LIMITATIONS ON
INCREASES IN PROPERTY
TAX ASSESSED VALUE

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LIMITATIONS ON INCREASES IN PROPERTY TAX ASSESSED VALUE

EXECUTIVE SUMMARY

There have been many efforts made across the country to reform property tax administration, and to impose various limits on the property tax, including limits on the tax rate, limits on the increase in the property taxes levy, limits on what is taxed, and limits on increases in the assessed value of property. The latter is the subject of this report.

A limitation on increases in assessed values has obvious appeal to property tax payers. While the individual property tax payer sees that the increase in the assessed value is controlled, it is important to consider the broader implications of a assessment limitation.

Existing Assessment Limitations

Seven states have adopted a statewide limitation on the annual growth of property tax assessment. In six states the limitation applies to individual parcels, while in one state (Iowa) the limit applies to the total property tax base. California adopted a property tax assessment limitation as part of Proposition 13, which was passed by referendum in June 1978. California’s limitation is the most widely cited, largely because of the breadth of the provisions contained in Proposition 13 and because it applies to all types of property, not just homesteaded property. California limits annual increases in assessed value to 2 percent.

Some of the limitations are very simple. For example, Florida's assessment limitation, which only applies to homesteaded properties, restricts increases in assessment to the lower of 3 percent and the change in the Consumer Price Index. On the other hand, Arizona, which adopted an assessment increase limit in 1980, has a more complicated limitation. The system works as follows. Each parcel of property has two separate values, a fair market value (FMV) and a Limited Property Value (LPV).
The statutory annual growth limit for the LPV is the greater of 10 percent, and 25 percent of the difference between last year’s LPV and this year’s FMV.

**Effect of Limitations on Property Taxes**

By themselves, limitations on increases in assessments will not necessarily control the growth in property taxes. Property taxes are the product of the property tax rate and the taxable value, and the assessment increase limitation only affects the taxable value. Local governments can simply raise the property tax rate in order to increase property tax revenue. Consistent with this, Preston and Ichniowski (1991) found that rate limits coupled with caps on assessments were the most effective in limiting municipal property tax revenue, and found that the effect was significant, up to a 45 percent reduction in the growth of property taxes. Shadbegian (1998) found that TELs reduce property taxes per capita by about three percent, while in another paper Shadbegian (1999) found that TELs that are binding reduce property taxes per capita by 12 percent.

Much of the criticism surrounding the property tax and most of the focus on property tax reform is associated with the premise that identical properties, i.e., properties with the same market value, should be assessed at the same value but frequently are not. Acquisition value is based on the premise that properties with the same historic purchase price should be assessed at the same value. (Neither system necessarily results in a close link between assessed value and income, which is another basis for equal treatment.) Given that the property tax is a tax on wealth, fair market value should be the basis for equal treatment. Thus, we focus on the disparities in the ratio of assessed value to market value that arise as a result of acquisition value assessment.

**The Assessment Limitation in California**

There is little research that addresses the issue of who benefits and who loses from a property tax assessment freeze, and the studies we identified focus on California’s Proposition 13. O’Sullivan,
Sexton, and Sheffrin (1995) and Sheffrin and Sexton (1998) provide the most significant analysis of the economic implications of the adoption of acquisition-value assessment in California. The following discussion is based on those studies.

Acquisition-value assessment leads to property tax disparities. To illustrate, consider two identical houses each worth $100,000 in 1975. Assume that the value of each property increases by 10 percent per year (so that market value is $984,973 in 1999) and that one of the houses sold in 1997 for its market value. The assessed value of the house that didn’t sell is $160,843 (the result of the 2 percent annual increase allowed under Proposition 13), while the assessed value of the house that sold is $984,973 (which is the market value in 1999). Thus, the owners of identical houses pay substantially different property taxes; for this example, the owner of the newly purchased house pays 6.12 times more than the other individual. This ratio is referred to as the “disparity ratio.”

The level of disparity depends upon the increase in property value, the frequency with which property ownership turns over, and the rate of new construction. For example, if property values increased at 6 percent instead of 10 percent, the disparity ratio in the above example would be only 2.51; if all property sold every year, there would be no disparity.

O'Sullivan, et. al. (1995) calculated the actual level of disparity in 1991 for homeowners for nine counties in California: three urban counties, three fast-growing suburban counties, and three rural and ex-urban counties, while Sheffrin and Sexton (1998) provide updated calculation for Los Angeles county for 1996. 33.2 percent of homeowners paid taxes in 1996 based on the 1975 assessed value increased by up 2 percent per year, while 3.9 percent of homeowners purchased their homes in 1996 and therefore paid 1996 taxes based on the 1996 market value. For the homeowners who have not moved since 1975, the median ratio of actual property value to assessed value is 3.84. In other words, the person who purchased his home in 1996 would pay 3.84 times the property taxes paid by a person
with a home of equivalent value that they have occupied since 1975. For the homeowners who have not moved since 1985, the median ratio of actual property value to assessed value is 1.22.

The disparity ratios differ across the nine counties, and at least for Los Angeles county, have fallen since 1991. In general, disparity in the assessed value across homeowners is greatest in urban counties, followed by fast-growing suburban counties, and least for rural counties. This ordering is related to differences in the increase in housing values and turnover rates across the three classes of counties.

For Los Angeles county the ratio of assessed value to market value in 1996 was 0.51, which means that total market value is almost 2 times the total assessed value. Thus, on average, property taxes are 51 percent of what they would be if the limitation on assessment growth and the one percent limit on the property tax rate were not in effect. Several studies have shown that other taxes and fees have increased to offset the reduced property taxes.

O’Sullivan et. al. also find that older and lower-income homeowners have benefitted more from the limitation since these individuals are less likely to move. They also find that the acquisition value assessment has reduced the likelihood that a home owner will move, i.e., it has discouraged home owners from selling their existing home and buying another one. The estimated effect on mobility, however, is small.

The Assessment Freeze in Muscogee County

Beginning in 1983, as a result of a local constitutional amendment, the assessed values of homesteaded property, i.e., property eligible for a homestead exemption, for local property tax purposes were frozen in Muscogee county. The assessed value of such property can be increased only if the property ownership changes (other than between spouses), there is an addition to or
renovation of the property, or to correct an error. Thus, for homesteaded property, Muscogee county has a true acquisition value property tax system.

The limitation on assessment increases applies only to local property taxes. Thus, the county must maintain two assessed values, the “frozen value” for local taxes and the fair market value for state taxes, for each homesteaded property. By comparing these two values, it is possible to determine how the freeze has effected property taxes in Muscogee county.

The reduction in the local gross property tax base due to the freeze is not very large; in recent years the difference between that state and local gross digest equals about one year of growth in the state digest. For 1997, the ratio of assessed value for local purposes to assessed value for state purposes is 0.94. This is much smaller than the ratio reported for California; the difference is likely due to slower increases in property values in Muscogee county and perhaps to more rapid turnover of homes.

There are substantial disparities in assessment due to the freeze. While 42.8 percent of parcels with assessed values that exceed the local homestead exemption of $13,500 have ratios of local to state values between 0.9 and 1.0, the remaining approximately 60 percent of parcels have local to state value ratios that range from 0.10 to 0.89, with the bulk lying between 0.50 and 0.89.

Of the parcels that have frozen values in 1997, 28.7 percent were first frozen in 1985 or earlier (data was not available for 1984.) For parcels that were first frozen in 1985 or 1984, the disparity ratio is 1.67, or somewhat less than for Los Angeles County. For Los Angeles county, property that has been frozen since 1982, i.e., the same elapse time as the Muscogee freeze has been in effect, has a disparity ratio of 1.27. This is lower than for Muscogee county, reflecting the decline in property values in California during the 1990s. The disparity ratio for Muscogee county decreases the shorter the time the parcel has been frozen, but the change since 1989 is very small.
There are large differences for 1997 between the state (non-frozen) assessed value and the local (frozen) assessed value by assessed value categories. For example, for parcels whose state assessed value is between $200,000 and $300,000 the reduction is 11.2 times the reduction for properties with a state assessed value of less than $25,000. However, expressed as a percentage reduction in assessed value, the relatively larger reductions occur for the low and high valued residential units.

We did not have information on the characteristics of the owner, but we were able to relate the average dollar reduction in assessed value within a census tract due to the freeze increases with the median income, average age, and percent white within the census track. We find that the elimination of the freeze would increase assessed values more for higher income homeowners, for the elderly, and for whites.

We also explored the effect of the freeze on the probability that a homeowner would move. We expected that the probability of moving should be negatively related to the absolute difference between the state and local assessed value. In other words, we expect that the benefit of the freeze would lock-in homeowners, thereby reducing the probability of moving. Our regression analysis suggests that the probability of moving is unrelated to the value of the freeze.

Summary

Property tax assessment limitations result in some reduction in property taxes. But they create large disparities among taxpayers. It does not appear that such limitations have much effect on the probability that a homeowner will move.
LIMITATIONS ON INCREASES IN PROPERTY TAX ASSESSED VALUE

I. Introduction

The property tax, despite its ubiquity and importance to local governments, is not highly revered. There are several reasons for this judgement, including the inequities in the assessment process and the limited association of property taxes with household income. As a result, there have been many efforts made across the country to reform property tax administration, and to impose various limits on the use of the property tax, including: limits on the tax rate, limits on the increase in the property taxes levy, limits on what is taxed, and limits on increases in the assessed value of property.\(^1\) The latter is the subject of this report.

A limitation on increases in assessed values has obvious appeal to property tax payers. While the individual property taxpayer sees that the increase in his or her assessed value is controlled, it is important to consider the broader implications of a assessment limitation. The purpose of this report is to describe how such limitations work in other states and to explore the effects of such limitations. The report is organized as follows: first, we provide a description of statewide limitations to the annual increase in the assessed value that have been adopted in seven states. Second, two relevant court cases are discussed, followed by a discussion of the literature that addresses the economic effects of these limitations. Finally we presents an analysis of the limitation adopted by Muscogee County (Columbus), Georgia.

\(^1\)For a discussion of tax and expenditure limitations see ACIR (1995).
II. Existing Limitations
Seven states have adopted a statewide limitation on the annual growth of property tax assessment. In six states the limitation applies to individual parcels, while in one state (Iowa) the limit applies to the total property tax base. The following is a brief description of the assessment limitations in the seven states in the order of their adoption.

1. Maryland (1959)

Maryland originally adopted an assessment increase limitation in 1959, but the statute was amended in 1991. The assessment limitation applies only to homesteaded property and varies by type of government. Assessment increases for state government property taxes are limited to 10 percent per year. County and municipal governments are allowed to cap the increase in assessed value at a rate less than 10 percent if they so desire, i.e., they can choose a limitation between 0 and 10 percent. There is no limitation imposed on assessment increases for school districts.

2. California (1978)

California adopted a property tax assessment limitation as part of Proposition 13, which was passed by referendum in June 1978. California’s limitation is the most widely cited, largely because of the breadth of the provisions contained in Proposition 13 and because it applies to all types of property, not just homesteaded property. It is one of the few limitations to be studied in any detail. Proposition 13 contained four key provisions:

- The property tax rate on any parcel cannot exceed 1 percent. (This means that millage rates applied by all local governments on a particular parcel cannot sum to more than 10 mills.)
- The assessed value of all property was “rolled back” to its 1975-76 value.
- The assessed value of any property can increase at no more than 2 percent per year.
• If the ownership of the property changes, the property is re-assessed to its market value, i.e., its purchase price. (Various exceptions have been adopted over time, e.g., a transfer within a family does not result in a re-assessment.)

The third provision essentially froze the assessed value of property until the 1990s since the increase in fair market value far exceeded 2 percent per year until the 1990s. The third and fourth provisions have lead to the use of the term “acquisition value assessment.” In essence, the assessed value of a property (except for the allowable 2 percent annual increase) equals the value of the property at the time the owner purchased it.

3. Iowa (1978)

Iowa has an approach to limiting assessment growth that differs from other states. The Iowa statute limits the growth of total assessed value in the state to 4 percent per year. The limit originally was set at 6 percent in 1978, but was lowered to 4 percent in 1980. New construction and improvements are excluded; utility property is limited to 8 percent annual growth.

To limit the growth in assessment, the state imposes a mandatory assessment ratio called a “rollback percentage” that ensures that the total assessed value in Iowa is at most 4 percent greater than the previous year. Taxable value for a parcel is equal to the parcel’s market value times the applicable rollback percentage. Separate rollback percentages are calculated for each class of property: agricultural, residential, commercial, industrial, utility, and railroads. The rollback percentage for residential property and agricultural property is further limited to the smaller of the increase in value of residential and agricultural property if either increases by less than 4 percent. Since the increase in agricultural property value (which is not assessed at market value) has generally been
much less than 4 percent, the effective limitation on residential property has been less than 4 percent.

This system means that all parcels within a given property category are assessed at the same percentage of market value. Consider the following example, suppose two parcels are initially worth $100,000, but one increases in value by 50 percent while the other experiences no increase. In other states, if the assessment cap was 4 percent, the two parcels would be assessed at $104,000 and $100,000, respectively, which would be 69.3 percent and 100 percent of market value. In Iowa, the two parcels would be assessed at a total of $208,000, and each parcel would be assessed at 83.2 percent of market value, where 83.2 percent equals (208,000/250,000)*100. Thus, the two parcels would be assessed at $124,800 and $83,200, respectively.


Arizona adopted an assessment increase limit in 1980. The system works as follows. Each parcel of property has two separate values, a fair market value (FMV) and a Limited Property Value (LPV). The statutory annual growth limit for the LPV is the greater of 10 percent, and 25 percent of the difference between last year’s LPV and this year’s FMV. (In no case can the LPV exceed fair market value.) To illustrate, consider a house with a LPV of $50,000 in 1996 and a FMV of $60,000 in 1997. A 10 percent increase in LPV would $5,000, while 25 percent of the difference between $50,000 and $60,000 would be $2,500. Thus, the LPV for 1997 would be $55,000, which equals $50,000 plus the greater of $5,000 and $2,500. If in 1998, the FMV is $85,000, then the LPV for 1998 would be $62,500, i.e., $55,000 plus the greater of 10 percent (i.e., $5,500), and 25 percent of the difference between $85,000 and $55,000 (i.e., $7,500).
Although Arizona has a limitation on assessment increases, it does not have an acquisition value assessment system. Instead of basing taxes on market value in the event of new construction, improvements, or change in use or ownership, the LPV for such property is recalculated based on the ratio of LPV to FMV for like properties in the surrounding geographic area. This ratio is then applied to the property's FMV to find the LPV.

Florida's assessment limitation, which only applies to homesteaded properties, restricts increases in assessment to the lower of 3 percent and the change in the Consumer Price Index. New construction may increase the assessments beyond the statutory limits.

Washington state in November 1997 passed a referendum limiting assessed values increases to 15 percent per year on all classes of property.

7. Texas (1997)
Texas voters in November 1997 approved a limitation on assessment increases. The increase in assessed value of homesteaded property is limited to 10 percent per year plus increases in value due to improvements. The assessed value reverts back to market value if the property is sold. However, the limitation is portable for homeowners over 65 years of age; if an elderly homeowner moves, the assessed value of the new person’s home will be the same percentage of the market value as was the original home. The legislation provides no mechanism for correcting for prior appraisal errors, thus locking in such errors.

In addition to these state-wide limitations, limitations on the growth in assessed value have been adopted for a number of sub-state governments. For example, there is a limitation in New York
City and in Nassau County, New York. In Georgia there is a freeze on assessments on homesteaded property in Muscogee County, a program which is described below.

III. The Constitutionality of Assessment Increase Limitations

There are two rulings of the U.S. Supreme Court relevant to use of differential property tax assessment. In Allegheny Pittsburgh Coal Co. v. County Comm’n of Webster Cty., 488 U.S. 336 (1989), the Supreme Court ruled 9 to 0 that a West Virginia county tax assessor could not base property tax assessments on the historic purchase price of the property. The Court determined that the use of acquisition value resulted in unequal assessments that violated the Equal Protection Clause.

In Nordlinger v. Hahn, 505 U.S. 1 (1992), which was a direct challenge to the acquisition value assessment process of California’s Proposition 13, the Court ruled that the unequal assessment that resulted from the Proposition 13 limitation on assessment increases did not violate the Equal Protection Clause. The author of the opinion, Justice Blackmun, wrote that the appropriate standard of review was whether the policy furthered a legitimate state interest and that Proposition 13 did advance such an interest. (Justice Stevens wrote a very strong dissenting opinion.)

The principal difference in the two cases is that in Webster County, West Virginia there was no law authorizing acquisition value while in California there was. Therefore, it appears that an assessment increase limitation that is imposed as a state constitutional amendment would stand up to federal court review.
IV. Economic Effects of Assessment Increase Limitations

There are several potential effects of assessment limitations.

A. Effect of Assessment Limitations on the Level of Property Taxes

One reason for adopting assessment increase limitations is to control the growth in property taxes. There have been several studies of the effect of tax and expenditure limitations (TEL) on property taxes, but most of these studies do not separately consider limits on assessment increases. Mullins and Joyce (1996), in a study of TEL, found some evidence that assessment limitations reduce local taxes as a share of local general revenue, but the magnitude of the effect was small, about 1.7 percentage points.

By themselves, limitations on increases in assessments will not necessarily control the growth in property taxes. Property taxes are the product of the property tax rate and the taxable value, and the assessment increase limitation only affects the taxable value. Local governments can simply raise the property tax rate in order to increase property tax revenue. Consistent with this, Preston and Ichniowski (1991) found that rate limits coupled with caps on assessment increases were the most effective in limiting municipal property tax revenue, and found that the effect was significant, up to a 45 percent reduction in the growth of property taxes. Shadbegian (1998) found that TELs reduce property taxes per capita by about three percent, while Shadbegian (1999) found that TELs that are binding reduce property taxes per capita by 12 percent.

Irregardless of whether assessment increase limitations affect property taxes in the aggregate, they do prevent large increases in property taxes for owners of properties whose increases in value are greater than average. Consider a local government with a millage rate of 20 mills that determines that it needs a 10 percent increase in property tax revenue. Suppose that the total property tax base

\[\text{\footnotesize\textsuperscript{2}}\text{For recent discussions of some of the effects of TEL literature, see Downes and Figlio (1999) and McGuire (1999).}\]
increases by 10 percent. Now consider three owners whose property increases in value by 5, 10, and 15 percent, respectively. Without the assessment freeze no millage rate increase is necessary (since the base increased by 10 percent), and therefore the three owners would have property tax increases of 5, 10, and 15 percent, respectively. With an assessment freeze, the local government must increase the millage rate by 10 percent. In this situation, all three owners experience a 10 percent increase in property taxes. In other words, the owner who had the above average increase in property value did better with the freeze, while the owner with a below average increase in property value did worse with the freeze.

B. Distributional Effects of Assessment Limitations

Much of the criticism surrounding the property tax and most of the focus on property tax reform is associated with the premise that identical properties, i.e., properties with the same market value, should be assessed at the same value but frequently are not. Acquisition value is based on the premise that properties with the same historic purchase price should be assessed at the same value. (Neither system necessarily results in a close link between assessed value and income, which is another basis for equal treatment.) Given that the property tax is a tax on wealth, fair market value should be the basis for equal treatment. Thus, we focus on the disparities in the ratio of assessed value to market value that arise as a result of acquisition value assessment.

There is little research that addresses the issue of who benefits and who loses from a property tax assessment freeze, and the studies we identified focus on California’s Proposition 13. O’Sullivan, Sexton, and Sheffrin (1995) and Sheffrin and Sexton (1998) provide the most significant analysis of the economic implications of the adoption of acquisition-value assessment in California. The following discussion is based on those studies.
Acquisition-value assessment leads to property tax disparities. To illustrate, consider two identical houses each worth $100,000 in 1975. Assume that the value of each property increases by 10 percent per year (so that market value is $984,973 in 1999) and that one of the houses sold in 1999 for its market value. The assessed value of the house that didn’t sell is $160,843 (the result of the 2 percent annual increase allowed under Proposition 13), while the assessed value of the house that sold is $984,973 (which is the market value in 1999). Thus, the owners of identical houses pay substantially different property taxes; for this example, the owner of the newly purchased house pays 6.12 times more than the other individual. This ratio is referred to as the “disparity ratio.”

The level of disparity depends upon the increase in property value, the frequency with which property ownership turns over, and the rate of new construction. For example, if property values increased at 6 percent instead of 10 percent, the disparity ratio in the above example would be only 2.51; if all property sold every year, there would be no disparity.

O’Sullivan, et. al. (1995) calculated the actual level of disparity in 1991 for homeowners for nine counties in California: three urban counties, three fast-growing suburban counties, and three rural and ex-urban counties, while Sheffrin and Sexton (1998) provide updated calculation for Los Angeles County for 1996. To determine disparity ratios for all property, the market value of property that was not sold had to be estimated. Table 1 shows the median ratio of market value to assessed value for homeowners in Los Angeles County by acquisition year through 1996. The

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3In California property is assessed at 100 percent of value, where value is the acquisition price increased by up to 2 percent per year.
Table 1. Base-year Distribution and Disparity Ratios for Los Angeles County

<table>
<thead>
<tr>
<th>Year</th>
<th>Base Year Distribution</th>
<th>Disparity Ratio</th>
</tr>
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<tbody>
<tr>
<td>1975</td>
<td>33.2%</td>
<td>3.84</td>
</tr>
<tr>
<td>1976</td>
<td>1.8</td>
<td>2.98</td>
</tr>
<tr>
<td>1977</td>
<td>2.0</td>
<td>2.59</td>
</tr>
<tr>
<td>1978</td>
<td>2.0</td>
<td>2.14</td>
</tr>
<tr>
<td>1979</td>
<td>2.1</td>
<td>1.78</td>
</tr>
<tr>
<td>1980</td>
<td>2.0</td>
<td>1.47</td>
</tr>
<tr>
<td>1981</td>
<td>1.4</td>
<td>1.28</td>
</tr>
<tr>
<td>1982</td>
<td>1.1</td>
<td>1.27</td>
</tr>
<tr>
<td>1983</td>
<td>1.1</td>
<td>1.28</td>
</tr>
<tr>
<td>1984</td>
<td>1.0</td>
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<td>1985</td>
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<td>1986</td>
<td>2.9</td>
<td>1.20</td>
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<tr>
<td>1987</td>
<td>4.0</td>
<td>1.12</td>
</tr>
<tr>
<td>1988</td>
<td>4.3</td>
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<tr>
<td>1989</td>
<td>5.3</td>
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<td>5.0</td>
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<tr>
<td>1991</td>
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<tr>
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</tr>
<tr>
<td>1996</td>
<td>3.9</td>
<td>1.00</td>
</tr>
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</table>

Disparity ratios are the median ratio of market value to assessed value. Base year distributions are the percentages of properties that have not been sold since that year and 1996.

Source: Sheffrin and Sexton (1998, p 19)
second column of Table 1 shows that 33.2 percent of homeowners paid taxes in 1996 based on the 1975 assessed value increased by up to 2 percent per year, while 3.9 percent of homeowners purchased their homes in 1996 and therefore paid 1996 taxes based on the 1996 market value.

Column 3 of Table 1 reports the disparity ratio by year of acquisition. For the homeowners who have not moved since 1975, the median ratio of actual property value to assessed value is 3.84. For the homeowners who have not moved since 1985, the median ratio of actual property value to assessed value is 1.22, while for those who purchased their home in 1996 the median ratio of market value to assessed value is, of course, 1.00. Thus, the person who purchased his or her home in 1996 would pay 3.84 times the property taxes paid by a person with a home of equivalent value that she or he has occupied since 1975, and would pay 1.22 times the taxes paid by a person who moved into an equivalent house in 1985.

The disparity ratios differ across the nine counties, and at least for Los Angeles County, have fallen since 1991. Table 2, column 2, shows the disparity ratio based on values in 1991 for each of the nine counties for property acquired in 1975 (i.e., ratio of market value in 1991 and the assessed value if the property had not sold since 1975). Note first that the 1975 disparity ratios vary across counties. In general, the disparity ratios are greatest in urban counties, followed by fast-growing suburban counties, and least for rural counties. This ordering is related to differences in the increase in housing values and turnover rates across the three classes of counties. Second, note that the 1975 disparity ratio for Los Angeles County in 1991 was 5.19 (Table 2), while in 1996 it was 3.84 (Table 1). This is the result of a significant decline in property value due to the severe recession in California in the 1990s. It is clear from Tables 1 and 2 that one of effects of the adoption of acquisition-value assessment has been to create substantial inequality among homeowners.
Table 2. 1975 Disparity Ratios and Effective Property Tax Rates

<table>
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<tr>
<th>County</th>
<th>1975 Disparity Ratio</th>
<th>Effective Property Tax Rate</th>
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<tbody>
<tr>
<td>Alameda</td>
<td>4.94</td>
<td>0.57%</td>
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<td>San Bernardino</td>
<td>3.91</td>
<td>0.74</td>
</tr>
<tr>
<td>Butte</td>
<td>3.03</td>
<td>0.67</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>5.19</td>
<td>0.51</td>
</tr>
<tr>
<td>Kern</td>
<td>2.71</td>
<td>0.74</td>
</tr>
<tr>
<td>Sacramento</td>
<td>3.92</td>
<td>0.62</td>
</tr>
<tr>
<td>Sonoma</td>
<td>4.97</td>
<td>0.60</td>
</tr>
<tr>
<td>San Mateo</td>
<td>4.58</td>
<td>0.60</td>
</tr>
<tr>
<td>Placer</td>
<td>4.00</td>
<td>0.64</td>
</tr>
</tbody>
</table>

Source: O’Sullivan, et. al, (1995; p. 60)

The effective property tax rate for 1991 is reported in column 3 of Table 2 for each of the nine counties. The effective property tax rate equals 1 percent of total assessed value divided by total market values (recall that the property tax rate in California is limited to 1 percent). For Los Angeles County the effective tax rate is 0.51, which means that total market value is almost 2 times the total assessed value. There is substantial variation across counties in the effective rates, which reflects differences in increases in market values and turnover.

Because of differences across property types in the rate of ownership turnover and in market value increases, it is possible that different types of property will have different effective tax rates. The difference in effective tax rates is an indicator of differences across classes of property in the benefits of acquisition-valued assessment. Table 3 shows the effective property tax rate for 1991 by class of property.
Table 3. Effective Tax Rates

<table>
<thead>
<tr>
<th>County</th>
<th>Homesteaded</th>
<th>Other Single Family</th>
<th>Multifamily</th>
<th>Commercial and Industrial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alameda</td>
<td>0.51%</td>
<td>0.66%</td>
<td>0.51%</td>
<td>0.78%</td>
</tr>
<tr>
<td>San Bernardino</td>
<td>0.74</td>
<td>0.77</td>
<td>0.86</td>
<td>n.a.</td>
</tr>
<tr>
<td>Butte(^a)</td>
<td>0.67</td>
<td>0.71</td>
<td>0.69</td>
<td>n.a.</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>0.51</td>
<td>0.66</td>
<td>0.49</td>
<td>0.52</td>
</tr>
<tr>
<td>Sonoma</td>
<td>0.60</td>
<td>0.65</td>
<td>0.63</td>
<td>n.a.</td>
</tr>
<tr>
<td>San Mateo</td>
<td>0.60</td>
<td>0.70</td>
<td>0.64</td>
<td>n.a.</td>
</tr>
<tr>
<td>Placer</td>
<td>0.64</td>
<td>0.73</td>
<td>0.68</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

\(^a\)Small samples.


Across the 7 counties for which data were available, the effective tax rates for other single-family property (i.e., non-homesteaded) and for multi-family units are generally larger than for homesteaded homes. For example, in 1991 in Los Angeles County homeowners paid property taxes equal to 0.51 percent of market value, while owners of other single-family property paid 0.66 percent, which is nearly 30 percent greater. Multi-family property units turn over more frequently than single-family property (resulting in assessed value closer to market value), and thus the effective tax rate is higher for multi-family property class. For commercial and industrial properties, small properties turn over more rapidly than large properties, and thus small properties have a higher effective tax rate than large properties.

Finally, the O’Sullivan et. al. study looked at how the disparities are distributed across age and income classes. In general, older and lower-income homeowners have lower effective property tax rates since these individuals are less likely to move. If the acquisition value assessment system was eliminated and the property tax rates adjusted to maintain the same total property tax revenue, then property taxes will go up for lower income households and down for higher income households.
For example, replacing the acquisition value with market value but maintaining the same property tax revenue would increase property taxes for an average Los Angeles County homeowner in the $10,000 to $20,000 income bracket by $206, but decrease property taxes by $109 for a household in the $80,000 to $90,000 income bracket (O’Sullivan et. al., 1995; p.74).

Older households also benefit from the acquisition value assessment system. Seniors in Los Angeles County would pay an average of $503 more in property taxes while non-seniors would pay $152 less if the acquisition value system was replaced with a market value assessment system.

These changes in property tax payments mask substantial variations within income classes and within age groups. For example, within the $40,000 to $45,000 income range, the average tax change in Los Angeles County from eliminating acquisition value assessments is close to zero, but 25 percent of the households within that income range would experience an average tax decrease of $413 while 25 percent would experience a $417 tax increase (O’Sullivan, et. al., 1995; p. 75).

These results of O’Sullivan et. al. (1995) are consistent with earlier work focused on Proposition 13. For example, Chernick and Reschovsky (1982) concluded that low-income households and older households benefit from Proposition 13 and that substantial horizontal inequities are created. Menchik et. al. (1982) also found that low-income homeowners benefit from acquisition value assessment. Beaumont (1991) concludes that renters and younger people lose with the adoption of acquisition value assessment.

C. Other Economics Effects of Acquisition Value Assessment

Acquisition value assessment creates or alters economic incentives. Such an assessment system should reduce the likelihood that a home owner will move, i.e., it should discourage home owners from selling their existing home and buying another one. The estimated effect on mobility, however, is small. For households who are the least mobile, O’Sullivan et. al. (1994) estimate that
the acquisition value assessment increases the time between move by 12 percent, or about a year on average. For the most-mobile households, they find that the time between moves increases by only 1.2 percent.

V. Property Tax Assessment Limitation in Muscogee County

Beginning in 1983, as a result of a local constitutional amendment, the assessed values of homesteaded property, i.e., property eligible for a homestead exemption, for local property tax purposes were frozen in Muscogee County. The assessed value of such property can be increased only if the property ownership changes (other than between spouses), there is an addition to or renovation of the property, or to correct an error. Thus, for homesteaded property, Muscogee County has a true acquisition value property tax system.

The limitation on assessment increases applies only to local property taxes. The state levies a 0.25 mill property tax on 40 percent of the current fair market value, less any homestead exemptions. Thus, the county must maintain two assessed values, the “frozen value” for local taxes and the fair market value for state taxes, for each homesteaded property. By comparing these two values, it is possible to determine how the freeze has effected property taxes in Muscogee County. (We do not have to estimate market value as did O’Sullivan et. al.; we use the state assessed value.)

The analysis of this assessment freeze first considers the effect on the aggregate property tax base, and then considers disparities across in assessments across individual parcels. The third part of the analysis relates the assessed values within particular census tracts with the socio-economic characteristics of the census tracts. Finally, we present estimates of the effect of the property tax freeze on the probability of selling a home.

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4Until recently, Georgia allowed amendments to the state constitution that apply to just specific jurisdictions.
A. The Effect on Aggregate Property Tax Digest

Tables 4 and 5 present annual data on the state and local property tax digest. The data for this aggregate analysis were obtained from the Muscogee County Tax Commissioner. A few comments about the data are in order. First, data prior to 1985 were not available. Second, the state classification system for property changed in 1989. In particular, there were changes in the residential category, and thus direct comparisons by category pre- and post-1989 are not feasible. Third, state legislation passed in 1986 changed the way the state evaluates how well each county does in assessing property, which resulted in counties changing how they conduct their assessments. As a result of the legislation, nearly all counties had to conduct a mass re-assessment by 1989. Fourth, the local (frozen) property tax base by property class was not available prior to 1989; in particular data for the total local value of residential property are not available prior to 1989.

Table 4 shows the total gross digest and residential gross digest for state and for local purposes by year. Consider first the total gross digest. For the years 1985 to 1988, the difference between the state and local digest was small, $50 million or less. The freeze reduced gross assessed value for local tax purposes by less than 3.5 percent in these years. During that period, property assessments for state purposes did not change very much, so that the differences in state and local digest remained small. The state digest changed dramatically in 1989, due in part to a mass revaluation, while the local digest did not increase as much because of the freeze. For the post-1989 period, the assessment freeze resulted in differences between the state and local total gross digest in the $165 to $200 million range, or by about 6 percent to about 10 percent. The dollar difference between the state and gross local digest declined from 1989 to 1995, but has since increased by a
Table 5
modest amount. The percentage difference continuously declined between 1989 and 1997, falling from 9.91 percent to 5.93 percent.

The reduction in the local gross property tax base due to the freeze is not very large; in recent years the difference between that state and local gross digest equals about one year of growth in the state (non-frozen) digest. For 1997, the ratio of assessed value for local purposes to assessed value for state purposes is 0.94, which is much larger than the 1991 ratios reported in Table 2 for California counties. The difference between Muscogee County and California is likely due to slower increases in property values in Muscogee County and perhaps to more rapid turnover of homes.

For residential property, comparisons between state and local digest can be made only for the post-1989 period. Nearly all property with a frozen value is classified as residential property; homes that are part of a farm are included in the freeze but are not separated out from other agricultural property. However, not all residential property is eligible for the freeze. Thus, about 95 percent of the difference between the total gross state and local digest is accounted for by residential property. Since the residential difference is approximately equal to the difference in the total gross digests, the pattern for the differences between the state and local residential gross digests are similar to those for total gross digests. This also suggests that for the pre-1990 period residential property followed the pattern for the total gross digest. (The large change in the state residential gross digest between 1989 and 1990 is due in part to the change in how property is classified.) The difference in frozen and non-frozen residential values is about 15 percent. Thus, on average the freeze has reduced residential property taxes by 15 percent, assuming that the property tax rate was not increased to offset the reduction in the tax base.

Table 5 presents information on the net digest, i.e., the gross digest less exemptions (homestead and others). For Table 5, the state digest equals the gross state digest less the state-level
exemptions, while the local digest equals the gross local digest less the local-level exemptions. Muscogee County has much larger homestead exemptions than homestead allowed for the state property taxes. For example, for 1997 the state allowed a regular homestead exemption of $2,000 for the state’s 0.25 mills property tax, while in Muscogee County the regular homestead exemption for local property taxes was $13,500. Therefore, the difference between state and local total net digest is much larger than for the total gross digest. In 1997, for example, the difference in the net digests was $531 million, while the difference in gross digests was $178 million. Again, the patterns for the differences for total net digest and for the residential proportion are very similar.

Relative to the reduction in local assessed value due to the exemptions, particularly the homestead exemptions, the property tax freeze has had a relatively small effect on total taxable property tax base in Muscogee County.

B. An Analysis of Assessment Disparities

In order to investigate disparities in assessment that result from the freeze, we obtained individual parcels records for each year 1985 through 1997, with the exceptions of 1987, 1988, and 1991 for which the computer tapes could not be located. We focused the analysis on parcels that were classified as residential; a few other parcels are eligible for the freeze but were not considered in this analysis.

Table 6 presents a distribution of the ratio of local to state values in 1997 for all 33,265 parcels that are eligible for the freeze. This ratio is similar to the effective tax rate calculated for California, except that in Georgia the property tax rate is not restricted to one percent, and thus is not the effective property tax rate. But it is still the case that the smaller the ratio, the more that the parcel benefits from the freeze. We separately consider properties that have a state assessed value of more than $13,500 and less than or equal to $13,500 since $13,500 is the value of the homestead
Table 6. Distribution of the Ratio of Local to State Value – 1997

<table>
<thead>
<tr>
<th>Ratio of Local to State Value</th>
<th>Number of Parcels with State Value &gt; $13,500</th>
<th>% of Total Parcels</th>
<th>Number of Parcels with State Value &lt;= $13,500</th>
<th>% of Total Parcels</th>
<th>Number of Parcels</th>
<th>% of Total Parcels</th>
</tr>
</thead>
<tbody>
<tr>
<td>.90 to 1.0</td>
<td>12621</td>
<td>42.8%</td>
<td>1328</td>
<td>35.2%</td>
<td>13949</td>
<td>41.9%</td>
</tr>
<tr>
<td>.80 to .89</td>
<td>3248</td>
<td>11.0</td>
<td>324</td>
<td>8.6</td>
<td>3572</td>
<td>10.7</td>
</tr>
<tr>
<td>.70 to .79</td>
<td>2835</td>
<td>9.6</td>
<td>758</td>
<td>20.1</td>
<td>3593</td>
<td>10.8</td>
</tr>
<tr>
<td>.60 to .69</td>
<td>5743</td>
<td>19.5</td>
<td>815</td>
<td>21.6</td>
<td>6558</td>
<td>19.7</td>
</tr>
<tr>
<td>.50 to .59</td>
<td>4095</td>
<td>13.9</td>
<td>383</td>
<td>10.2</td>
<td>4478</td>
<td>13.5</td>
</tr>
<tr>
<td>.40 to .49</td>
<td>830</td>
<td>2.8</td>
<td>112</td>
<td>3.0</td>
<td>942</td>
<td>2.8</td>
</tr>
<tr>
<td>.30 to .39</td>
<td>105</td>
<td>0.4</td>
<td>36</td>
<td>1.0</td>
<td>141</td>
<td>0.4</td>
</tr>
<tr>
<td>.20 to .29</td>
<td>11</td>
<td>0.0</td>
<td>13</td>
<td>0.3</td>
<td>24</td>
<td>0.1</td>
</tr>
<tr>
<td>.10 to .19</td>
<td>6</td>
<td>0.0</td>
<td>2</td>
<td>0.1</td>
<td>8</td>
<td>0.0</td>
</tr>
<tr>
<td>0 to .09</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

exemption. Thus, property with a state assessed value of $13,500 or less would not be affected by the freeze.

As can be seen in Table 6, there are substantial disparities in assessment due to the freeze. While 42.8 percent of parcels with assessed values over $13,500 have ratios of local to state values between 0.9 and 1.0, the remaining approximately 60 percent of parcels have local to state value ratios that range from 0.10 to 0.89, with the bulk lying between 0.50 and 0.89.

Table 7 shows how the effect of the freeze varies with the year that the property last became eligible for the freeze. Table 7 starts with parcels that in 1997 were eligible for the freeze, i.e., were homesteaded. We then determined the year in which each parcel took on its 1997 local value, i.e., we identified the year in which the parcel’s assessed value was last frozen. The number of parcels frozen in each year is shown in column one. Of the parcels that have frozen values in 1997, 28.7 percent were first frozen in 1985 or earlier (data was not available for 1984.) In Los Angeles
Table 7. State and Local Values

<table>
<thead>
<tr>
<th>Year</th>
<th>Parcels by Year property took 1997 local value</th>
<th>Median 1997 Value</th>
<th>Disparity Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percent</td>
<td>State</td>
</tr>
<tr>
<td>1997</td>
<td>1652</td>
<td>4.97</td>
<td>$30,164</td>
</tr>
<tr>
<td>1996</td>
<td>1571</td>
<td>4.72</td>
<td>$29,366</td>
</tr>
<tr>
<td>1995</td>
<td>1723</td>
<td>5.18</td>
<td>$27,234</td>
</tr>
<tr>
<td>1994</td>
<td>1762</td>
<td>5.30</td>
<td>$27,774</td>
</tr>
<tr>
<td>1993</td>
<td>1770</td>
<td>5.32</td>
<td>$26,478</td>
</tr>
<tr>
<td>1992</td>
<td>3088</td>
<td>9.28</td>
<td>$24,413</td>
</tr>
<tr>
<td>1991</td>
<td></td>
<td></td>
<td>$24,413</td>
</tr>
<tr>
<td>1990</td>
<td>2113</td>
<td>6.35</td>
<td>$25,326</td>
</tr>
<tr>
<td>1989</td>
<td>8155</td>
<td>24.52</td>
<td>$25,763</td>
</tr>
<tr>
<td>1988</td>
<td></td>
<td></td>
<td>$25,763</td>
</tr>
<tr>
<td>1987</td>
<td></td>
<td></td>
<td>$25,763</td>
</tr>
<tr>
<td>1986</td>
<td>1868</td>
<td>5.62</td>
<td>$25,845</td>
</tr>
<tr>
<td>1985</td>
<td>9557</td>
<td>28.74</td>
<td>$20,753</td>
</tr>
</tbody>
</table>

County, 33.2 percent of the parcels took their current (1996) value in 1975. Given that the time period for Los Angeles County is longer than for Muscogee County, the 28.7 percent is low. This suggests that there is more turnover of housing in Muscogee County than in Los Angeles County.

Columns 3 and 4 give the 1997 median state and local value for parcels who assessments were first frozen in that year. The state value of the parcels increased over time. The last column contains the disparity ratio and shows how differences between the state and local value increase the longer the parcels’ local assessed value has been frozen. These ratios are similar to the ratios for California as shown in Table 1.

For parcels that were first frozen in 1985 or 1984, the disparity ratio is 1.67. The 1991 disparity ratios for 1975 for California counties, as reported in Table 2, are much higher than that. This is partly due to the shorter duration of the Muscogee County freeze and the smaller increases
in property values in Muscogee County. For Los Angeles County, property that has been frozen since 1982, i.e., the same elapse time as the Muscogee freeze has been in effect, has a disparity ratio for 1996 of 1.27. This is lower than for Muscogee County, reflecting the decline in property values in California during the 1990s. The disparity ratio for Muscogee County decreases the shorter the time the parcel has been frozen, but the change since 1989 is very small.

Table 8 shows the difference for 1997 between the state (non-frozen) assessed value and the local (frozen) assessed value by assessed value categories. The first column shows the total number of residential parcels, while column two shows the average assessed value for state tax purposes for all residential parcels. Residential parcels include rental homes and complexes of four units or less. Thus, not all property classified as residential are homestead property, i.e., eligible for the freeze.

Column 3 shows the number of parcels with frozen values, and the next two columns present the average assessed value for state purposes (i.e., the non-frozen value) and the average assessed value for local purposes (i.e., the frozen value).

Columns 6 and 7 show the mean total and percentage differences between the state and local values. (Note these values are the difference between the average assessed values, not the mean of the differences.) The average reduction in assessed value due to the freeze is much larger for the higher valued properties than for lower valued properties. For example, for parcels whose state assessed value is between $200,000 and $300,000 the reduction is 11.2 times the reduction for properties with a state assessed value of less than $25,000. However, expressed as a percentage reduction in assessed value, the relatively larger reductions occur for the low and high valued residential units. The parcels in the two highest valued classes, for which state and local values are the same, are homes that have recently been built or sold.
Table 8
The last two columns of Table 8 presents the maximum differences (in dollars and percentages) for a single parcel within in each assessed value class. The pattern for the maximum dollar difference is very similar to that for the differences in mean values, although the dollar differences for higher valued homes relative to that for lower valued homes is not as great as for the mean difference. For lower valued homes there are parcels whose local assessment is 80 to 85 percent lower than their state assessment.

C. An Analysis by Socio-Economic Characteristic

No information concerning the characteristics of homeowners is available in the property tax files. In order to relate the freeze to socio-economic characteristics we relied on census tract data from the 1990 Census of Population. We first identified the census tract for each of the residential parcels. We then regressed the mean value of the difference between fair market value and the frozen value (both dollars and percentage) against each socio-economic characteristics of the census tracts.

Table 9 contains the results of the six regressions. The average dollar reduction within a census tract in assessed value due to the freeze increases with income, age, and percent white. Thus, the elimination of the freeze would increase assessed values more for higher income homeowners, for the elderly, and for whites. Recall that O’Sullivan et. al. (1995) found that lower income and elderly homeowners would be worse off if the assessment limitation was removed in California.

In terms of the percentage reduction the results are just the opposite for income, i.e., higher income homeowners have a smaller percentage reduction in assessed value due to the freeze. Median age and percent white are not statistically significant in the regressions with percentage reduction in assessed value.
Table 9. Regressions with Socio-Economic Characteristics

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Dollar Difference</th>
<th>Percentage Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Median Income</td>
<td>Mean Age</td>
</tr>
<tr>
<td>Intercept</td>
<td>14674.4</td>
<td>27.04</td>
</tr>
<tr>
<td>Coefficient</td>
<td>2.00</td>
<td>.001</td>
</tr>
<tr>
<td>t-statistic</td>
<td>2.69</td>
<td>4.59</td>
</tr>
<tr>
<td>R²</td>
<td>0.128</td>
<td>0.300</td>
</tr>
</tbody>
</table>

Sample size = 51

D. Mobility

We explored the effect of the freeze on the probability that a homeowner would move by estimating a probit regression for moves in 1997. We expect that the probability of moving should be negatively related to the absolute difference between the state and local assessed value, denoted DIFF. In other words, we expect that the benefit of the freeze would lock-in homeowners, thereby reducing the probability of moving. For control variables we included a set of dummies to measure the number of years that the homeowner has occupied the house. We include these variables to capture the effect that duration might have on the probability of moving. Since occupancy duration is truncated at 1986 and since we have no expectation that the effect of duration will be linear, we used a set of dummy variables, denoted D1996 through D1985, to measure duration. The value of D1996 equals one if the owner moved into the house in 1996, etc. The excluded dummy is D1985, which equals one if the owner moved into the home in 1985 or earlier. To control for socio-economic characteristics we included a set of variables measured at the census tract level. These variables and the expected signs are:
• Population (POP) is included to control for the size of the census tract; we have no *a priori* expectation regarding the sign of the coefficient.

• Median age (AGE) is included since we expect that older individuals are less likely to move, implying a negative sign.

• Percent white (%WH) is included since we expect whites to move more frequently than nonwhites because of less restrictions on housing choices due to discrimination, and thus we expect a positive sign.

• Households with higher median income (INC) are expected to move more frequently, and thus we expect a positive sign.

• The percent who lived in the census tract in 1985 (SAME) is included to control for neighborhood stability; it should be negatively related to the probability that someone in the census tract will move and thus we expect a negative sign.

• Percent owner occupied housing (%OWN) is included as another measure of the stability of the neighborhood; we expect the sign to be negative.

• We expect that homes in census tracts with higher median house value (VALUE) to be more likely to move, so we expect a positive sign.

Table 10 contains the regression results.

The results in Table 10 suggest that the probability of moving is unrelated to the value of the freeze. We had expected that the coefficient on DIFF would be negative, but it is positive but is not statistically significant. The coefficients on the duration variables are all negative and generally significant. The negative coefficients on the duration dummies imply that the probability of moving is less if one moved into the home after 1985. However, the coefficients on the duration dummies do not follow any particular pattern.

The control variables are all significant, with the exception of %OWN. The signs of the coefficients are generally what one might expect, except for %WH and VALUE.
Table 10. Probit Equations for Moving

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>1.710</td>
<td>0.111*</td>
</tr>
<tr>
<td>DIFF</td>
<td>0.018</td>
<td>0.040</td>
</tr>
<tr>
<td>D1996</td>
<td>-0.179</td>
<td>0.042*</td>
</tr>
<tr>
<td>D1995</td>
<td>-0.094</td>
<td>0.044**</td>
</tr>
<tr>
<td>D1994</td>
<td>-0.095</td>
<td>0.047**</td>
</tr>
<tr>
<td>D1993</td>
<td>-0.075</td>
<td>0.050</td>
</tr>
<tr>
<td>D1992</td>
<td>-0.151</td>
<td>0.043*</td>
</tr>
<tr>
<td>D1990</td>
<td>-0.026</td>
<td>0.057</td>
</tr>
<tr>
<td>D1989</td>
<td>-0.064</td>
<td>0.036***</td>
</tr>
<tr>
<td>D1986</td>
<td>-0.247</td>
<td>0.063*</td>
</tr>
<tr>
<td>POP (in 1000s)</td>
<td>0.024</td>
<td>0.007*</td>
</tr>
<tr>
<td>AGE</td>
<td>-0.024</td>
<td>0.005*</td>
</tr>
<tr>
<td>%WH</td>
<td>-0.001</td>
<td>0.0006**</td>
</tr>
<tr>
<td>INC (in 1000s)</td>
<td>0.013</td>
<td>0.004*</td>
</tr>
<tr>
<td>SAME</td>
<td>0.011</td>
<td>0.003*</td>
</tr>
<tr>
<td>%OWN</td>
<td>-0.002</td>
<td>0.002</td>
</tr>
<tr>
<td>VALUE (in 1000s)</td>
<td>-0.002</td>
<td>0.001**</td>
</tr>
</tbody>
</table>

Log Likelihood = -7872.42

* significant at the 1 percent level  
** significant at the 5 percent level  
*** significant at the 10 percent level
We estimated similar equations for each year. We also estimated the equation using the percentage differences in state and local assessed values, and with different combinations of the control variables. In none of the regressions was the benefit of the freeze statistically significant.

VI. Conclusions

No one looks forward to tax increases, especially increases in taxes that result from an increase in unrealized property value. While a household’s wealth increased as property value increases, there has not necessarily been an increase in the household’s cash flow to pay the taxes. Thus, pressure is exerted to impose controls on the increase in property taxes. But limitations on increases in property tax assessments results in large disparities in property taxes. Furthermore, assessments limitations do little to increase the stability of communities since the effect on mobility is small.


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