Robert M.

La Follette School of Public Affairs

at the University of Wisconsin-Madison

Working Paper Series

La Follette School Working Paper No. 2009-006 http://www.lafollette.wisc.edu/publications/workingpapers

The Growth of Homeowner Property Taxes: Evidence from Wisconsin

Rebecca Boldt

Team Leader, Income Tax Policy and Economic Team, Division of Research and Policy, Wisconsin Department of Revenue rebecca.boldt@revenue.wi.gov

Bradley Caruth

Economist, Income Tax Policy and Economic Team, Division of Research and Policy, Wisconsin Department of Revenue bradley.caruth@revenue.wi.gov

Andrew Reschovsky

Professor, La Follette School of Public Affairs, University of Wisconsin-Madison reschovsky@lafollette.wisc.edu



Robert M. La Follette School of Public Affairs 1225 Observatory Drive, Madison, Wisconsin 53706 Phone: 608.262.3581 / Fax: 608.265-3233

info@lafollette.wisc.edu / http://www.lafollette.wisc.edu

The La Follette School takes no stand on policy issues; opinions expressed within these papers reflect the views of individual researchers and authors.

The Growth of Homeowner Property Taxes: Evidence from Wisconsin

Rebecca Boldt
Wisconsin Department of Revenue
rebecca.boldt@revenue.wi.gov

Bradley Caruth
Wisconsin Department of Revenue
bradley.caruth@revenue.wi.gov

Andrew Reschovsky
Robert M. La Follette School of Public Affairs
University of Wisconsin-Madison
reschovsky@lafollette.wisc.edu

The authors wish to acknowledge the financial support provided by the Lincoln Institute of Land Policy that made this research possible. The findings and conclusions of this paper are solely those of the authors. They do not necessarily reflect the views and policies of the Wisconsin Department of Revenue or the Lincoln Institute of Land Policy.

Introduction

One of the major issues facing policymakers in many states across the country is how to curtail the growth in property taxes, especially the property taxes paid by homeowners. In response to political opposition to the tax, during the last several years over half of the states have enacted or are considering provisions to place strict limits on the growth of property tax revenue or limit the growth rate of homeowner assessed property values.

In spite of these efforts, policy makers have found that the monies spent in providing tax relief have largely failed to reduce citizen frustration over growing property taxes and property tax burdens. In today's climate of economic uncertainty, weak real estate markets, and budget deficits, state and local governments will likely face further complaints about the property tax at the same time they have fewer resources available to address the issue.¹

A reasonable question for both citizens and for state policy makers arises. After the enactment of policies to restrict the growth in property taxation plus the expenditure of billions of dollars of state resources aimed at reducing the reliance of local governments on property taxes, why do homeowners continue to complain about rising property tax bills and high property tax burdens? Are state-imposed property tax limits and direct property tax relief measures not going to those homeowners for whom the property tax is creating the greatest hardships? To provide answers to these questions, we need information about the size of the property tax liabilities faced by homeowners and information about how these tax liabilities change over time. A major goal of this paper is to provide this information.

Surprisingly, little is actually known about the property tax paid by homeowners.² To understand why, it is important to recognize the source of most existing data on property tax payments. In nearly all states, property tax collection is the responsibility of local governments.

¹ In states that place limits on property tax rate increases, or require voter approval for rate increases, falling home values are likely to translate into property tax reductions. Although Wisconsin has state-imposed limits on annual increases in tax levies, local governments remain free to raise tax rates. Thus, in Wisconsin there is no reason that falling home prices will automatically translate into reductions in property tax liabilities for individual taxpayers.

² The 2004 The Levidence State and text allow the Wisconsin Boundary of Boundary found the Wisconsin Boundary for the Wisconsin Boundary

² The 2004 Tax Incidence Study conducted by the Wisconsin Department of Revenue found the Wisconsin property tax to be regressive for tax year 2001. However, the study analyzed the tax for a single year and did not measure changes in tax burden over time.

Although information on the assessed value and on the property tax liability levied on each parcel is in the public domain, these data are maintained at the local government level and generally are not collected by state governments or stored in state depositories. Thus, assembling individual property tax assessment and tax records for any given state would in most cases involve a Herculean effort, especially as local property assessment and property tax collection offices may not use consistent data formats. Even if a state government on a regular basis collects property tax liability records in a consistent manner for all parcels in their state, it is important to remember that property tax records contain very little information about the owner of each parcel, and to our knowledge rarely contain data about the income and household structure of the owners.

In most states, the only property tax information collected by the state government (generally the Department of Revenue) is data on the property tax *revenue* of local governments within the states. These revenue data can usually be disaggregated by the type of property from which the revenue was raised. Thus, many states report separately on the property tax revenue from residential, commercial, industrial, and agricultural property. As the residential property category includes rental properties, second homes, and homes owned by non-residents, in most states it is difficult to determine, even in the aggregate, the annual amount of property tax paid by resident homeowners on their primary residence. Knowledge about changes in property tax liabilities faced by individual homeowners, aside from anecdotal evidence, is completely absent.

In this paper, we report on our efforts, using Wisconsin data, to push aside the veil of ignorance about changes over time in homeowners' property tax liabilities and tax burdens. We exploit the fact that Wisconsin homeowners report information on property taxes paid on their income tax returns in order to receive a nonrefundable school property tax credit (SPTC) that is available to all taxpayers and a refundable homestead credit that is available to low-income taxpayers.³

3 The homestead credit is available to homeowners whose income is below \$24,500 and provides up to \$1,160 of property tax relief.

Constructing the Data

The starting point of our analysis is income tax returns filed by Wisconsin residents for tax year 2005. From a total of about 2.7 million returns, approximately 1.3 million returns were filed by homeowners who claimed the SPTC or homestead credit in 2005. 4 Using tax return data for the years 2000 through 2005, we construct, whenever possible, six-year histories of each taxpayer who was a Wisconsin homeowner in 2005. In order to build these histories, we had to overcome three major methodological challenges in order to accurately measure the household composition, property tax paid and exact household location for each year. Household composition is an important determinant of tax burdens; thus, we had to address the situation where a household's composition changed during the 2000 to 2005 period. Our starting point was the household status of the primary taxpayer in 2005. In cases where household composition changed in prior years due to marriage, divorce or death of a spouse, we captured those changes by constructing a household history comprised of the primary taxpayer's returns. The second challenge related to the timing of property tax payments. Our interest is the property tax levied in each year as opposed to the tax that is paid in a given year. Thus, we had to address situations where, for example, a taxpayer paid both her 2004 and 2005 property taxes in a single calendar year and reported both amounts on her 2005 income tax return for purposes of claiming the SPTC. In such a case, we had to determine how much of the amount claimed for the SPTC was attributable to the 2004 property tax levy and how much to the 2005 levy. Finally, we had to address the challenge of matching household addresses across tax years in order to determine if a taxpayer moved during the period of analysis. While the panel data matches taxpayer information across time using social security numbers, the matching across household addresses presented formidable obstacles.⁵

⁴ This approach underestimates the number of homeowners because it does not include homeowners who do not file income tax or for some reason did not claim the SPTC.

⁵ Contact the authors for details on steps taken to address these methodological challenges.

As we are particularly interested in changes in property tax liabilities that are not the result of taxpayer actions such as a change in residence or new construction, the analysis in this paper focuses on the changes in property taxes of those homeowners who did not undertake a residential move during the period. Approximately 701,600 of the 1.3 million who were homeowners in 2005 were identified as being Wisconsin homeowners who resided in the same home in every year since 2000. While these non-mover homeowners paid only 57 percent of the total property taxes levied on owner-occupied residential property, by focusing on the changes in property taxes paid by these homeowners, we can isolate the property tax trends due primarily to public policies, such as local government spending decisions, state aid allocations, and changes in property tax relief measures, rather than on choices made by individual homeowners.

To see why the non-mover distinction is important, consider the growth trends reported in Table 1. Total revenue from the property tax imposed on all types of property grew at an average annual rate of 5.1 percent during the five-year period, from \$6.1 billion to \$7.9 billion. By comparison, residential property taxes grew at an annual average rate of 6.0 percent, and the share of total property tax revenue that comes from residential property grew from 67.8 percent in 2000 to 71 percent in 2005. The growing residential share of the property tax reflects both the relatively slow growth in the value of commercial and manufacturing real estate and the quite rapid rise in home prices over this period. Data on aggregate residential taxes, however,

Table 1: Growth in Total Property Taxes Paid by Wisconsin Homeowners, 2000 to 2005

	Calendar Year			
	2000	2005	5-Year Growth	Average Annual
	(millions of dollars)		Rate	Growth Rate
Total Property Tax Levy	6,135.1	7,585.0	28.1%	5.1%
Residential Property Tax Levy	4,161.2	5,580.8	34.1%	6.0%
Residential Share of Total	67.8%	71.0%		
Homeowners:				
Property Taxes Paid by Homeowners	3,238.0	3,970.6	22.6%	4.2%
Median Property Tax	2,195	2,671	21.7%	4.0%
Non-Mover Homeowners (all years, 2000 to 2005)				
Property Taxes Paid by Non-Mover Homeowners	1,846.3	2,168.3	17.4%	3.3%
Median Property Tax	2,348	2,769	17.9%	3.4%

provide a very imperfect and limited picture of the changes in property tax burdens over time borne by individual Wisconsin families. Residential property is a broad category that includes, in addition to owner-occupied homes, all residential rental property, whether occupied or vacant, and residential property owned and occupied by families whose permanent residence is outside of Wisconsin.

The second panel of Table 1 reports the property taxes paid by Wisconsin homeowners in 2000 and 2005. The taxes on these properties grew 4.2 percent on average over the period. Removing the influence of relocation decisions, the bottom panel shows that property taxes on non-mover homeowner properties grew at an average annual rate of only 3.3 percent.

The data in Table 2 demonstrate that the average annual rate of change in property taxes provides a very incomplete picture of the change in property taxes experienced by most Wisconsin's non-mover homeowners. For 12 percent of the non-mover homeowners, property taxes were actually lower in 2005 than they had been in 2000. For another 20.9 percent of this group, property taxes increased, but at an annual rate below the rate of inflation during this period (approximately 2.5 percent per year). At the same time, for almost 38 percent of non-mover homeowners, property taxes grew at an annual average rate of over 4 percent.

Table 2: Average Annual Property Tax Growth 2000 to 2005

	Stable Nonmover	
	Homeowners	Percent of Total
Decrease	84,012	12.0%
Less than 2%	146,936	20.9%
2% to 4%	204,991	29.2%
4% to 6%	136,278	19.4%
More than 6%	129,392	18.4%
Total	701,609	100.0%

To begin exploring which Wisconsin taxpayers benefited from tax reductions and which taxpayers faced particularly large increases, we investigate whether the percentage change in property taxes between 2000 and 2005 was systematically related to the size of taxpayers' property tax liability in the year 2000. As seen in Table 3, the households that experienced the most rapid property tax growth tended to be those that paid the least in property taxes in 2000.

Conversely, a relatively large share of households whose taxes fell between 2000 and 2005 paid a high level of property taxes in 2000.

The bottom panel of Table 3 shows the column distribution, i.e., for each property tax level, the share of households that fall into each property tax growth breakdown. This is also shown in Figure 1. About half of the non-mover households paid between \$1,500 and \$3,000 in 2000 property taxes. Over 20 percent paid less than \$1,500 and another 21.4 percent paid between \$3,001 and \$4,500. Around 9 percent paid more than \$4,500 in 2000 taxes.

Since the variation in property values greatly exceeds the variation in property tax mill rates, we see a pattern emerging whereby low-valued properties experienced higher property tax increases than higher-valued properties over the period. The average annual growth for the lowest-valued properties was 5.5 percent, compared to 3.3 percent overall. Well over a third of households whose 2000 property tax was less than \$1,500 saw average annual increases of 6 percent or more. This is more than double the share seeing similar growth in the \$1,501 to

Table 3: Non-mover Homeowners

By 2000 Property Tax Amount and Average Annual Percentage Change

By 2000 I roporty Tax Amount and Average Amidal I croemage onange					
Household Count					
	\$1,500 or	\$1,501 to	\$3,001 to	More than	
Average Annual Growth	Less	\$3,000	\$4,500	\$4,500	Total
Decrease	16,686	34,665	21,328	11,333	84,012
Less than 2%	18,148	71,365	41,580	15,843	146,936
2% to 4%	27,512	108,332	51,179	17,968	204,991
4% to 6%	28,354	74,608	23,719	9,597	136,278
More than 6%	52,560	57,870	12,557	6,405	129,392
Total	143,260	346,840	150,363	61,146	701,609
Average Annual Growth	5.5%	3.5%	2.6%	2.5%	3.3%

Household Count					
	\$1,500 or	\$1,501 to	\$3,001 to	More than	
Average Annual Growth	Less	\$3,000	\$4,500	\$4,500	Total
Decrease	11.6%	10.0%	14.2%	18.5%	12.0%
Less than 2%	12.7%	20.6%	27.7%	25.9%	20.9%
2% to 4%	19.2%	31.2%	34.0%	29.4%	29.2%
4% to 6%	19.8%	21.5%	15.8%	15.7%	19.4%
More than 6%	36.7%	16.7%	8.4%	10.5%	18.4%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

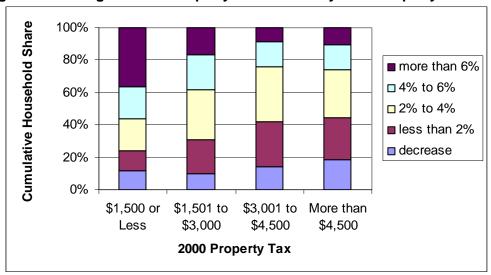


Figure 1: Average Annual Property Tax Growth by 2000 Property Tax Level

\$3,000 property tax range. In contrast, the average growth in property taxes for households paying over \$4,500 in 2000 was 2.5 percent, with 44.4 percent of these households seeing either a small increase (less than 2 percent) or a decrease in property taxes. Similar trends are observed for those paying between \$3,001 and \$4,500.

Two things can explain why more low-valued properties saw high property tax growth over the period than higher-valued homes. Either the low-valued properties saw a greater proportionate appreciation in the assessed, and presumably, market value of their homes over the period; or these properties were located in areas experiencing above average levy (and tax rate) increases or possibly both. In future research we will attempt to determine the reasons for the observed pattern of changes in property tax liabilities.

Property Tax by Income

To explore the relationship between property tax payments and household income, income should be defined to reflect taxpayers' ability to pay, and thus should include income from both taxable and nontaxable sources. In this study, we have defined income as total federal income before adjustments plus nontaxable social security, deferred compensation,

nontaxable pension income and nontaxable interest.⁶ Future work will broaden the income measure to incorporate the imputed rental value of owner-occupied housing. This will allow us to explore property tax incidence based on a broader measure of economic well-being, and to more carefully examine the tax incidence by age.

Economists have long argued that when one's goal is to determine tax incidence, it is inappropriate to measure ability to pay using income data from a single year. The use of annual income rather than measures of lifetime income in the calculation of tax burdens will overstate the regressivity of the property tax because many people with low (high) incomes in any given year are only temporarily at that income level, and base their housing consumption decisions on a higher (lower) level of lifetime income. In our exploration of the incidence of the property tax on Wisconsin homeowners, we calculate the tax burden for each homeowner as the homeowner's average property tax payment over the 2000 to 2005 period relative to their average income over the same period. However, when we explore **changes** in tax burdens between 2000 and 2005, we calculate and compare annual tax burdens for 2000 and 2005.

Figure 2 displays gross property tax burdens for homeowners ranked by average income quintile, with the highest quintile divided into two groups, one representing the 5 percent of households with the highest incomes. Overall, the property tax comprised 3.8 percent of household income over the period. The lowest income quintile spent on average 7.5 percent of their average income over the period on property taxes compared to only 2.1 percent for the 5 percent of households with the highest incomes.

The use of average rather than annual income to calculate tax burdens does in fact reduce the calculated regressivity of the property tax. For the bottom income quintile, the 2005

⁶ One half of self-employment tax is removed from income in order to make sole proprietor income comparable to wage income. In addition non-taxable pension income excludes rollovers or section 1035 exchanges.

⁷ On this point, see, for example, Poterba (1989).

⁸ See Chernick and Reschovsky (1997) for a discussion of the use of average income as a measure to ability to pay.

⁹ The lowest quintile households had average income of \$25,324 over the period. The average income of the next four quintiles were \$16,000-\$20,000 higher than the preceding quintile. The top 5 percent of households had an average income of \$285,568 over the period.

property tax burden calculated using 2005 annual income is 0.3 percentage points higher than the average burden presented in Figure 2. The burden calculated using annual income is 0.2

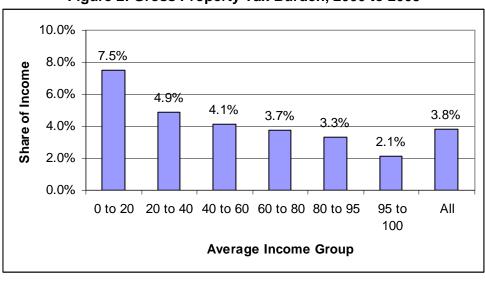


Figure 2: Gross Property Tax Burden, 2000 to 2005

percentage points higher in the second quintile and 0.1 percentage points higher in the third and fourth quintiles.

The burdens shown in Figure 2 reflect the gross burden, i.e., the burden of the property tax before taking into account other tax policies that effectively lower the amount paid. Three policies in particular effectively lower the property tax paid by individual homeowners. The state school property tax credit (SPTC) serves to reduce the property taxes for households that have an income tax liability. Second, the homestead credit provides a targeted tax credit to low-income households. Third, the ability to deduct from federal taxes the amount of property taxes paid on residential property allows taxpayers who itemize deductions on their federal returns to, in effect, export a share of their property tax burden to the federal government in the form of a lower federal tax liability.¹⁰

In total, these three policies reduced the non-mover households' property tax by an average \$432 million per year over the 2000 to 2005 period. The largest reduction in property taxes comes from federal deductibility (\$269 million or 62.4 percent of the total), followed by the

10

¹⁰ The tax reduction is measured by comparing the actual federal tax liability when property taxes are taken as a deduction and what the federal tax liability would have been without the deduction.

SPTC (\$139 million or 32.3 percent of the total) and the homestead credit (\$23 million, or 5.3 percent of the total).

Figure 3 shows the effect of each of these measures on the average property tax by income group. By design, the benefits of the homestead credit are concentrated to households in the lowest quintile. For these households, the average homestead credit effectively lowered the average property tax by \$187. The benefits of the federal deduction are more concentrated at higher income levels. The average property tax reduction due to the federal tax deduction was \$445; however around 70 percent of the federal deduction benefits were distributed to the top 40 percent of households with incomes over \$70,497. The average deduction benefit for these households was \$783, compared to \$220 for households in the bottom 60 percent of the income distribution. The average SPTC was \$230 over the period and was more evenly distributed across income groups.

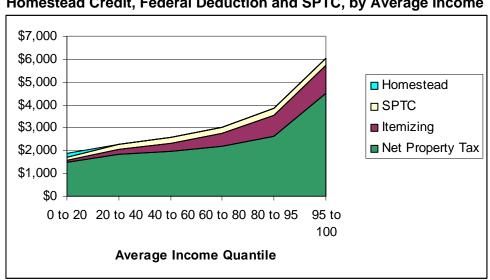


Figure 3: Average Net Property Tax, Homestead Credit, Federal Deduction and SPTC, by Average Income

Figure 4 shows the gross and net average burden after taking these tax policies into account. The tax relief measures effectively lowered the tax burden for all income groups. The overall gross tax burden was reduced from 3.8 percent to 2.8 percent. However, the tax remains regressive with the lowest quintile paying 5.9 percent of their income in property taxes, more

than double the overall average and 3.7 times more than the highest income households, who paid 1.6 percent of their income in net property taxes over the period.

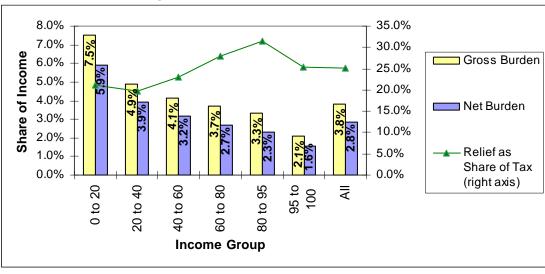


Figure 4: Gross and Net Tax Burdens

As illustrated in Figure 4, the three tax relief measures offset an increasing share of taxes at higher income levels, offsetting around 20 percent of the tax paid by lowest income but over 30 percent of the tax for the households in the top income quintile. While the three relief measures served to lower the property tax for all income quantiles, the combined effect of these measures made the property tax more regressive. Only the homestead credit served to reduce the regressivity of the property tax. Because the SPTC was evenly distributed across income groups, it has little effect on the regressivity of the tax.

On the other hand, because the tax benefit of itemizing increases with income, the federal itemizing of property taxes actually increases the regressivity of the property tax. The lowest quintile paid 5.9 percent of their income in property taxes, more than double the overall average (2.8 percent) and 3.7 times more than the highest income households, who paid 1.6 percent of their income in net property taxes over the period.

Changes Over Time

We now turn to the question of whether the growth in property tax liabilities between 2000 and 2005 was systematically different for households with different levels of income in

2005. The data indicate that over this period property taxes grew at a somewhat faster than average rate for households in the bottom two income quintiles (3.5 percent compared to an average annual rate of 3.3 percent) and fewer high-income households saw very high property tax growth as compared to lower-income households. In the highest quintile, 14 percent of households saw average annual growth over 6 percent, compared to the 21 percent of households in the bottom two quintiles. This is consistent with the hypothesis that low-valued properties saw higher property tax growth over the period and lower-income households were more likely to own these low-valued properties.

To explore the question of changing burdens, we first compare property tax liabilities in 2000 relative to annual income in that year with tax liabilities in 2005 relative to 2005 annual income. We then focus on how individual homeowners' burdens changed over this time period. We are particularly interested in identifying which taxpayers faced rapidly rising burdens.

Figure 5 shows the 2000 and 2005 gross property tax burdens (with burden calculations based on annual income in each year) for non-movers by income group. ¹¹ For all homeowners, the average property tax represented 3.6 percent of household income in 2000 and 3.8 percent of income in 2005. This represents a 6.5 percent growth in burden for all homeowners combined. However, the average growth obscures significant differences across households - 41.6 percent of homeowners actually saw a decrease in their gross burden over the period, while 30 percent of households saw their burden increase by 25 percent or more from 2000 to 2005.

Homeowners in the lowest quintile faced the greatest increase in gross burden over the period, increasing 17.4 percent over the period from 6.7 percent of income in 2000 to 7.8 percent in 2005. Almost 40 percent of these homeowners faced a 2005 burden that was at least

13

-

¹¹ The income groups remain defined by average income over the period. By defining the income groups in this way, each income group retains the same individuals in both years and burden comparisons within quintiles reflect the same set of homeowners.

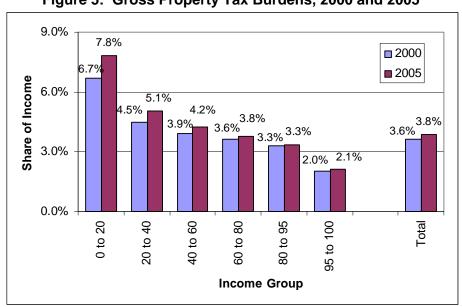


Figure 5: Gross Property Tax Burdens, 2000 and 2005

25 percent higher than in 2000, and for 22 percent of these households, their 2005 burden was at least 50 percent higher than in 2000.

Changing property tax burdens are influenced by both changes in property taxes and changes in income. Figure 6 shows that much of the explanation for why the property tax burden of the lowest quintile grew more than burdens on higher income homeowners relates to the slow growth in their incomes. While the annual property tax growth over the period was roughly similar across all income groups, income grew far more slowly for low-income

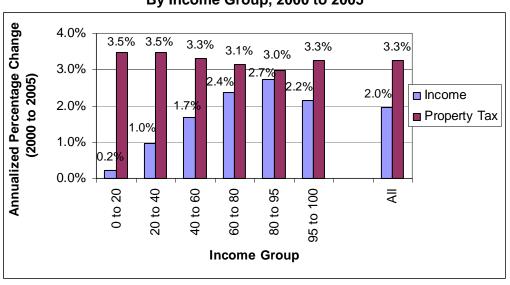


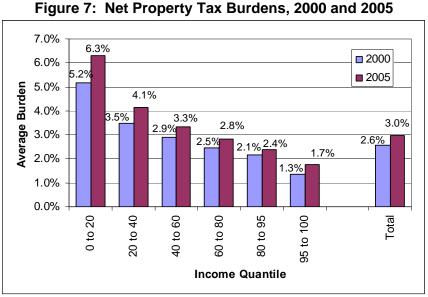
Figure 6: Annualized Change in Income and Property Tax By Income Group, 2000 to 2005

homeowners than for those with higher incomes. The average income in the lowest income quintile grew at an annual rate of only 0.2 percent, compared to the 2.0 percent income growth rate for all homeowners. And income growth in the second quintile was only half the average among all homeowners.

Growth in property taxes clearly contributed to the increased burden facing the lowest quintile households, but their burden would have grown by half as much had their income grown at the same pace as experienced by the average homeowner. Put another way, had there been no change in property taxes over the period, the average burden of all homeowners would have fallen 9.3 percent from 2000 to 2005; however, the property tax burden on the lowest income quintile would have fallen by only 1.1 percent.

We know that individuals complain when their property taxes increase, but it is likely the complaints grows louder when the tax becomes less affordable in terms of a household's ability to pay. If policymakers in Wisconsin wish to reduce property tax burdens, their policy responses should recognize that both tax and income trends affected changes in the property tax burden over the 2000-2005 period.

Figure 7 shows the net burden for 2000 and 2005 after taking the three tax relief policies into account. The net burden for all non-mover homeowners increased from 2.6 percent to 3.0



percent. But as we saw in the growth in the gross burden, the lowest income households faced higher growth in their net burden relative to other households. Their net burden increased 21.8 percent over the period.

Comparing Figure 7 to Figure 5 demonstrates that net burdens grew faster from 2000 to 2005 than gross burdens, largely due to the fact that the tax relief measures did not grow to the same extent as the growth in property tax. Indeed, only the lowest income households saw any increase in the offsets from the relief measures combined, but the growth was too small (0.7 percent annually) to offset the growing property taxes. The reason for the more rapid growth of net burdens among higher income homeowners is that the value to Wisconsin homeowners of the federal deductibility of the property tax fell from \$293 million in 2000 to \$247 million in 2005. This decline can be attributed to the reduction in marginal federal tax rates over that period and the fact that more taxpayers became subject to the federal Alternate Minimum Tax (AMT) and thereby lost all or most of the value of their property tax deduction. During this same period, homeowners' tax savings due to the SPTC and the homestead credit grew by \$4 million and \$3.7 million, respectively, hardly enough to offset the reduced impact of federal deductibility.

Our discussion has focused on the average change in burden over time for each quintile. However, it is important to note that the average obscures large differences across households. While the overall net burden grew an average 16 percent for all households, over a third of all households saw a decrease in their net burden from 2000 to 2005, while around 40 percent saw their net burden significantly increase (25 percent or more). Similar patterns hold across all the income groups to the extent that each income group includes homeowners whose burdens decreased; however, the households experiencing large increases in burden were concentrated in the lower income groups – 43 percent of those seeing their net burden significantly increase were in the lowest two income quintiles.

Summary and Conclusions

Elected officials in Wisconsin and elsewhere face the brunt of citizen complaints about

rising property taxes. Undoubtedly, the current economic downturn will increase the frequency and the intensity of these complaints. The results of this paper can help public officials craft policies to effectively address taxpayer concerns about the property tax. The main conclusion we draw from the data presented in this paper is that the burden of the property tax on homeowners and any economic hardships it creates vary tremendously among homeowners. While some homeowners are facing both high and increasing property tax burdens (at least relative to their current income), for other homeowners, the property tax is relatively low and/or falling over time.

The policy lesson we take from our findings is that in a world with limited resources (certainly the world we live in), it is essential to target property tax relief to those residents who are most in need of relief from high or rapidly rising property tax burdens. Unfortunately, to a large extent, Wisconsin has pursued a set of policies that can only be described as highly untargeted. In its fiscal year 2008 budget, the state government is providing local governments (including independent school districts) with \$8.7 billion of state financial assistance. While this money is intended to help local governments finance high quality education and essential local government services, another quite explicit objective is to allow local governments to reduce their reliance on the property tax. In addition, the state has effectively mandated property tax reductions through the enactment of a revenue limit on school districts and property tax levy limits for municipal and county governments. These policies have reduced property taxes for everyone who pays property taxes. This includes Wisconsin residents and non-residents and owners of all types of property, including residential, commercial, industrial, and agricultural. Among homeowners, a rate reduction provides the largest dollar amounts of tax reductions to those who own the most expensive homes, not those facing the highest burdens. By pursuing untargeted property tax relief policies, relatively few state resources are available to benefit those taxpayers that either face the highest tax burdens or experience the fasted growth in tax burden.

One reason why the two existing state income tax credits designed to provide property tax relief are not more effective is their relatively small size. The total of SPTC credits received by non-mover homeowners offset only 7.7 percent of the \$1.8 billion in gross property taxes paid by these households. The homestead credit, with its restricted eligibility, was received by just 13.4 percent of all non-mover homeowners in 2005 and offset only 1.3 percent of the gross property tax liability of eligible homeowners. Aside from their modest size, changes in the design of the two credits could improve their effectiveness in providing more property tax relief to those taxpayers facing high property tax burdens. One alternative would be to redesign the SPTC so that its benefits are targeted to lower income taxpayers by providing them with a higher credit rate and a phasing out of benefits as taxable income rises. In addition, the reach of the homestead credit could be expanded by increasing the maximum allowable credit and by raising the income eligibility limit. The new income limit could then be indexed for inflation.

Finally, the state could expand and reform its existing tax deferral program. The current program is very limited and its existence is probably unknown to most homeowners. An advantage of a property tax deferral program is that homeowners can remain in their home even if their property tax bills are large relative to their current income. Deferral programs could be improved by linking eligibility directly to either high property tax burdens or rapid increases in property tax levies or burdens. Homeowner participation in deferral programs could be improved by simplifying the application procedures and investing in outreach efforts, targeted specifically to elderly homeowners.

The primary purpose of this paper was to investigate changes in property tax liabilities and burdens among Wisconsin homeowners and to identify which taxpayers faced the largest increases in tax liabilities and burdens. In future work, we will attempt to *explain* the findings of this paper. Our next step will be to match our data on the property tax payments by individual taxpayers with municipal, county, and school district property tax information to explore whether the growth in taxes is attributable to changes in local government spending or whether state

policies that change the distribution of state aid may have impacted tax trends faced by homeowners. We will also explore whether differential rates of changes in property values in different parts of the state may help explain the observed variation among homeowners in property tax liabilities and burdens. Finally, we will explore the oft-repeated claim that high tax burdens are forcing elderly homeowners to sell their homes. To better examine the incidence across age groups, we will broaden our definition of income to include the imputed rental value of owner-occupied housing. Over time, we hope this panel data will provide a longer time horizon to better describe the distributional effects over the life-cycle of Wisconsin households.

References

Ando, Albert, and Franco Modigliani. The 'Life Cycle' Hypothesis of Saving: Aggregate Implications and Tests. *American Economic Review* 53 (March, 1963): 55–84.

Chernick, Howard. On the Determinants of Subnational Tax Progressivity in the U.S. *National Tax Journal* 58, no. 1 (March, 2005): 93-112.

Chernick, Howard and Andrew Reschovsky. Who Pays the Gasoline Tax? *National Tax Journal* 50, no. 2 (June, 1997): 233-259.

Haveman, Mark and Terri A. Sexton. *Property Tax Assessment Limits; Lessons from Thirty Years of Experience*, Policy Focus Report, Cambridge, MA: Lincoln Institute of Land Policy, 2008.

Poterba, James M. Lifetime Incidence and the Distributional Burden of Excise Taxes. *American Economic Review* 79, no. 2 (May, 1989):325–30.

Wisconsin Department of Revenue. Division of Research and Policy. *Wisconsin Tax Incidence Study*. Madison, WI, 2004.

Wisconsin Department of Revenue. Division of State and Local Finance, Bureau of Property Tax. *Town, Village, and City Taxes* – *2000.* Madison, WI, 2000 and *Town, Village, and City Taxes* – *2005.* Madison, WI, 2005.