimates of fair market value every year. 35 ILCS 200 §9-205.

If the taxing district has unfettered access to its total tax base, it is able to choose the amount of revenue it wants to raise.⁹ This amount is referred to as the levy and it is reported to the county clerk. Next, the clerk is required to determine which tax rate, when multiplied by the total tax base, produces the amount of levy requested by the taxing district.¹⁰ If the state has imposed restrictions on the district's access to the tax base, the clerk does not allow the district to set a levy higher than the maximum allowed under the restrictions. The amount of revenue allowed by the clerk is referred to as the tax extension. Thus, a taxing district's tax rate is defined by the following accounting identity.

$$\text{tax rate} \equiv \frac{\text{tax extension}}{\text{total tax base}}$$

In Illinois, the most important restrictions on access to tax base are tax rate ceilings and a ceiling on the annual increase in tax extensions—revenue—called the Property Tax Extension Limitation Law (PTELL). These rate ceilings vary across and within types of taxing districts. PTELL restricts the percentage increase in a taxing district's extension to the lesser of 5 percent or the rate of inflation. Taxing districts can exceed the PTELL ceilings and many tax rate ceilings through referenda and various non-referenda exemptions.

Further details on tax rate ceilings and PTELL are beyond the scope of this chapter, but note that these restrictions do not apply uniformly across the state or across types of taxing districts. For example, tax rate ceilings apply in all counties while PTELL applies only to non-home-rule taxing districts in 39 counties. In addition, tax rate ceilings are more likely to bind revenue choices in districts with low levels of total tax base, while PTELL is likely to bind districts regardless of the level of their total tax base.

⁹ See the following statutes: 35 ILCS 200 §18-10 (counties) and §18-15 (municipalities and school districts).

¹⁰ See the following statute: 35 ILCS 200 §18-45.

Understanding Individual Tax Liabilities

In this section, we introduce a new concept—tax share—that is helpful in explaining individuals' tax liabilities. We believe that understanding the concept of tax share helps make the property tax system more transparent, and it is essential to our proposed new property tax statement.

Although the county issues a single property tax statement, a property owner owes taxes to multiple taxing districts. Most will owe taxes to their municipality, school district, county, and at least several special districts, such as a park district, library district, or water reclamation district. Because each district may have a different extension and total tax base, each taxing district has its own tax rate.

For simplicity, it is best to consider the taxes that a property owner owes to one of its taxing districts. Generally, an owner's property tax liability to one taxing district is equal to the product of the district's tax rate and the property's taxable EAV.

$$\text{Tax Liability} \equiv \text{tax rate} \times \text{taxable EAV}$$

If we replace "tax rate" by its definition from above we get

$$\text{Tax Liability} \equiv \frac{(\text{tax extension})}{(\text{total tax base})} \times \text{taxable EAV}$$

If we allow "taxable EAV" and "tax extension" to switch places, we arrive at a different accounting identity for tax liability.

$$\text{Tax Liability} \equiv \frac{\text{taxable EAV}}{(\text{total tax base})} \times (\text{tax extension})$$

A taxpayer's tax share is the ratio of his or her taxable EAV to the total tax base in this taxing jurisdiction.

"In the United States overall, property tax revenue accounts for 35 percent of school districts' general revenue. In Illinois, that figure is 52 percent."

$$\text{tax share} \equiv \frac{\text{taxable EAV}}{\text{total tax base}}$$

Because these are accounting identities, we know that the two equations for tax liability are equivalent. That is, the equations always produce identical tax liabilities; both are true.

$$\begin{aligned} \text{Tax Liability} &\equiv \text{tax rate} \times \text{taxable EAV} \\ &\equiv \text{tax share} \times \text{tax extension} \end{aligned}$$

Importantly, this equation shows that the tax share equals the cost to an individual taxpayer for each additional dollar of property tax revenue. In other words, your tax share is the amount by which your tax liability would increase if your taxing district increased its extension by one dollar. Because this will be a very small number, when interpreting the tax share in this way it is informative to multiply it by \$1 million so that the tax share is the amount your taxes would increase if your taxing district increased its extension by \$1 million.

Although this new equation for tax liability is only a rearranged version of the standard equation, it allows us to decompose the annual change in an individual's tax liability into two parts: the part explained by tax share changes and the part explained by tax extension changes. These two parts are mutually exclusive and can be readily calculated from administrative data.¹¹

$$\begin{aligned} \Delta \text{ Tax Liability} &= \\ &\text{tax share effect} + \text{tax extension effect} \end{aligned}$$

The tax share effect isolates the part of the total annual change in an individual's tax liability that is caused solely by changes in the tax share and not by changes in tax extensions. It is the answer to the

question: if my taxing district had left its tax extension unchanged, my tax liability would have changed by how much?

$$\begin{aligned} \text{tax share effect} &\approx \\ &(\text{new tax share} - \text{old tax share}) \times (\text{old extension}) \end{aligned}$$

The tax extension effect isolates the part of the total annual change in an individual's tax liability that is caused by changes in the tax extension and not by changes in tax share. It is the answer to the question: if my tax share had stayed the same, my tax liability would have changed by how much?

$$\begin{aligned} \text{tax extension effect} &\approx \\ &(\text{new extension} - \text{old extension}) \times \\ &(\text{old tax share}) \end{aligned}$$

The tax share effect and the tax extension effect explain changes in the level of tax liability.¹² Perhaps more intuitive is the role of the tax share and tax extension in explaining percentage changes in tax liability. The equation below is a useful rule of thumb for calculating percentage changes in an individual's property tax liability.

$$\begin{aligned} \% \Delta \text{ Tax Liability} &\approx \\ \% \Delta (\text{tax share}) &+ \% \Delta (\text{extension}) \end{aligned}$$

This rule says that the percentage change in an individual's property tax liability is approximately equal to the percentage in her tax share plus the percentage change in her taxing district's extension.

This has at least four provocative implications. First, an individual's tax liability can increase from one year to the next, even though an individual's tax district does not increase its revenue (i.e., extension). Second, although PTELL may prevent the

¹¹ Programs such as tax increment finance (TIF) do not interfere with these calculations. Tax relief programs that operate outside of the assessment system, such as the property tax credit on individual income taxes or abatements financed by taxing districts, are not accounted for by the equation but the equation can easily be modified to do so.

¹² The expressions for calculating the actual (rather than approximate) tax share and tax extension effects are similar to those presented, but are a bit less intuitive. For small changes in tax shares and extensions, the approximate effects will be almost identical to the actual effects. On the tax bill we calculate the actual and not the approximate effects.

extension from increasing by more than 5 percent, tax share changes can cause a taxpayer's liability to increase by more than 5 percent. Third, tax share changes, by themselves, cause changes in individuals' tax liabilities. Fourth, through no fault of the taxing district, an individual's property tax liability can increase even though her property value and taxable EAV declined.

To understand why tax liability may increase while taxable EAV decreases, note that the percentage change in any individual's tax share is approximately equal to the difference between the percentage change in the taxable EAV of her property and the percentage change in total tax base.

$$\begin{aligned} \% \Delta (\text{tax share}) = \\ \% \Delta (\text{taxable EAV}) - \% \Delta (\text{total tax base}) \end{aligned}$$

Consider an individual whose property depreciated in value and the local assessor adjusted downward the estimate of market value, and, as a result, the individual's taxable EAV decreased by 5 percent. Suppose, however, that nearly all the properties in the individual's school district also decreased in value. As she should, the local assessor adjusted her estimate of market value for all properties and, as a result, the total tax base decreased by 10 percent. According to the equation for percentage changes in tax share, the individual's tax share has increased by about 5 percent even though her taxable EAV declined by 5 percent. Our rule of thumb implies that even if her school district decreased its extension by 2 percent, her tax liability increased by 3 percent. In sum, her tax bill increased because her decline in market value was not as steep as those of her neighbors and thus some of their taxes shift onto her.

We think that taxpayers will find the answers to these two questions valuable. In particular, the tax extension effect offers taxpayers a simple method of monitoring the extent to which increases in government revenue are responsible for an increase in their taxes.

These simple equations allow us to explain the effects of important policies in Illinois, including reassessment, homestead exemptions, and tax

increment financing. The rules of thumb demonstrate that a reassessment affects a taxpayer's property tax liabilities only if it increases her tax share or if her taxing district decides to increase its extension. For example, suppose that a reassessment causes the taxable EAV of all property in your school district to increase by 10 percent. Your tax share will remain unchanged. Thus, the only reason your property tax liability will increase is if your school district chooses to increase its extension. Because school districts set extensions, leaving the rate constant to collect more revenue is a conscious decision to change the extension rather than a default policy.

"Through no fault of the taxing district, an individual's property tax liability can increase even though her property value and taxable EAV declined."

The rules of thumb also demonstrate how homestead exemptions affect property tax liabilities. The homestead exemption in Illinois subtracts \$6,000 from a property's EAV.¹³ The tax share rule of thumb shows that the homestead exemption decreases your tax share only if it produces a larger percentage decrease in your taxable EAV than it produces in the total tax base. In other words, a homestead exemption reduces not only your taxable EAV but also that of all other properties that receive it. The reductions in taxable EAV of other properties increase your tax share while the reduction in your EAV decreases your tax share. Within the same school district, properties with lower pre-exemption taxable EAV benefit more from the same \$6,000 exemption than properties with higher pre-exemption EAV. Thus, the homestead exemption shifts taxes from low-valued homes to high-valued homes and away from homes onto non-residential properties.

Tax increment finance districts (TIF) have an effect similar to homestead exemptions. The full mechanics of TIFs are too detailed to include in this chapter, but the bottom line for, say, a school district, is that a TIF within its boundaries reduces the school

¹³ 35 ILCS 200 §15-175.

district's total tax base by exempting some portion of TIF properties' EAV from taxation by the school district. For properties within the school district but outside the TIF boundaries, the TIF causes their tax shares to increase. Thus, TIF districts increase the costs of raising property tax revenue for all non-TIF taxpayers in a school district.¹⁴

Property Taxes in Cook County

To demonstrate the potential importance of the tax share effect, we examine the tax liabilities of some actual (anonymous) taxpayers in Chicago. Within the city, there are nine major taxing bodies that account for all property revenues raised outside of tax increment finance (TIF) districts and special service areas (SSA). Of these nine districts, two are home-rule jurisdictions and are not limited by PTELL's cap on property tax revenue growth. These two are the City of Chicago and Cook County.

Figure 1 demonstrates the relationship between tax extensions, tax shares, and the tax liabilities of individual taxpayers. We consider three taxing jurisdictions: Cook County, the City of Chicago and the Board of Education, which, together, account for a majority of the tax revenue collected. The first column shows, for each jurisdiction, the nominal tax extension (blue), total tax base (red) and tax rate (gold). These nominal figures are indexed to their 2000 levels. For example, the top graph shows that between 2000 and 2010, the nominal extension for Cook County decreased by 20 percent, while over the same 11 years the extensions for the City of Chicago and the Board of Education increased by about 20 percent and 40 percent. One important observation is that between 2007 and 2010 the City of Chicago held its nominal extension virtually constant. This implies that during this period, any individual taxpayer's liability to the City of Chicago changed only if his or her tax share changed.

¹⁴ This is the case as long as properties within the TIF experiences increases in their taxable values.

The second column shows for 10 randomly selected actual taxpayers located within Chicago the taxes they owed to Cook County, the City of Chicago, and the Board of Education from 2000-2010. Notice that the annual liabilities of these individual taxpayers move around a lot more than tax extensions. For example, compare the smooth path of the City of Chicago's tax

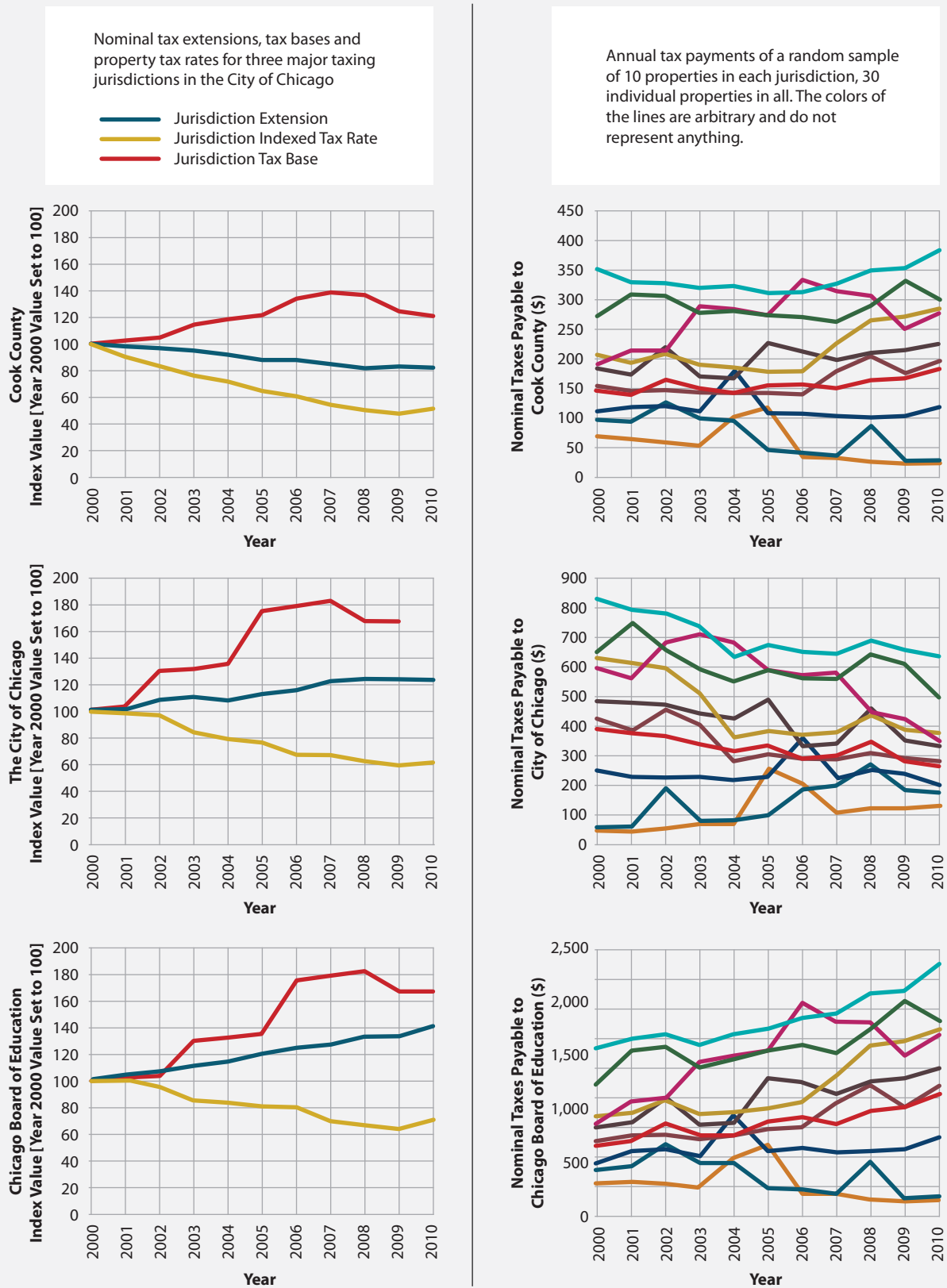
extensions to the sharp increases and decreases in individual tax liabilities. Note also that although the tax extension increased during this period, the majority of our 10 taxpayers experienced net decreases in tax liabilities. If tax shares were constant over time, the tax liabilities would mimic the path of the tax extension. Overall, there is often little connection between changes in a jurisdiction's extension and changes in the tax liabilities

of individual payers. This is consistent with our argument that a large portion of annual changes in individual property tax liabilities are due to changes in tax shares rather than changes in tax extensions.

In Figure 2 (page 36) we provide evidence of the importance of the tax share effect. Each row displays information on a different property's tax liability to a specific jurisdiction between 2006 and 2010. The three properties selected are not atypical. For each jurisdiction, we display the property with the median amount of variation in tax liability. In the first column, we describe each property's level of tax liability. The red line shows each property's actual tax liability and the blue line shows what each property's tax liability would have been if the jurisdiction held its extension at its 2006 level. That the blue lines increase over time demonstrates that even if extensions had remained constant, tax liabilities would have still increased. This demonstrates the importance of the tax share effect in explaining property tax increases and that holding the tax extension constant does little to reduce annual variation in tax liability."

In the second column, we decompose the annual changes in each property's tax liabilities into the part attributable to changes in jurisdictions' extensions and the part attributed to changes in its tax share. The blue bar represents the change in tax liability caused

Figure 1
Individual Tax Payments Are More Volatile Over Time than Total Tax Extensions



Source: Authors' tabulations using data provided by the Office of the Cook County Clerk.

Figure 2
The Tax Share Effect Explains Most of the Changes in Individual Taxes Payable Over Time



Source: Authors' tabulations using data provided by the Office of the Cook County Clerk

by the tax share effect and the red bar represents the change caused by the tax extension effect. The sum of the two bars equals the total actual change in tax liability. Consider the middle row, were we show the annual changes in a property's tax liability to the city of Chicago. The bars for 2007 decompose the taxpayer's change in tax liability from 2006 to 2007. The blue bar demonstrates that the tax share effect caused an increase in tax liability of about \$250 and the tax extension effect caused an increase of about \$60. Thus, from 2006 to 2007 actual tax liability increased by \$310. From 2007 to 2008, the tax share effect caused tax liability to decrease by about \$90 while the tax extension effect caused tax liability to increase by about \$10. Thus, from 2007 to 2008 actual tax liability decreased by about \$80. In all years and in all three jurisdictions, the tax share effect explains at least half of the total actual change in tax liability.

Both columns show that the variation in annual tax payments for this property is mostly due to changes in its tax share. In the first column, the blue and red lines move in tandem, indicating that holding the tax extension constant does little to reduce annual variation in tax liability. In the second column, blue bars that are larger than the red bars indicate that changes in tax share account for most of the annual changes in this property's tax liability.

A Proposal For A New Property Tax Statement

Figures 3 and 4 (on pages 38 and 39) each show a different property tax statement for the same property. Though all identifying information has been removed from the statements, they reflect tax liability for an actual property in the North Chicago Township. We refer to our reformulation of the statement as the "new statement" (Figure 3) and the statement as it was mailed in 2009 as the "old statement" (Figure 4).

The main difference between the old and new statements is the way information about changes in tax liability is conveyed to the taxpayer. The old statement includes information on jurisdictions' tax rates. In the new statement, we drop the tax rates in favor of information on jurisdictions' extensions and tax bases and taxpayers' tax shares. The old

statement includes none of this information.* Because the tax rate is the ratio of the extension to the tax base, excluding tax rates does not substantively change the content of the bill. But it does allow taxpayers to better understand the reasons their taxes change from one year to the next.

We now compare the old and new statements, starting from the top of the new statement and working our way down.


Panel 1 of the new statement shows the same information shown along the right-hand column of the old statement. The only difference is that the new statement reports the exemption in terms of EAV, rather than in dollars subtracted from the property's tax bill. Property tax rates do not appear anywhere in the new statement, but they can be calculated from the information on the new statement. Panel 2 reports the property's tax share. This is neither reported on the old statement nor can a taxpayer calculate it from the information on the old statement.

Panel 3 reports the extensions and tax bases of all taxing jurisdictions in the City of Chicago, except TIFs and SSAs. This information is also not reported on the old tax statement, and cannot be calculated from information on the old statement.

Panel 4 reports the tax payments due from this property to each taxing jurisdiction. This is the same information reported in the center panel of the old tax statement, but the new statement omits the tax rates. Panel 5 provides a simple analysis of the change in this property's tax liability from, in this illustration, 2008 to 2009. First, it gives the dollar amount of the change. Then, it reports the tax share effect and the tax extension effect.

* Cook County Treasurer Maria Pappas revealed a new property tax statement days before this chapter went to press. Our understanding is that although the new statement differs from our proposal, it also increases taxpayers' ability to monitor their governments. (*Chicago Tribune*, January 26, 2013)

Figure 3
 "New" Property Tax Statement for an Actual Property in the North Chicago Township



2009 Second Installment Property Tax Bill

Payee: John Doe Chicago, IL 60613	Property PIN: [REDACTED] Property Address: [REDACTED] Chicago, IL 60613 Vol. 000 Tax Code: 00000 Tax Year: 2009 (Payable in 2010) Township: North Chicago
Amount Due By 12/13/2010 \$3655.84	Late penalty is 1.5% per month by state law

Panel 1—Your Taxable Value				Panel 2—Your Tax Share*			
	2008	2009	% Change		2008	2009	% Change
Estimated Market Value	458,650	252,250	-45%	Cook County	0.79	0.44	-44%
Assessed Value	45,865	25,225	-45%	City of Chicago	1.69	0.93	-45%
Exemptions	6,000	6,000	0%	*Tax Share is the additional amount you would have to pay in the event the government increased its levy by \$1 million. In 2009, each \$1 million in City revenues cost you 93 cents, and each \$1 million in County revenues cost you 44 cents.			
Equalization Factor	2.9786	3.3701	13%				
Adjusted Equalized Assessed Value (AEA)	130,613	79,011	-40%				

Panel 3—Jurisdiction Extensions and Tax Bases				
Jurisdictions you pay taxes to	Extension*		Tax Base*	
	2008	2009	2008	2009
County Jurisdictions				
Cook County	721	702	173,642	178,071
Forest Preserve System of Cook County	89	87	173,642	178,071
Metro-Water				
Metropolitan Water Reclamation District	429	455	170,097	174,468
City Jurisdictions				
Chicago Libraries	83	84	80,983	84,592
City of Chicago	751	750	80,983	84,592
School Building and Improvement Fund	95	95	80,983	84,592
Chicago Board of Education	2,002	2,001	80,930	84,592
Chicago Community Colleges	126	127	80,930	84,592
Chicago Park District	249	250	80,983	84,592
Aquarium and Bonds	12	12	80,978	84,587
Total	4556	4562	173,642	178,071

*Figures in millions of dollars

Panel 4—Your Taxes Due			Panel 5—Additional Information
Jurisdictions you pay taxes to	Tax Bill		Amount Your Taxes Changed:
	2008	2009	
County Jurisdictions			
Cook County	566.95	311.30	-\$2,925.58
Forest Preserve System of Cook County	69.67	38.72	
Metro-Water			
Reclamation District	344.27	206.22	Change Due to Changes in Tax Shares:* -\$2,909.74
City Jurisdictions			
Chicago Libraries	139.34	78.22	Change Due to Changes in Extensions:* -\$15.85
City of Chicago	1,267.68	700.78	
School Building and Improvement Fund	159.83	88.49	
Chicago Board of Education	3,379.09	1,869.27	
Chicago Community Colleges			
Colleges	213.10	118.45	
Chicago Park District	420.74	233.07	
Aquarium and Bonds	20.49	11.06	
Total	6,581.15	3,655.57	2009 Inflation Rate: 1.01%

*Approximations

Figure 4
 "Old" Property Tax Statement for an Actual Property in the North Chicago Township

PAY ONLY THIS AMOUNT		2009 Second Installment Property Tax Bill					
\$ 4,088.02*		Property Index Number (PIN)	Volume	Code	Tax Year	(Payable In)	Township
BY 12/13/10 (on time)			493	74001	2009	(2010)	NORTH CHICAGO
* INCLUDES 1ST INSTALLMENT BALANCE OF \$3,633.33							
IF PAID LATE 12/14/10 - 01/13/11		IF PAID LATE 01/14/11 - 02/13/11		IF PAID LATE 02/14/11 - 03/13/11			
\$ 4,142.86		\$ 4,197.70		\$ 4,252.54			
LATE PENALTY IS 1.5% PER MONTH, BY STATE LAW.							KEEP UPPER PORTION FOR YOUR RECORDS
TAX CALCULATOR							
2008 Assessed Value							
45,865							
2009 Property Value							
252,250							
2009 Assessment Level							
X 10%							
2009 Assessed Value							
= 25,225							
2009 State Equalization Factor							
X 3.3701							
2009 Equalized Assessed Value (EAV)							
= 85,011							
2009 Local Tax Rate							
X 4.627%							
2009 Total Tax Before Exemptions							
= 3,933.46							
Homeowner's Exemption							
- 277.62							
Senior Citizen Exemption							
- .00							
Senior Assessment Freeze Exemption							
- .00							
2009 Total Tax After Exemptions							
= 3,655.84							
First Installment							
3,201.15							
+ Second Installment							
454.69							
Total 2009 Tax (Payable In 2010)							
= 3,655.84							

Property location and classification for this PIN							
CHICAGO IL		Property Classification 2-99					
Taxing District	2009 Tax	2009 Rate	2009 %	Pension	2008 Tax	2008 Rate	
MISCELLANEOUS TAXES							
Metro Water Reclamation District	206.22	0.261	5.64%	11.85	304.55	0.252	
Parks-Museum/Aquarium Bond	11.06	0.014	0.30%		18.13	0.015	
Chicago Park District	233.08	0.295	6.38%	9.48	372.23	0.308	
Miscellaneous Taxes Total	450.36	0.570	12.32%		694.91	0.575	
SCHOOL TAXES							
Board of Education	1,869.40	2.366	51.13%		2,987.49	2.472	
Chicago Community College Dist 508	118.52	0.150	3.24%		188.53	0.156	
School Taxes Total	1,987.92	2.516	54.37%		3,176.02	2.628	
MUNICIPALITY/TOWNSHIP TAXES							
Chicago School Bldg & Imp Fund	88.49	0.112	2.42%		141.40	0.117	
Chicago Library Fund	78.22	0.099	2.14%		123.27	0.102	
City of Chicago	700.83	0.887	19.17%	322.36	1,121.52	0.928	
Municipality/Township Taxes Total	867.54	1.098	23.73%		1,386.19	1.147	
COOK COUNTY TAXES							
Cook County Forest Preserve District	38.72	0.049	1.06%	0.79	61.64	0.051	
County of Cook	154.86	0.196	4.24%	56.09	270.69	0.224	
Cook County Public Safety	90.07	0.114	2.46%		126.90	0.105	
Cook County Health Facilities	66.37	0.084	1.82%		103.93	0.086	
Cook County Taxes Total	350.02	0.443	9.58%		563.16	0.466	
(Do not pay these totals)							
	3,655.84	4.627	100.00%		5,820.28	4.816	

We believe the new statement is superior to the old statement in a number of ways. We have already discussed in detail the decomposition of changes in tax liability into the portions attributable to changes in extensions and tax shares. That information is reported in Panel 5 of the new statement. Another advantage of reporting tax extensions is that it allows taxpayers to better monitor their local governments. In 2009, the Cook County assessor reduced his estimate of the value of nearly all properties in the county. Some properties, however, depreciated faster than others, leading many taxpayers to experience coincidentally decreasing assessed values and increasing property taxes. Some believed this was caused by increases in extensions.¹⁵ From the new statement, however, it is clear that city jurisdictions

increased their extensions by a net \$1 million, though some, including the city itself, decreased their extension. One advantage of the new bill, then, is to allow taxpayers to see when their government increases, or doesn't increase, its property tax extension. Taxpayers may want to know, for example, that the Chicago Board of Education actually decreased its extension from 2008 to 2009, two years before a major dispute with the Chicago Teachers' Union over teacher pay.

Thank you to the Cook County Clerk's Levies, Rates and Extensions Office for providing data. ■

¹⁵ Jorovsky, Ben. "My property tax bill is defective—I want a refund!" *The Chicago Reader*. February 29, 2012.