When and Why do Cities Bind Themselves?
The Existence and Extent of Locally-Imposed Tax and Expenditure Limits

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Abstract

Though the social science literature has thoroughly dissected the extent, causes, and consequences of state-mandated tax and expenditure limits on cities, to date there has been no systematic knowledge about or even whether cities enact such limits on themselves. Our survey of cities shows that at least one in eight municipalities has a locally-imposed limit on taxation or spending, and that these limits focus predominantly on the property tax. We combine our survey data with a 35-year panel on municipal finances and demographics and find that voters act to restrict politician behavior in homerule cities, in cities in metropolitan areas with few municipalities, and in places where the population composition is changing quickly. We interpret these findings as broadly consistent with a model in which voters adopt TELs in an attempt to insure themselves against future political changes.

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When and Why do Cities Bind Themselves? The Existence and Extent of Locally-Imposed Tax and Expenditure Limits

From the Charter, City of Mesa, Arizona:

> TRANSACTION PRIVILEGE TAX. The Council shall have the power to levy a transaction privilege tax (commonly called sales tax), provided that no such tax, if based on gross income, gross proceeds of sale, or gross receipts, shall be levied at a rate in excess of one percent (1\%), unless such rate is approved by a majority of the qualified electors voting on the question at a general or special election.
> INCOME TAX. No tax shall be levied on incomes unless approved by a majority of the qualified electors voting thereon at a general or special election.
> REAL ESTATE TAX. No tax shall be levied on real estate unless approved by a majority of the qualified electors voting thereon at a general or special election.
> PERSONAL PROPERTY TAX. No tax shall be levied on personal property unless approved by a majority of the qualified electors voting thereon at a general or special election.

State limitations on the ability of cities to tax and spend are ubiquitous: over the last thirty years almost every state has adopted some restriction on municipal fiscal behavior. The study of these limits by social scientists is similarly ubiquitous. Mullins and Wallins (2004) and Advisory Commission on Intergovernmental Relations (1995) document the presence and extent of these limits, while other researchers study why these limits are imposed (Alm and Skidmore, 1999; Cutler et al., 1999; Ladd and Wilson, 1982, 1983; Stein et al., 1983; Temple, 1996; Vigdor, 2004). Further work examines their effect on expenditures and fiscal structure (Shadbegian, 1996; Joyce and Mullins, 1991; Figlio and O'Sullivan, 2001; Joyce and Mullins, 1991; Mullins, 2004; Mullins and Joyce, 1996) and their effect on the distribution of taxation (Chernick and Reschovsky, 1982). Another branch of the literature examines the effect of these limits on service quality (Figlio and Rueben, 2001; Downes et al., 1998; Dye and McGuire, 2001; Downes and Figlio, 1999).

Despite this wealth of knowledge on state-imposed tax and expenditure limits (TELs), there is no systematic evidence on a very similar type of limit: those which cities impose on themselves. There are many reasons to think that locally-imposed TELs should not exist. First, almost all cities already face at least one state-imposed tax or expenditure limit. Second, cities are by construction already quite constrained in their ability to raise revenue. The process of municipal incorporation includes formal limits by state governments on the amount of debt cities may issue, the tax rates they may charge, and the bases on which they may levy taxes. In addition, cities face competition that should lead to efficient service provision from other municipalities in the same metropolitan area (Tiebout, 1956). This competition should minimize a government's ability to tax beyond the desires of the median voter.

Despite this, our survey of 347 cities shows that at least one in eight cities over 25,000 people has some type of locally-imposed tax or expenditure limit. Due to our verification process, we interpret this estimate as a firm lower bound on the extent of these limits. As do state-imposed limits, these local TELs focus heavily on the property tax: almost two-

thirds of local TELs restrict the ability of cities to increase property tax levies. We document that roughly half of cities with local TELs believe them to be binding, and more than half of local TEL cities say that these limits have affected municipal fiscal practices.

Economists and political scientists have long been puzzled by TELs, which are inconsistent with a simple model where voters elect politicians who faithfully enact voters' policy preferences. Our new data allow us to evaluate several potential explanations for the adoption of local tax and expenditure limitations. Two of these -- the Excessive Taxation and Insurance hypotheses -- have been previously posed in the economics and political science literatures to explain that existence of state-level TELs. The Excessive Taxation hypothesis argues that voters adopt TELs when the size of government has grown beyond that desired by the median voter. The Insurance hypothesis argues that voters adopt local TELs, not as a response to current conditions, but as a hedge against future tax changes.

The third, the Competition hypothesis, we derive from the extensive theoretical and empirical research on inter-municipal competition. This hypothesis suggests that competition between jurisdictions for good governance may serve as a substitute for a TEL.[1]

By combining our new data on the extent and timing of local TEL adoption with a 35-year panel of municipal fiscal, demographic, and political characteristics, we test which of these hypotheses is most consistent with the empirical patterns of local TEL adoption. Interestingly, we find no correlation between the adoption of a local TEL and the adoption or strength of a state-mandated TEL. Local TELs are associated, in the cross-section, with metropolitan areas with fewer local governments, and are much more likely to be adopted in homerule cities. We interpret this as evidence in favor of both the Insurance and Competition hypotheses. Using the full panel, we do not find evidence that cities TEL adoption is motivated by sharp changes in tax revenue patterns before the TEL is adopted.

Survey and Supplemental Data

Survey Description

Before launching our survey, we conducted a pre-survey of sixty cities in the summer of 2006 in which we attempted to verify if we could identify locally-imposed limits by reading municipal charters or codes. In this pre-survey, we first examined each city's charter (if existing) and municipal code to find limits. We then called the cities to ask whether the city had any limits; if the answer was no and our reading suggested yes, we asked about the discrepancy. It quickly became clear it was very easy to mistake a limit mentioned in city documents for a locally-imposed limit when it was, in fact, a state-imposed limit.

[1] An interesting additional hypothesis, that TELs are adopted at the state level in order to allow suburban voters to control central city behavior, clearly does not apply here (Vigdor, 2004).

With this knowledge in hand, in 2007 we undertook a phone survey of 347 cities. Our sample consists of all 247 cities over 100,000 people, and a random sample of 100 cities between 25,000 and 100,000 people. We used the Census of Governments 2002 Governments Integrated Directory as our sample frame and kept only cities with with the following political descriptions: Charter Township, City, City and Borough, City and County, City-Parish, Consolidated Government, Municipality, Town, and Village.[2] We refer to all these entities throughout as cities. For each city, we collected contact information from city websites on the city's Manager, Budget Director and Finance Director and attempted to contact each of the 736 officials for whom we had information.[3]

In total, we spoke with 439 officials, and received responses from 320 unique cities, generating a 92 percent response rate.[4] When a city told us that it had a local limit, we verified this limit by looking in the code or charter for evidence of the limit. If we could not find the limit, or if the evidence suggested that it was a state-imposed limit, we re-contacted the city to verify the information. This lead to the exclusion of several false positives. We do not do a similar exclusion for false negatives -- cities that do have a limit, but which mistakenly reported that they do not. For this reason, we interpret our results as a firm lower bound on the presence of local TELs; we believe their true extent to be larger than our estimate indicates.

Supplemental Data

We combine the the results of our survey with a wealth of local municipal data in order to explain which types of cities adopt local TELs. To describe cities' fiscal condition, we use data from the Annual Survey of Government Finances, 1970-2004, which collects fiscal information from all larger cities with certainty, and from a random sample of smaller cities. To describe the demographic features of cities, including the metropolitan area in which each city is located, we use data from the Census's Summary Tape File 3, combining information from the decennial censuses of 1970, 1980, 1990, and 2000.[5] Data on city political structure comes from the 1987 Census of Government Organization. We use the urban consumers price index to convert all of our information into 2006 dollars.

We use data on state-mandated tax and expenditure limits from Mullins and Wallins

[2] Appendix Table 2 presents summary statistics for the cities which were sampled with certainty (those over 100,000 people in 2002), and compares the 90 sampled to the 908 non-sampled cities in the 25,000 to 100,000 population range. Note that we based our sample on older population figures, so that 10 of the cities which we chose as being between 25,000 and 100,000 people moved up into the over 100,000 category. As we would expect, for all variables but one (total revenues), the average (non-certainty) sampled city is statistically insignificantly different from the average non-sampled city.

[3] The survey instrument is included as Appendix A. Though the survey is presented as a form which respondents could return, the vast majority of responses were by telephone.

[4] Appendix Table 1 compares respondent and non-respondent cities. Among the eleven fiscal and demographic characteristics we present, ten comparisons are insignificant; non-respondents report significantly lower median income.

[5] Census municipal codes change wholesale from 1980 to 1990, and we construct a cross-walk to merge across years.

(2004) and Advisory Commission on Intergovernmental Relations (1995). In addition, we identify states with potentially binding TELs. The set of potentially binding TELs includes general revenue or expenditure limits, property tax levy limits, or the combination of a property tax rate limit and a limit on assessment increases.

Basic Survey Results

Forty of our 320 respondent cities, or 12.5 percent, have at least one local limit. These 40 cities have 55 individual local limits. Table 1 presents one example of each different type of local limits about which our survey asked. Eastpointe, Michigan caps the property tax rate at 1.5 percent, and Lincoln, Nebraska limits the total property tax levy to no more than a seven percent annual increase from a 1966 baseline. Baltimore, Maryland limits the growth in property assessments to no more than four percent, and Tucson, Arizona limits the municipal sales tax to two percent. Anchorage, Alaska has one of the most extreme local limits in our survey: it limits tax revenue growth to inflation and population growth. Columbus, Ohio caps the municipal income tax rate at one percent.

Table 1: Local TEL Examples

City	Description	Override
Baltimore, MD	Assessment Limit: Assessments on property cannot increase by more than 4%	Majority of City Council
Eastpointe, MI	Property Tax Rate Limit: Property tax rate is capped at 1.5%	Majority of Voters
Lincoln, NE	Property Tax Levy Limit: The total property tax levy may not increase annually by more than seven percent from the 1966 baseline	Majority of Voters
Anchorage, AK	Revenue or Expenditure Limit: Total tax revenue cannot increase by more than the rate of inflation plus population growth	Majority of Voters
Tucson, AZ	Sales Tax Limit: The city cannot levy a sales tax that exceeds 2%.	Majority of Voters
Columbus, OH	Other: The city income tax is capped at 1%	Majority of Voters

Source: Authors' survey.
Notes: This table presents an example of each type of TEL about which our survey asked.

Because a systematic description of locally-imposed TELs is entirely new, we present a thorough description of these limits and their perceived restrictions, as well as a variety of covariates for local TEL adoption. The top panel of Table 2 presents survey results by type of limit, reporting that TELs are overwhelmingly concentrated on limiting property tax revenues. Property tax rate limits and property tax levy limits at 42 and 15 percent respectively, make up the majority of the limits we observe. There are three total revenue or expenditure limits, which are the very strongest type of limit. Well over half of local TELs are written into municipal charters, making their repeal more difficult and politically costly than a limit in the municipal code. The majority of local TELs can be overridden, but in 65 percent of cities this requires a majority vote of the electorate.

Table 2: Description of Local TELs

	(1) Number	(2) Share
By TEL		
Type of TEL		
Assessment Limit	4	7.3
Property Tax Rate Limit	23	41.8
Other	12	21.8
Property Tax Levy Limit	8	14.5
Revenues or Expenditure Limit	3	5.5
Sales Tax Limit	5	9.1
Total	55	100
Where is the TEL adopted?		
In municipal charter	38	69.1
In municipal code	12	21.8
No valid response	5	9.1
Is an override possible?		
No valid response	5	9.1
No	2	3.6
Yes: Majority vote of the city council	6	10.9
Yes: Majority vote of the electorate	36	65.5
Yes: Super majority of the city council	3	5.5
Yes: Super majority of the electorate	3	5.5
By City		
Number of Cities with TELs	40	12.5
Has Your City Reached the TEL Limits?		
No valid response	2	7.2
No, but close	1	5.0
No, not close	9	38.8
Yes	11	48.9
Has the TEL Affected Practices in Your City?		
Effects long term projects only	1	1.5
No valid response	3	4.5
No clear effect	24	36.4
Other	12	18.2
We have increased borrowing	1	1.5
We have new revenue sources	12	18.2
We have reduced service provision	13	19.7

Source: Authors' survey.
Notes: We allowed respondents to choose more than one way the local TEL could affect practices in their city, so this question has more answers than there are cities with TELs.

The bottom panel of Table 2 reports city-level statistics on the 40 cities with TELs. Roughly half of cities report that they have reached the limits set by the TEL, while another five percent report being close. We also asked officials if they thought the TEL had affected fiscal practices in their city, and slightly over half suggest that the limit has had some effect: approximately one-fifth report finding new revenue sources, and another roughly one-fifth report reducing service provision.

Table 3 compares local TEL adopters to non-adopters. Cities in the South and Midwest are more likely than average to adopt local TELs. Cities in the West are less likely, and cities in the Northeast substantially less likely. When we rank the surveyed cities by quartile of median family income, we find that adopting cities are under-represented in the wealthiest quartile. Slightly more than three-quarters of local-TEL-adopting cities are in states with a potentially binding state-mandated TEL, but this is quite similar to the 70 percent of non-adopting cities located in such states. We find no evidence that local TEL adoption is related to the strength of the state-mandated TEL. One useful measure of a TEL's strength is the difficulty voters face in repealing it. Constitutional TELs are more difficult to repeal than statutory TELs. Roughly forty percent of local-TEL-adopting and non-adopting cities are located in states where the potentially binding TEL is written into the state constitution.

Table 3: Local TEL Status Covariates

	(1)	(2)	(3)	(4)
	Number of Cities by Local TEL status		Share of Cities by Local TEL status	
	Yes	No	Yes	No
Region				
Northeast	3	51	0.075	0.186
Midwest	14	42	0.350	0.153
South	13	77	0.325	0.281
West	10	104	0.250	0.380
Quartile of Income				
1, lowest	11	64	0.275	0.234
2	11	66	0.275	0.241
3	13	67	0.325	0.245
4, highest	5	77	0.125	0.281
State Has a Binding TEL				
No	8	82	0.200	0.299
Yes	32	192	0.800	0.701
State Has a Constitutional Binding TEL				
No	24	162	0.600	0.591
Yes	16	112	0.400	0.409

Source: Authors' survey; region and income data are from the Decennial censuses; state TEL information is as cited in the text.
Note: Shares are column shares. E.g., 7% of cities with a local TEL are in the Northeast, compared to 19% of cities without a local TEL.

Table 4 presents descriptive statistics, by local TEL adoption, for the key covariates we use in our regression analysis from the 2002 cross section. We present results from 2002 because it is the most recent census of governments year and has the best coverage for fiscal information for our surveyed cities. The final column in the table reports a t-test for equality of the sample means. The top panel of the table shows that regardless of the per capita fiscal measure considered -- total revenues, total own source revenues, total tax revenues, total sales tax revenues, or total property tax revenues -- cities with local TELs are insignificantly different from cities without local TELs.

Table 4: Local TEL Status and Key Covariates

		(1)	(2)	(3)
		Local TEL Status		
		Yes	No	t-test, yes=no
Fiscal Variables ($1,000s, per capita)				
Total Revenue	mean	2.026	2.073	0.149
	sd	1.955	1.440	
	count	40	269	
Total Own Source Revenue		1.471	1.595	0.624
		1.201	1.115	
		40	269	
Total Tax Revenue		0.776	0.734	0.169
		0.958	0.490	
		40	269	
Total Sales Tax Revenue		0.249	0.222	0.266
		0.313	0.208	
		38	263	
Total Property Tax Revenue		0.369	0.417	0.788
		0.398	0.458	
		40	269	
Demographic and Political Variables				
Population	mean	349,289	227,844	1.344
	sd	535,612	561,357	
	count	40	274	
Median Family Income ($1,000s)		55.333	62.403	3.108
		12.113	20.859	
		40	274	
Homerule (1 if yes; 0 otherwise)		0.79	0.55	3.418
		0.41	0.50	
		39	241	
Total Number of Elected Officials		9.0	8.3	0.697
		7.3	5.2	
		40	249	
Mayor Directly Elected		0.825	0.671	2.297
		0.385	0.471	
		40	249	
Number of Cities in the MSA		19.3	41.0	3.983
		28.6	49.0	
		39	260	
Herfindahl Index				
Age		0.44	0.44	0.801
		0.04	0.04	
		40	274	
Income		0.91	0.91	1.649
		0.01	0.01	
		40	274	
Race		0.92	0.92	1.891
		0.01	0.01	
		40	274	

Note: These data are from the 2002 cross-section. We do not observe all variables for all respondent cities.
Sources: Decennial census data, Census of Governments political and fiscal data.

The bottom panel of the table reports means for demographic and political variables. Local-TEL adopting cities have slightly, but insignificantly, more people than non-adopting cities. Adopters have higher median family income, and eighty percent of adopting cities are governed by homerule, in contrast to the roughly half of non-adopting cities that have homerule status. Cities with local TELs are in metropolitan areas with fewer cities -- 19 on average -- compared to cities without local TELs, which are in metropolitan areas with an average of 41 cities.

The final portion of the table considers whether local TEL adoption is related to population heterogeneity. We measure heterogeneity as
$$H = 1 - \sum_{j=1}^J s_j^2 ,$$
where $j \in \{1,...,J\}$ is the number of groups into which municipal population is divided \ (e.g., share less than 18 years old, share age 18 to 64, share age 65 plus).

Heterogeneity increases in ***H***: a homogeneous city where all citizens are in one group receives ***H***=0, and heterogenous city where population is divided into an infinite number of groups has ***H***=1. In 2002, there is little difference in age or income heterogeneity by local TEL adoption status, and a modest difference in racial heterogeneity.

Theoretical Framework

With this description of local TELs in hand, we now turn to posing and examining explanations for their adoption by cities. We sketch three hypotheses, two of which have received substantial attention in the literature.

According to the first hypothesis, Excessive Taxation, tax and expenditure limitations are adopted once government has reached a size inconsistent with the preferences of the median voter -- i.e., when the government has grown ``too large." A number of scholars have argued that budget-maximizing bureaucrats are often able to exploit their asymmetrical information advantages to grow the size of the public sector beyond that desired by most voters (Brennan and Buchanan, 1979; Niskanen, 1971). The public then presses for the adoption of tax and expenditure limits as a means of constraining bureaucrats, lowering tax burdens, and bringing about a more effective use of revenues (Cutler et al., 1999; Danziger, 1980; Chernick and Reschovsky, 1982; Alm and Skidmore, 1999; Hansen, 1983).

If this hypothesis holds for the adoption of locally-imposed tax and expenditure limitations, we expect to find local TEL adoption in cities with either high tax receipts as a share personal income, or in cities that have experienced large increases in per-capita tax burden before TEL adoption. This hypothesis relies fundamentally on time-series analysis -- taxes are unusually high, and then a limit is placed -- so we do not expect to detect it in our cross-sectional analysis.

The second hypothesis we test -- the Insurance hypothesis – argues that tax and expenditure limitations act as an insurance policy against future tax volatility (Anderson

and Pape, 2008). Anderson and Pape focus primarily on the risks that homeowners face because the value of their home may change in value relative to other homes. In combination with a tax rate constant across homes, this leads to unpredictable tax increases for some owners and decreases for others. We extend this line of thinking to consider voters who favor TELs in order to mitigate the risks of future "bad" behavior by fellow voters. For example, suppose that residents in a given jurisdiction currently favor low taxes, but that with some probability new voters with divergent preferences (i.e., preferences for higher taxation) may enter the municipality. In this case, current TEL adoption can protect status quo policies from the tastes of future voters.

Under such a scenario, we expect TEL adoption where changes in municipal tastes have been, or are expected to be, large. If local TELs act as insurance, we expect to see them in cities with large changes in population composition. The Insurance hypothesis also suggests that voters should be more likely to support local TELs in cities where politicians have more flexibility. We measure such cities by homerule status. Cities usually incorporate as general law cities, in which the city accepts the state's standard restrictions on municipal behavior. In contrast, homerule cities have charters, and the charter, like a state's constitution, allows it broader latitude in setting forth the laws by which it governs itself.

Our third hypothesis contends that municipalities adopt tax and expenditure limitations as a result of horizontal competition among jurisdictions. Social scientists have long noted that cities compete with one another over businesses and high-quality residents through the fiscal policies that their elected officials design (Oates, 1972; Wilson, 1987, 1995; Wildasin, 1988; Kenyon, 1990, 1997; Oates and Schwab, 1991). A municipality that taxes excessively, relative to nearby jurisdictions, will see mobile economic resources locate elsewhere.

Thus, cities in metropolitan areas with more municipalities already have an effective curb on politician behavior. In contrast, cities in metropolitan areas with fewer municipalities should be more likely to adopt a local TEL to constrain politicians.[6] Though we have sketched this as a separate argument, we regard this hypothesis as a subset of the Insurance one. Instead of insuring themselves against other voters' behavior, voters insure themselves against institutional design.

Specifying Alternative Explanations for Adoption

We now pose empirical specifications to disentangle which of the three hypotheses posed -- Excessive Taxation, Insurance, or Competition -- is most consistent with the pattern of local TEL adoption we observe. We begin with a cross-sectional model to analyze factors, such as the number of cities in a metropolitan area and homerule status, that change little over time. We then use the panel nature of our data to examine whether cities adopt TELs in response to changing fiscal or demographic conditions.

[6] Alternatively, cities may, in the face of particularly intense interjurisdictional competition, enact TELs as a means of credibly committing themselves to low stable tax rates in the future and thereby position themselves well for attracting and retaining mobile resources. Our evidence does not support this hypothesis.

In the cross-section, we estimate a linear model of local TEL adoption as a function of a vector of city characteristics:

\begin{equation}

1\{\mbox{Local TEL = 1}\}_c = \beta_0 + \beta_1 {\bf X_c} + \beta_2 {\bf F_c} + \beta_3 {\bf I_c} + \beta_4 {\bf C_c} + \mbox{region}_c + \epsilon_c.

\end{equation}

Specifically, we examine whether a city *c* has a local TEL ($1\{\text{Local TEL} = 1\}_c$ is 1 if the city has a local TEL and 0 otherwise) as a function of covariates.[7] We use bold to denote matrices. $\mathbf{X}_c$ is a matrix of city characteristics, including population, log of population, median family income, the unemployment rate, and the share of persons less than 18. $\mathbf{F}_c$ is a matrix of fiscal variables used to test the Excessive Taxation hypothesis. We use the level of per capita own-source tax revenues and property tax revenues, as well as the ratio of these revenues to municipal median family income. We do not place too much weight on the interpretation of β_2 in this framework, because we believe the effects of fiscal considerations are predominantly dynamic. We do include the fiscal variables, however, to account for important unobserved factors, such as a city's taste for public spending.

$\mathbf{I}_c$ is a matrix of variables used to measure the insurance hypothesis. This includes demographic composition – Herfindahl indices for race, income and age -- and a dummy equal to one if the city has homerule status. Whenever we include the heterogeneity measure ***H*** in a regression, we include its component shares as convariates to ensure that our results are driven by heterogeneity, and not an extreme value in any one demographic group. We believe that the insurance hypothesis for the demographic variables is best tested in the panel setting, and include the composition variables in this regression predominantly as controls. However, our time-series analysis is poorly suited to testing the importance of homerule. This is because our time-series efforts compare one city across time, and thus effectively nets out homerule status. We were to observe the effect of homerule status in the time-sereis context, it would be through changes in homerule. Such changes are very rare and unlikely to be at random. Therefore, this is our preferred specification for investigating the relationship between homerule status and local TEL adoption.

The matrix $\mathbf{C}_c$ contains variables used to measure the Competition hypothesis. These are the number of municipalities in a city's metropolitan area, and the ratio of municipal per capita own-source and property tax revenue to the average of the same revenue in the metropolitan area. The number of cities in a metropolitan area, like homerule status, changes infrequently over time. Thus, the cross-section is our preferred specification for using this variable to test the competition hypothesis. If local competition between governments, proxied by the number of cities in a metropolitan area is negatively related to TEL adoption ($\beta_4 < 0$), we interpret this as evidence that voters in cities in metropolitan

[7] We estimate a linear model for ease in interpreting coefficient values. Results are qualitatively very similar when we use a probit model.

areas with fewer cities are more likely to believe they need a local limit to constrain politician behavior.

In all specifications, we control for region fixed effects ($region_c$). These fixed effects net out the clear geographic pattern of TEL adoption we saw in Table 3, and lets us compare municipalities within a given region.

While the cross-section is ideal for testing whether infrequently-changing municipal features are related to local TEL adoption, it is poorly suited to answering questions of whether the timing of local TEL adoption is related to time-varying municipal characteristics. Ideally, we would estimate a panel data model that would allow us to identify whether changes in heterogeneity or changes in tax burden directly precede TEL adoption. Though we observe 40 cities that have adopted local TELs, only 14 of these cities adopted a TEL within time period (1970-2004) that we observe, or have data for years surrounding the TEL adoption.

Because of this small sample, we turn to individual city graphs to directly examine whether their are any discernable changes in patterns of tax revenues or heterogeneity around the time of TEL adoption. To test the Excessive Taxation hypothesis, we consider total revenue, total own-source revenue, total tax revenue and total property tax revenue, as well as the ratio of revenue to median family income and the ratio of revenue to the average of the past three years. To test the Insurance hypothesis, we analyze whether changes in demographic composition drive the adoption of local TELs. Specifically, we examine whether there are any large changes in our measure of heterogeneity, H, before or after TEL adoption.

Results

We present the results of our estimation of Equation 1 in Table 5. The second and fourth columns in each section controls for region dummies (the four regions in Table 3) and basic demographic and fiscal covariates, which include median family income, presence of a state binding TEL, population, log of population, the unemployment rate, and the share of persons less than 18, per capita own-source revenues and per capita property tax revenues. The first four columns of the table report regressions that examine the effect of variables associated with the Excessive Taxation hypothesis. In the cross-section, levels of spending are not correlated with local TEL adoption. We hold further analysis of this hypothesis for the panel analysis.

Table 5: Cross-Sectional Regression Analysis

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Excessive Taxation Hypothesis				Insurance Hypothesis				Competition Hypothesis			
Own Source Revenue	-0.008	-0.026										
	(0.019)	(0.021)										
Property Tax Revenue	-0.018	0.079										
	(0.047)	(0.062)										
Own Source Revenue/			-0.004	-1.418								
Median Family Income			(1.015)	(1.135)								
Property Tax Revenue/			-0.419	4.149								
Median Family Income			(2.621)	(3.277)								
Herfindahl Index												
Age					8.055	5.732						
					(5.004)	(5.409)						
Income					-1.087	0.215						
					(4.461)	(4.603)						
Race					0.353	-0.686						
					(3.672)	(3.734)						
1 if a Homerule City							0.113**	0.080+				
							(0.043)	(0.045)				
Number of Cities in Metropolitan Area									-0.110**	-0.066		
									(0.041)	(0.052)		
Own Source Revenue/											0.001	0.014
Mean Metropolitan Area Own Source Revenue											(0.035)	(0.049)
Property Tax Revenue/											-0.003	-0.015
Mean Metropolitan Area Own Source Revenue											(0.044)	(0.048)
Basic Demog. & Fiscal Covariates		x		x		x		x		x		x
Components of Herfindahl Index					x	x						
Region Dummies		x		x		x		x		x		x
Other Political Institutional Features							x	x				
R-squared	0.002	0.090	0.000	0.090	0.035	0.100	0.040	0.105	0.024	0.091	0.000	0.089
Observations	309	309	309	309	314	309	280	277	299	294	309	309

Notes: ** Significant at the 1% level; * significant at the 5% level; + significant at the 10% level. Dependent variable is one if the city has a local TEL and zero otherwise. Revenue variables are expressed in $1,000s per capita. Basic demographic covariates are median family income, presence of a state binding TEL, population, ln(population), the unemployment rate, and the share of persons less than 18. Components of the H index controls for share Black, share Hispanic, and share greater 65 years or older. Region dummies are the four census regions in Table 3. Other political institutional features are the year of incorporation, total number of elected officials, total number of at-large elected officials, and a dummy equal to one if the mayor is directly elec

The second set of columns examine the Insurance hypothesis. Levels of demographic heterogeneity -- whether income, race, or age – are not associated with local TEL adoption. Again, we hold further analysis of these variables for the panel context. However, a city's homerule status is signficantly associated with local TEL adoption. A city is 10 percentage points more likely to adopt a TEL if it has homerule status. This result is robust at the 8 percent level when we control for a city's year of incorporation, the total number of elected officials, the total number of at-large elected officials, and a dummy equal to one if the mayor is directly elected.

The third set of columns examine the Competition hypothesis. We find that in a metropolitan area with more municipalities, a city is less likely to adopt a local TEL. This is consistent with the predictions of the Competition hypothesis which contends that the restrains from inter-jurisdictional competition and from local TELs are substitutes. This result is not robust to regional and demographic controls; however, much variation in the number of cities in a metropolitan area is by region, so these controls may be masking variation that is of interest. We do not find that local TEL adoption is associated with municipal revenues relative to metropolitan-area-wide average revenues in the cross-section.

In sum, the cross-sectional results find support for the Insurance and Competition hypotheses: both homerule status and the number of cities in a metropolitan area explain local TEL adoption. In fact, we can plausibly interpret the competition finding here as a subset of the Insurance hypothesis. Metropolitan areas with more cities "insure" against politician misbehavior by construction, so that a local TEL is superfluous. Both a limited number of municipalities and homerule status leave ample room for politicians to maneuver -- room which voters apparently prefer to circumscribe.[8]

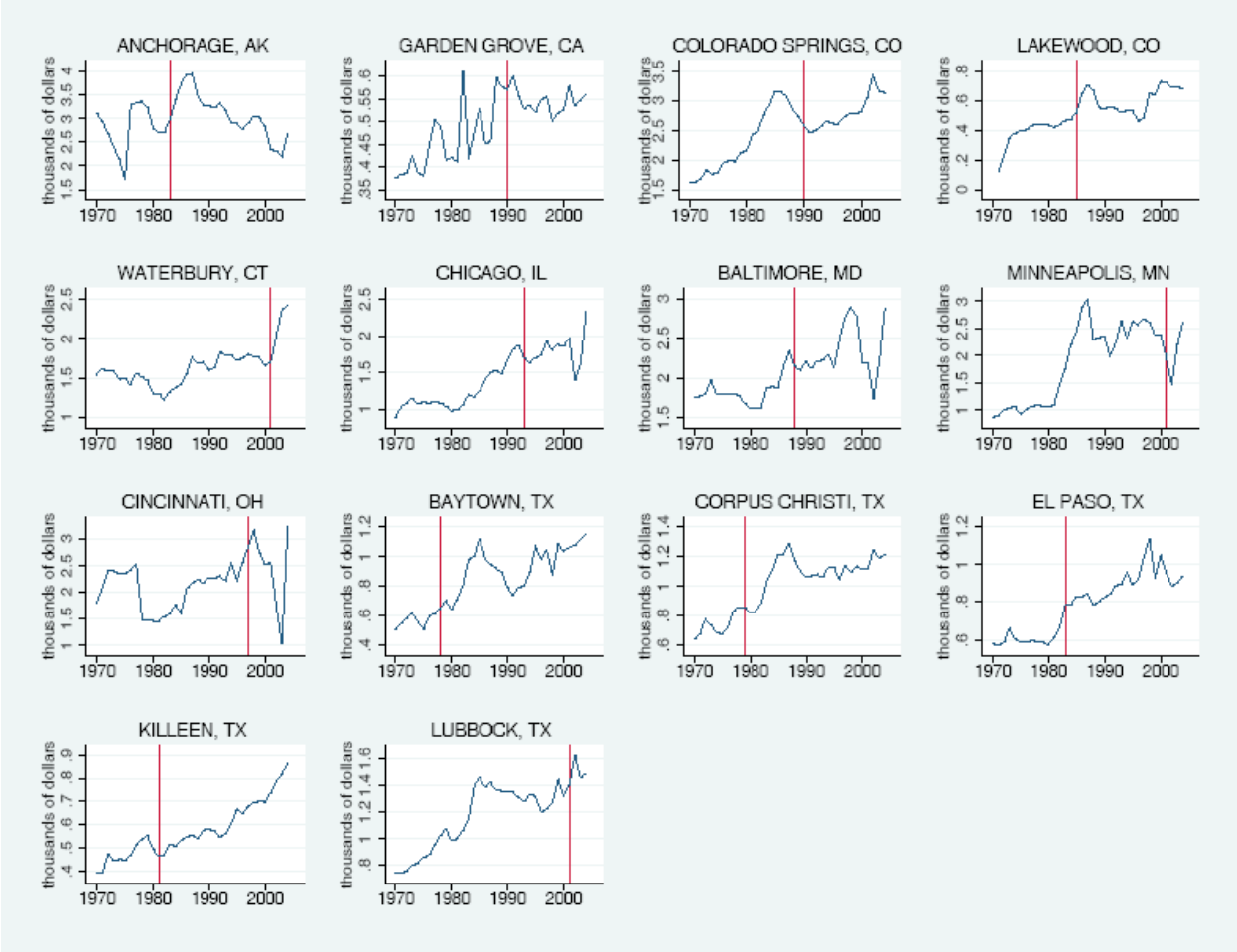
Among the covariates omitted in the table, the log of population and being in the Midwest are both frequently positively associated with local TEL adoption.

We turn now an analysis that takes advantage of our panel data to examine whether local TEL adoption is associated with pre-adoption shocks. We now limit our analysis to 14 of the 40 local TEL cities for which two additional criteria are met: (1) the adoption is within our data period of 1970-2004, and (2) we observe data for the bulk of that period for that city. Figure 1 shows the time pattern in real own-source revenues of these cities (expressed in thousands of dollars), and denotes the year before TEL adoption with a red line. We use own-source revenues, rather than total revenues, since we expect voters are sensitive to revenues based on taxes they face, rather than revenues raised by taxes elsewhere -- the difference between total and own-source revenues. We do not find that Figure 1 offers convincing evidence in support of the Excessive Taxation hypothesis. Some cities, such as Lubbock and El Paso, Texas, do seem to have revenue peaks before TEL adoption. However, Colorado Springs and Killeen, Texas show revenue drops before adoption. It is certainly possible that revenue drops are politicians responding to

[8] The results discussed are robust to a probit specification, and also hold in the largest constant sample of 263 cities. In the sample of 263 cities, standard errors tend to be somewhat larger, as the sample size is substantially decreased. However, none of the results in Table 5 are driven by the differences in samples across columns.

the threat of a limit; however, if that were the case, the response seems to have been insufficient, as the limit was eventually adopted.

Figure 1: Local TEL Adoption and Real Own-Source Revenues Per Capita

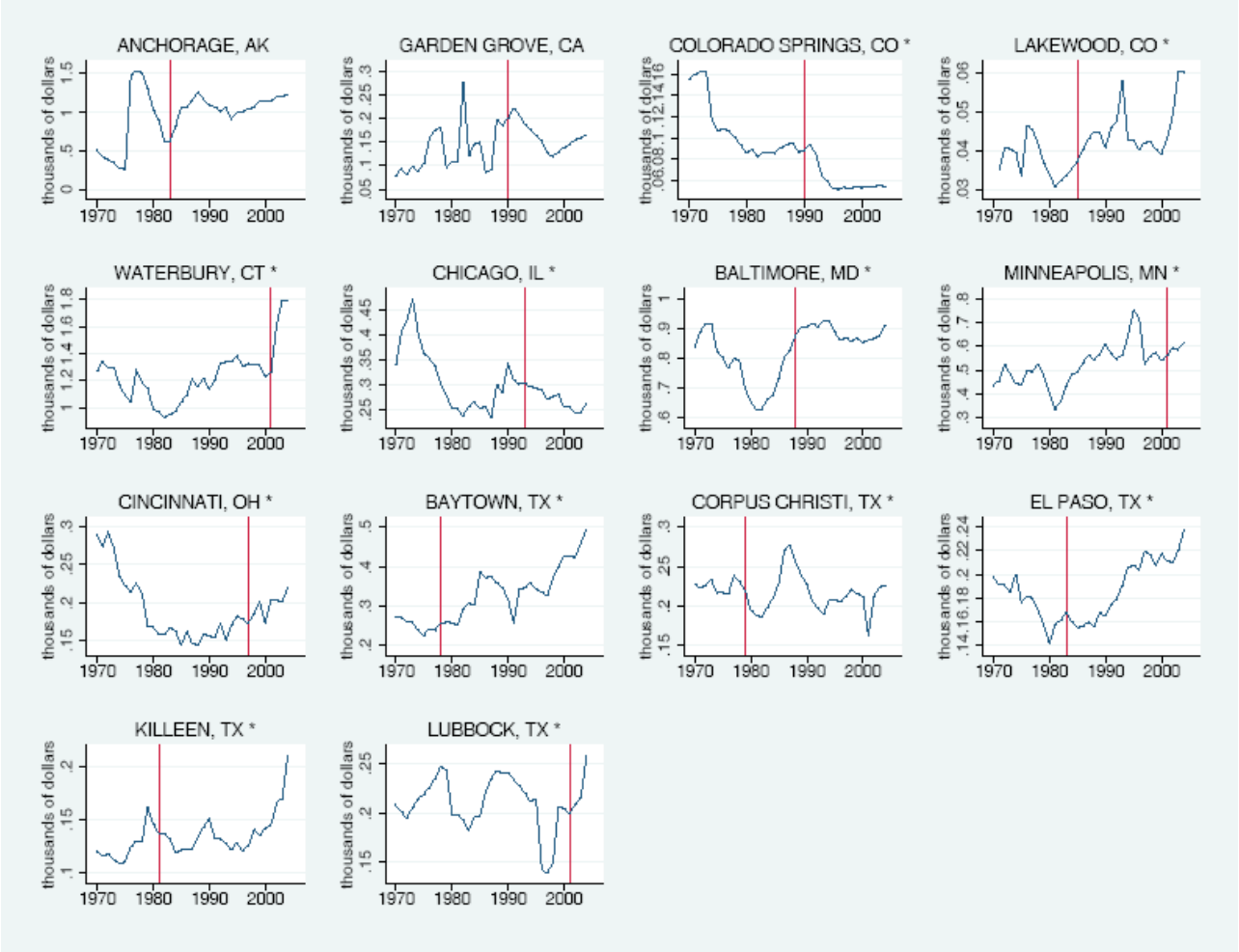


Source: Authors' survey, Annual Survey of Government Finances. See data section for more detail.
Notes: The red line designates the last year before local TEL adoption. These are the 14 cities for which we observe a date of adoption, where the date of adoption falls within the years we observe, and where we observe data across the period.

Figure 2 does a similar analysis, but restricts the pictures to property tax revenues (in thousands of dollars). We note cities that adopted a TEL that restricts property tax revenues with a star after the name of the city. Here, if excess tax burdens lead cities to adopt a local TEL, we would expect sharper revenue peaks pre-TEL in cities that adopt property tax-specific limits relative to cities that adopt non-property tax-specific limits. Unfortunately for this comparison, only two of these 14 cities do not have limits related to the property tax, and one of these (Anchorage, Alaska) has a strict revenue limit that likely ends up impacting property tax revenues. However, with the exceptions of Chicago, Baltimore, and El Paso, we see limited evidence that taxes increase before the

limit is adopted. Again, this suggests that something else besides immediate high taxes drives the adoption of local TELs.

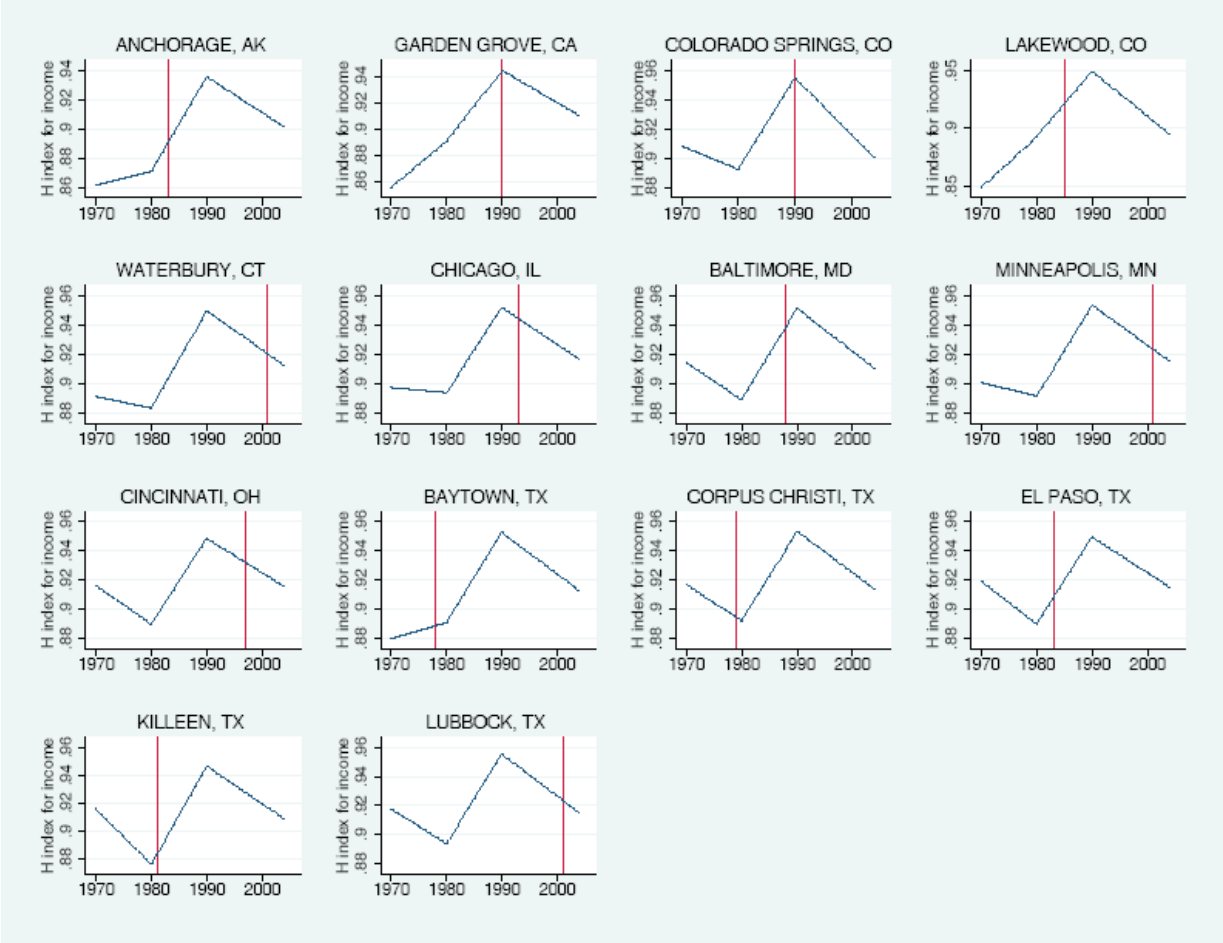
Figure 2: Local TEL Adoption and Real Property Tax Revenues Per Capita



Source: Authors' survey, Annual Survey of Government Finances. See data section for more detail.
Notes: The red line designates the last year before local TEL adoption. Stars denote cites that have a local TEL that specifically targets the property tax. These are the 14 cities for which we observe a date of adoption, where the date of adoption falls within the years we observe, and where we observe data across the period.

Our final figure tests the Insurance hypothesis by asking whether cities that will soon have large changes in heterogeneity -- population composition that could affect willingness or ability to pay taxes -- are more likely to adopt TELs. Unfortunately, we only observe income heterogeneity in the four census years (1970, 1980, 1990, and 2000) and must interpolate the ***H*** index we describe above between those years. All cities pictured in Figure 3 have a strikingly similar pattern of income heterogeneity increases from 1980 to 1990, and decreases thereafter. We interpolate 2000-2004 based on the 1980 to 1990 projection, so 2000-2004 should not be weighted very heavily in any analysis.

Figure 3: Local TEL Adoption and Income Heterogeneity



Source: Authors' survey, Decennial Censuses. See data section for more detail.
Notes: We observe income in the four census years (1970, 1980, 1990, 2000) and linearly interpolate for the other years. These are the 14 cities for which we observe a date of adoption, where the date of adoption falls within the years we observe, and where we observe data across the period.

This picture offers no clear evidence that changing heterogeneity impacts TEL adoption in any systematic fashion; this may be more a limitation of our data, however, than a refutation of the hypothesis. We plan to extend this analysis by considering how a city's heterogeneity changes relative to the mean city in the metropolitan area.

Conclusion

This paper makes two contributions. First, we document the existence of a new class of tax and expenditure limits: self-imposed municipal TELs. Our survey results show that at least one in eight cities has a local TEL, and that, like state-imposed TELs, they focus heavily on the property tax.

We combine our survey results with a wealth of municipal fiscal and demographic data to examine why cities adopt these limits. The evidence we gather is most consistent with voters using local TELs as insurance against politician behavior. In the cross-section, we

show two key results. First, local TELs are more likely to be adopted in metropolitan areas with fewer jurisdictions, where other municipalities are less likely to act as a check on the city. Local TELs are strikingly more likely to be adopted in cities with homerule status, where constraints on officials are fewer. Looking at the time-series data, we do not find any evidence that local TELs are more likely to be adopted in cities where own-source revenues or property tax revenues spike before adoption.

While this analysis sheds light on the extent and causes of municipal TELs, we recognize that this research may be just the beginning of the exploration of TELs adopted below the state level. What are the systematic patterns of TEL adoption in counties? in school districts? More broadly, why do citizens decide when and how to change the rules of local government?

References

Advisory Commission on Intergovernmental Relations, 1995. *Tax and Expenditure Limits on Local Government*. Washington, D.C.

Alm, James and Skidmore, M., 1999. "Why do Tax and Expenditure Limitations Pass in State Elections?" *Public Finance Review* 27(5) 27(5): 481–510.

Anderson, Nathan B. and Pape, Andreas D., 2008. "An Insurance Model of Property Tax Limitations." Working Paper, University of Illinois at Chicago.

Brennan, Geoffrey and Buchanan, James, 1979. "The Logic of Tax Limits: Alternative Constitutional Constraints on the Power to Tax." *National Tax Journal* 32: 149–170.

Chernick, Howard and Reschovsky, Andrew, 1982. "The Distributional Impact of Proposition 13: A Microsimulation Approach." *National Tax Journal* 35: 149–170.

Cutler, David M., Elmendorf, Douglas W., and Zeckhauser, Richard, 1999. "Restraining the Leviathan: Property Tax Limitation in Massachusetts." *Journal of Public Economics* 71(3): 313–334.

Danziger, James N., 1980. "California's Proposition 13 and the Fiscal Limitations Movement in the United States." *Political Studies* 28(4): 599–612.

Downes, Thomas A., Dye, Richard F., and McGuire, Therese J., 1998. "Do Limits Matter? Evidence on the Effects of Tax Limitations on Student Performace." *Journal of Urban Economics* 43: 401–417.

Downes, Thomas A. and Figlio, David N., 1999. "Do Tax and Expenditure Limits Provide a Free Lunch? Evidence on the Link Between Limits and Public Sector Quality." *National Tax Journal* 52(1): 113–128.

Dye, Richard F. and McGuire, Therese J., 2001. "The Effect of Property Tax Limitation Measures on Local Government Fiscal Behavior." *Journal of Public Economics* 80: 49–71.

Figlio, David N. and O'Sullivan, Arthur, 2001. "The Local Response to Tax Limitation Measures: Do Local Governments Manipulate Voters to Increase Revenues?" *Journal of Law and Economics* XLIV: 233–257.

Figlio, David N. and Rueben, Kim S., 2001. "Tax Limits and the Qualification of New Teachers." Journal of Public Economics 80: 49–71.

Hansen, Susan B., 1983. *The Politics of Taxation: Revenue without Representation.* New York, NY: Praeger.

Joyce, Philip G. and Mullins, Daniel R., 1991. "The Changing Fiscal Structure of the State and Local Public Sector: The Impact of Tax and Expenditure Limits." *Public Administration Review* 51(3): 240–253.

Kenyon, Daphne A., 1990. "Reassessing Competition Among State and Local Governments." *Intergovernmental Perspective* winter: 32–6.

Kenyon, Daphne A., 1997. "Theories of Interjurisdictional Competition." *New England Economic Review* March/April: 13–28.

Ladd, Helen F. and Wilson, Julie Boatwright, 1982. "Why Voters Support Tax Limitations: Evidence from Massachusetts' Proposition 2 1/2." *National Tax Journal* 35: 121–147.

Ladd, Helen F. and Wilson, Julie Boatwright, 1983. "Who Supports Tax Limitations: Evidence from Massachusetts' Proposition 2 1/2." *Journal of Policy Analysis and Management* 2: 256–279.

Mullins, Daniel R., 2004. "Tax and Expenditure Limitations and the Fiscal Response of Local Government: Asymmetric Intra-Local Fiscal Effects." *Public Budgeting and Finance* winter: 111–147.

Mullins, Daniel R. and Joyce, Philip G., 1996. "Tax and Expenditure Limitations and State and Local Fiscal Structure: An Empirical Assessment." *Public Budgeting and Finance* 16: 75–101.

Mullins, Daniel R. and Wallins, Bruce A., 2004. "Tax and Expenditure Limits: Introduction and Overview." *Public Budgeting and Finance* 24(2): 2–15.

Niskanen, W., 1971. *Bureaucracy and Representative Government*. Chicago, IL: Aldine-Atherton.

Oates, Wallace E., 1972. *Fiscal Federalism.* New York, NY: Harcourt Brace Jovanovich.

Oates, Wallace E. and Schwab, Robert M., 1991. "The Allocative and Distributive Implications of Local Fiscal Competition." In Daphne A. Kenyon and John Kincaid, (Eds.) "Competition among States and Local Governments: Efficiency and Equity in American Federalism," Washington, D.C.: Urban Institute.

Shadbegian, Ronald J., 1996. "Do Tax and Expenditure Limitations Affect the Size and Growth of State Government?" *Contemporary Economic Policy* 14: 22–35.

Stein, Robert M., Hamm, Keith E., and Freeman, Patricia K., 1983. "An Analysis of Support for Tax and Expenditure Limitation Referenda." *Public Choice* 40: 187–194.

Temple, Judy, 1996. “County Composition and Voter Support for Tax Limitations: Evidence from Home Rule Elections.” *Southern Economic Journal* 62: 1002–1016.

Tiebout, Charles, 1956. “A Pure Theory of Local Expenditures.” *Journal of Political Economy* 64: 416–424.

Vigdor, Jacob L., 2004. “Other People’s Taxes: Nonresident Voters and Statewide Limitation of Local Government.” *Journal of Law and Economics* 47: 453–476.

Wildasin, David E., 1988. “Nash Equilibria in Models of Fiscal Competition.” *Journal of Public Economics* 35: 229–240.

Wilson, John D., 1987. “Trade, Capital Mobility, and Tax Competition.” *Journal of Political Economy* 95: 835–856.

Wilson, John D., 1995. “Mobile Labor, Multiple Tax Instruments, and Tax Competition.” *Journal of Urban Economics* 38: 3

Appendices

Appendix Table 1: Respondents versus Non-Respondents

		(1) All Cities	(2) Respondents	(3) Non-Respondents	(4) t-test: respondents vs non
Fiscal Variables ($1,000s)					
Total Revenues	mean	2.062	2.067	2.005	0.251
	sd	1.490	1.512	1.229	
	count	336	309	27	
Own-Source Revenues		1.565	1.579	1.401	1.124
		1.101	1.125	0.766	
		336	309	27	
Tax Revenues		0.740	0.739	0.753	0.174
		0.558	0.571	0.392	
		336	309	27	
Sales Tax Revenues		0.217	0.220	0.180	1.132
		0.219	0.223	0.171	
		336	309	27	
Property Tax Revenues		0.413	0.411	0.444	0.412
		0.447	0.451	0.413	
		336	309	27	
Demographic and Political Variables					
Population	mean	243,220	243,315	242,121	0.016
	sd	544,716	558,785	348,188	
	count	341	314	27	
Median Family Income ($1,000s)		60.8	61.5	52.4	3.474
		19.7	20.1	12.5	
		341	314	27	
Number of Cities in MSA		37.3	38.2	27.1	1.291
		47.1	47.4	43.2	
		326	299	27	
Herfindahl Index					
Age		0.442	0.442	0.451	1.426
		0.039	0.040	0.033	
		341	314	27	
Income		0.910	0.910	0.913	1.650
		0.013	0.013	0.009	
		341	314	27	
Race		0.919	0.919	0.922	1.501

	0.013	0.014	0.010
	341	314	27

Appendix Table 2: Comparison of Samples

		(1)	(2)	(3)	(4)
			Cities between 25,000 & 100,000 people		
		Sampled with Certainty	In Sample	Out of Sample	t-test: (2) vs (3)
Fiscal Variables ($1,000s)					
Total Revenues	mean	2.131	1.874	1.608	2.26
	sd	1.612	1.076	1.010	
	count	246	90	908	
Own-Source Revenues		1.609	1.445	1.285	1.79
		1.188	0.810	0.835	
		246	90	908	
Tax Revenues		0.735	0.756	0.646	1.81
		0.558	0.562	0.479	
		246	90	908	
Sales Tax Revenues		0.246	0.136	0.158	1.12
		0.228	0.172	0.195	
		246	90	908	
Property Tax Revenues		0.374	0.522	0.411	1.67
		0.364	0.609	0.485	
		246	90	908	
Demographic and Political Variables					
Population		318,763	47,605	47,851	0.13
		625,360	18,168	19,569	
		246	95	963	
Median Family Income ($1,000s)		58.3	67.1	65.3	0.65
		16.4	25.5	22.5	
		246	95	963	
Number of Cities in MSA		38.6	33.3	35.9	0.56
		49.3	40.1	44.0	
		244	82	826	
Herfindahl Index					
Age		0.440	0.448	0.451	0.59
		0.034	0.050	0.047	
		246	95	963	
Income		0.913	0.905	0.904	0.53
		0.010	0.016	0.016	
		246	95	963	
Race		0.921	0.913	0.912	0.40
		0.011	0.018	0.017	
		246	95	963	

Appendix: Survey Form

COLUMBIA UNIVERSITY
IN THE CITY OF NEW YORK
DEPARTMENT OF POLITICAL SCIENCE

Hello –

I am conducting a Columbia University/McGill University survey on city-level restrictions on taxes and expenditures, and am writing to ask for your help in completing the survey.

In particular, our research team is interested in whether your city imposes limits on taxes and expenditures **in addition** to those limits imposed by state statutory or constitutional law. More information on the team and the survey is available at www.municipaltaxandexpenditurelimits.org.

To complete the survey, fill in this writeable pdf file. If you have Acrobat Writer, you may save the form and return it to us as an attachment by email (emily.gaus@googlemail.com). If you don't have Acrobat Writer or if you prefer to print and mail or fax the form, our fax number is 212-222-0598, and address is Justin Phillips/Columbia University/Mail Code 3320/420 W. 118th St./New York, NY 10027.

We greatly appreciate your completing our survey. If you have questions, please feel free to call me at 347-410-5029. If you would like a copy of the completed survey, please write SURVEY here:

Many thanks,
Emily Gaus
Research Assistant, Municipal Tax and Expenditure Limit Project

City Name: _____ State: _____

Position: _____ Name (optional): _____

Question 1. Does your city charter or code contain any of the following tax and expenditure limits? In particular, these are not limits from the state, but limits imposed by your city on itself. Please select all that apply.

	Yes or No	If Yes, When?	If Yes, How?
A) Ceiling on Property Tax Rates This limitation caps property tax rates.	__ No __ No, but considered __ Yes	Year: _____ __ Don't Know	__ Limit in municipal code __ Limit in municipal charter __ Other
B) Property Tax Levy Limit This limitation restricts the amount of revenue that can be raised using the property tax.	__ No __ No, but considered __ Yes	Year: _____ __ Don't Know	__ Limit in municipal code __ Limit in municipal charter __ Other
C) Limit on Assessment or Assessment Increases This limitation caps the assessed value of property or restricts the rate at which the government can increase the assessed value of property for tax purposes.	__ No __ No, but considered __ Yes	Year: _____ __ Don't Know	__ Limit in municipal code __ Limit in municipal charter __ Other
D) Limit on the Overall Sales Tax Rate This limitation caps the local sales tax rates.	__ No __ No, but considered __ Yes	Year: _____ __ Don't Know	__ Limit in municipal code __ Limit in municipal charter __ Other
E) General Revenue or Expenditure Limitation This limitation caps the amount of total revenues a government can collect or the total expenditures that it can make.	__ No __ No, but considered __ Yes	Year: _____ __ Don't Know	__ Limit in municipal code __ Limit in municipal charter __ Other
F) Any Other Type of Limitation Any other municipally-imposed limit on taxes or expenditures.	__ No __ No, but considered __ Yes	Year: _____ __ Don't Know	__ Limit in municipal code __ Limit in municipal charter __ Other
Please describe this other limit:			

Question 2. How would you characterize the general attitude of the majority of your city's voters toward taxation? Answers to this question are completely confidential.

Strongly anti-tax…….	☐	Moderately accepting of tax increases.....	☐
Moderately anti-tax……	☐	Very accepting of tax increases……	☐
Neutral……...	☐	Don't know……..	☐

If your answer to Question 1 above was no for all limits, you are finished with the survey. We greatly appreciate your response. If you have answered yes to any of the above, please continue.

Question 3. How has your city been affected by these limits?

Has Your City Reached Its Limits?	Has the Limit Affected Fiscal Practices?	Can Your City's Limits be Overridden?
A) Ceiling on Property Tax Rates		
__ Yes __ No, but close __ No, not close	__ No clear effect __ We have increased borrowing __ We have reduced service provision __ We have found new revenue sources __ Other – Please describe in notes below	__ No __ Yes, Majority vote of the electorate __ Yes, Super majority of the electorate __ Yes, Majority vote of the city council __ Yes, Supermajority vote of council __ Yes, Other – Please describe in notes below
B) Property Tax Levy Limit		
__ Yes __ No, but close __ No, not close	__ No clear effect __ We have increased borrowing __ We have reduced service provision __ We have found new revenue sources __ Other – Please describe in notes below	__ No __ Yes, Majority vote of the electorate __ Yes, Super majority of the electorate __ Yes, Majority vote of the city council __ Yes, Supermajority vote of council __ Yes, Other – Please describe in notes below
C) Limit on Assessment or Assessment Increases		
__ Yes __ No, but close __ No, not close	__ No clear effect __ We have increased borrowing __ We have reduced service provision __ We have found new revenue sources __ Other – Please describe in notes below	__ No __ Yes, Majority vote of the electorate __ Yes, Super majority of the electorate __ Yes, Majority vote of the city council __ Yes, Supermajority vote of council __ Yes, Other – Please describe in notes below
D) Limit on the Overall Sales Tax Rate		
__ Yes __ No, but close __ No, not close	__ No clear effect __ We have increased borrowing __ We have reduced service provision __ We have found new revenue sources __ Other – Please describe in notes below	__ No __ Yes, Majority vote of the electorate __ Yes, Super majority of the electorate __ Yes, Majority vote of the city council __ Yes, Supermajority vote of council __ Yes, Other – Please describe in notes below
E) General Revenue or Expenditure Limitation		
__ Yes __ No, but close __ No, not close	__ No clear effect __ We have increased borrowing __ We have reduced service provision __ We have found new revenue sources __ Other – Please describe in notes below	__ No __ Yes, Majority vote of the electorate __ Yes, Super majority of the electorate __ Yes, Majority vote of the city council __ Yes, Supermajority vote of council __ Yes, Other – Please describe in notes below
F) Any Other Limitation, As Identified in Question 1F		
__ Yes __ No, but close __ No, not close	__ No clear effect __ We have increased borrowing __ We have reduced service provision __ We have found new revenue sources __ Other – Please describe in notes below	__ No __ Yes, Majority vote of the electorate __ Yes, Super majority of the electorate __ Yes, Majority vote of the city council __ Yes, Supermajority vote of council __ Yes, Other – Please describe in notes below

If you have any additional notes or comments about municipally imposed tax and expenditures limits, we are eager to hear them. Please write in the box below.

We thank you again for your participation in this survey.

Note: This represents the set of possible answers. We sent out the form as a fillable pdf, unless the respondent specifically requested otherwise. The vast majority of our survey responses were by phone