Politics and tax levels: evidence from American states

What is more important in determining the level of taxes in individual American states – political institutions or political ideology? *Leandro de Magalhaes* and *Lucas Ferrero* look at nearly half a century of data to explore this question.

Each of the 50 states in America works in a similar way to the US federal government: it has both an executive and a legislature. Each state can also create state-specific taxes on top of federal taxes. To understand what determines the level of taxes in American states, we analyse data on state budgets, political institutions and election outcomes covering the period from 1960 to 2006.

Our measure of a state's tax level is the sum of state-specific income, corporate and sales taxes divided by the state's GDP in that year. And the first question we ask is whether Democratic political control of a state has a causal effect on the tax level. As Figure 1 shows, there is a positive relationship between the tax level and the percentage of seats the Democrats hold in the state legislature. This is in line with our expectation that Democrats will typically prefer a bigger government and higher taxes.

But what does this relationship mean? We cannot conclude from a positive correlation that there is a causal link between Democratic control and a higher tax level. In other words, we cannot conclude that taxes would go up if we were to keep everything else constant and increase the number of Democrats in the state legislature.

Tax levels in American states are not driven by whether Democrats or Republicans control the legislature

It may be the case that voters' preference for a certain tax level varies for reasons that have nothing to do with ideology. Changes in the public's preferred level of taxation could be driven by other variables, such as unemployment levels, a crisis in a specific economic sector, immigration to the state or other

unknown variables. Representatives in the state legislature may just be responding to these preferences.

If this is indeed the case, when voters start to demand higher taxes, the representatives will deliver it regardless of whether they are Republicans or Democrats. What Figure 1 captures could just be that when the voters prefer higher taxes, they also tend to vote Democrat. What drives the tax level, however, is not the degree of Democratic political control but the variables that determine voters' preferences. Representatives do just what voters want, be they Democrats or Republicans.

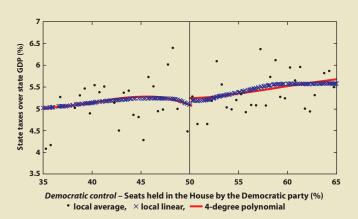
Tax levels are influenced by whether executives and legislatures are politically aligned or politically divided

To check whether Democrats have a causal effect on the tax level, we restrict our attention to a small variation in the percentage of Democrats in the legislature that leads to a major shift in political control. We look at what happens when the percentage of Democrats in the state legislature crosses the 50% threshold. If the Democrats have more than 50% of the seats, they can impose their preferred budget and tax level on the Republican minority. If they have less than 50%, the Republicans can impose their preferred budget and tax level on the Democrats.

We compare the tax level between elections that have delivered slim majorities, as we can think of election results around the 50% threshold as random. These elections were so close that the outcome (which party won the majority) was decided by random events such as rainfall and its effect on turnout.

If we accept this assumption, then all the variables that may

Figure 1: State tax level and Democratic control



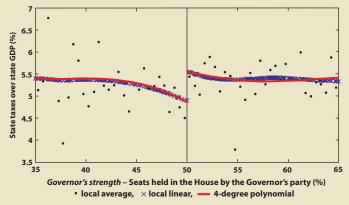
affect voters' preferences, such as unemployment, economic conditions, immigration and others, must, on average be the same on either side of the 50% threshold. And if they are the same on either side, they could not be causing a change in the tax level at the 50% threshold.

These random election results may exchange a few Republicans seats with a few Democratic seats, turning a slim Republican majority into a slim Democratic majority. If this happens, and the tax level increases, it must be because the Democrats have gained the majority, as this is the only variable that has changed as we moved across the 50% threshold.

In Figure 1, we observe no jump in the tax level at the 50% threshold. This is so even though we estimate the average tax level immediately to the left and right of the 50% cut-off only using data to the left and right respectively. This result suggests that adding Democrats to the legislature does not have a causal effect on the tax level. The party identity of the majority, it seems, has no causal effect on the tax level.

We then explore an alternative hypothesis. Most states give the governor more power over the state budget than the US president has over the federal budget. In most states, the

Figure 2: State tax level and Governor's strength in states with line-item veto



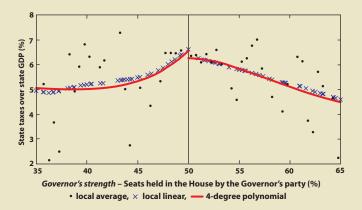
governor can veto or trim particular items or lines in the budget. In a few other states and in the federal government, the executive can only block veto the budget – it cannot selectively cut the budget.

If the objectives of the governor and of the majority party in the legislature are aligned – that is, they are both from the same party – there should be little to cut. If, however, there is a divided government – that is, the majority in the legislature is from one party and the governor is from another party – we would expect the governor to take advantage of the line-item veto power.

To test this hypothesis empirically, we look at the percentage of seats in the state legislature belonging to the governor's party, whether Democratic or Republican. We call this variable *governor's strength*. Again, as we move across the 50% threshold, there is a major shift in political control. To the left of the threshold, the government is divided, whereas to the right of the threshold, the government is aligned.

Figure 2 shows that as we move across the 50% threshold, the tax level jumps. This indicates a causal relationship between having an aligned government and a higher tax level. We estimate that the tax level increases by 13%.

Figure 3: State tax level and *Governor's strength* in states with block veto



Interestingly, we only observe this jump in states in which the governor has the line-item veto. In states in which the governor has the block veto, there is no jump in the tax level, as Figure 3 shows.

Our theoretical explanation for this is that the budget can be thought of as a 'sequential bargaining game' between the majority party in the legislature and the governor. The legislature makes an offer with different spending items and an overall tax level. In states with the block veto, this is a 'take-it-or-leave-it' offer.

It is too costly for the governor to block veto this offer. In most states, blocking the whole budget implies a government shutdown. Governors are therefore reluctant to use their block veto power. In these states, the majority party in the legislature is able to target expenditures as it wishes. This gives the majority an incentive to have high taxes, as they benefit fully from an extra dollar of revenue.

The design of a state governor's budget veto – block veto or line-item veto – has an impact on the tax level

In states with the line-item veto, the budget is not a 'take-it-or-leave-it' offer. Once the budget has been approved by the legislature, the governor can selectively cut particular items or

trim down values. In these states, the majority does not have the freedom to target spending to their benefit. A governor from another party would easily veto any item. Since the majority cannot choose how to spend the tax revenues, they do not have any incentives to propose a high tax level.

Our three results seem to indicate that party identity – that is, whether the majority is Democratic or Republican – is not the key determinant of the tax level. Rather, it seems that it is institutional features – the type of budget veto power and whether the government is aligned or divided – that are the determining factors.

This article summarises 'Budgetary Separation of Powers in the American States and the Tax Level: A Regression Discontinuity Design' by Leandro de Magalhaes and Lucas Ferrero, CMPO Working Paper No. 09/225 (http://www.bristol.ac.uk/cmpo/publications/papers/2009/wp225.pdf).