Towson University
Department of Economics
Working Paper Series

Working Paper No. 2010-16

Political Costs and Fiscal Benefits: The Political Economy of Residential Property Value Assessment

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August 2010

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Abstract: In many American states and municipalities, property taxes are the primary means of raising government revenues. Unlike sales or income taxes, however, property taxes have a significant element of subjectivity - the assessed value of the property being taxed. Given this subjectivity, there exists the possibility of political and fiscal incentives entering into property value assessment. We examine the determinants of assessed property value growth in a panel of 351 Massachusetts municipalities from 1995 to 2009. We hypothesize that the year to year growth of assessed value is in part determined by the municipality's fiscal condition, the availability of alternative revenue sources, and whether the municipality's property assessor is directly elected or appointed by an elected official. We find evidence that elected assessors respond to both the fiscal benefits and political costs of increasing their assessment of property values. Appraisals grow faster in towns with appointed assessors and respond to temporary raises in the cap on tax revenues with increases in appraisal growth.

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I. Introduction

The assessment of property values is as much an art as it is a science. This is particularly so in small towns and rural areas, where market exchanges of property are less frequent and comparable property more difficult to identify. The inherent subjectivity of these assessments is especially interesting given the importance of property taxes for many local and state governments, often representing the bulk of budgeted revenues. Property assessors, acting as either appointed agents of government officials or as elected officials themselves, have incentive to maximize government revenues and voter satisfaction. Can changes in assessed residential property value be solely explained by changes in the real estate market, or does the assessment process present an alternative means to raise property taxes and supplement budgets for vote maximizing elected officials?

According to Massachusetts law, municipal property assessors are to "neither undervalue nor overvalue any property subject to taxation" (M.G.L., Chapter 41, Section 29). The law, however, does not provide a means by which undervaluation or overvaluation would be determined. The position of municipal property assessor was at one time a universally elected office in the state of Massachusetts. Over time, however, many municipalities have chosen (by town referendum) to make the position one appointed by either the elected board of selectmen (aldermen) or the town mayor.[1] The office of assessor is distinct from many political offices in that it necessitates specific training and certification. It is, unlike a mayor or alderman, a uniquely professional position. This professional character, however, does not necessarily insulate it from political pressures. Even when the position is appointed, it is always appointed by a directly elected official or board of officials. Is one degree of separation sufficient to engender political neutrality?

There is an extensive literature on the political economy of the property tax. Bowman and Mikesell (1989) study property value appraisals for Virginia municipalities in the year 1980. The authors examine whether appointed appraisers differ from their elected counterparts in terms of appraisal uniformity (i.e., dispersion of property values across a municipality). Controlling for factors such as economic and demographic structure of municipality, the authors find that method of appraiser selection does not influence property value dispersion. In an analysis of

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[1] These decisions followed a Massachusetts General Law amendment allowing appraisers to be elected or appointed (M.G.L., Chapter 41, Section 24)

United States Census appraisal data, Strauss and Sullivan (1998) conclude that elected officials appraise property value more uniformly than do appointed officials, especially at the local level. Eom (2008) finds that expected level of resident monitoring in an area contributes to appraisal uniformity. Though Eom draws out important relationships, some of his explanatory variables, such as proportion of adults with a college education, may be related to natural sources of municipal property value dispersion. In a study of Massachusetts municipalities, Brueckner and Saavedra (2001) show that "strategic interaction among local governments does occur in the choice of property-tax rates." The results of the study indicate that local government officials at least partly consider the costs and benefits of property tax revenues. Other studies compare the roles of appointed and elected officials in general. In a study of state-level utility regulation, Besley and Coate (2003) find that elected regulators are more consumer-protective than appointed regulators.

Our study provides new insights into local political economy. We examine a fifteen year panel data of property value appraisals, with special attention paid to the effects, and interactions, of political structure, budgetary conditions, and fiscal institutions. Such a micro-panel approach is made possible by Massachusetts Department of Revenue data, which allows the nominal value of a fixed stock of property to be tracked over time. We compare the progression of a fixed stock of residential property value over time such that the dependent variable represents variation in what is essentially the same appraisal decision over time. This offers the considerable advantage of better controlling for natural sources of property value dispersion. We take advantage of the unique Massachusetts property tax institution known as Proposition 2 ½ to better understand how fiscal budgetary conditions and political costs might influence appraisal decisions. We also benefit from differing rules regarding the selection of a town assessor. The office of town assessor is an elected position in roughly two-thirds of Massachusetts towns and is appointed in all others. We take advantage of this heterogeneity to better separate the role of political costs in shaping property appraisals when assessors are faced with fiscal incentives to appraise at higher values.

Massachusetts is one of several states that, during the "tax revolt" of the early 1980s, passed legislation to curb the growth of property taxes and property tax revenue. Proposition 2 ½ places specific limits on both the growth in tax revenue from year to year and the total tax revenue that may be levied during a given year. Only with the passage of a town "override"

referendum can a town exceed the soft limits imposed, and even then there are "hard caps" that cannot be surpassed. When such a referendum fails, the local government faces especially strong incentives to identify sources of additional revenue. There exist a variety of alternative revenues sources. Some, such as state aid, come with relatively low political costs. Others, such as licensing fees, fines, and forfeitures, are more likely to be borne by local constituents. When a town fails to pass an override referendum, will property assessors increase their appraisal of property values to, at least in part, make up for the budgetary shortfall?

The data support the hypothesis that elected assessors respond to both the fiscal benefits and political costs of assessing a higher rate of growth in appraised property values. When the anticipated budgetary shortfall is smaller, and the fiscal benefit of indirectly raising taxes is smaller, elected assessors respond to the political costs signaled by a failed override referendum with the assessment of lower growth rates. Elected assessors appraise at higher growth rates when the anticipated shortfall is larger (and, in turn, the fiscal benefit is greater). We observe the converse when towns approve override referenda to raise revenue limits. For smaller increases, assessors respond to the passed override as a signal of lower political costs of appraisal growth and an opportunity to assess more taxes before hitting the revenue ceiling. For referenda that approve large increases, however, assessors respond by lowering growth rates. This reflects both the reduced fiscal benefit associated with successfully closing a budgetary shortfall and also the potentially higher political costs given a constituency that has already seen its taxes rise that year. We also find that property appraisals grow at a lower rate when alternative revenue sources, such as the municipality's stability fund balance or state aid, account for a larger percentage of the municipal budget. These findings suggest that property appraisal is not independent of political and fiscal forces.

II. Data and Institutional Background

The data for this study were formed from several public data files and online databases concerning Massachusetts municipalities, most of which are available on the Massachusetts Department of Revenue website. The Massachusetts Department of Revenue requires each of its 351 municipalities to report annual property values. The reports provide values by year and property classification (i.e., residential, commercial, industrial, personal property, or open space). Municipalities must also report the value of new growth property, which includes newly

constructed property, new property resulting from a renovation, and property that was previously exempted from taxation. Netting out new growth property value allows one to determine movements in the appraised value of fixed stocks of property over time.

In 1980, the voters of Massachusetts passed a referendum, Proposition 2 ½, that limits a municipality's average property tax rate and its ability to increase property tax revenues from one year to the next. Without a successful override decision by municipal voters, a municipality in Massachusetts cannot increase its property tax revenue by more than 2.5 percent from one year to another. Further, under no circumstance can a municipality levy more than 2.5 percent of its total appraised property value. An override ballot is presented by municipal officials and must state the purpose and dollar amount of the proposed override. An override proposal is approved if a majority of voting residents favor it.

Proposition 2 ½ can greatly constrain municipal revenue streams. Without a successful override referendum, the Proposition causes real tax revenues to decline whenever the inflation rate is greater than 2.5 percent. Proposition 2 ½ thus provides a unique means of insight into municipal political economy and finance. Indeed, prior studies have shown that Proposition 2 ½ has slowed or decreased spending levels at the municipal level (Cutler et al. 1999; Bradbury et al. 2001) and shifted the sources of municipal tax revenue (Susskind and Horan 1983; Makowsky and Stratmann 2009). Susskind and Horan observed in 1983 that, "Municipalities have already begun to tap existing non-property-tax revenues and, to a lesser extent, to levy charges...Like local option taxes, fees can be levied on nonresidents" (170).

II. Hypotheses and Empirical Framework

Assessors in Massachusetts, whether elected or appointed, are required to complete a series of course studies that will provide them with the necessary technical skills. Nonetheless, there is a significant amount of discretion in assessing the market value of an object, such as a home, that while comparable to similar objects is in the end a unique property with no perfect substitute. Further, individual properties will often go decades between transactions, leaving the assessor often without a recent market exchange to use as a reference point. Given this discretion and uncertainty, property assessors face a variety of other potential incentives beyond the desire for accuracy and market prescience.

We hypothesize that the incentives facing assessors beyond accuracy and demonstrating professional acumen fall under the rubric of political economy. Property tax revenues constitute the bulk of revenue for Massachusetts municipalities and are dependent on the assessment of property values. This gives local government officials strong incentive to increase or decrease the appraised value of property in response to political, electoral, and fiscal conditions. A political economy model of property appraisal predicts that assessors will attempt to maximize fiscal health subject to the legal and electoral constraints. It also predicts that assessors will consider the political costs of indirectly imposing additional tax demands on local constituents. Using this simple model, we construct several predictions that can be tested within the dataset.

When assessors are appointed by elected government officials (either a mayor or board of town executives), they are afforded greater political distance from the tax increase effected by an increase in appraised property value. When assessors are elected, however, constituents have an official they can more directly hold accountable. This increases the political cost of property appraisal growth.

> Testable Prediction 1 (TP.1) Residential property appraisals will grow *less* when assessors are elected officials (versus appointed).

Beyond property taxes, there are alternative revenue sources, including state aid, licensing fees, fines, forfeitures, free cash, the stability fund, and other miscellaneous sources of revenues. Some sources of revenue, such as state aid, come with no discernable political cost for locally elected officials. The greater a share of the town budget these alternative sources account for, the lower the incentive to incur the political cost of property appraisal growth.

> TP.2) Residential property appraisals will grow *less* when alternative revenues from sources outside of the constituency are available.

As mentioned earlier, there is within Proposition 2 ½ the override mechanism for increasing tax revenue growth beyond the 2.5 percent limit. Override referenda present a unique opportunity to simultaneously test both the fiscal and political dimensions of the political economy model. The calling of an override referendum vote by municipal executives requires both a description as to the purpose of the additional revenues and the additional dollar amount to be levied in property taxes. The calling of an override referendum signals fiscal distress and indicates that there are

significant fiscal benefits to be had from generating additional revenue. At the same time, the outcome of the vote signals the preferences of the constituency and their willingness to bear additional taxes. We can expect that government action contrary to the preferences expressed by constituents at the ballot box will bear greater political costs. A passing override vote signals lower political costs to increasing taxes,[2] while a failed vote signals higher political costs.

We also know the dollar amount requested by the override. The size of the request gives us a sense of the relative magnitude of the associated fiscal benefits and political costs. When a large dollar value override fails, this is a sign that there is greater need and, in turn, greater fiscal benefit to be had from generating additional revenue. When a large override passes, however, constituents have already increased their tax burden. The larger the passed override, the greater the political costs of further tax increases. Adding up these effects, we can make testable predictions for both passed and failed overrides.

> TP.3) Passing a small override will increase appraisal growth, but with larger dollar values the political costs will incentivize lower appraisal growth.
>
> TP.4) The failure of a small override will lower appraisal growth, but with larger dollar values the greater fiscal benefits of additional revenue will incentivize higher appraisal growth.

When constituents experience growth in the appraised value of their taxable property, they will be more sensitive to subsequent growth. Thus previous appraised value growth will increase the political cost of appraisal growth.

> TP.5) Residential property appraisals will grow *less* when residential property grew more the previous year.

To test these hypotheses, and control for other factors that affect assessed growth, we estimate the following regression:

(1) $\text{ResidentialGrowth}_{it} = \beta_0 + \beta_1 \textbf{Appraisal}_{it} + \beta_2 \text{Elected}_i + \beta_3 \textbf{Budget}_{it-1} + \beta_4 \textbf{Override}_{it-1} + \beta_5 \textbf{Municipal}_{it-1} + \beta_6 \textbf{Override}_{it-1} * \textbf{Elected}_i + \text{Municipality}_i + \text{Year}_t + \varepsilon_{it}$

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[2] Larger dollar amount failed overrides also indicated greater room for tax levy growth under the hard cap.

The ResidentialGrowth$_{it}$ variable is the growth in appraised value of preexisting property in town i for fiscal year t.[3] **Appraisal**$_{it}$ is a vector of variables related to property appraisals, including nonresidential growth, lagged residential growth, and the changes in property exemption. Nonresidential growth is included as a control variable for the local real estate market. As local economic and social conditions ebb and flow, we expect that non-residential property values will move in step, and in turn, in the same direction as residential property values. We include lagged residential growth as a control for past indirect tax increases through property appraisal growth and constituent "fatigue." We include the change in the fraction of property that is declared exempt from taxation to control for changes in the base of taxable property. Elected$_i$ is a dummy variable that equals one in towns where assessors are elected and zero in towns where they are appointed. The rest of the variables in the regression specification regard local fiscal and municipal conditions that would potentially affect the assessor's decision making. These variables are all lagged due to the timing of the appraisals. Appraisals for fiscal year t occur during the middle of fiscal year $t-1$. Therefore the lagged values are the ones concurrent with assessment. **Budget**$_{it-1}$ is a vector of budgetary variables. These include local receipts (fines, forfeitures, fees, etc), the stability fund, and state aid. All control variables related to dollar quantities are converted to fractions of the local budget. **Municipal**$_{it-1}$ is a vector of local condition variables that include the unemployment rate and log population. **Override**$_{it-1}$ is a vector of dummy variables indicating if an override referendum passed (OverridePass$_{it-1}$), if one failed (OverrideFail$_{it-1}$), and their associated dollar amounts ($OverridePass$_{it-1}$ and $OverrideFail$_{it-1}$). In some specifications, we interact the **Override**$_{it-1}$ vector with Elected$_i$.

Summary statistics of growth rates and other municipal data are presented in Table 1. In the sample analyzed, appraised value of pre-existing residential property grew an average 5.6% per year, with positive growth in 56.2% of the observations. Negative growth is prominent because ResidentialGrowth$_{it}$ tracks the value of existing property over time (i.e., is not affected by value from new construction or renovation), which is often subject to structural depreciation. Figure 1 shows the histogram of ResidentialGrowth$_{it}$. The histogram displays a distribution that, though largely bell-shaped, is skewed slightly to the right and spikes at the value zero. The spike

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[3] As was noted, this variable nets out property value increases from new growth construction or renovation. Thus, it reflects appraisals of a fixed stock of property over time.

in the distribution at zero suggests that assigning last year's appraisal values in the subsequent year is a convention among many assessors dealing with existing residential property.

The override fail dummy takes a value of one for 4.8% of the sample, where 132 of the 351 towns in the sample had at least one override fail. The mean failed override requests a dollar amount equal to 3.0% (s.d. 3.2%) of the corresponding town's budget. The override pass dummy takes a value of one for 7.4% of the sample, where 155 of the 351 towns had at least one override pass. The mean passed override requests a dollar amount equal to 2.6% (s.d. 2.2%) of the corresponding town's budget.

III. Results

The results of our five regression model specifications are presented in Table 2. ResidentialGrowth$_{it}$ is the dependent variable in all five specifications. Each specification includes year fixed effects and robust errors clustered by municipality. Specifications 3 and 5 include municipal fixed effects as well. In column 1, we run a simple OLS regression on concurrent nonresidential growth, lagged residential growth, and the Elected$_i$ dummy variable. In column 2, we run the same OLS model, but include our set of budget and municipal control variables. The key control variable, concurrent growth in nonresidential property, behaved as expected, with a large positive coefficient. The coefficient on nonresidential growth is identical in both OLS specifications (columns 1 and 2) and is relatively unchanged in all five specifications (columns 1 through 5). A one standard deviation increase in the appraisal growth rate of nonresidential property correlated to 35% of a standard deviation increase in the growth rate of residential property.[4] On the other hand, residential appraisal growth was negatively correlated to residential growth from the previous fiscal year. A 1 percent increase in the residential growth rate from the previous fiscal year's appraisal led to a 0.23 percentage point drop in following year's appraisal. This supports our testable prediction that assessors are reluctant to increase appraisals when appraisals grew in the previous year. Our control for the change in tax exempt property has identical positive coefficients in columns 2 through 5 and is significant at the 1% level, indicating that when there is a greater change (in dollar value) of

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[4] We ran all of our specifications with the lagged nonresidential growth as well. Its coefficient was not significant, either statistically or in magnitude, and did not meaningfully change any results.

property exempt from taxation, assessors reacted with higher appraisal growth for tax eligible property.[5]

In columns 2 through 5, we include budgetary variables. The political economy model predicts that our budgetary variables will all have negative coefficients. While free cash, stability fund, local receipts, and state aid all have negative coefficients, only state aid and local receipts are statistically significant in any of the specifications. Interestingly, while local receipts are statistically significant only when the specification includes municipal fixed effects (columns 3 and 5), state aid is only statistically significant when the specification does not include municipal fixed effects (columns 2 and 4). This is likely a result of the reduced variation in state aid from year to year within municipalities. While the standard errors are too large for some of the coefficients to be deemed statistically significant, the fact that the coefficients are negative across all four budgetary variables in all five specifications supports the hypothesis that alternative revenue sources are preferred to appraisal growth as a means of raising revenues.

In column 3, we include the vector of override variables and municipal fixed effects. The only override related variable that is statistically significant is the $OverrideLoss_{it}$ dummy. The variable's coefficient is negative, which supports the hypothesis that failed overrides signal high political costs of greater appraisal growth. The cumulative effect of failed and passed overrides is difficult to discern from the specification in column 3 given the low precision of coefficients.

In columns 4 (OLS) and 5 (OLS with fixed effects), we interact the override vector with the $Elected_i$ dummy. Separating the impact of override referenda outcomes in towns with elected assessors and towns with appointed assessors does much to clarify our story and increase the precision of the results. In both columns 4 and 5, neither of the coefficients on the $OverideFail_{it}$ or $\$OverideFail_{it}$ variables, on their own, are significant, but both are significant at the 10% level when interacted with the $Elect_i$ dummy. An override failure in a town with elected assessors has a baseline effect of a 3 percentage point drop in the appraisal growth rate (column 5). The effect scales up with the dollar value of the failed override. When a failed override requested a dollar amount less than 3.2% of the town budget, the net effect is negative. In our sample, 73% of failed overrides correlated to a negative impact on appraisal growth. This supports the hypothesis of the political costs and fiscal benefits of raising revenues through appraisal growth. During

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[5] This could reflect assessors attempting to replace revenue lost to exempt status by generating more revenue from taxable property, or could simply indicate that tax exempt property value moves in the same direction as taxable property.

most budgetary shortfalls, if the constituents reveal their strong preference against higher taxes by voting down an override, the political costs of appraisal growth are higher and elected assessors react with lower appraisals. But, for the largest 27% of shortfalls, the fiscal benefits of greater revenue are sufficient and assessors respond with higher appraisals.

The results of a passed override are more complex. Coefficients on $OveridePass$_{it}$, OveridePass$_{it}$ *Elect$_i$, and $OveridePass$_{it}$ *Elect$_i$ are all statistically significant. The coefficient on OveridePass$_{it}$ is negative, but not significant at the 10% threshold (p=0.12). The reduced precision of the OveridePass$_{it}$ coefficient makes interpretations less reliable, but we include all four coefficients in our interpretation of the net effect of passed overrides. OveridePass$_{it}$ and OveridePass$_{it}$ *Elect$_i$ serve as the baseline impacts of the smallest dollar amount overrides passed overrides, and $OveridePass$_{it}$ and $OveridePass$_{it}$ *Elect$_i$ indicate how that impact changes with the increasing dollar amounts of requests. We find that appointing towns have a negative baseline (that assessments shrink with the passage of an override), but that the impact moves towards the positive as dollar amounts increase. In towns with appointed assessors, the net effect of passed overrides on appraisal growth is negative for the smallest 71% of overrides, but becomes positive but when the dollar request exceeds 3.2% of the budget (29% of observed passed overrides).[6] Conversely, we find a baseline that is positive in towns which elect their assessors, but (quickly) moves towards the negative with larger dollar amounts. In towns with elected assessors, the net effect is negative when a passed override requested a dollar amount more than 1.6% of the town budget (59.6% of observed overrides). The interpretation of net effects are more precise for towns with elected assessors, but it holds true in both electing and appointing towns that the majority of passed overrides result in lower appraisal growth. The results in towns with elected assessors also support the political economy hypothesis of political costs and fiscal benefits. In the event of a very small budgetary shortfall, if the constituents reveal their willingness to endure higher taxes by passing an override, the political costs of appraisal growth are revealed to be sufficiently low and assessors react with larger appraisals. Most passed overrides, however, increase the tax burden on constituents enough that the political costs of a marginal increase in taxes, and the reduced fiscal benefit of raising taxes after the shortfall as already been closed, result in lower appraisals. While electoral pressure does not

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[6] Because of the lack of statistical significance on OverridePass$_{it}$, we could interpret it as a zero coefficient, and that all passed overrides in appointing towns have a positive effect on appraisal growth. This fits in nicely with the theory, but is not, in our opinion, the proper interpretation of the regression results.

appear to be necessary to engender this reaction to passed overrides from assessors, it does add to precision to the result, and likely consistency, to this result.

IV. Conclusion

The interaction of Proposition 2 ½ override referenda and differing selection mechanisms for town assessors illustrates the calculus facing elected officials. When constituents vote down an override referendum, they signal their preference against additional taxation. Elected assessors lower the rate of appraisal growth on preexisting property under these circumstances, except when the budgetary shortfall is so great that the fiscal benefits exceed their political costs. When voters pass an override, the fiscal pressure is alleviated, at least to some degree, and taxes are raised. For larger passed overrides, these results in lower fiscal benefits from appraisal growth, and greater political costs, leading to lower appraisals. Further, appraisals grow by less when alternative revenues from sources outside of the constituency are available. These results illustrate the difficulty of engendering analytical neutrality in any subjective assessment that is directly connected to revenues and the political fortunes of elected officials. They also illustrate the important role that even a relatively small amount of political distance can insulate government officials from political pressures. The response to a failed override referendum by appointed assessors is distinctly different from those who must themselves run for office and, in turn, directly seek the approval of constituents at the ballot box.

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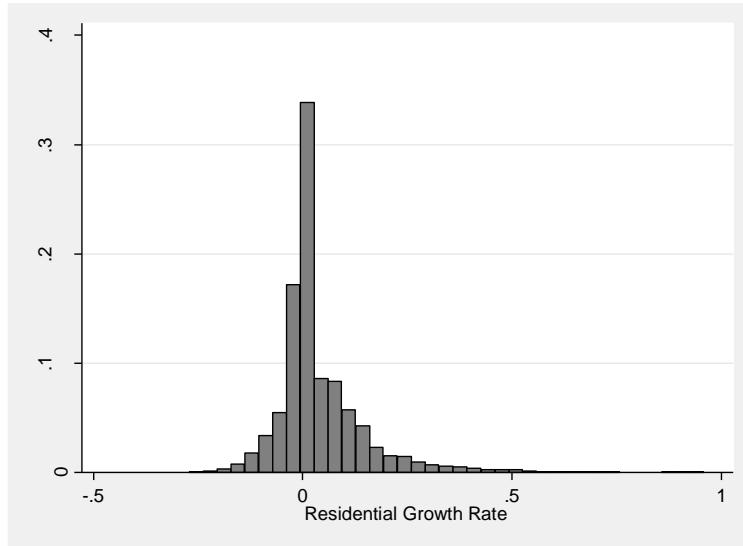
Figure 1.Histogram of Residential Growth

Table 1 Data Summary

Variable	Mean	Std. Dev.	Min	Max
Residential growth	0.056	0.111	-0.218	0.957
Non-residential growth	0.009	0.094	-0.426	2.372
Chief Appraiser Elected	0.667	0.471	0	1
Override Fail	0.048	0.214	0	1
Override Fail Dollar Amount (%)	0.002	0.010	0.000	0.315
Override Pass	0.074	0.261	0	1
Override Pass Dollar Amount (%)	0.002	0.009	0	0.188
Free Cash (%)	0.055	0.055	-0.171	0.517
Stability Fund (%)	0.048	0.066	-0.002	0.910
Unemployment Rate	0.044	0.023	0.000	0.522
Local Receipts (%)	0.155	0.065	0.004	0.519
State Aid (%)	0.178	0.126	0.001	0.698
Log Population	8.958	1.310	4.419	13.320

Table 2. Percent Growth in Appraised Value of Residential Property (Ordinary Least Squares)

	(1)	(2)	(3)	(4)	(5)
Residential growth (lagged)	-0.198***	-0.203***	-0.228***	-0.202***	-0.228***
	(0.012)	(0.013)	(0.014)	(0.013)	(0.014)
Non-residential growth (concurrent)	0.426***	0.410***	0.413***	0.411***	0.414***
	(0.091)	(0.092)	(0.094)	(0.092)	(0.094)
Δ Exempt Property	0.003	0.024***	0.024***	0.024***	0.024***
	(0.003)	(0.007)	(0.007)	(0.007)	(0.007)
Chief Assessor Elected	-0.007***	-0.004*		-0.003	
	(0.002)	(0.002)		(0.002)	
Override Fail			-0.018*	0.005	0.008
			(0.010)	(0.011)	(0.014)
Override Fail Dollar Amount (%)			0.412	-0.308	-0.376
			(0.300)	(0.313)	(0.418)
Override Pass			0.001	-0.006	-0.023
			(0.009)	(0.011)	(0.015)
Override Pass Dollar Amount (%)			-0.376	0.397	0.708*
			(0.271)	(0.271)	(0.383)
Elected * Override Fail				-0.026*	-0.030*
				(0.014)	(0.017)
Elected * Override Fail Amount (%)				0.766*	0.941*
				(0.421)	(0.508)
Elected * Override Pass				0.018	0.036**
				(0.014)	(0.018)
Elected * Override Pass Amount (%)				-1.090***	-1.516***
				(0.341)	(0.456)
Free Cash (%)		-0.010	-0.016	-0.012	-0.017
		(0.033)	(0.048)	(0.033)	(0.048)
Stability Fund (%)		-0.047	-0.032	-0.054	-0.033
		(0.040)	(0.076)	(0.046)	(0.077)
Unemployment Rate		0.197***	0.005	0.197***	0.008
		(0.061)	(0.131)	(0.064)	(0.131)
Local Receipts (%)		-0.013	-0.258***	-0.013	-0.256***
		(0.018)	(0.061)	(0.018)	(0.061)
State Aid (%)		-0.029***	-0.079	-0.029***	-0.080
		(0.010)	(0.058)	(0.010)	(0.057)
Constant	-0.009*	-0.019	-0.197	-0.017	-0.212
	(0.005)	(0.013)	(0.195)	(0.014)	(0.197)
Error Clustering?	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Town Fixed Effects by Town	No	No	Yes	No	Yes
Observations	5941	4911	4911	4911	4911
R-squared	0.463	0.457	0.470	0.459	0.472

Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1. All specifications are across 351 Massachusetts towns for error clustering and fixed effects purposes. All budgetary variables are lagged values from the previous fiscal year (e.g. are concurrent at the time of appraisal). .