

Taxes and the Electoral Cycle: How Sensitive Are Governors To Coming Elections?

*Anne Case**

Recent tax increases in several eastern states have received attention from both voters and the press. In 1991, New Jersey Republicans gained veto-proof majorities in both houses of the legislature for the first time in 20 years. Shortly after the election, the *New York Times* of

November 13, 1991, attributed the outcome to “[Governor Florio’s] unpopularity and the \$2.8 billion tax package he pushed through the legislature.” In the wake of Governor Weicker’s income tax legislation, 40,000 Connecticut residents “carried signs that called for everything from impeachment to lynching for the Governor and his budget officers,” according to the *New York Times* of October 7, 1991. History suggests these tax changes may have cost the governors their jobs. In New Jersey, Governor Florio was unsuccessful in his re-election bid in

*Anne Case is an Assistant Professor of Economics and Public Affairs, Princeton University. When she wrote this article, she was a visiting scholar in the Philadelphia Fed’s Research Department.

November 1993. In Connecticut, Governor Weicker has announced he will not stand for re-election. Thad Beyle documents that "tax loss" governors have been a common sight on the political landscape since the 1960s.

Political economists, pollsters, and the popular press have long understood the tension that taxes create between elected officials and their constituents. Such tension is to be expected: governors are at times called upon to introduce or increase taxes in order to carry out the wishes of the electorate. Voters understand that tax increases are sometimes unavoidable, but they have limited information with which to assess each call for higher taxes. The electorate also has few tools available with which to punish or reward officials for their performance, and this may add to the tension. Citizens may protest tax increases, as was seen in both Trenton and Hartford, or reduce their political donations in the face of unwelcome tax changes. The electorate may also vote with its feet, leaving the state for one more frugal. These strategies, however, are limited in the size of the punishment they can bring to bear on incumbents. Exit may impose a larger cost on those who choose to move than on the errant official.

A more effective strategy for disciplining elected officials is, often, the ballot box. Threatening to unseat an incumbent may provide the most powerful lever under the electorate's control. However, fiscal decisions are made by elected officials who understand that their re-election odds depend upon their tax policies. For this reason, tax decisions may be based not only on their economic merits but on their political merits as well. This gives way to two potentially important phenomena. Voters, with limited access to information on the need for new taxes, may evaluate and vote on their governor's performance by comparing his fiscal policies with those of governors in neighboring states. Governors who would like to be re-elected may, for this reason, time state tax

changes to coincide with those in states nearby. This would lead to a correlation between tax changes in states in close geographic proximity. In addition, tax increases may be postponed until a governor no longer fears the ballot box: tax changes may be timed to correspond with term limits.

Conventional wisdom suggests that voters react to recent changes in taxes. This article quantifies that reaction and shows how it depends upon what neighboring states have done. It also examines the impact of voters' comparisons between tax changes at home and in nearby states on a governor's tax setting behavior. Overall, the results tend to support Ferejohn, who suggests "the key to the voting decision is found not in the earnest pledges of the contenders but, rather, in the infamous remark of a Kansas farmer: 'But what have you done for me lately?'"

EFFECTS OF TAX CHANGES AND ECONOMIC PERFORMANCE ON RE-ELECTION

Data on state tax changes and economic performance indicate some clear differences in states in which the governor was re-elected from those in which he or she was not. We present data on state economies for the two years leading up to each election from 1979 to 1988 (Table). We use two-year changes in state economic and fiscal performance because it sometimes takes governors a full fiscal year to implement their fiscal policies.¹ States in which the governor was re-elected and those in which he or she was not differ dramatically in their taxing behavior. Increases in state income tax liabilities, measured in constant dollars, were significantly lower in those states in which governors were re-elected compared with states in which governors were not. On average, the

¹The results presented in this article are similar when three-year changes are used.

TABLE
A History of Gubernatorial Re-elections
1979 - 1988

	All States Holding Elections	Governor Re-elected	Governor Not Re-elected	Significance Level of Difference ^c
Number of observations	74	47	27	
Change in income tax liability ^a	34.03	10.81	74.44	0.033
Change in state unemployment rate ^b	0.49	0.24	0.92	0.178
Change in state income per capita ^b	353.46	464.14	160.81	0.075

All changes are two-year differences: that is, the change between the fiscal year ending just prior to the election and two years before the election.

^aChange in income tax liability for joint filers with no dependents who earn \$25,000 annually, calculated for filers taking average deductions for this income category. Sample here restricted to states with income taxes.

^bSource: Statistical Abstract of the United States.

^cSignificance level of difference between the average among governors re-elected and those unseated.

Source: National Bureau of Economic Research, TAXSIM data.

tax liability of joint filers earning \$25,000 increased by \$10 in the two years leading up to the elections in which the incumbent was returned to office. This contrasts with the \$74 increase on average in states in which the incumbent was not re-elected. This difference, of \$64, amounts to roughly 10 percent of the income tax liability of filers earning \$25,000.² Voters appear to take tax increases during an incumbent's term into account when standing in the voting booth.

The overall economic health of the state also seems to influence whether a governor is re-elected. Changes in state income per capita during a governor's watch significantly affects the probability of his or her re-election. States

²Throughout this article we use joint filers with \$25,000 in income as the basis for our analysis, but the basic results hold for other income levels as well.

in which governors were re-elected had lower increases in state unemployment rates (a 0.24-percentage-point increase versus a 0.92-percentage-point increase, on average) and significantly larger increases in income per capita (\$464 versus \$160, on average) than did states in which governors were not re-elected.

Thus, tax changes and economic performance seem to influence election outcomes. Can we quantify the effects? We can estimate the impact of changes in taxes on a governor's re-election odds and also the effects of state unemployment and income by using a statistical technique known as probit analysis. From 1979 to 1988, incumbents were eligible to stand for re-election in 74 races under study and were returned to office roughly 60 percent of the time. Governors ineligible to stand for re-election due to a binding term limitation are not included in this part of the analysis. In addi-

tion, we do not study races in which the governor was eligible to run again but chose instead to run for the United States Congress. Governors eligible for re-election who chose not to run again and who did not run for Congress are included as governors "not re-elected." Voluntary retirement from public office is often a masked defeat: some governors would rather retire than go down to defeat at the polls.³

The results of our probit analysis suggest that an increase in tax liability significantly increases the probability that a governor will not be re-elected. (See *Increasing Taxes Lowers the Probability of Re-election*, in which the effect of an increase in tax liability on the probability of re-election is estimated to be .146.) If a governor were to increase taxes by \$34.03, which is the average tax change observed during this period, this would reduce the probability of re-election by 5.0 percent (.3403 x .146), holding all else equal.

Voters appear to hold the governor more accountable for the impact of tax policy on their disposable income than for the impact of overall economic conditions within the state. In the period from 1979 to 1988, increases in state unemployment also appear to reduce the odds

³Inclusion of governors who voluntarily retire improves the precision of (reduces the standard errors on) our estimates but does not otherwise affect the analysis. We could also model transitions in the governor's chair from one party to another and, in this way, include in the analysis decisions made by governors who cannot stand for re-election because of term limits. Party loyalty may force elected officials to behave prudently even though they personally will not benefit at the ballot box. However, Besley and Case (1993) find that party loyalty does not appear to play a role in the decisions made by governors facing term limits, and for this reason, governors facing term limits are excluded from the current analysis.

⁴The statistical significance level of the unemployment rate effect varies greatly depending on what other variables are entered into the equation. (See *Increasing Taxes Lowers the Probability of Re-election*.)

of re-election, but its effect is not as clear as that of tax changes.⁴ The probability of re-election does not depend significantly upon changes in state income per capita. Gubernatorial sensitivity toward tax changes may, for this reason alone, be well placed.⁵

TAX CHANGES IN NEIGHBORING STATES

Do tax increases always reduce re-election odds? Good governors must raise taxes or cut services, or both, when costs rise more quickly than revenues. How does the electorate decide whether a tax increase is "appropriate"? Evidence from a study by Besley and Case (1992) suggests voters may look to neighboring states when determining whether a given tax increase is out of line. For example, a recession-driven revenue shortfall may require that taxes be raised if the government is expected to provide a minimum level of services. Voters without access to perfect information about the magnitude of such a recession may find it difficult to assess the need for a tax increase. However, if the recession has a regional component, voters may be able to add to their information base by noting how neighboring states have responded. Voters in New Jersey, for example, may look to the tax changes occurring in Pennsylvania and New York to determine whether a tax increase is appropriate. Neighboring states may provide a benchmark against which a given state's

⁵For a detailed analysis of the relationship between tax changes and gubernatorial re-election, see Besley and Case (1992). It is possible that when states face fiscal crises they simultaneously raise taxes and reduce expenditures. The effect of tax changes on re-election odds may be in part proxying for the impact of reduced expenditures on re-election odds. To test for this, changes in state expenditures per capita were added to the re-election equation. We found that the probability of gubernatorial re-election in this period is insensitive to changes in total state expenditures per capita, whether or not change in taxes is used as an explanatory variable.

performance may be measured. Information on tax levels and changes within a region is available in local newspapers. For example, at the time income taxes were introduced in Connecticut, the *New York Times* ran a front page article under the headline "Neighbors Challenge New York's Tax Reputation." The article compared effective tax rates for filers in different income categories living in a variety of cities in New Jersey, New York, and Connecticut. Such articles appear at regular intervals and may provide information adequate to allow voters to evaluate their governor's relative performance.

Our data suggest that voters gather and use such information. (See ... *But Neighbors' Tax Policy Matters, Too.*) Tax increases in neighboring states appear to offset the effect of home-state tax increases. Governors are not penalized for tax increases if neighbors are raising taxes simultaneously. If neighboring states increase their tax liability by \$34, holding all other things equal, this will increase the probability of re-election for the home-state governor by 6.6 percent ($.34 \times .194$), almost exactly offsetting the reduction in the likelihood of re-election that (as we showed earlier) results from the same-size tax increase in his own state. This may have implications for gubernatorial behavior. Governors, recognizing that voters are making comparisons between tax changes at home and in neighboring states, may wait until neighbors are raising taxes before calling for a tax increase at home. Therefore, governors may become responsive to what neighboring states are doing.

We find tax changes are positively and significantly correlated between neighboring states during the 10-year period 1979-88.⁶ There are several possible explanations for this correlation. Neighboring states may face shocks to their economies that are regional in nature, as

⁶The correlation coefficient is 0.17.

argued above. Furthermore, changes in the national economy may cause neighboring states' tax changes in a given year to appear significantly correlated. We do not want to attribute to re-election concerns a correlation that is actually due to regional or national economic conditions. One natural way around this is to look separately at governors who are eligible to stand for re-election and those who are not. If correlation between neighboring states' taxes is due primarily to political concerns, we should find a positive and significant relationship between changes in home-state taxes and changes in neighbors' taxes only in those states in which the governor can stand for re-election. This is indeed what we find: in states in which the governor is ineligible to stand for re-election, there is no correlation between tax changes in home and neighboring states; in states in which the governor is eligible to run again, there is positive and significant correlation between tax changes.⁷

These relationships are presented graphically (Figures 1 and 2) for two-year tax changes observed in 1983 for joint filers earning \$25,000 in each state. Similar patterns are present in every year. In Figure 1, the tax change in a given state is marked on the vertical axis, and the average tax change in that state's neighbors is marked on the horizontal axis. For example, Michigan had a very high change in taxes from 1981 to 1983, and so did Michigan's neighbors. Fiscal year 1983 ends before the elections of 1983. Comparing states whose governors were eligible to stand in their states' next election,

⁷The correlation coefficient for these states is 0.19. We continue to find a positive and significant relationship between neighbors' tax changes in states where governors can run again, even when we control for state income and unemployment, state demographic variables (proportion elderly and young in the state population), year effects, and state-specific fixed effects. We continue to find no relationship between neighbors' tax changes in states governed by lame ducks. See Besley and Case (1992) for tests based on alternative econometric specifications.

... But Neighbors' Tax Policy Matters, Too

We define geographic neighbors as states that share a common boundary. "Neighbors' tax change" is the average tax change experienced in a given state's geographic neighbors. In results presented here, all neighbors are given equal weight. Changes in taxes and state income are in hundreds of 1982 dollars.

Governor Defeat =

$$0.110 \times \text{tax change} - 0.194 \times \text{neighbors' tax change} + 0.004 \times \text{change in state inc./cap} + 0.090 \times \text{state unemp.}$$

(t=1.66) (t=1.74) (t=0.29) (t=1.97)

\$25,000 filers \$25,000 filers state inc./cap

$$+ 0.025 \times \text{gov.'s age} + 0.269 \times \text{pres. election yr} - 0.112 \times \text{pres. coattails}$$

(t=3.03) (t=1.66) (t=0.72)

Governor Defeat =

$$0.017 \times \text{tax change} - 0.059 \times \text{neighbors' tax change} - 0.010 \times \text{change in state inc./cap} + 0.053 \times \text{state unemp.}$$

(t=1.68) (t=2.69) (t=0.79) (t=1.29)

\$100,000 filers \$100,000 filers inc./cap

$$+ 0.029 \times \text{gov.'s age} + 0.165 \times \text{pres. election yr} - 0.138 \times \text{pres. coattails}$$

(t=3.42) (t=1.21) (t=0.91)

Number of observations = 74.

Increases in neighboring states' taxes offset the effect of tax changes at home on an incumbent's re-election odds; the absolute value of the coefficients on own tax changes and neighbors' tax changes are not statistically different from one another.

The effect of changes in income taxes on the probability of re-election is present in different parts of the income distribution. The increase in the probability of gubernatorial defeat when taxes are raised at home, and the offsetting effect of increases in neighbors' taxes, are seen here for both \$25,000 joint filers and \$100,000 joint filers.

and significant correlation with neighboring states' tax changes. We take this behavioral difference as evidence that the sensitivity to neighbors' taxes is due to electoral effects.

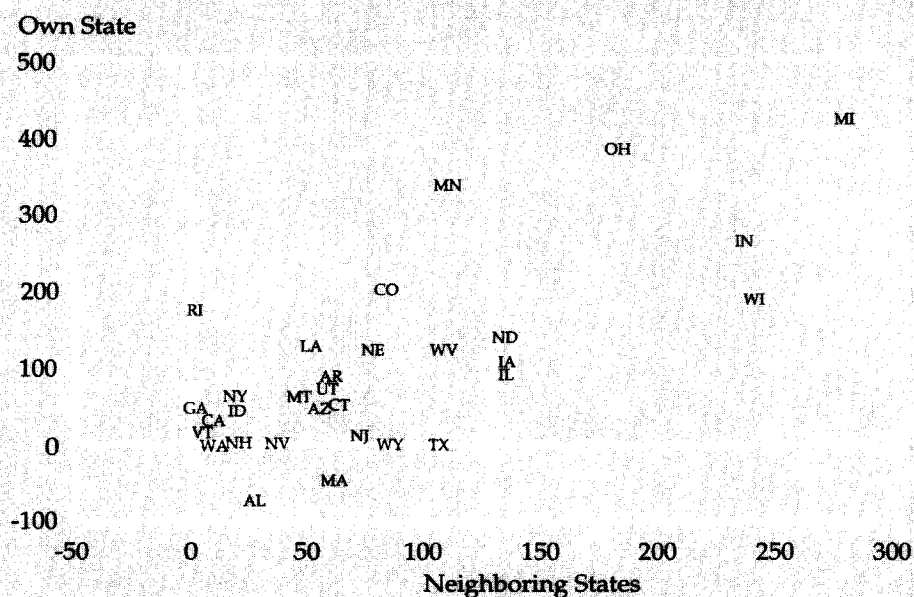
Contrary to textbook public finance models in which state taxation decisions are based solely on economic criteria, our evidence sug-

gests that the governors' political timetable and the behavior of neighboring states may influence state taxation decisions.

TERM LIMITS, ELECTORAL CYCLES, AND TAXATION

The timing of tax changes may be affected

FIGURE 1
The Relationship Between Own and
Neighbors' Tax Changes (1981-83)
When the Governor Is Eligible for Re-election^a



^aIncreased tax liability in dollars for joint filers with incomes of \$25,000

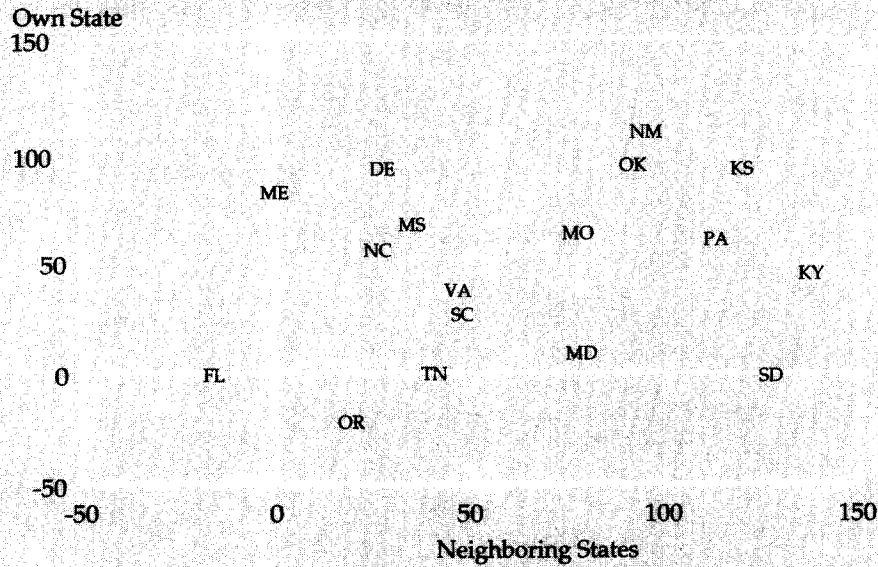
not only by changes in neighboring states but also by the presence of term limits. The political economy literature discusses the potentially offsetting effects of such limits. James Adams and Lawrence Kenny suggest that, in the absence of term limits, it may be relatively easy for one party to put a lock on the governor's office, especially in small states. Political capital may accrue to the party in office, acting to increase the odds of gubernatorial re-election. States may perceive term limits as a way to block the accrual of political capital and, thus, as a means to broader representation.

While term limitations provide a guarantee that a state will not be stuck with a bad incumbent indefinitely, this guarantee may come at a

price. In addition to the costs associated with learning about candidates and voting, there is also the possibility that incumbents, as lame ducks, may change their behavior to better suit their own long-term goals. Some analysts do not believe such a change in behavior is likely. Given that parties live forever even when incumbents do not, Alberto Alesina and Stephen Spear suggest that the incumbent's political party could compensate the official to keep him in line and, in this way, protect others within the party from being punished in response to the lame duck's behavior. Lott (1990) provides some evidence of this among congressmen.

We find differences in many aspects of the taxing behavior of governors eligible to stand

FIGURE 2
The Relationship Between Own
and Neighbors' Tax Changes (1981-83)
When the Governor Is Ineligible for Re-election^a



^aIncreased tax liability in dollars for joint filers with incomes of \$25,000.

for re-election and those facing term limitations, in addition to the difference in sensitivity toward neighbors' tax changes discussed above. Our data suggest that governors who are hitting term limits increase taxes more than those who can stand for re-election. For example, controlling for state income per capita, state unemployment, and state-specific effects, we find that in each year of the term of an incumbent ineligible to stand for re-election, state income tax liability for \$25,000 joint filers increases by \$26 more per year than it does when that state is governed by an incumbent who can run for re-election.⁸ Over a four-year term, this amounts to a tax increase of \$106 (26.49 x 4), or roughly 15 percent of the tax liability of \$25,000

filers. This is true even though, on average, states with term limits have lower income tax liability for \$25,000 joint filers: \$650 versus \$783

⁸This result comes from the regression: Tax liability = 26.49 x an indicator that the incumbent is ineligible to run again (t = 2.33), controlling for state income per capita, state unemployment, and state-specific fixed effects. (Number of observations = 480: 48 states for the period 1977-86. Regression run with heteroskedasticity consistent standard errors.) The sample is larger than that for gubernatorial re-elections because we have tax data for every year of an incumbent's term, not just election year data. In addition, the sample covers both governors who can and cannot run for re-election. Indicator variables were used to see if taxes varied within the four years of a term. We found no evidence that they did. Taxes were higher by about the same amount in every year of a lame duck's term.

on average from 1977 to 1988. This lower tax is maintained through gubernatorial behavior in the years in which the governor is eligible to run for re-election. In many states with term limits, a governor can serve for two consecutive terms. In the first term, the governor holds tax changes below the state's average. If re-elected, the governor raises taxes more than the average for that state. In this way, term limits lead to electoral tax cycles.

CONCLUSION

Models of fiscal decision-making must take political variables into account if they are to

adequately capture reality at the state level. The analysis of gubernatorial behavior suggests re-election looms large in choices made by incumbents. The common perception is that governors who raise taxes do not get re-elected, and therefore, governors are reluctant to propose tax increases (at least in the two years prior to an election). In fact, the situation is more complicated. The experience of neighboring states in raising taxes has a great deal of influence. Moreover, governors who are not eligible for re-election may raise taxes more than other governors, producing an electoral cycle in tax policy.

REFERENCES

Adams, James D., and Lawrence W. Kenny. "Optimal Tenure of Elected Public Officials," *Journal of Law and Economics*, 29 (October 1986), pp. 303-28.

Alesina, Alberto, and Stephen E. Spear. "An Overlapping Generations Model of Electoral Competition," *Journal of Public Economics*, 37 (December 1988), pp. 359-79.

Bartlett, Sarah. "Neighbors Challenge New York's Tax Reputation," *New York Times* (September 22, 1991), p. 1.

Besley, Timothy, and Anne Case. "Incumbent Behavior: Vote Seeking, Tax Setting and Yardstick Competition," National Bureau of Economic Research Working Paper 4041, March 1992.

Besley, Timothy, and Anne Case. "Does Electoral Accountability Affect Economic Policy Choices? Evidence from Gubernatorial Term Limits," National Bureau of Economic Research Working Paper 4575, December 1993.

Beyle, Thad L. "Governors," in V. Gray, H. Jacob, and K. Vines, eds., *Politics in the American States*. Little, Brown and Company, 1983.

Ferejohn, J. "Incumbent Performance and Electoral Control," *Public Choice*, 50(1), (1986) pp. 5-25.

Gray, Jerry. "Embattled Florio Says He'll Seek Guidance From the Voters," *New York Times* (November 13, 1991), p. B1.

Johnson, Kirk. "Lawmakers Tell 40,000 at Rally Connecticut Income Tax Will Die," *New York Times* (October 6, 1991), p. I 34.

Lott, John R., Jr. "Attendance Rates, Political Shirking, and the Effect of Post-Elective Office Employment," *Economic Inquiry*, 28 (January 1990), pp. 133-50.